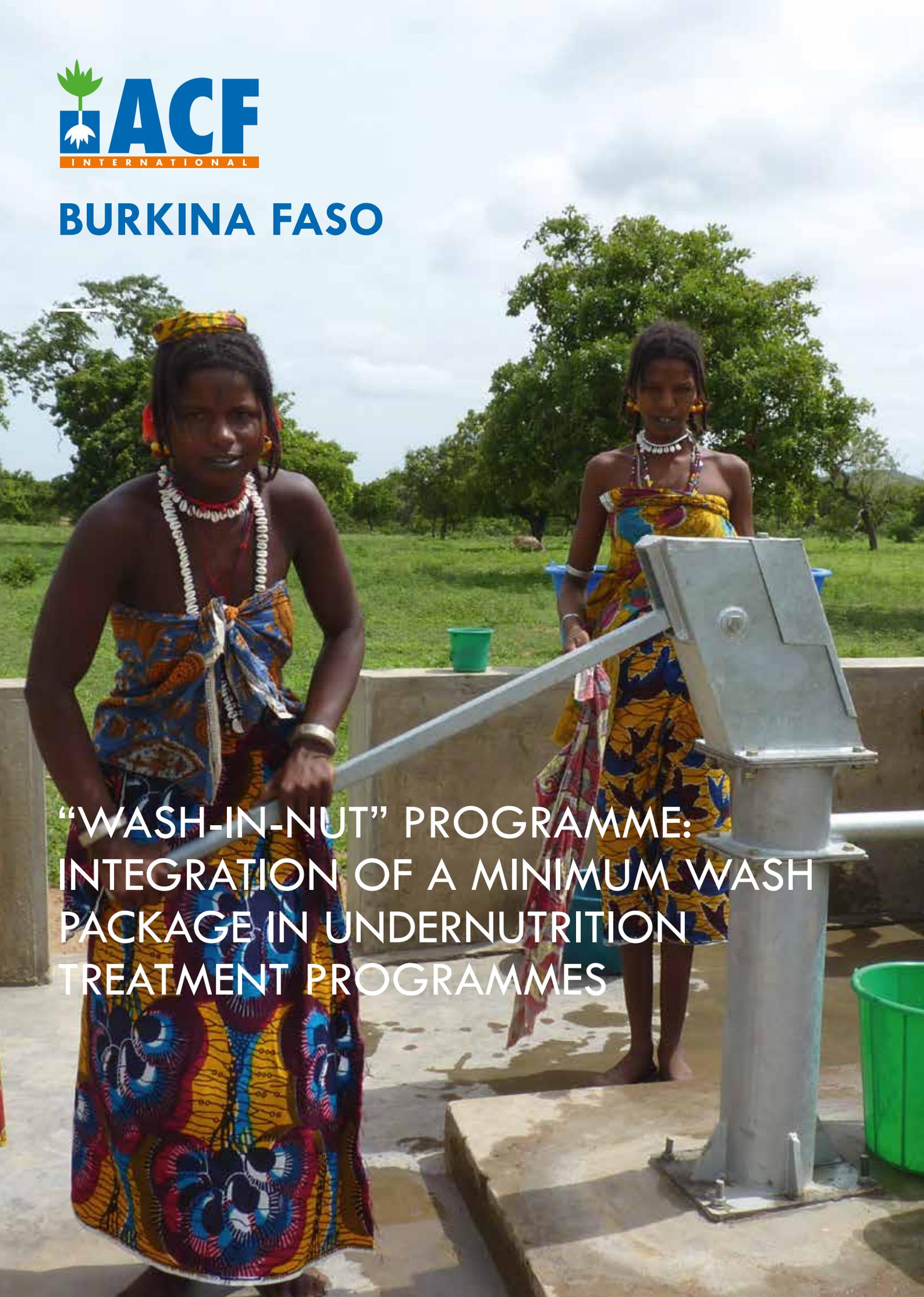


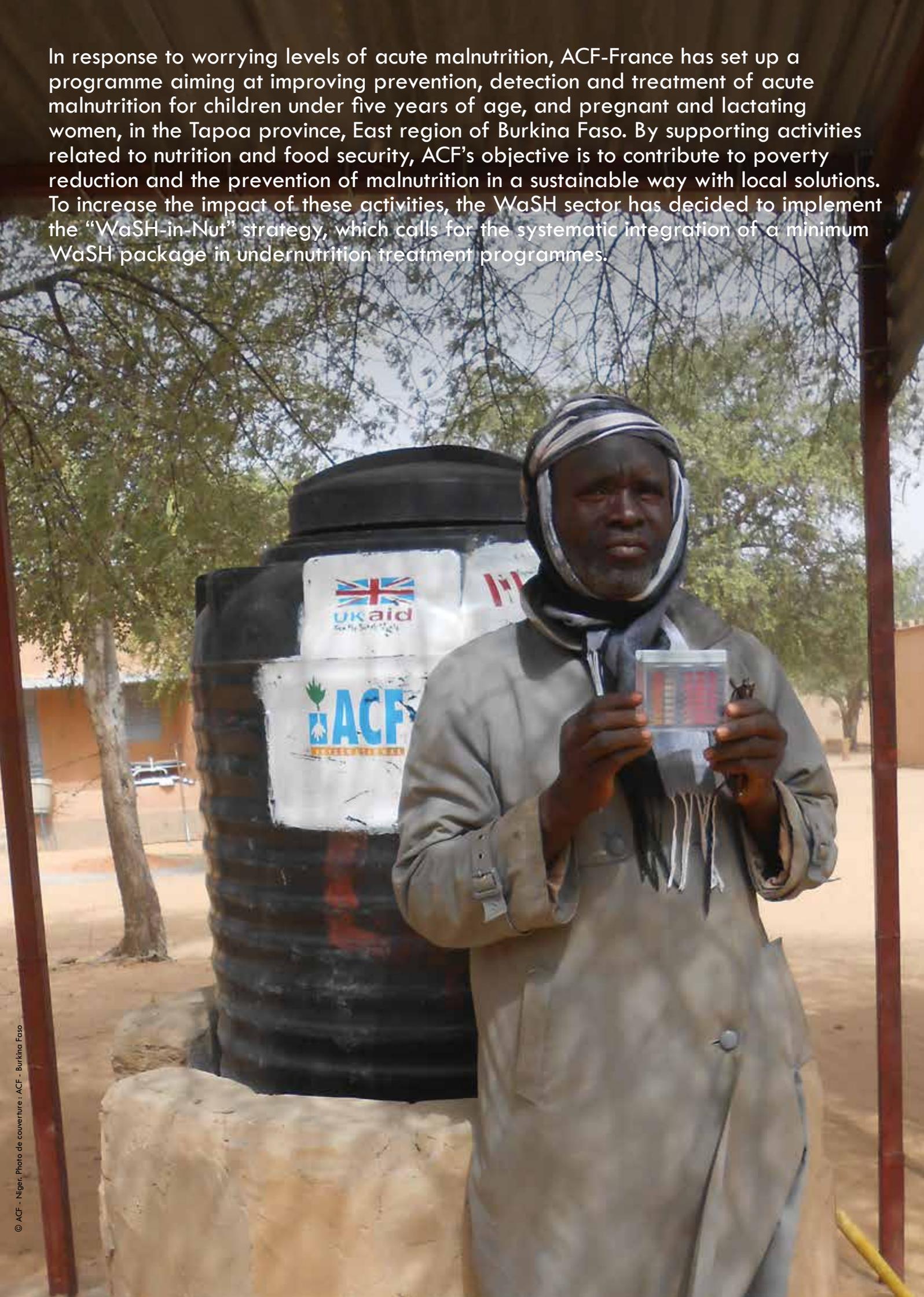


BURKINA FASO

A photograph of two women in traditional Burkinabe attire standing at a hand-operated water pump. The woman on the left is operating the pump handle, while the woman on the right stands nearby. They are in an outdoor setting with green trees and a clear sky in the background. Several green plastic buckets are visible on the ground and on a concrete ledge.

