Building a Strategic Alliance for the Fortification of Oil and Other Staple Foods (SAFO)
A CASE STUDY
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# Building a Strategic Alliance for the Fortification of Oil and Other Staple Foods (SAFO)

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOREWORD</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>EXECUTIVE SUMMARY</strong></td>
<td>7</td>
</tr>
<tr>
<td><strong>1. BUILDING THE ALLIANCE</strong></td>
<td>10</td>
</tr>
<tr>
<td>1.1. Solutions to Vitamin A Deficiency</td>
<td>10</td>
</tr>
<tr>
<td>1.2. Partners and Approach</td>
<td>11</td>
</tr>
<tr>
<td><strong>2. ACHIEVING MANDATORY OIL FORTIFICATION IN TANZANIA</strong></td>
<td>14</td>
</tr>
<tr>
<td>2.1. The role of SAFO</td>
<td>15</td>
</tr>
<tr>
<td>2.2. Standard-Setting and Regulation</td>
<td>27</td>
</tr>
<tr>
<td>2.3. Next Steps</td>
<td>18</td>
</tr>
<tr>
<td>2.4. Results</td>
<td>20</td>
</tr>
<tr>
<td>2.5. Roles and Actors</td>
<td>21</td>
</tr>
<tr>
<td><strong>3. STRENGTHENING INCLUSIVE BUSINESS ECOSYSTEMS</strong></td>
<td>24</td>
</tr>
<tr>
<td>3.1. Strategies</td>
<td>24</td>
</tr>
<tr>
<td>3.2. Structure</td>
<td>25</td>
</tr>
<tr>
<td>3.3. Combination of structures</td>
<td>26</td>
</tr>
<tr>
<td><strong>4. LESSONS LEARNED</strong></td>
<td>28</td>
</tr>
<tr>
<td><strong>APPENDICES</strong></td>
<td></td>
</tr>
<tr>
<td>A. List of Stakeholders Consulted</td>
<td>30</td>
</tr>
<tr>
<td>B. Literature</td>
<td>31</td>
</tr>
<tr>
<td>C. List of abbreviations</td>
<td>31</td>
</tr>
<tr>
<td>D. Endnotes</td>
<td>32</td>
</tr>
</tbody>
</table>
Building a Strategic Alliance for the Fortification of Oil and Other Staple Foods (SAFO)

Development challenges such as tackling poverty and unemployment, improving food, water and energy security, increasing access to education, health care and nutrition, and adapting to climate change are notoriously systemic. They have their roots in public awareness, regulatory and policy frameworks, social and cultural norms, market dynamics, institutional capacity, infrastructure, and many other factors that shape people’s incentives and drive their behavior. And behind each of these factors is a set of interconnected, interdependent stakeholders.

The private sector is increasingly recognized by the development community as a crucial partner in helping to address these challenges. New technologies, products and services, and more inclusive business models are helping to improve livelihoods and quality of life for millions of low-income households while at the same time improving the efficiency of natural resource use and decreasing environmental degradation. Yet, with a few notable exceptions such as the development of mobile banking, most of these market-based solutions have not achieved business growth and development impact at scale. Many are impeded by a combination of market failures, governance gaps, insufficient financing and inadequate individual and institutional capacity. There is an enormous need for more collaborative solutions that leverage the combined resources and capabilities of business, government and civil society to overcome these barriers.

In this context, the CSR Initiative at Harvard Kennedy School has undertaken research on the different strategies and structures that companies are using to strengthen the ecosystems around their inclusive business models. We have looked at three approaches that can help overcome barriers to scaling these business models:

- Private initiative by an individual company along its own value chain;
- Project-based alliances between a company and one or more other organizations; and
- Platforms that are formal networks of potentially large numbers of players, established for a common purpose.

These structures are complementary and companies often use them in combination, either sequentially or simultaneously. The following case study looks at a project-based alliance aimed at strengthening ecosystems for food fortification in developing countries and reducing micronutrient deficiencies and malnutrition.

The Strategic Alliance for the Fortification of Oil and Other Staple Foods (SAFO) was set up in 2008 as a project-based alliance between BASF and GIZ. BASF is a multinational producer of chemicals and one of the largest producers of micronutrients such as Vitamin A. GIZ is a German agency for technical development cooperation. The partnership was set up under the umbrella of the developpp program, where public and private partner share the cost of a business-driven development initiative and collaborate by building on their individual capacities.

SAFO, we believe, is an interesting example of a project-based alliance with a systemic approach. It supports national initiatives for food fortification in creating the standards, regulation, and technical capacities to achieve a broad based fortification of staple foods such as oil, flour or sugar. In this way, even people with very low-incomes can benefit from, improved nutrition. “Hidden hunger” is reduced, and so are its negative consequences such as stunting, blindness, mental disabilities, or a weak immune system.

SAFO is based on the principle that national food fortification initiatives must be driven locally. It supports national initiatives through coordination of various stakeholders, and by providing technical knowhow to both the public and the private sector actors. Here, the partners can bring in their distinct capacities, with BASF collaborating with staple food producers and GIZ with government agencies. With this systemic approach, SAFO has managed to reach...
more than 100 million people in several developing and emerging countries by increasing the countrywide availability of affordable vitamin A fortified staple foods.

Project-based alliances are by nature limited in time and scope. The SAFO approach effectively leverages the competencies of the partners to reinvigorate and strengthen national initiatives for food fortification. Regulation is usually required to create a market for fortified food that includes all consumers, not just those with high incomes. Regulation must be supported broadly by relevant stakeholders. This requires stakeholder dialogue, awareness raising and capacity building. Here, SAFO shows how project-based alliances can make a critical injection, even with limited resources.

Since it was founded in 2003, the CSR Initiative at Harvard Kennedy School has worked to bridge theory and practice in the field of multi-stakeholder partnership. This case is part of a series focused on collaboration between business and other sectors to drive systemic change. Our goal is to learn in “real time” how a new generation of collaborative initiatives designed for systemic change and scale are mobilized, and how they work. We hope others will benefit from the experiences of these initiatives and be able to accelerate their own progress in developing models that achieve both business benefit and development impact through tackling some of the world’s most pressing development challenges.

Jane Nelson
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Case Study Background

This case study is part of a Harvard Kennedy School CSR Initiative workstream on systemic approaches to creating business opportunity and development impact at scale. An initial framing paper, “Tackling Barriers to Scale: From Inclusive Business Models to Inclusive Business Ecosystems,” was published in September 2011. This document is one of three in-depth case studies now being conducted to generate knowledge and provide practical guidance on what such systemic approaches look like and how to structure and implement them.

Inclusive business incorporates people living in poverty into the value chain as producers, consumers, employees and business partners. Inclusive business ecosystems are communities or networks of interconnected, interdependent players whose actions determine whether or not a particular company’s inclusive business model will succeed. These actors typically include individuals, companies, governments, intermediaries, NGOs, public and private donors, and others.

The research suggests that broadening the focus from developing inclusive business models to strengthening inclusive business ecosystems helps companies deal more efficiently and effectively with the widespread challenges in the slums and villages where the poor reside. Companies use a variety of strategies to strengthen the ecosystems around their inclusive business models. These include Base of the Pyramid (BOP) awareness raising and capacity building, research, information sharing, public policy dialogue, and the creation of new organizations.

Companies execute these strategies using three structures – private initiative by an individual company, project-based alliances and platforms – to harness the necessary resources and capabilities and to overcome the incentive problems that coordination and cooperation entail. This case study explores an example of a project-based alliance.

A project-based alliance brings two or more players together under a formal agreement to accomplish a certain objective within a set timeframe. It typically includes a project plan with well-defined roles and responsibilities, milestones, and monitoring and evaluation mechanisms that enable the partners to make course corrections as needed over the life of the project.

Project-based alliances are employed when companies rely critically on the resources and/or capabilities of other players, and cannot simply purchase them on the market; for example, the expertise, on-the-ground networks, and catalytic financing of NGOs, donors, and development banks. Since the reputation and success of each partner is at stake if the other fails to comply with its commitment, formal alliance models, such as partnerships or joint ventures, are often required.

This case study was conducted between June and September 2011, including on-site interviews in Tanzania between September 4 and 12. Tanzania was selected as a site for field research since several examples of inclusive ecosystem development had been identified there. The research sought insight into the following questions:

- How can project-based alliances strengthen inclusive business ecosystems? Where are the limitations?
- How are project-based alliances combined with other structures to strengthen inclusive business ecosystems?
- How are project-based alliances governed and managed?
The Strategic Alliance for the Fortification of Oil and Other Staple Foods (SAFO) is a project-based alliance with the private aim to strengthen inclusive ecosystems for food fortification in developing countries, and the public objective to reduce malnutrition. Roughly two billion people around the world suffer from vitamin A deficiency, as many low-income consumers often can only afford to buy staple foods and do not get a balanced diet that would provide them with adequate amounts of vitamin A. Vitamin A deficiency most notably causes night blindness and weakens the immune system. Fortifying basic staples with vitamin A is an easy and cost-effective way to fight malnutrition.

