

Mali: Final Country Report October 2014 – March 2016 (FY15-16)



About SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded cooperative agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

Disclaimer

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031, SPRING, managed by JSI Research & Training Institute, Inc. (JSI). The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the U.S. Government.

Acknowledgements

SPRING would like to thank the U.S. Agency for International Development (USAID), the Mali Ministry of Health and Hygiene (MOH&H), the Ministry of Rural Development (MRD), the Ministry of Social Development (MSD), and Helen Keller International/Mali for the important role they played in the final design and the implementation of the project. Our deepest thanks to the health facility directors, health workers, and community volunteers for their warm acceptance of the ENA/EHA approach and their cooperation and support in the implementation of the activities. Further gratitude and appreciation to the communities in the Mopti region for their participation and engagement in Farmer Nutrition Schools (FNS) and Community-Led Total Sanitation (CLTS). And a special thank you to our other key partners, including the World Vegetable Center (AVRDC), UNICEF, l'Institut de l'Economie Rurale (IER), the Direction Régionale de l'Assainissement et de Contrôle des Pollutions et Nuisances (DRACPN), and the Service Hydraulique.

Recommended Citation

SPRING. 2016. *Mali: Final Country Report—October 2014-March 2016 (FY15-16)*. Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.

SPRING

JSI Research & Training Institute, Inc.

1616 Fort Myer Drive, 16th Floor

Arlington, VA 22209 USA

Phone: 703-528-7474

Fax: 703-528-7480

Email: info@spring-nutrition.org

Internet: www.spring-nutrition.org

COVER PHOTO: Lauren Bailey (JSI), SPRING project

Contents

- Acronyms and Abbreviations.....v**
- Executive Summary vii**
- SPRING in Mali.....1**
 - Country Background..... 1
 - SPRING/Mali Approach.....1
 - Interventions and Coverage..... 9
- Major Accomplishments 11**
 - Integrated, Nutrition-Sensitive Agriculture Approach11
 - Increased Access to Quality Nutrition Services13
 - Increased Demand for Key Agriculture, Nutrition, and WASH-related Practices16
- Best Practices, Challenges, and Recommendations 19**
 - Lessons Learned/Best Practices19
 - Challenges and Recommendations19
 - Conclusion20
- References..... 23**
- Annex 1: Indicator Matrix 25**
- Annex 2: GIS Coordinates of 100 Project Villages..... 31**
- Annex 3: SPRING-supported Health Facilities 35**
- Annex 4: Protocol for Selecting FNS Participants 37**
- Annex 5: CLTS Outcomes by Mobilized Village 39**
- Annex 6: List of Supplemental SPRING Documents..... 43**

Figures

1. Conceptual Pathways between Agriculture and Nutrition 2
2. Map of SPRING/Mali Target Communes 3

Tables

1. SPRING/Mali’s 20 Target Communes by Cercle 3
2. Crops Promoted through FNS 5
3. Integrated FNS Topics: Sessions 1-4 6
4. FNS Training Participants 11
5. SPRING/Mali Feed the Future Outcomes 12
6. ENA/EHA TOT for Health Facility Staff 14
7. ENA/EHA Training for RC, ASC, and Community Group Leaders 15
8. SPRING/Mali ENA/EHA Achievements 16
9. SPRING Villages/hameaux Declared ODF and Number of Latrines 17
10. SPRING/Mali WASH Outcomes 18