“WASH-IN-NUT” PROGRAMME:
INTEGRATION OF A MINIMUM WASH
PACKAGE IN UNDERNUTRITION
TREATMENT PROGRAMMES

In response to worrying levels of acute malnutrition, ACF-France has set up a programme aiming at improving prevention, detection and treatment of acute malnutrition for children under five years of age, and pregnant and lactating women, in the Tapoa province, East region of Burkina Faso. By supporting activities related to nutrition and food security, ACF's objective is to contribute to poverty reduction and the prevention of malnutrition in a sustainable way with local solutions. To increase the impact of these activities, the WaSH sector has decided to implement the "WaSH-in-Nut" strategy, which calls for the systematic integration of a minimum WaSH package in undernutrition treatment programmes.





Humanitarian Context

Background

The main risk factor for children under five years of age, undernutrition is responsible for the deaths of more than 40,000 children each year in Burkina Faso¹: results of the national nutritional survey conducted in August 2010² showed a prevalence of global acute malnutrition (GAM) of 10.5% and severe acute malnutrition (SAM) of 1.4%, while underweight reached 31.4% and chronic malnutrition 28.9%. Waterborne diseases are very common and contribute to aggravating the nutritional situation of the population.

The population is massively dependent on rain fed agriculture, which is severely limited by the unpredictable nature of the Sahel rainfall patterns, by a limited access to agricultural inputs and by the progressive impoverishment of soil. A significant part of the rural population lives in poverty and is in a state of chronic food insecurity. Despite efforts made through national policies, access to drinkable water, sanitation, education and health remains limited.

The national nutrition survey³ showed that the rate of prevalence in the East region remained above the alert threshold, with GAM⁴ at 12.6% and SAM⁵ at 1.7%.

The Tapoa province is situated in the East region, bordering Niger and Benin. The population, an estimated 430,169 inhabitants in 2013⁶, is spread among eight largely rural communes: Botou, Diapaga, Kantchari, Namounou, Partiaga, Tambaga, Tansarga, and Logobou. The capital of the province is Diapaga.

The province is covered by the Diapaga health district. This district is divided into 26 health areas, each containing health centre, locally called CSPS⁷. The Diapaga health district

initially contained 27 CSPS and a CMA⁸ in 2009, and these figures have increased steadily over time (31 CSPS and a CMA in 2013).

Initial Assessment

In 2008, ACF undertook a food security evaluation followed by an analysis of the causes of malnutrition (NCA⁹). These two surveys, undertaken at household level, highlighted the importance of a secure access to water and sanitation, as well as adapted hygiene practices, to reduce the incidence of diarrhoeal diseases which are a major cause of malnutrition in children under five years of age in this province.

Indeed, access to water in the East region is among the lowest in the country: only 47.3% of people have access to drinkable water, compared with a national average of 58.5%¹⁰. In Tapoa province, the situation is worrying, as the access rate is even declining: it went from 42.31% in 2010 to 39.81% in 2011. Access to sanitation in this region is very poorly developed: 0.4% against 3.1% nationally. These shortfalls have a serious impact on the health situation of the population.

Further, the health district of Diapaga has been selected for three reasons: the severity of the acute malnutrition problem in the health district; the strong political will of the central health authorities to establish collaboration with the health authorities of the Diapaga health district; and the willingness of ACF to ensure the continuity of the programme through the various activities it undertakes.

Linkages between water, sanitation, hygiene and undernutrition: current issues.

Numerous questions remain on the exact nature of the interactions that exist among these public health issues. Some links have been established for a long time among these fields, but that does not make it easy to conclude that interventions in water, sanitation and hygiene (WaSH) will reduce prevalence of or improve treatment of undernutrition.

Particularly in children, an infectious disease will cause a series of psychological and physiological phenomena, which make them more vulnerable to wasting, stunting and reduced cognitive development.

Some studies* have shown the positive impact of a WaSH intervention on stunting in children (chronic malnutrition). However, there is no scientific evidence yet of this impact on acute malnutrition. Providing such evidence is a strategic priority for ACF.