The German development agency GIZ and the German chemical company BASF have joined forces to facilitate the establishment of functional markets for fortified food in developing countries. The partners have taken a systemic approach and in Tanzania, as in other countries, a multi-stakeholder dialogue has been the foundation of this process. In addition, GIZ advises the public sector on malnutrition policies, while BASF works with staple food producers on developing technical capacities and business models. Jointly set up in 2008, SAFO has already reached more than 100 million people in several developing and emerging countries by increasing the countrywide availability of affordable vitamin A fortified staple foods.

When SAFO started working in Tanzania in late 2008, the country had already been involved in discussions around food fortification with other countries from East, Central and Southern Africa. A National Food Fortification Alliance (NFFA) had already been established and first versions of national standards for the fortification of flour had already been drafted, yet the whole process had lost momentum due to technical questions. Through multi-stakeholder facilitation and very targeted interventions, the alliance partners revived the process and made significant progress. In early 2009, the World Bank started to support the national food fortification program in Tanzania and, with significant resources, also pushed the agenda on the political level. By the end of 2010, standards had been created, and by September 2011, a label had been developed and regulations have been passed to make the fortification of oil with vitamin A mandatory. The main oil producers are ready to start fortifying, and an awareness raising campaign is underway. Soon, 30 million people in Tanzania will benefit from fortified oil.

Roles and Actors

The process towards the fortification of oil with vitamin A in Tanzania involved a multitude of actors from all sectors. It involved government ministries and agencies, international donors and NGOs, and local producer companies. SAFO was embedded in this larger ecosystem of actors. The NFFA created a platform for all players in Tanzania to come together, exchange opinions, create a shared vision and organize to implement food fortification processes.

SAFO played an enabling role for this local stakeholder ecosystem. In addition to reviving the local multi-stakeholder process, the initiative contributed to its progress through three very targeted activities. GIZ sponsored and coordinated the label development process. BASF raised awareness and provided technical assistance to producer companies and inspectors. For quality control purposes, BASF also provided a mobile test kit for inspectors and smaller companies to conduct instant, cheap tests of the approximate quantity of vitamin A in oil.

Analyzing the roles of the many stakeholders involved along the process, six key roles emerge. Two of them – stakeholder coordination and funding – were required throughout the process. The other four were only relevant at certain stages during the process. They are: advocacy and policy dialogue, technical support, defining rules, and technical implementation.
Strengthening inclusive business ecosystems

Systemic change is required in order to reach low-income consumers with fortified food. This segment is not typically aware of the benefits of fortified food and cannot afford to buy premium (i.e. relatively expensive) products. But as the public health benefits are significant and the cost of fortifying is low, public partners need to come in to raise awareness, set standards and pass regulation. Since regulation in particular requires broad support within the society, a national platform is required to lead a multi-stakeholder process towards fortification. Further, small and large oil producers need to change their perspective from viewing fortification as purely an additional cost to recognizing its benefits for the company, including customer loyalty and improved reputation.

In this setting, SAFO as a project-based alliance takes the role of strengthening and accelerating such national processes. By joining forces, BASF with its technical know-how and credibility in the private sector and GIZ with its convening capacity and credibility in the public sector, can fill critical gaps in these national processes. SAFO never intended to start or lead such a process and instead found it critical that local actors were in the lead. A project-based alliance fits these objectives well, since it is the right structure to achieve well-defined objectives with several partners within a limited timeframe.

SAFO is not an organization of its own but an alliance of two partners. Because the success of the SAFO approach depends fully on the contribution of both partners, the collaboration requires a formal structure. The formal partnership agreement between GIZ and BASF for SAFO defines how the project-based alliance shall be executed. It defines the objectives, targets, tasks and timeframe for the partnership and stipulates a governance structure. As such, the agreement creates alignment and security while leaving enough flexibility for detailed implementation planning.

SAFO works with a well-defined approach in all of its countries of implementation. Specific strategies are chosen based on the individual needs of each country. In Tanzania, SAFO employed strategies for the facilitation of stakeholders, strengthening national platforms and regulatory capacity. It also worked to strengthen businesses through technical advocacy, assistance in developing market frameworks and quality control. As a project-based alliance, SAFO deliberately stayed away from activities that require long-term engagement, such as funding social marketing among consumers.

Lessons learned

As a project-based alliance, SAFO had to embed itself into existing structures and processes. Since it was working under a strict timeline of only three years, it had to focus on clearly defined interventions. The case of Tanzania shows some lessons of what is required to operate successfully with this structure:

- **Understanding the local ecosystem**: mapping must go beyond formal structures and uncover informal networks and relationships as well as personal agendas of critical actors.
- **Working with “embedded” people**: the role of personal networks to organize systemic change cannot be overestimated.
- **Running an open, participatory process**: SAFO involved all local stakeholders in jointly creating a vision and an action plan.
- **Staying within defined boundaries**: stakeholders knew they had to do their homework, and did not need to worry that SAFO would interfere with their own agendas.
- **Creating ownership and enforcement mechanisms**: thinking through critical commitments and how to enforce them should be part of the design of
ecosystem change initiatives. SAFO identifies critical gaps and builds the required capacities.

- **Use vs. lose the momentum:** SAFO built on the momentum of the first workshop and followed up quickly with a second meeting and setting up a label-development task force. At the end of the process, momentum slowed due to capacity constraints. Resources should be allocated rather generously in order to keep the momentum.

SAFO has proven the value of a project-based alliance between a public and an industry partner for strengthening inclusive business ecosystems for food fortification. In Tanzania and several other countries, it has shown that its approach of strengthening local platforms by convening stakeholders and filling gaps can help significantly in advancing national food fortification processes with limited resources. By operating in several countries parallel, SAFO has also created significant knowhow on how to replicate the approach in different settings.

Project-based alliances are by definition time-bound (the SAFO alliance ends in 2012), and usually have just a few years to prove their value. Often, they are created with the explicit aim to develop a new model, though replicating the model takes time. The alliance approach should be reviewed to understand how the investments into pilot development can really pay off. To achieve real impact, it is critical to invest in replication as well.
There is a need to work in partnership with the private sector. The local milling industry needs support with better quality processing to add valuable micronutrients. We need to work with other development partners and with civil society to educate the public on the value of fortified foods. Food fortification is a whole industry, but a legislative and regulatory framework is crucial to impose discipline and standards.

Ronald Sibanda, Resident Representative of the World Food Programme in Tanzania

SAFO, the Strategic Alliance for the Fortification of Oil and Other Staple Foods, is a project-based alliance with the private aim to strengthen inclusive ecosystems for food fortification in developing countries, and the public objective to reduce malnutrition. Roughly two billion people around the world suffer from micronutrient deficiency, meaning that they don’t get enough micronutrients such as vitamins and minerals. The German development agency GIZ and the German chemical company BASF have joined forces to facilitate the establishment of functional markets for fortified food in developing countries.

Roughly two billion people around the world suffer from vitamin A deficiency. Low-income consumers can often only afford to buy staple foods and do not get a balanced diet that would provide them with adequate amounts of vitamin A, raising the risk for developing night blindness and weakened immune systems. Fortifying basic staples with vitamin A is an easy and cost-effective way to fight micronutrient deficiency.

### 1.1 Solutions to Vitamin A Deficiency

Vitamin A deficiency is a serious problem in more than 70 countries around the world. People affected by this form of malnutrition can go blind and more easily contract infections like measles or diarrhea because of their weakened immune systems. The World Health Organization (WHO) estimates that, in particular, 140 to 250 million children under five years of age are suffering from vitamin A deficiency worldwide. Additionally, women with vitamin A deficiency are at a much greater risk of dying during pregnancy or childbirth.

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**Figure 1. Map of vitamin A deficiency**

Source: Maplecroft

Last Updated: February 2011
The human body cannot produce vitamin A itself, and the vitamin may only be absorbed when eaten with food. In developing and emerging countries, many people can often not afford expensive foods like high-fat fish and meat or even dairy products and vegetables, which contain natural supplies of the vitamin. They eat mainly cheap staple foods with less nutritional value such as corn, rice, flour and oil.

Food fortification is a simple and inexpensive solution to combat micronutrient deficiency. With this method, food is enriched with vitamins and minerals that it either does not naturally contain at all or only in small amounts. For example, oil is a good carrier for vitamin A, because the micronutrient is itself oily and dissolves easily in oil, and because people need fat to digest and take up vitamin A. The process of fortifying oil is rather easy: the micronutrient is simply added to the cooking oil at the end of the production process. Properly packaged, it remains stable during the whole shelf-life of oil (12-18 month).