Acronyms and Abbreviations

ANC	antenatal care
ASC	agent de santé communautaire (community health worker)
AVRDC	World Vegetable Center
CHW	community health worker
CHV	community health volunteer
CLTS	community-led total sanitation
CSCom	Centre de Santé Communautaire (Community Health Center)
CSRef	Centre de Santé de Référence (District Referral Hospital)
CU2	children under 2
CVC	cereal value chain
DRACPN	Direction Régionale de l'Assainissement et de Contrôle des Pollutions et Nuisances
DTC	directeurs technique du centre
EHA	essential hygiene actions
EMMP	Environmental Mitigation and Monitoring Plan
ENA	essential nutrition actions
FNS	farmer nutrition schools
GIS	geographic information systems
GHI	Global Health Initiative
GOM	Government of Mali
HFP	homestead food production
HKI	Helen Keller International
ICRAF	World Agroforestry Center
ICRISAT	International Crop Research Institute for the Semi-Arid Tropics
IER	Institut de l'Economie Rurale
IFPRI	International Food Policy Research Institute
IP	implementing partner
IYCF	infant and young child feeding
JSI	JSI Research & Training Institute, Inc.
L4G	Livestock for Growth
M&E	monitoring & evaluation

MEWS	Ministry of Environment, Water and Sanitation
MOH&H	Ministry of Health and Hygiene
MRD	Ministry of Rural Development
MSD	Ministry of Social Development
NSA	nutrition-sensitive agriculture
NGO	nongovernmental organization
ODF	open defecation free
ORPA	observation, reflection, personalize and explore action
PLW	pregnant and lactating women
PMP	performance monitoring plan
PNH	CARE-USAID Nutrition and Hygiene Project
RC	relais communautaires (community volunteers)
SBCC	social and behavior change communication
SC	Save the Children
SPRING	Strengthening Partnerships, Results, and Innovations in Nutrition Globally
UNICEF	United Nations Children’s Fund
USAID	U.S. Agency for International Development
USDA	U.S. Department of Agriculture
USG	U.S. Government
WASH	water, sanitation, and hygiene
WRA	women of reproductive age
VSLA	village savings and lending associations

Executive Summary

SPRING/Mali officially launched in December 2014 with the support of our lead implementing partner, Helen Keller International (HKI). USAID/Mali tasked us with improving the nutritional status of women and children, with a special emphasis on building resilience in the Mopti Region through the prevention and treatment of undernutrition while targeting the critical “1,000 days” of pregnancy and a child’s first two years. . During the 15 months we were operational in Mopti, the project forged important partnerships with local government institutions and implementing partners (IPs) and provided nutrition-sensitive and nutrition-specific services to over 165,723 community members. SPRING/Mali developed an integrated program and received funding from USAID’s health, economic growth, and water and sanitation sources.

Working across 20 focus communes in the Feed the Future zone of influence in the Mopti Region, SPRING utilized community platforms to promote improved agricultural practices, nutrition-sensitive agriculture practices, and key water, sanitation and hygiene (WASH) behaviors to project beneficiaries. We employed an integrated approach to ensure that community members received practical trainings and thoughtful engagement that incorporated elements of agriculture, nutrition, and WASH with social and behavior change communication.

SPRING/Mali rolled out three distinct, multi-sectoral activities: farmer nutrition schools (FNS), trainings in essential nutrition actions and essential hygiene actions (ENA/EHA), and community-led total sanitation (CLTS):

- The FNS platform integrated improved behaviors in nutrition, WASH, and nutrition-sensitive agriculture into trainings for local farmers in improved vegetable gardening techniques. By the project’s end, we completed four FNS modules, training 500 FNS leaders focused on improved practices for vegetable production and promoted nutrition-sensitive agriculture practices; these leaders in turn trained 5,000 additional farmers from their respective villages.
- To build facility-level and community-level capacity in nutrition and hygiene, we trained over 375 facility-based providers and community health workers and volunteers in ENA/EHA. SPRING supplemented the existing Ministry of Health and Hygiene (MOH&H)-approved ENA training curriculum used in Mali with the hygiene component, ensuring an integrated and comprehensive curriculum.
- SPRING/Mali staff, in coordination with the local sanitation department, helped to establish 4,894 handwashing stations with soap and, having assessed the sanitation needs of more than 50 villages, implemented CLTS in 26 villages, ultimately certifying 20 villages open defecation free (ODF) by project’s end.

Our work included routine follow-up visits in each area of work—agriculture, nutrition, and hygiene—to ensure quality and reinforce behavior change. Additionally, each quarter we collected data for our nutrition and WASH indicators, and during the second quarter of FY16, we collected agriculture (Feed the Future) data for the rainy/cold season ending September 2015 and for the cool season through February 2016.