A WaSH intervention effectively reduces risks of diarrhoea and tropical enteropathy**, but how long should it last to prevent or correct a deficit of height and weight? Should it be undertaken preventively for undernutrition? Or curatively, to reduce duration and improve effectiveness of treatment?

* cf: *The Cochrane Collaboration, Interventions to improve water quality and supply, sanitation and hygiene practices, and their effects on the nutritional status of children (Review), The Cochrane Library, 2013, Issue 8*

** *Deterioration of the intestinal wall owing to frequent ingestion of faecal bacteria, which causes a reduction in the assimilation of nutrients, without apparent symptoms.*

¹ WHO Countdown to 2015, 2012 Report. Burkina Faso

² SMART survey conducted by the Directorate for Nutrition of the Ministry of Health

³ SMART survey of October 2012

⁴ GAM (global acute malnutrition)

⁵ SAM (severe acute malnutrition)

⁶ According to the projections of the INSD (National Institute for Statistics and Demographics)

⁷ CSPS: Centre de Santé et de Promotion Sociale (Health and Social Promotion Centre)

⁸ CMA: Centre Médical avec Antenne chirurgicale (Medical Centre with Surgical Unit)

⁹ NCA: Nutrition Causal Analysis

¹⁰ PN-AEPA joint review, March 2012



Programme overview and rationale

Since July 2008, ACF has been implementing a malnutrition prevention and treatment programme in Tapoa province, which **aims to improve the prevention, detection and treatment of acute malnutrition for children under five years of age, and pregnant and lactating women**, through:

- Support to the Regional Health Directorate of the East region and the nutrition and food security surveillance system at regional level;
- Support to the Diapaga health district for the detection, early referral and quality treatment of acute undernutrition;
- Distribution of complementary foods to prevent undernutrition.

To support the undernutrition treatment and prevention activities, the “WaSH-in-Nut” strategy has been implemented.

The goal of this strategy is to strengthen the link between the WaSH and Nutrition sectors, and more specifically between infections that may be nosocomial (contracted within the health centre) or contracted at home and the nutritional condition of children. The implementation of these activities has therefore been the subject of an integration between two sectors of ACF (WaSH and Nutrition) and a collaboration with head nurses (ICPs),

The “WaSH-in-Nut” strategy is a tool which targets, in a specific and integrated way, mother-malnourished children couples, from health infrastructure to communities. It was developed by UNICEF in 2012 in partnership with humanitarian actors including ACF.

This strategy recommends three main groups of activities:

1. Improving WaSH conditions in nutrition centres and reducing the risks of nosocomial infection among children who receive treatment;
2. Providing a hygiene kit and giving advice to families in order to improve treatment and reduce risks of relapse;
3. Improving the WaSH environment in communities at risk of undernutrition to prevent new cases.

the existing WaSH management committees (CoGes)¹¹, mayor’s offices, local service providers and the community.

Two main levels of intervention have been determined:

- **Activities undertaken within health centres:**

- Provision of water treatment kits (for 30 health centres and CREN¹²) and training on their use;
- Construction and restoration of water wells, latrines, laundry areas and showers;
- Training of 30 water point committees;
- Organisation of a consultation framework for the management of water points in health centres;
- Holding of a “clean CSPS” and “clean CM/ CMA” competition.

- **Activities undertaken at community and family level:**

WaSH activities at this level consist in distributing hygiene kits (home water treatment and hand washing kits) to families of malnourished children and promoting hygiene practices for families with malnourished children. Thus, the beneficiaries of the “WaSH-in-Nut” activities are the ones targeted by nutrition activities, which makes it possible to ensure joint health, nutrition and hygiene promotion at community level, while improving the overall impact of the programme.

The main activities of this “WaSH-in-Nut” programme are based on the active participation of the beneficiaries as health agents.

¹¹ CoGes: Comités de Gestion (WaSH management committees): The management committees exist within health centres, in order to provide infrastructure maintenance or hygiene support tasks.

¹² CREN: Centre de Récupération et d’Education Nutritionnelle (Nutritional Recovery and Education Centre)



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Implementation

Targeting and involvement of beneficiaries in the design of the action

Nutrition activities were implemented by ACF in 30 health centers within the health district of Diapaga. 4 of these health centers have been identified to receive «WaSH in Nut» activities at family level.