While the technical process to fortify food is simple, in particular in the case of oil, the governance process is all the more complicated. Products for the upper market segment, such as bottled oil or snacks, are often fortified by producers on a voluntary basis in order to achieve a unique selling proposition vis-a-vis their customers. The poorer the target group, the harder it is to market such additional benefits for a premium price. Consumers at the base of the economic pyramid (BoP) typically buy oil in small quantities from barrels and care much more about price than about branding.

To reach these BoP consumers, regulation that makes fortification mandatory is usually the most effective approach. Fortification increases the production cost only minimally and thus fortified staple foods become available for low-income consumers. For maximum impact, regulation should be paired with a broad-based public awareness campaign.

1.2 Partners and Approach

BASF has been working in the area of food fortification for many years. BASF is a leading vitamin producer with a competence focus on vitamin A. The quality of its nutrients is acknowledged by a number of scientific studies. Through a highly integrated production concept, BASF can produce quality vitamins at competitive cost. Not only does the company produce...
and sell vitamins and other micronutrients to food producers around the world, it also helps these producers install the right equipment and implement the best processes to produce quality products with BASF’s ingredients. Thus, the company has longstanding experience in working closely with local producers of fortified oil, sugar, flour and milk products. BASF’s efforts to combat micronutrient deficiency are part of its strategic goal of sustainability.

Local producers rely on certain framework conditions in order to be able to successfully sell fortified food.

- First, fortification needs to be transparent for consumers, so that they understand what they buy. This requires a label that consumers can easily recognize. It also requires education of consumers regarding the benefits of micronutrients and healthier diets in general.

- Second, a standard defining at what level certain vitamins and minerals are to be added must be in place. Because nutritious food is essential for people’s health, the selling of food is typically heavily regulated. In Tanzania, the Tanzania Food, Drugs and Cosmetics Act requires that fortified food must be registered based on national or international standards on fortification.

- Third, to reach the lower-income groups in society, fortification often needs to be made mandatory through national regulation, since otherwise only higher-value products, where a price premium can be charged, will be fortified.

Without these framework conditions, producers will often have no incentives, and limited ability, to fortify food, especially for lower-income consumers who need it most.

Therefore, BASF joined forces with German development agency GIZ (formed on 1 January 2011 through the merger of former DED, GTZ and Inwent) in a project-based alliance called the “Strategic Alliance for the Fortification of Oils and Other Staple Foods.” This alliance was set up under the program develoPPP.de.

The SAFO partnership was designed to combat micronutrient deficiency in several countries through a close collaboration between the public and private sector. BASF handles the technical aspects, providing technical support to companies and helping them to develop a business model and business case, including CSR thinking. The role of GIZ is mainly to advise the public sector and to facilitate multi-stakeholder dialogue in the countries themselves. The initiative was launched in 2008 and aims to improve nutrition for 100 million people in several developing and emerging countries by 2012. It reached this milestone already in mid-2010.
SAFO was based on a clear approach to support national actors and ongoing processes for food fortification and help them to achieve their goals. As GIZ project team member Leonie Vierck stated: “As an external agent, you should not take the lead on such processes. They need to be locally driven and owned.” SAFO was working with a clearly defined set of instruments that could be used as required in the countries of implementation.

Design of the specific intervention for each country was informed by an overarching framework. This framework proceeds in four steps:

- **Advocacy:** SAFO educates and advises stakeholders on the role of food fortification and the effects of micronutrient deficiency through media, workshops, and dialogue.

- **Technical trials:** On the public sector side, micronutrient deficiency data needs to be applied in order to calculate food fortification levels, which are adjusted to the level of deficiency. On the industry level, technical feasibility assessments, trainings and ultimately pilot production of samples need to be conducted.

- **Voluntary fortification:** The national bureau of standards develops a standard for fortification, including technical specification. A label has to make consumers aware of the added substances. For marketing purposes, this label can be implemented in conjunction with a label that facilitates the marketing of fortified food. Social marketing activities raise awareness for fortification.

- **Law and compliance:** In the last phase, mandatory legislation for fortification is being passed. Quality assurance and control mechanisms, including spot and field tests, have to be implemented.

The initiative was designed in the headquarters of both BASF and GIZ in Germany and received local feedback. Countries for intervention were chosen based on a variety of factors, including:

- A significant prevalence of micronutrient deficiency among the population
- Local GIZ structures
- Existing momentum among local stakeholders for food fortification
- Presence of a significant edible oil production sector, including large companies

Based on these criteria, a set of countries was chosen as part of the SAFO pilot. Tanzania was one of them.
The United Republic of Tanzania was chosen as one of the countries for SAFO’s pilot implementation. Tanzania met all the requirements of SAFO: micronutrient deficiency was widespread; GIZ had an extensive, long-established health program; a National Food Fortification Alliance (NFFA) had already been established and various meetings on the regional and national levels had been held. Finally, Tanzania was a significant market, with approximately 40 million citizens, and BASF was already doing business there via its partner HighChem in Kenya. Two large companies, East Coast Oils and Fats Ltd. and Murzah Oil Mills Ltd. owned the majority of the edible oil market. Furthermore oil and flour are widely consumed and locally processed.

Tanzania has a severe vitamin A deficiency problem. A National Vitamin A survey in 1997 found that 24% of children had low serum retinol while 69% of women had low breast milk retinol. According to the 2005 Demographic Health Survey (DHS), the data used when SAFO started, only 52% of the children in rural areas consumed fruits and vegetables rich in vitamin A in the previous day. In urban areas, the rate was 61%. A national supplementation program had helped to reduce infant mortality rates since 1987; through that program, all children between 5 and 59 months receive a vitamin A supplement twice a year. Although the program has achieved great coverage, it does not reach the rest of the population. Furthermore, supplements should not be the only source of vitamin A in a child’s diet.4

The table below summarizes the most important milestones of the process to establish fortification of oil with vitamin A in Tanzania. It includes activities by SAFO (highlighted in orange), but also activities of other players.

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
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<tbody>
<tr>
<td>2002</td>
<td>Tanzania participates in the 36th Regional Health Ministers conference, passing a resolution on enhanced public private collaboration for food fortification</td>
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<tr>
<td>2003</td>
<td>National Food Fortification Alliance (NFFA) is established</td>
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<tr>
<td>2004-2009</td>
<td>East, Central and Southern Africa (ECSA) Health Community conducts regional meetings, training workshops for laboratory personnel, and technical workshops to develop regional standards</td>
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<tr>
<td>March 2007</td>
<td>ECSA workshop “Harmonization of Regional Regulations and Standards of Fortified Foods” (Arusha, Tanzania)</td>
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<tr>
<td>February 2008</td>
<td>SAFO set up between GIZ and BASF</td>
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<tr>
<td>September 2008</td>
<td>Exploratory mission of SAFO to Tanzania</td>
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<tr>
<td>November 2008</td>
<td>International Food Fortification workshop in Arusha, Tanzania; participants commit to accelerate action</td>
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<tr>
<td>February 2009</td>
<td>SAFO stakeholder workshop and expert workshop in Dar es Salaam, co-hosted by NFFA, to define the contribution of SAFO.</td>
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<tr>
<td>February 2009</td>
<td>Two consultants financed by the World Bank begin drafting the National Action Plan together with stakeholders</td>
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<tr>
<td>March 2009</td>
<td>SAFO presents its support program to the NFFA</td>
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<tr>
<td>September 2009</td>
<td>High Level Forum, under the auspices of the Prime Minister’s office, to agree with and adopt the Food Fortification Action Plan</td>
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<tr>
<td>January 2010</td>
<td>World Bank Board approves $2 million to support the implementation of the Food Fortification Action Plan</td>
</tr>
<tr>
<td>February 2010</td>
<td>Label for fortified oil finalized, with support from SAFO</td>
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<tr>
<td>March 2010</td>
<td>The Government of Japan approves a $2.69 million grant to support sustainable approaches to rural food fortification</td>
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**DATE** | **EVENT**
---|---
October 2010 | East Coast and the World Bank host a meeting to celebrate progress in food fortification; BASF presented test kits
October 2010 | Standards for fortification of oil finalized
December 2010 | Global Alliance for Improved Nutrition (GAIN) approves $650K to be implemented by Helen Keller International (HKI) to keep the momentum for food fortification
March 2011 | Regulation for fortification of oil with vitamin A and wheat and maize flour with iron, zinc, B12 and folic acid gazetted
August 2011 | Regulation for fortification passed
October 2011 | DFID provided a grant for social marketing and other activities (also managed by HKI)

### 2.1 The role of SAFO

SAFO was implemented in Tanzania in 3 steps:

- **Research:** Data and stakeholder mapping to identify who plays which role.
- **Design:** Stakeholder dialogue to specify concrete deliverables for all actors, including GIZ and BASF.
- **Implementation:** GIZ and BASF delivered their contributions locally.