For FY16, USAID/Mali elected not to fund SPRING/Mali further and the project continued to spend carry-over FY15 funding through February 2016, with the final office closure planned for March 31, 2016. All our reports, tools, and data will be passed on to the successor projects identified by USAID, implemented by AVRDC and CARE.

SPRING in Mali

Country Background

According to the 2012-2013 Mali Demographic and Health Survey (DHS), 39 percent of children under five are stunted or suffer from chronic malnutrition and 13 percent of children exhibit low weight for height, or wasting.¹ In Mopti Region, nearly half (47 percent) of all children under five suffer from chronic malnutrition, the highest rate in Mali. National statistics show that nearly two-thirds of children are not exclusively breastfed and only 7 percent of children 6-23 months old receive a minimal acceptable diet. Prevalence of anemia among children aged 6-59 months is at 82 percent, and among women of reproductive age, 51 percent. To help improve agriculture and nutrition outcomes in Mali, the United States Government (USG) named Mali a Feed the Future focus country and reinstated direct foreign assistance to the country after the 2012 military coup. With Feed the Future support, the Government of Mali (GOM) places strong emphasis on building resilience of vulnerable households and making investments to address the high levels of malnutrition and low dietary diversity.²

Mali remains one of the least developed countries of the world:

- Ranks 179 out of 187 on the 2015 Human Development Index
- 39% of children under 5 stunted or suffering from chronic malnutrition
- 22% of households have their own toilets

Mali's lack of water, sanitation, and hygiene (WASH) infrastructure contributes to the population's poor nutritional status. Only 22 percent of households have their own, improved toilets (e.g., ventilated pit latrines or toilets connected to a septic tank); and without the proper disposal of feces, households are at a higher risk of exposure to pathogens. Handwashing with soap is low in Mali—only 26 percent of households observed in the DHS were found to have handwashing stations. In Mopti, only 21 percent of households had designated handwashing locations, and of those households, only 29 percent had both soap and water available.

To help achieve Feed the Future's goal of reducing the prevalence of stunting in children under five in the zone of influence by 20 percent,³ we complemented the work of existing USAID-funded projects by working with USAID/Mali to select target communes in Mopti that were not already working with other Feed the Future projects.

SPRING/Mali Approach

SPRING/Mali's goal was to improve the nutritional status of women of reproductive age (WRA), pregnant and lactating women (PLW), and children under two years of age (CU2) in the Mopti Region. We did this by promoting the adoption of essential nutrition actions and essential hygiene actions (ENA/EHA), improving delivery of nutrition in health services, increasing the availability and consumption of nutritious and diverse diets through community gardens, and mobilizing communities through community-led total sanitation (CLTS).

To achieve improved nutritional outcomes, we pursued three primary objectives:

- Objective 1: Increase access to diverse and quality foods

¹ Mali Enquête Démographique et de Santé 2012-2013 Rapport de synthèse régionale

² <http://www.feedthefuture.gov/country/mali>

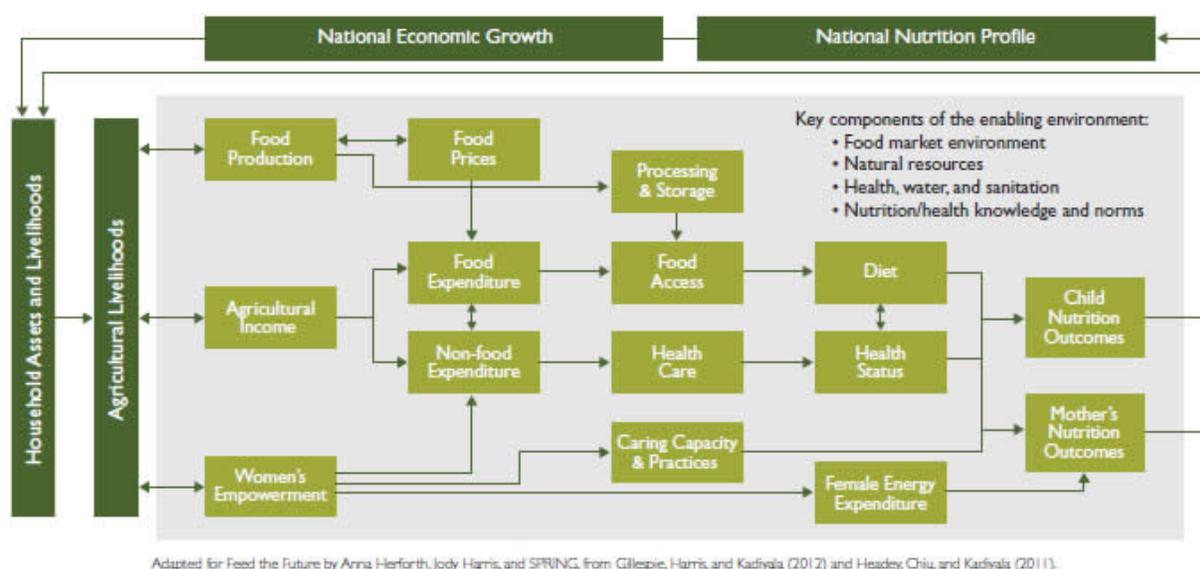
³ Feed the Future Country Fact Sheet: Mali; <http://www.feedthefuture.gov/printpdf/77>

- Objective 2: Increase access to quality nutrition services
- Objective 3: Increase demand for key agriculture, nutrition, and water, sanitation, and hygiene (WASH)-related practices and services

We launched our activities in Mali in December 2014 following a series of stakeholder meetings and the approval of the FY2015 work plan by USAID/Bamako. Under the guidance of our lead implementing partner, Helen Keller International (HKI), the team established a project office in Sévaré, Mopti, and hired 25 staff members with expertise in agriculture, nutrition, and WASH. While our project office and staff were based in Mopti, the Chief of Party (COP) split his time between Bamako and Mopti to ensure strong relations with the Ministry of Health & Hygiene (MOH&H) and Bamako-based partners, while also overseeing operations in Mopti.

Our approach was based on using agricultural activities (objective 1) as an anchor for entering targeted villages. We integrated activities in nutrition and WASH (objectives 2 and 3) into the same target villages. This approach is grounded in the USAID Multi-Sectoral Nutrition Strategy 2014-2025 and the widely adopted primary pathways for improving nutrition through agriculture: production, income, and women’s empowerment.⁴ (See Figure 1)

Figure 1. Conceptual Pathways between Agriculture and Nutrition



In collaboration with USAID/Mali, SPRING selected four of the eight cercles within the Mopti Feed the Future zone of influence in which to launch our FY2015 activities. The cercles were chosen, in part, on the basis of their relative security (Mopti was and remains insecure) and their proximity to one another.