Households targeted by the «WaSH in Nut» program were by large the beneficiaries of the health centers. Indeed, the specificity of «WaSH in Nut» program is to enhance the impact of nutritional activities through complementary WaSH activities, targeting the same beneficiaries (11,430 individuals in this project), in order to reduce undernutrition treatment duration and risks relapse due to infections. Particular attention is given to the unit «mother/care provider-malnourished child.»

Vulnerable households benefiting from cash transfer activities implemented by FSL¹³ department also received hand washing and home water treatment kits.

For this program as for the previous ones, health authorities have been involved in the design of the action and in its implementation. Consultation workshops with all partners were organized in Diapaga. Activities and planning were discussed and decided upon in close collaboration with the district health authorities, ACF only providing technical and financial support.

Affected populations have been involved in the design of the action through vulnerability surveys and focus groups discussions implemented in target areas during assessment stage. Vulnerability criteria from HEA¹⁴ studies are the result of population inputs.

Construction/rehabilitation of water supply facilities

Execution of the works has been programmed according to the priorities of each health center and based on the budget available.

Within the water supply component, 10 new wells were drilled in both existing CSPS not previously equipped and new CSPS which had just opened. 4 boreholes in need of repair were rehabilitated, and 4 others that did not have superstructures were completed.

Hand washing facilities

Emphasis was placed on achieving hand washing facilities¹⁵ in every health facility in the Diapaga district. These installations have been prioritized in order to ensure proper hand washing for patients and accompanying relatives. These structures are very effective in preventing diarrheal diseases, while maintenance is relatively simple. Health workers have been empowered to transmit the same information to people attending health centers.

Latrines, showers and laundry areas

A total of 16 latrines were built in clinics and maternity hospitals, and additional 6 latrines close to the health gardens managed by women's groups; 25 showers and 2 laundry areas were also created in maternity hospitals.

Establishment and training of management committees

The results of the initial diagnosis revealed dysfunctions in the use and management of WaSH facilities in health centers. Therefore, capacity building activities were initiated towards members of WaSH infrastructures management groups, in order to enable their members to initiate enhance infrastructure management. ACF relied on members of existing CoGes, and involved health workers and some volunteers, for a total of 10 members. Particular attention was given to the participation of women in management bodies. Involvement of nurses and midwives was encouraged, but women's representation remained relatively low.

Two days training sessions were organized in each health facility and revolved around the promotion of hygiene and sanitation in the CSPS: 165 workers from these structures have benefited from capacity strengthening, including 66 health workers, amongst which 16 were specifically trained on drinking water treatment kits.

Organization of "Healthy Environment Days"

To support CoGes in achieving their action plans, "Healthy Environment Days" were organized in each CSPS. Their preparation lied under the responsibility of each CoGes: information to population, selection of the date, etc.). ACF supported the CoGes through sensitizing and motivating participants through distribution of hand washing kits.

These days were also a part of global awareness strategy for the population in general, and for mothers of malnourished children in particular.

Main activity of the day was the general cleaning of all the compound, rooms, and water and sanitation facilities. This allowed users to understand the importance of maintenance of the infrastructures but also the consequences of poor hygiene practices on health. During awareness sessions, emphasize was put on good practices that can significantly reduce diarrheal diseases.

¹³ Food Security and Livelihoods

¹⁴ Household Economy Approach : standardized method to assess households economy

¹⁵ Covered water tanks equipped with a tap, placed on a concrete support, with a piece of soap attached to ensure thorough hand washing.

Programme impacts

WASH kits distribution

Kits distributions were organized in health centers (CSPS kit) and at household level (home water treatment kit and hand washing kit).

In each CSPS, 4 types of kits were distributed: hygiene kit, medical waste management kit, water treatment kit and picture kit to support hygiene promotion. These kits aimed at maintaining cleanliness and water quality in health centers. They included soaps, bleach, trash cans, gloves, boots, kettles, water containers...