#### Research

The project started with a fact-finding mission to Tanzania in September 2008. The objective was to identify all relevant stakeholders for fortification of oil, sugar and flour, and to understand how best to enter and support the process. Dr. Andreas Blüthner, Senior Global Manager Food Fortification and BoP at BASF, and Minira Prosser, then responsible for support of SAFO in Tanzania at the GIZ headquarters, conducted meetings with GIZ and other local stakeholders. They presented SAFO during a meeting of the National Food Fortification Alliance (NFFA), a stakeholder alliance, offering to fill the gaps in the existing support landscape. They also entered into an agreement with the Tanzania Food and Nutrition Centre (TFNC), a public body under the Ministry of Health and Social Welfare (MoHSW) and secretariat of NFFA, to conduct a workshop in spring 2009 to define the value added of SAFO in Tanzania.

#### Design

Based on this on-the-ground research, a workshop was co-organized with NFFA on February 4 and 5, 2009, in Dar es Salaam. The workshop aimed to re-energize the process toward food fortification in Tanzania and to identify the support SAFO could best provide. All national stakeholders were invited. International experts came to present on the status quo and trends in the field. The workshop was able to provide an update on both the national and the international status quo.

On the first day, a broad group of stakeholders from the public, private and civil society sector met in the stakeholder workshop “Towards a Sustainable Cost-Effective Food Fortification Partnership for Tanzania.” The objective was to get a common understanding of food fortification and its benefits, technical requirements, and implementation approaches. BASF explained the business case, including a broader CSR perspective, to companies. Other experts presented updates on

![SAFO workshop](Source: BASF)
international trends around food fortification. Participants identified different roles for different actors and agreed on a broad way forward in which the public sector would speed up the development of a label, standards and regulation and build capacity to monitor and regulate while the private sector would develop business plans and build the required technical capacities. Both sectors would seek high-level political commitment for fortification and, later on, educate consumers. Potential contributions of SAFO were also identified by attending stakeholders, which was crucial in solidifying their commitment to SAFO and in creating ownership.

On the second day, a smaller group met in the “Expert Workshop on Standards Setting in Food Fortification in Tanzania.” Participants learned about the international experience in standard setting in Tanzania. In working groups, they reviewed the status quo of food fortification in Tanzania, identified the main challenges, and came up with critical next steps. Standards for oil, flour and sugar had been drafted, but needed to be finalized. A label was still missing and monitoring processes needed to be put into place. The group agreed upon tasks and responsibilities, including potential areas for support from SAFO. 5

In March 2009, another workshop was held to present the results of the joint work. SAFO was now concentrating solely on the fortification of cooking oil. The producers of sugar had been extremely reluctant to enter the fortification process, and so efforts were focused on the industry which had more momentum. Stakeholders decided that SAFO’s role was to facilitate and finance the label creation and review process, to support the establishment of monitoring procedures via a test kit, and to provide technical assistance to oil producers. Other stakeholders committed to do their part to move the process along, including the drafting of standards, development of monitoring regulations and building technical capacity.

Implementation
In the subsequent months, the SAFO partners realized their defined deliverables.

Label. GIZ was responsible for supporting the label development. It requested proposals and received a number of suggestions. During an NFFA meeting, participants chose one proposal as their favorite, and the submitting company was asked to develop the label further and to undergo pre-testing among the Tanzanian population in order to incorporate its view on the label. Via the lead of a label task force and an extensive consultation process within and beyond the NFFA, the final label was chosen by the stakeholders. The whole process took about a year. The label was finalized in February 2010, but it was only presented in November 2010, during the next NFFA meeting, which was delayed due to difficulties in convening all actors. With regulation now passed, companies that fortify oil according to TFDA standards are allowed to display the label on their products.

Technical assistance. BASF was responsible for the technical assistance. A technical workshop was hosted by one of the two main oil producers in Tanzania, East Coast Oil, together with the World Bank. The aim was to celebrate progress with food fortification and to discuss next steps. Representatives from companies and public authorities learned about the food fortification process, quality control, and monitoring approaches. BASF Global Technical Application Manager Claus Søndergaard and Marketing and Senior Regional Food Fortification Manager Marco Sterz conducted presented the test kit and explained its use.
TestKits. BASF also introduced a mobile testing device which had specifically been designed for its food fortification efforts. The device allows for a qualitative measurement of the vitamin A content in oil through a simple and quick test. While exact tests via high performance liquid chromatography cost $50-100 per sample, testing with the kit costs only $0.02-0.05 per sample. To facilitate monitoring once regulations are in place, the test kit will be supplied free of charge to smaller companies without lab equipment as well as field inspectors of the Tanzania Food and Drug authority.

In order to enable a fully quantitative measurement of the vitamin A content in oil, BASF worked with BioAnalyt, a German provider of analytical equipment, to provide a second generation Testkit. The “iCheckChroma” is as accurate as regular laboratory equipment, but is the size of a large cell phone and costs only about a tenth of the regular equipment.

Both test kits are highly complementary and help companies and authorities to ensure the quality of their fortification programs.

2.2 Standard-Setting and Regulation

SAFO had not taken a role in technically supporting the standard setting and regulation process for food fortification, apart from providing information during the standard setting workshop. Neither GIZ nor BASF had a mandate to intervene on this political level, so when all the technical capacities were in place, these critical frameworks for action were still absent. The Tanzania Bureau of Standards (TBS) had other priorities and was not advancing the process.

Fortuitously, the World Bank had come in at roughly the same time as SAFO to support the food fortification process in Tanzania. In addition to fortification of oil, the World Bank worked on creating the enabling environment for maize and wheat flour fortification with iron, zinc, B12 and folic acid. In February 2009, two consultants financed by the World Bank began drafting the National Action Plan for Food Fortification together with stakeholders. In October 2009, the World Bank hired a full-time consultant and nutrition specialist. In January 2010, the World Bank approved the financing of the implementation of the Food Fortification Action Plan with $2 million. With this, the World Bank had the mandate and the resources to convince the TBS to speed up the standard-setting process. This included a media-campaign on the benefits of improved nutrition and food fortification.
In June 2010, TBS sent the draft standards for public review. GIZ also provided comments on the draft standards during the review process. The finalization process dragged on as comments from stakeholders were inadvertently not being reflected in subsequent drafts. After an unwieldy process, the standards were eventually finalized in October, printed, and disseminated to relevant companies by December 2010. Along with the standards, the World Bank supported the development of food fortification guidelines and manuals for food manufacturers and for the Tanzania Food and Drug Authority (TFDA) (on measurement and evaluation), as well as the training of food and laboratory inspectors.

Two oil manufacturers, East Coast and Murzah Oils, make up 80% of the edible oil market in Tanzania. At the beginning, the manufacturers were not ready to embrace a fortification standard; they worried that consumers would not accept fortified products if it was not mandated by government, since they might not be aware of the benefits and may be concerned about potential downsides. Thus, even though the large oil producers had the human and technical capacities to start fortifying, they waited for government to pass regulation that would mandate fortification.

In December 2010, a stakeholder meeting was held to comment on the draft national food fortification regulation. TFDA incorporated the comments and sent the regulation to the Ministry of Health and Social Welfare for signature. In March 2011, regulation was gazetted; it finally passed in August 2011.

2.3 Next Steps

Now that the standard and the regulation are in place, the roll-out phase has started for all relevant players in Tanzania. All oil companies must begin fortifying. Since BASF is one of few quality and cost-effective vitamin A suppliers globally, it may well be the supplier of choice for many of the Tanzanian companies. Helen Keller International (HKI), an NGO dedicated to preventing blindness and reducing malnutrition which has been working in Tanzania since 1985, is supporting industry to procure fortificants through funds from DFID. Last but not least, the TFDA needs to implement the required monitoring and evaluation processes, building upon its food inspectors in all 127 districts.

One critical element for the roll-out phase is social marketing. Today, most people, and especially those from lower-income segments and in rural areas, are not aware of micronutrient deficiency and the benefits of oil fortified with vitamin A. To fund these activities, HKI led the development of a proposal to the Global Alliance for Improved Nutrition (GAIN), which was approved in December 2010. HKI manages the funds from GAIN and DFID, which, among other things, include social marketing activities. The World Bank is also working with DFID to design support for the national food fortification program, including the awareness-raising activities.