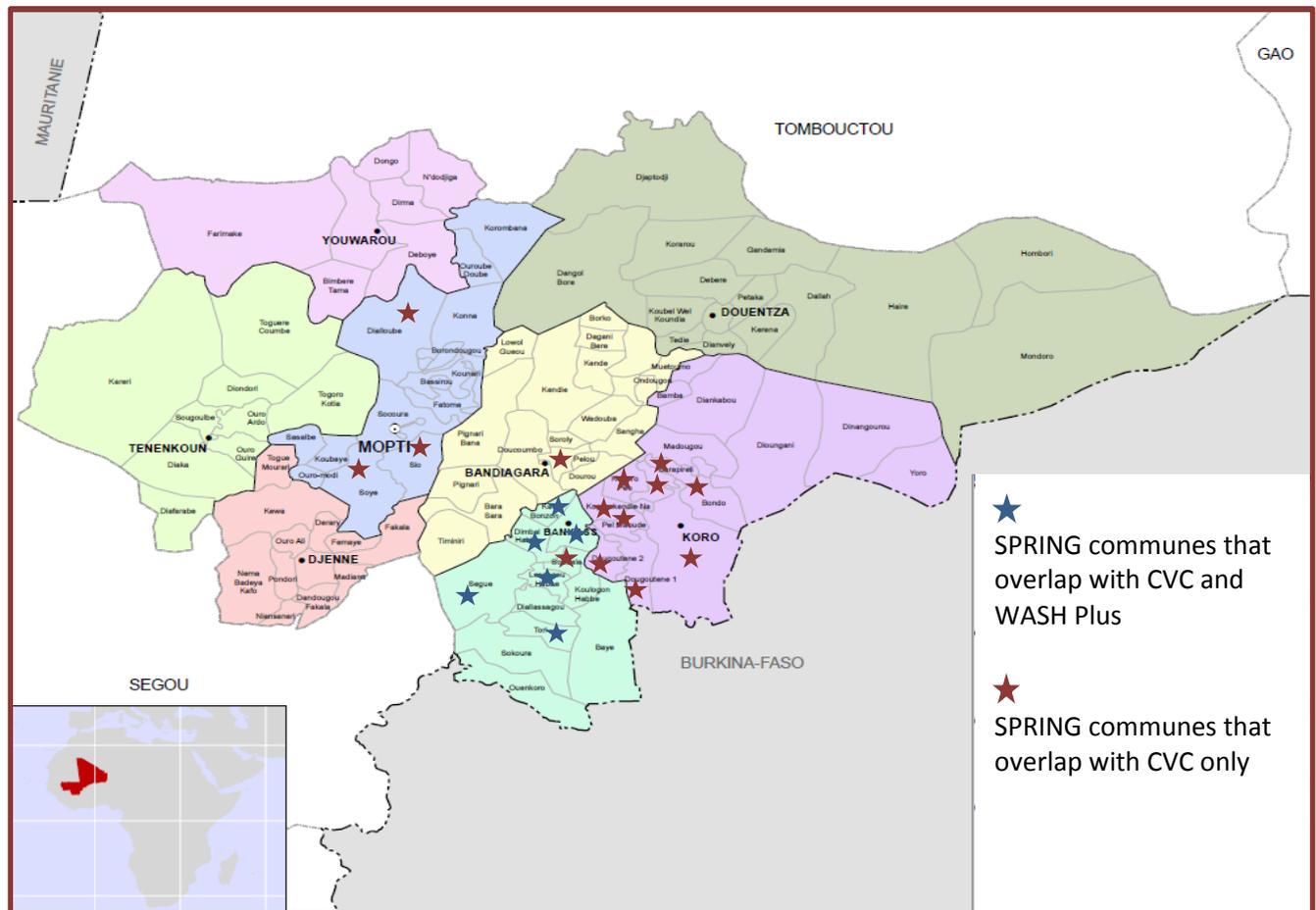
Within the four targeted cercles, we selected 20 Feed the Future target communes (See Table 1. SPRING/Mali’s 20 Target Communes by Cercle). USAID/Mali requested that we concentrate our programming in communes where the CARE-USAID Nutrition and Hygiene Project was not present, but where other relevant USAID Feed the Future investments, specifically the Cereal Value Chain (CVC) Project, the Livestock for Growth (L4G) Project, and the WASHPlus Project were operating (See Figure 2, Map of SPRING/Mali Target Communes).

⁴ For a detailed introduction to the agriculture-to-nutrition pathways, please refer to the [Improving Nutrition through Agriculture Technical Brief Series](#), 2014. Arlington, VA: USAID/Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project.