Prior to the distributions, awareness sessions on drinking water quality and fecal contamination risk have been organized. Demonstration sessions on hand washing and water chlorination with bleach technique were also conducted.

During the same period, families of 171 malnourished children referred to health centers for treatment also received hand washing and water treatment kits, along with information on their importance and good use.

Organization of « Clean CSPS » contests

- To encourage and motivate Health Centers staff to sustainably develop good hygiene practices, a competition for the «cleanest CSPS» was initiated. The evaluation committee consisted of the ACF team and the Executive District Team (ECD – Equipe Cadre du District). The evaluation criteria were:
- Dynamism of the CSPS team and of existing management committees,
- Management and maintenance of the water point,
- Cleanliness of the yard and treatment rooms,
- Management of hand washing facilities
- The announcement of the contest results happened during annual review workshop. The rank and rating of each CSPS were shared, in order to motivate them to achieve the best possible position.

Monitoring and evaluation of the programme

In 2011, a diagnosis undertaken in Diapaga Health District in order to identify the needs in water, sanitation and hygiene of CSPS and CREN, served as a baseline for the intervention. It provided information on the status of existing water and sanitation installations, their management, and to assess the needs to be covered in order to achieve the national standards with regard to equipment of health centers with WaSH infrastructure.

In addition, CAP surveys were conducted in 2010, 2011 and 2012 to identify and monitor hygiene behaviors and practices of malnourished children and their mothers admitted in CREN or CSPS, as well as health staff.

Monitoring of activities was also achieved through direct observation (via regular supervision), questionnaires to the care recipients and training participants, interviews with health centers staff and CoGes members, and finally reports and monthly meetings with local stakeholders.

A KAP Survey was conducted in 2013 and the results were compared to 2011 survey in order to assess the level of change with regard to health and hygiene practices. A final analysis, based on interviews and observations, was carried out in order to assess the results against the original objectives. The following conclusions were reached:

Diarrheal diseases in children and behaviors

37.9% of children had watery stool in the two weeks preceding the 2013 survey, compared to 47.6% in 2011.

3.9% of mothers had the adequate response behavior, according to the assessment.

Nonetheless, this result needs to be put into perspective; the definition of «adequate behavior in case of diarrhea» is rather restrictive and calls for a set of behaviors not easily fulfilled. This indicator has remained almost at the same level as in 2011 but declined compared to 2012 data. Disaggregation of indicators shows a general decrease between 2012 and 2013.

Access to drinking water

Access to a source of drinking water is a viable indicator of the sanitary condition of a population.

According to the 2011 KAP Survey, people often made a link between water quality and some diseases: 61.4% respondents recognized that water consumption can lead to diseases.

In rural areas¹⁶, water from public tap stands, boreholes and constructed wells is considered drinkable. Additionally, the proportion of individuals having access to drinking water (i.e., water from a pump/borehole/tap stand or tap during the dry season as well as the rainy season) reached 56.4% according to this survey. The same indicator corresponded to 42.9% in 2012 and 44.2% in 2011, reflecting an improvement in access to drinking water.

It was however observed that more than 10% of the respondents usually drink surface water when it is available, during the rainy season.

In the Diapaga health districts, there are currently 30 out of 31 CSPS with a borehole. The remaining CSPS is in the process of being connected with a simplified drinking water supply. However the boreholes constructed in 2009 regularly break down, often due to lack of maintenance.

Use of latrines

The practice of defecating in a latrine is quite uncommon and this practice has remained virtually unchanged between the 2011 and 2013 KAP Surveys. 90.7% of people surveyed defecate outside and 88.5% throw the waste from of children under 5 years old outside.

A cross-analysis of people who do have a latrine in their homes and those who use latrines showed that 100% of people with access to



¹⁶ According to PN-AEPA

Lessons learned and recommendations

latrines nearby actually use them. This shows that these individuals are responding positively to these facilities.

Hand and utensils hygiene

The 2011 KAP Survey showed that 56.4% of respondents claimed knowing that clean water and hand washing limits the transmission of waterborne diseases.