All in all, it has taken almost ten years to establish a standard and regulation for fortification of oil in Tanzania. In 2002, Tanzania participated in the 36th Regional Health Ministers conference, where a resolution was passed that aimed at collaboration between the public and private sectors for enhanced implementation and coordination of food fortification interventions at the regional and national levels. In August 2011, regulation to fortify oil with vitamin A was finally passed. The sugar sector still remains opposed to fortification efforts. The East, Central and Southern African Health Community (ECSA) has been instrumental in raising awareness and setting the agenda for food fortification in Tanzania. SAFO has managed to
revitalize the food fortification process, and contributed very targeted, yet critical technical ingredients to the process: a label, test kits and technical support. Yet, without the World Bank and its big push for standardization and regulation, this process might have taken even longer, and only the upcoming quality control roll-out phase will eventually get the product to the low-income customers. The example shows that it often takes several actors taking on different roles in a multi-year process to improve and strengthen an inclusive business system, especially where regulation is involved. The chart below summarizes the process, its critical roles and actors.

Figure 7. Timeline of activities to achieve mandatory fortification of oil in Tanzania  
Source: Author

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>NFFA/TFNC</td>
<td>TBS</td>
<td>TFDA</td>
<td>TFDA</td>
<td>TFDA</td>
</tr>
<tr>
<td>World Bank</td>
<td>TFDA</td>
<td>SAFO (GIZ): logo</td>
<td>SAFO (BASF)</td>
<td>HKI (via GAIN and DFID)</td>
</tr>
<tr>
<td>Local companies</td>
<td>MoHSW</td>
<td>Local companies</td>
<td>World Bank</td>
<td>NFFA/TFNC</td>
</tr>
</tbody>
</table>
2.4 Results

After introduction of the mandatory regulation for oil fortification with vitamin A, all oil sold in Tanzania has to be fortified. Since almost everyone in the country consumes cooking oil as part of the normal diet, 30 million Tanzanians will be reached via this initiative.

The National Action Plan for the Enrichment of Staple Food, produced by NFFA, includes a cost-benefit assessment of food fortification in Tanzania. According to this document, 24% of all children under the age of five in Tanzania suffer from vitamin A deficiency, and so do 69% of lactating women. Thus, the experts calculate, vitamin A deficiency causes economic losses of more than $32 million per year. The National Action Plan also notes that not all costs of deficiencies can be resolved by food fortification, and estimates conservatively that vitamin A deficiency in Tanzania will be reduced by 30%.

On the other hand, the costs of vitamin A fortification are comparatively small. The Action Plan calculates that if the entire cost of fortification was passed along to the consumer, the additional cost (using a 12 mg per day serving size), would be $0.018 or Tsh. 24 per person per year. In fact, the two main oil producers were not planning to pass on the additional cost to the consumer at all, but keep prices at the same level. The major part of the estimated amortized annual cost of $851K for vitamin A fortification will be borne by the oil producers. Refinery fortification is expected to account for $741K per year. Costs for legal, regulatory and food control, social marketing and monitoring and program management add up to the remaining $110K per year. All in all, the cost per metric ton oil would just be $1.67.

Although they were hesitant in the beginning, cooking oil company representatives have come to appreciate the value of vitamin A fortification for their customers. Vijay Raghavan, CEO of East Coast Oils and Fats Ltd., saw standardized fortification as a competitive advantage when moving into neighboring markets, such as Zambia or Rwanda, where producers were not yet supplying fortified oil. The new label would help the company market this value proposition under a trustworthy legal framework. This fit well with the current facility expansion of the company, quadrupling production capacity within 18 months from 10,000 liters to 45,000 liters per month. In addition, the new initiative was in the interest of Mohammed “Mo” Dewji, CEO of Mohamman Enterprises Tanzania Ltd (METL), to which East Coast Oils and Fats Ltd belongs. Mr. Dewji is a member of parliament for the Singida district and member of the National Executive committee of the ruling party CCM. His declared goal is to improve the lives of people in his district and in Tanzania generally, and food fortification fits in with this goal. This link is not unusual: most companies in Tanzania are family owned and run, and personal and family issues can play an important role in strategic decisions for a company.
2.5 Roles and Actors

The process toward fortification of oil with vitamin A in Tanzania involved a multitude of actors from all sectors. SAFO, with GIZ and BASF as the partners, is embedded in this larger ecosystem of actors. The NFFA creates a platform for all players in Tanzania to come together, exchange opinions, create a shared vision and organize to implement it. SAFO played an enabling role for this local stakeholder ecosystem. It interacted with stakeholders directly and via the NFFA platform. GAIN has no local presence in Tanzania and only plays a role as a funder, so it is the only other organization that is involved in the process and not part of the NFFA platform. The chart below illustrates the relationships among the various players.

Mobilizing for vitamin A fortification in Tanzania has been the work of many hands. Different stakeholders have participated with different degrees of intensity at different times. Depending on their unique capabilities, they have taken on diverse roles throughout the process. Analyzing the roles of many stakeholders involved, several key capabilities emerge. Some are related to the SAFO concept, while others, such as stakeholder coordination and funding, are required throughout the process.

1. **Stakeholder coordination:** Facilitating dialogue, relationship-building, trust, alignment among the players, defining responsibilities and following up on execution.
2. **Funding:** Providing the necessary monetary resources for program management, workshop organization, platform maintenance (NFFA), procurement of non-technical equipment, and outreach activities.
3. **Advocacy and policy dialogue:** Raising awareness among stakeholders, including government, on the need for food fortification. Discussing the necessary regulatory steps with government bodies, production and analytics. Providing advice on standards and policy formulation and processes.
4. **Technical support:** Providing knowhow on technical procedures of fortification.
5. **Defining rules:** Setting standards and passing regulation. Enforcing regulation and controlling quality.
6. **Technical implementation:** Enriching oil with vitamin A and selling products to consumers and ensuring quality and correct labeling.
The table below summarizes the role of each stakeholder:

<table>
<thead>
<tr>
<th>ACTOR</th>
<th>ROLES</th>
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<tbody>
<tr>
<td><strong>Key SAFO partners</strong></td>
<td></td>
</tr>
<tr>
<td>BASF, Multi-domestic chemical company headquartered in Germany</td>
<td>• <strong>Technical support</strong>: conducted workshop with companies and public authorities; provided test kits; provided advice on developing a business case, including CSR approaches</td>
</tr>
<tr>
<td>GIZ, German development agency</td>
<td>• <strong>Stakeholder coordination</strong>: convened multi-stakeholder workshops; facilitated label development and testing process through the lead of a task-force and the services of hired media agencies, supported standard setting through an expert workshop and comments on draft</td>
</tr>
<tr>
<td></td>
<td>• <strong>Funding</strong>: hired part-time consultant for coordination, funding workshops and the label development process</td>
</tr>
<tr>
<td><strong>International public/not-for profit actors</strong></td>
<td></td>
</tr>
<tr>
<td>ECSA, East, Central and Southern Africa Health Community</td>
<td>• <strong>Advocacy and policy dialogue</strong>: convened regional meetings with ministers and other public authorities</td>
</tr>
<tr>
<td></td>
<td>• <strong>Technical support</strong>: trained laboratory personnel; guided the development of standards and enforcement mechanisms</td>
</tr>
<tr>
<td>World Bank, Multilateral donor</td>
<td>• <strong>Advocacy and policy dialogue</strong>: intensive dialogue to accelerate the development of standards and regulation, media campaigns</td>
</tr>
<tr>
<td></td>
<td>• <strong>Stakeholder coordination</strong>: facilitated NFFA meetings; bilateral consultations</td>
</tr>
<tr>
<td></td>
<td>• <strong>Technical support</strong>: facilitated development of national standards, regulations and related guidelines and manuals</td>
</tr>
<tr>
<td></td>
<td>• <strong>Funding</strong>: full-time resource for coordination; procurement of laboratory equipment and chemicals</td>
</tr>
<tr>
<td>GAIN, Global Alliance for Improved Nutrition</td>
<td>• <strong>Funding</strong>: funded activities including dialogue with industry, development of an measurement and evaluation plan, funding of NFFA meetings and development of a more comprehensive social marketing campaign</td>
</tr>
<tr>
<td>International foundation for partnerships to end malnutrition</td>
<td></td>
</tr>
<tr>
<td>DFID, Department for International Development</td>
<td>• <strong>Funding</strong>: funded implementation of food fortification activities</td>
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<tr>
<td>Donor agency of the UK government</td>
<td></td>
</tr>
<tr>
<td>HKI, Helen Keller International</td>
<td>• <strong>Technical support</strong>: manages funds of GAIN and DFID to implement activities around stakeholder coordination, procurement of premix, and development of a social marketing campaign (implementation will be outsourced)</td>
</tr>
<tr>
<td>International NPO working to prevent blindness and reduce malnutrition</td>
<td></td>
</tr>
<tr>
<td><strong>National public actors</strong></td>
<td></td>
</tr>
<tr>
<td>MoHSW, Ministry of Health and Social Welfare</td>
<td>• <strong>Defining rules</strong>: made commitments on the international level to advance food fortification; signed standards</td>
</tr>
<tr>
<td></td>
<td>• <strong>Funding</strong>: funds and controls critical public bodies TFNC and TFDA</td>
</tr>
<tr>
<td>TFNC, Tanzania Food and Nutrition Center</td>
<td>• <strong>Advocacy and policy dialogue</strong>: raised awareness among stakeholders on the need for fortification, developed guidelines, provided technical expertise for standard setting</td>
</tr>
<tr>
<td>Public center under the MoHSW to promote improved nutrition</td>
<td>• <strong>Stakeholder coordination</strong>: led the establishment and acts as the secretariat of the NFFA</td>
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</table>
### ACTOR