Despite this knowledge, the 2013 KAP Survey showed that only 23.4% of mothers report always washing their hands with soap, as well as their children's hands (18.3%), before meals.

Conclusions and limits of the 2013 KAP Survey

Diarrhea incidence in 2013 reduced compared to 2012 KAP Survey data (37.9% compared to 49.6%).

Even though actions taken against diarrhea have not improved in many households, cases of diarrhea have nonetheless decreased and hygiene indicators have improved from 2011 to 2012. Hand and kitchen utensils washing practices, access to drinkable water and the use of latrines have all improved.

The benefits observed up to this point should be strengthened by community networks becoming better involved in the dissemination of messages about proper hygiene and sanitation practices. The promotion strategy should involve home visits in order to observe household practices up-close. Additionally, despite the support of the project to create family latrines, the level of access to sanitation remains low: strategies need to be developed to allow the project's activities to be easily replicated in this regard. This is the price to pay so that our interventions can have an even bigger impact on the health of those that we help in the future.

Lessons learned

During the implementation of WaSH activities in health centers, ACF faced a range of difficulties. This allowed us to learn lessons on how to improve the way in which future projects should be enhanced:

Water point management

Despite ACF's efforts to support proper use and management of water points, more than half of CSPS do not have the capacity to repair their boreholes when they break down. Local populations take water from these boreholes but do not agree to contribute financially to their maintenance. The existing CoGes do not ensure the management and good use of water and sanitation structures, despite the fact this is one of their roles.

Meetings between CoGes, Water Users Associations and mayor's offices need to take place in order to improve appropriation and proper management of water infrastructures in health centers, in accordance with the reform of water point management system in schools and health centers¹⁷.

The direct involvement of the district management team as well as health agents and village leaders will help achieve project goals, and more importantly change people's behavior.

Recommendations

In order for the «WaSH-in-Nut» strategy to be successfully implemented, the following points need to be considered:

- Involvement and training of community workers ensure enhanced behavior change at community level (long term approach);
- To obtain the best possible results, actions must be coordinated with nutrition actors;
- Involvement of health agents is necessary for more sustainable interventions;
- Involvement of health care personnel in choosing technical options (structures, water treatment, etc.) to enhance appropriation.

- For the scaling up:
- Make sure authorities in charge of nutrition are more involved in the implementation of WaSH-in-Nutrition activities
- Use existing structures and community-based health workers contracted by health districts to ensure sustainability
- Work on integration of Wash-in-Nutrition in national protocols for management of severe acute malnutrition
- Document activities carried out and regularly collect data to inform WaSH-in-Nutrition indicators
- Ensure active and continuous advocacy towards the government (Ministry of Health and Ministry of Water, Hydraulic and Sanitation) and technical and financial partners in order to ensure funding of WASH-in-Nutrition strategy.

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For more information, please refer to the following documents:

- Sahel WaSH in Nut strategy from the Regional WaSH Group
- Rapport diagnostic EAH dans les CSPS de la Tapoa, ACF-Burkina Faso, Mars 2011
- Rapport de capitalization «WaSH In Nut», ACF-Burkina Faso, Octobre 2013

¹⁷ This reform states that if a WaSH CoGes is unable to ensure management of water points, the mayor will transfer responsibility to the village Water Users Association.



This document is part of a series of case studies on ACF nutrition sensitive interventions, aimed at reducing and/or preventing undernutrition. These case studies are developed by the ACF Working Group “Aligning interventions with Nutrition” in order to share experiences and lessons learned on the topic.

All the existing case studies can be downloaded in English and in French here:
<http://www.actioncontrelafaim.org/fr/content/aligning-casestudies>

The objective of the Working Group «Aligning interventions with Nutrition» is to promote and strengthen nutrition sensitive interventions, within ACF and partner organizations. The Working Group supports these operations through collecting and disseminating lessons learned, conducting research, developing tools and guides, and capacity building.

For more information on the “Aligning” approach, refer to the ACF manual: Maximizing the nutritional impact of food security and livelihoods interventions. A handbook for field workers.
<http://www.actioncontrelafaim.org/fr/content/maximising>