<table>
<thead>
<tr>
<th>National public actors continued</th>
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<tbody>
<tr>
<td><strong>NFFA</strong> National Food Fortification Alliance</td>
</tr>
<tr>
<td>Multi-stakeholder alliance, secretariat at TFNC</td>
</tr>
<tr>
<td><strong>TFDA</strong> Tanzania Food and Drug Authority</td>
</tr>
<tr>
<td>Regulatory body responsible for controlling the quality, safety and effectiveness of food and drugs, under the MoHSW</td>
</tr>
<tr>
<td><strong>TBS</strong> Tanzania Bureau of Standards</td>
</tr>
<tr>
<td>Agency under the Ministry of Industry, Trade and Marketing responsible for standard setting and control</td>
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<table>
<thead>
<tr>
<th>National private actors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East Coast Oil and Fats Ltd.</strong> Large national producer of oil and soap</td>
</tr>
<tr>
<td><strong>Murzah Oil</strong> Large national producer of oil and soap</td>
</tr>
</tbody>
</table>

### ROLES

<table>
<thead>
<tr>
<th>Stakeholder coordination: forum for relevant stakeholders to exchange views and agree upon actions; provided input to draft standards and label (Members: public: MoH, MIT, MoA, TBS, TFDA, TFNC, SIDO, private: IHFA, Power Foods, Tropical Foods, SS Bakhresa, Media, PSI, Food manufacturers and Consumer Association, Chamber of Commerce, academia, NGO, Multilaterals: UNICEF, WFP, World Bank, WHO, ECSA)</th>
</tr>
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<tbody>
<tr>
<td>Monitoring and evaluation: controls the compliance with mandatory fortification</td>
</tr>
<tr>
<td>Defining rules: draft standards for fortification of oil</td>
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<tr>
<td>Technical implementation: technical setup, procurement and product labeling to sell fortified oil</td>
</tr>
<tr>
<td>Technical implementation: technical setup, procurement and product labeling to sell fortified oil</td>
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</table>

Now that the process is moving into implementation phase, other players with new roles may join the ecosystem. For example, it is critical that consumers learn about fortification and its benefits. NGOs specialized in social marketing may play a role in raising awareness. HKI is currently working on the development of a social marketing strategy, and will outsource implementation to another organization.
3 Strengthening Inclusive Business Ecosystems

In order to reach low-income consumers with fortified food, systemic change is required. Even though companies market fortified foods with a commercial success mainly to high- and middle-income consumers, this individual approach does not work in the low-income market. Here, consumers are typically not aware of the negative effects of micronutrient deficiency and the benefits of fortified food. Even if they are, they often cannot afford to buy premium products, since there are tough trade-off decisions to make with an income of $2-5 per day.

To create a market for fortified oil in the low-income segment, public partners need to come in to fulfill three critical roles: raise awareness, set standards and pass regulation. The private sector is not legitimized to take on the first role, and does not have the credibility and authority to take on the second role. In order to be accepted, policies have to be grounded in broad-based support from critical stakeholders, which can only be achieved through stakeholder dialogue. Therefore, a national platform is required as a space to lead this dialogue and the process towards fortification.

In this setting, SAFO as a project-based alliance took the role of strengthening and accelerating such national processes. By joining forces, BASF with its technical knowhow and credibility in the private sector, and GIZ with its convening capacity and credibility in the public sector, could fill critical gaps within these national processes. SAFO never tried to start or lead national processes. A project-based alliance is the right structure to achieve well-defined objectives within a limited timeframe.

3.1 Strategies

SAFO worked with a targeted approach and toolbox in all its countries of implementation. Even though each country differed in terms of concrete malnutrition challenges, actor system and process, this core approach still enabled the SAFO team to learn from the others’ experiences and create a common body of knowledge. SAFO was thus designed for replication and scale up.

The ‘tools’ SAFO used were all designed to enhance the systems it operated within. In the case of Tanzania, SAFO employed the following strategies:

- **Ecosystem research**: Intervention in each country was preceded by thorough research on the local opportunities and challenges of food fortification. A detailed stakeholder mapping, including interviews with key stakeholders on the ground, informed the concrete approach per country. One critical question during the mapping was who or what acts as a platform on a national level to coordinate the various stakeholders, and who or what is driving the agenda in what role.

- **Stakeholder coordination**: Based on the stakeholder mapping, SAFO set up workshops with all the required stakeholders. Besides international experts, critical local players were asked to speak during the workshops, thus engaging and encouraging existing champions.

- **Strengthening national platforms**: SAFO collaborated closely with the national platform, and meetings were usually convened by the national platform. In some cases, like in Tanzania, this external impetus helped to revive and revitalize a national platform that had lost its momentum.

- **Creating shared vision**: The main aim of the kick off workshop and the following design process was to create shared vision among all stakeholders on the objectives to scale up nutrition and the ways to achieve those objectives. Stakeholders jointly identified the need and aim, remaining barriers, and defined next steps and responsibilities for each stakeholder. SAFO filled critical gaps by taking responsibility for steps nobody else was in the position to assume.
• **Information sharing:** The initial workshop was used to update national stakeholders on international developments and best practices regarding food fortification. It also allowed stakeholders to update each other on relevant activities of their own organizations. In the process that followed, information sharing continued on an on-demand basis, clarifying technical questions, or learning more in detail from experiences in other countries.

• **Capacity building:** BASF’s main role was to build the capacity of local producers to establish food fortification processes. GIZ worked with public agencies and the national platform to build the capacity for standard setting and enforcement.

As part of the developpp.de program, SAFO was confined to a three year time frame, extended for two more years. Therefore, the initiative could only take on activities that could safely be implemented within this period and deliberately stayed away from activities that required a longer-term engagement. These included activities that are critical for the successful establishment of mandatory food fortification, such as policy dialogue or awareness-raising among consumers. In the case of Tanzania, it was a lucky coincidence that the World Bank came in to take on dialogue with the public bodies, who were hampering progress, and brought GAIN and HKI in board for the awareness raising. In cases where these long-term activities don’t have a natural owner, SAFO also works to build up capacities that can fill these gaps.

### 3.2 Structure

SAFO is a project-based alliance. BASF and GIZ have joined forced to achieve their individual goals more effectively by working closely together: BASF seeks to broaden the market for fortificants and engage in strategic Corporate Social Responsibility with the attendant benefits of increased brand recognition, improved employee recruitment and retention, and more. GIZ aims to reduce micronutrient deficiency, thus strengthening people’s health and their opportunities in life. As we have already seen, both partners contributed critical capacities, which enable a systemic approach neither could implement by itself.

SAFO is not an organization of its own but an alliance of two partners. Because the success of the SAFO approach depended fully on the contribution of both partners, the collaboration requires a formal structure. After all, each organization put its reputation and investment on the line, which would be damaged or lost if the other organization did not follow through with its commitments. GIZ would risk its credibility among governments and civil society if it started a process with a private partner, and BASF would not be available for technical questions, or would overstep boundaries and enter into the political process, thus abusing the legitimacy of GIZ in this domain. Likewise, BASF would waste its investment if it spent time and resources on building the capacity of local producers, if GIZ could not advance the process towards a label and standards.

The formal partnership agreement between GIZ and BASF for SAFO clearly defined how the project-based alliance was to be executed. It stated the joint objectives, defined quantitative and qualitative targets and set a timeframe. The alliance was launched in 2008 and aimed to benefit more than 100 million people in several countries through fortified staple food by 2012. It describes the responsibilities of each partner and what resources each would contribute. Together, the partner contribute resources worth €2.8 million towards the whole initiative, with BASF’s share at 54%. With this, the agreement created enough alignment and security while leaving enough flexibility for detailed implementation planning and adjustments over the course of the project. SAFO was set up within the framework of the developpp.de program of the BMZ. This program defines basic principles for public-private partnerships for development and thus facilitates the setup of individual partnerships.
Governance and organization
SAFO was implemented by a project team. The team consisted of members from both organizations. BASF and GIZ each had a global coordinator who collaborated closely and managed processes within their organizations. This structure was replicated at the local level. For each country, GIZ had designated a local project coordinator and BASF had defined a local representative. In Tanzania, this role was taken by a representative of a local wholesale partner of BASF.

Measurement and evaluation
The project coordinators tracked the quantitative targets of the initiative. To this end, annual progress reports had to be submitted by each country.

In addition, the initiative was evaluated by an external auditing team as part of the evaluation routine of GIZ.

3.3 Combination of structures
SAFO is just one structure BASF uses to establish inclusive business ecosystems for food fortification around the globe. With its food fortification initiative, it collaborates with many different players and platforms.

Private initiative
Ultimately, BASF is pushing the agenda as a private initiative to establish markets for fortified food around the world, combining its economic interests with humanitarian objectives. Thus, food fortification is part of BASF’s sustainability strategy.

Project-based alliances
SAFO itself combined various structures. As a project-based alliance, it built on and strengthened existing national platforms through targeted interventions. It worked closely with local companies to develop a CSR business case in order to motivate the private initiative of these players.

BASF is also involved in other project-based alliances. In 2010, BASF joined forces with the Micronutrient Initiative, an NGO working to eliminate vitamin and mineral deficiencies, and the UN Global Compact, to host “Addressing Malnutrition at the Base of Pyramid (BoP),” a Technical Partnership Dialogue on November 8-9 at the Millennium UN Plaza Hotel in New York City. The event brought together nutrition stakeholders to raise awareness, create a learning platform and initiate programs that address hunger and malnutrition worldwide. Close to 100 nutrition experts from the private sector and international developmental agencies attended.

BASF’s Sustainability Strategy
BASF states its purpose as “We create chemistry for a sustainable future”. With a view to the world’s growing population and limited resources, the company defines three major areas in which innovations based on chemistry will play a key role: resources, environment and climate; food and nutrition; and quality of life. The sustainability strategy of BASF is embedded in the day-to-day activities of the company. Its aims are to minimize risks, establish strong relationships with internal and external stakeholders, and take advantage of business opportunities. For example, the company fosters R&D and innovation in more sustainable products and solutions.

Food Fortification is a flagship social responsibility initiative of BASF. Its aim is to address a humanitarian challenge in an economically sustainable way. Through its product solutions, technical assistance, scientific capacities and partnerships with academic and public-interest organizations, BASF engages in programs in over 40 developing countries to help alleviate vitamin A malnutrition. These activities contribute to the achievement of MDG 1 – the eradication of extreme poverty and hunger.

Source: http://www.basf.com/group/sustainability_en/index; www.food-fortification.com
BASF has also collaborated with Maplecroft, a company providing risk analysis and mapping, to produce maps that illustrate the challenges of vitamin and mineral deficiencies around the world. These maps help to share complex yet critical information in an intuitive way and thus raise awareness among stakeholders on the need for food fortification.

**Platforms**

On the global level, BASF is a member of the GAIN (Global Alliance for Improved Nutrition) Business Alliance. This platform brings together companies, government, NGOs, international organizations and academic and research institutions to work towards a world without malnutrition. The platform convenes stakeholders and shares information. It actively facilitates partnerships and the setup of national platforms or fortification alliances, including funding. It also creates common infrastructure, including a premix facility, which supports governments and companies in procuring high quality fortificant premix.

These various structures are not separate from each other. In fact, there is a global stakeholder ecosystem around malnutrition, which collaborates through a variety of structures and initiatives to advance the food fortification agenda. As part of this ecosystem, BASF can create synergies among these various initiatives and its own programs, and, in return, feed into the continuous learning process on a global level.
As a project-based alliance, SAFO has to embed itself into existing structures and processes to drive systemic change. Since it is working under a strict timeline of only five years, it could not advance the establishment of inclusive business ecosystems for food fortification alone holistically (nor did it aim to do so), but had to focus on clearly defined interventions. The case of Tanzania shows what is required to operate successfully within this structure.

**Understanding the local ecosystem**
The key to plugging in successfully into an existing ecosystem is to have a detailed sense of what that ecosystem looks like. The mapping must go beyond formal structures and uncover informal networks and relationships as well as personal agendas of critical actors. In Tanzania, SAFO was very effective in bringing all the right actors to the table for the kickoff workshop. Yet, there was a moment of dissonance when the personal sensitivities of one participant were not fully recognized. To avoid such pitfalls, it is advisable to work closely with or even hiring people who are already very “plugged in” to the local ecosystem.

**Working with "embedded" people**
To strengthen the ecosystem, it is best to work with people who are embedded within the system and intimately understand its dynamics and participants. It takes time and much personal interaction to become embedded and create trust among stakeholders. Rotating people in and out would be deadly for any systemic initiative. The role of personal networks to organize systemic change cannot be overestimated.

**Running an open, participatory process**
SAFO did not enter Tanzania with a predefined analysis and action plan. Rather, it involved all local stakeholders in jointly creating a vision and an action plan through an open, participatory process. Good preparation and facilitation is critical to produce concrete outcomes in such a process. GIZ hired the Collective Leadership Institute, an NGO specialized in facilitating multi-stakeholder processes, for SAFO in Tanzania. The institute conducted research for the preparation of the workshop and spoke with all stakeholders individually in order to eliminate possible reservations. This intensive preparation was critical for the good attendance and positive attitude during the first workshop. By acknowledging the important role of each stakeholder, SAFO could also engage all stakeholders to take responsibility. Eventually, only few small gaps had to be filled by the initiative itself. This approach helped SAFO to operate in several countries and achieve broad-based results with limited resources and time.

**Staying within borders**
For local stakeholders, it was important to see that SAFO stayed within the boundaries they had defined jointly during the workshop. On the one side, they felt safe that SAFO would not overstep boundaries and interfere with their own agenda and plans. In addition, they could trust that BASF as a private company would not abuse SAFO to interfere with policymaking processes and create undue advantage for itself, since SAFO had not taken a role in defining standards and pushing regulation, other than developing a label. On the other side, stakeholders knew that if they did not implement their own tasks, progress would be stalled, since SAFO would not simply take over. They had to do their homework.

**Creating ownership and enforcement mechanisms**
Without bringing all relevant actors on board, an alliance of just a few parties cannot move a whole system to a new equilibrium. Others need to take true ownership for their part. An open, participatory process can create this ownership, staying within borders helps to maintain it. A clear process with milestones and follow-ups helps to keep the momentum. But what if one actor simply refuses to fulfill its commitments? In Tanzania, delays due to bureaucracy seriously slowed down the development of the national standards by TBS, and neither SAFO nor the other local stakeholders had a way to enforce this commitment. Had the World Bank not stepped in and escalated the process to the highest ministerial level, the whole initiative might have been delayed. Thinking through
such critical roles, how to strengthen ownership of those roles, and how to create enforcement mechanisms should be part of the design of ecosystem change initiatives. The approach of SAFO to remediying these risks is to build capacities where they are missing.

**Use vs. lose the momentum:**
SAFO used the momentum after first workshops very well. It followed up quickly with meetings and rapidly established the label development task force. This resulted in continued voluntary commitment of label task force members from the public and private sectors to quickly proceed to the label development. However, the initiative had to meet capacity constraints at the end of the process, which slowed the momentum. In particular with multi-country projects, resources should be allocated generously. Because multi-stakeholder processes are very time-consuming, having the capacity to keep the momentum going is essential.

**Outlook**
SAFO has proven the value of a project-based alliance between a public and an industry partner for strengthening inclusive business ecosystems for food fortification. In Tanzania and several other countries, it has shown that its approach of strengthening local platforms by convening stakeholders and filling gaps can help significantly in advancing national food fortification processes with limited resources. By operating in several countries parallel, SAFO has also created significant knowhow on how to replicate the approach in different settings. The alliance ends in 2012. BASF and GIZ are currently reviewing the results of the alliance in order to plan for individual or joint next steps.

Project-based alliances are by definition time-bound, and usually they have just a few years to prove their value. Often, they are created with the explicit aim to develop a new model. But such an investment cannot reap its full benefits within just a few years. It is time to carefully review the alliance approach and understand how the greatest impact can be achieved. If a successful model is established, how can it be rolled out? Will another alliance be required? Or is a longer-lasting structure, like a new organization, more attuned to implement a scale up? Ideally, these questions should be clarified while the model is being tested, so that a new phase can begin seamlessly once the time of the alliance is over. Too many pilots at the base of the pyramid remain just pilots. To achieve real impact, it is critical to invest in replication.
Appendix A: List of Stakeholders Consulted

In alphabetical order by last name

Dr. Andreas Blüthner, BASF
Janneke Hartvig Jorgensen, World Bank
Dinesh Khanna, Murzah Oil Mills Ltd.
Claudia Kowald, GIZ
Celestin Mgoba, Tanzania Food and Nutrition Centre
Nyangasa Mhina, East Coast Oils and Fats Ltd.
Anna Maria Mpanda, Consultant to GIZ
Manoj Kumar Prajapati, East Coast Oils and Fats Ltd.
Minira Prosser, formerly GIZ
Vijay Raghavan, East Coast Oils and Fats Ltd.
Raymond Wigenge, Tanzania Food and Drug Authority
Leonie Vierck, GIZ
Appendix B: Literature


Websites:

BASF Food Fortification: www.food-fortification.com

ECSA: hwww.ecsahc.org

GIZ: http://www.gtz.de/en/leistungsangebote/31422.htm

Appendix C: List of abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BoP</td>
<td>Base of the Pyramid</td>
</tr>
<tr>
<td>CCD</td>
<td>Chama cha Mapinduzi (Party of the Revolution)</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<tr>
<td>BMZ</td>
<td>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development)</td>
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<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
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<tr>
<td>ECSA</td>
<td>Eastern, Central and Southern African Health Community</td>
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<tr>
<td>GAIN</td>
<td>Global Alliance for Improved Nutrition</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GIZ</td>
<td>Gesellschaft für Internationale Zusammenarbeit GmbH (German development agency)</td>
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<tr>
<td>HKI</td>
<td>Helen Keller International</td>
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<tr>
<td>MoHSW</td>
<td>Ministry of Health and Social Welfare</td>
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<td>NFFA</td>
<td>National Food Fortification Alliance</td>
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<tr>
<td>SAFO</td>
<td>Strategic Alliance for the Fortification of Oil and Other Staple Foods</td>
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<tr>
<td>TBS</td>
<td>Tanzania Bureau of Standards</td>
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<tr>
<td>TFDA</td>
<td>Tanzania Food and Drug Authority</td>
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<tr>
<td>TFNC</td>
<td>Tanzania Food and Nutrition Centre</td>
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Appendix D: Endnotes

1. These lessons refer solely to the question of how to strengthen inclusive business ecosystems. They do not consider lessons for establishing and managing project-based alliances (or ‘partnerships’) successfully.
2. NFFA (2011)
3. BASF (2009) Microcapsules against malnutrition
4. NFFA (2011)
6. NFFA (2009) The costs are based on the net present value of the reduced value added to the economy, assuming a working life of 37 years (starting at age 15 and continuing until age 52; the current life expectancy), and a 5% discount rate. The costs are adjusted for the current participation rate (2006 ILFS) in the workforce of 89.6% (including agriculture).
7. NFFA (2009)
8. NFFA (2009)
**About the Author**

**Christina Gradl** has spent more than ten years researching and advising companies on CSR, sustainable development, and inclusive business. She is a fellow of the Corporate Social Responsibility Initiative at the Harvard Kennedy School and a strategic advisor to the UNDP Growing Inclusive Markets Initiative. She is also a founder and managing director of Endeva, an independent research and consulting institute working towards enterprise solutions for development.

Christina has co-authored more than ten publications on inclusive business. With Beth Jenkins, she wrote the UNDP report “Creating Value for All: Strategies for Doing Business with the Poor.” In collaboration with the German Federal Ministry for Economic Cooperation and Development and GIZ, she developed, inter alia, the "Inclusive Business Guide." Besides a focus on the energy, insurance, and agribusiness sectors, Christina is particularly interested in the ecosystems of various players, their individual contributions and their collaboration, that make inclusive businesses work.

Currently, Christina completes a PhD in economics and business strategy on the business model concept. She holds an MSc in Philosophy of Public Policy from London School of Economics and a Masters degree in International Business and Regional Studies from the University of Passau, Germany. She was the Kofi-Annan-Fellow on Global Governance 2006/07 and an associate with McKinsey & Company.

**About the CSR Initiative at the Harvard Kennedy School**

The Corporate Social Responsibility Initiative (CSRI) at the Harvard Kennedy School’s Mossavar-Rahmani Center for Business and Government (M-RCBG) is a multi-disciplinary and multi-stakeholder program that seeks to study and enhance the public contributions of private enterprise. The initiative explores the intersection of corporate responsibility, corporate governance, and public policy, with a focus on analyzing institutional innovations that enhance governance and accountability and help to achieve key international development goals. It bridges theory and practice, builds leadership skills, and supports constructive dialogue and collaboration among business, government, civil society and academics. Founded in 2004, the CSR Initiative works with a small Corporate Leadership Group consisting of global companies that are leaders in the fields of corporate responsibility, sustainability or creating shared value. The group currently consists of the following companies: Abbott Laboratories; Chevron; The Coca-Cola Company; ExxonMobil; Intercontinental Hotels Group; Microsoft; Nestlé; SAP; and Unilever. The Initiative also works with other leading CSR and sustainability organizations, government bodies, non-governmental organizations and companies to leverage innovative policy research and examples of good practice in this field.
Related CSR Initiative Reports

2011
Tackling Barriers to Scale: From Inclusive Business Models to Inclusive Business Ecosystems
Christina Gradl and Beth Jenkins

Expanding Opportunity and Access: Approaches that harness markets and the private sector to create business value and development impact
Jane Nelson

2010
Scaling Up Inclusive Business: Advancing the Knowledge and Action Agenda
Beth Jenkins, Eriko Ishikawa, Alexis Geaneotes, John H. Paul (CSRI with IFC)

Business Partnerships for Development in Africa: Redrawing the Boundaries of Possibility
Richard Gilbert and Beth Jenkins (CSRI with Business Action for Africa)

Unleashing the Power of Convergence to Advance Mobile Money Ecosystems
Piya Baptista and Soren Heitmann (CSRI with IFC)

2009
Corporate Partnerships for Entrepreneurship: Building the Ecosystem in the Middle East and Southeast Asia
Shannon Murphy

Accelerating the Development of Mobile Money Ecosystems
Jonathan Dolan (CSRI with IFC)

Jane Nelson, Eriko Ishikawa and Alexis Geaneotes (CSRI with IFC)

Business Linkages: Enabling Access to Markets at the Base of the Pyramid
Beth Jenkins and Eriko Ishikawa (CSRI with IFC)

2008
Supporting Entrepreneurship at the Base of the Pyramid through Business Linkages
Beth Jenkins, Eriko Ishikawa, Marisol Giacomelli, and Emma Barthes (CSRI with IFC and IBLF)

Developing Mobile Money Ecosystems
Beth Jenkins (CSRI with IFC)

2007
Expanding Economic Opportunity: The Role of Large Firms
Beth Jenkins

The Role of the Extractive Sector in Expanding Economic Opportunity
Holly Wise and Sokol Shtylla

The Role of the Financial Services Sector in Expanding Economic Opportunity
Christopher N. Sutton and Beth Jenkins

The Role of the Food and Beverage Sector in Expanding Economic Opportunity
Ramyas Krishnaswamy and Marc Pfitzer

The Role of the Health Care Sector in Expanding Economic Opportunity
Adeeb Mahmud and Marcie Parkhurst

The Role of the Information and Communications Technology Sector in Expanding Economic Opportunity
William J. Kramer, Beth Jenkins and Robert S. Katz

The Role of the Tourism Sector in Expanding Economic Opportunity
Caroline Ashley, Peter DeBrine, Amy Lehr, and Hannah Wilde

The Role of the Utilities Sector in Expanding Economic Opportunity
Christopher N. Sutton

Business Linkages: Lessons, Opportunities, and Challenges
Beth Jenkins, Anna Akhalkatsi, Brad Roberts, and Amanda Gardiner (CSRI with IFC and IBLF)

Building Linkages for Competitive and Responsible Entrepreneurship: Innovative Partnerships to Foster Small Enterprise, Promote Economic Growth, and Reduce Poverty in Developing Countries
Jane Nelson

2006
Tanzania: Lessons in Building Linkages for Competitive and Responsible Entrepreneurship
Tamara Bekefi

Viet Nam: Lessons in Building Linkages for Competitive and Responsible Entrepreneurship
Tamara Bekefi

Business as a Partner in Overcoming Malnutrition: An Agenda for Action
Jane Nelson (CSRI with The Conference Board and IBLF)

Business as a Partner in Strengthening Public Health Systems in Developing Countries: An Agenda for Action
Jane Nelson (CSRI with the Conference Board and IBLF)

Investing in Social Innovation: Harnessing the Potential of Partnership between Corporations and Social Entrepreneurs
Jane Nelson and Beth Jenkins