Table 1. SPRING/Mali's 20 Target Communes by Cercle

	Cercles			
	Bandiagara	Bankas	Koro	Mopti
Communes	Dandoli	Bankass	Barapireli	Dialloubé
		Dimbal Habbe	Bondo	Sio
		Kani-Bonzoni	Dougoutene I	Soye
		Lessagou Habe	Dougoutene II	
		Segue	Kopro Pen	
		Soubala	Koprokendie Na	
		Tori	Koro	
			Pel Maoude	
			Youdiou	

Figure 2. Map of SPRING/Mali Target Communes



Within each of the 20 focus communes, we selected five villages (See Annex 3 for the GIS coordinates of all 100 project villages) based on a list of criteria related to our agriculture and nutrition activities. The selection criteria were:

- Criteria related to agricultural activities
 - Community interest in agriculture activities and acceptance of SPRING/Mali in the village
 - Existence of a water point for easy irrigation
 - Existence of agricultural infrastructure (existing community garden)
 - Existence of women groups in the village
- Criteria related to health and nutrition activities
 - Accessibility to a Centre de Santé Communautaire/Community Health Center (CSCoM) and availability of nutrition services in the CSCoM
 - Availability of community health workers and volunteers

Our catchment area included a total population of 165,723 (23,675 households) (DNSI 2011) and included 33 health facilities (29 CSCoMs and 4 Centres de Santé de Référence/District Referral Hospital (CSRRefs). (See Annex 4 for a list of SPRING/Mali-supported health facilities.)

Approach to Objective 1: Increased access to diverse and quality foods

To improve dietary diversity and promote consumption of nutrient dense foods at the household and community levels, we implemented an integrated community gardening program called Farmer Nutrition Schools (FNS). Based on SPRING's highly successful implementation of FNS in Bangladesh, we adapted the FNS approach in Mopti to:

- Use a farmer field school methodology centered on increasing agricultural production of vegetable crops and income generation through strengthening existing community gardening practices and gardening groups.
- Target training primarily to pregnant and lactating women and women with children under two and their households, but also to include men and other women working in community gardens.
- Support FNS members to cultivate individual plots and to participate in a series of trainings aligned with the seasonal calendar throughout up to three vegetable growing seasons.

The FNS approach promotes good agricultural practices combined with nutrition-sensitive agriculture practices. Examples of this combined approach include growing and consuming nutrient-dense crops, increasing income through cash crops, promoting women's empowerment and integrating water resource management and WASH practices in an agricultural environment. The FNS approach also integrates social and behavior change communication (SBCC) with messages to enhance nutrition-sensitive agriculture practices that link to improved nutrition and WASH outcomes. FNS leaders take their learning back to their villages and, through demonstration and community mobilization, encourage others to adopt improved practices.

We began our effort to adapt the FNS approach for Mopti by taking an inventory of the existing literature related to community gardening in the region. We used the HKI/Mali community gardening manual, the SPRING/Bangladesh FNS curriculum, and materials from AVRDC and IER as the basis for our training modules. To

address gaps in knowledge, our staff conducted a rapid assessment to determine local community gardening practices. The assessment⁵ identified existing varieties of nutrient-dense crops and cash crops that FNS members could produce through gardening activities (See Table 2).

Table 2. Crops Promoted through FNS

Nutrient-Dense Varieties for Consumption	Cash Crops
Okra	Carrot
Orange squash (pumpkin)	Beet root
Dark leafy greens, such as spinach and cow pea leaves (originally planned as amaranths)	Shallot
Moringa tree leaves	Peppers
Baobab tree leaves	
Papaya tree fruit	

Although orange-fleshed sweet potatoes (OFSP) are a well-known, nutrient-dense variety, these are not currently grown, tested, or approved by the IER in Mali. Therefore, introduction of OFSP would have required importation of vines. Consequently, we chose not to introduce this variety in FY2015.

SPRING identified vendors of high-quality seeds for these varieties. The intent was to purchase seeds in FY2015 that would be provided to FNS participants during the first year. During FY2015, SPRING’s strategy was to strengthen input supply systems for the improved varieties of nutrient dense crops through training seed multiplication groups and facilitating linkages between input suppliers and FNS groups, and, over time, to phase out the input subsidy to FNS members. SPRING ultimately did not procure seeds (see the Challenges section below) and participants in FNS used their own available seeds. As noted in Table 2, we had planned to procure seeds for growing amaranth, which was not widely grown, but because we did not procure the seeds, we promoted continued use of other dark leafy greens.



FNS Cooking Demonstration, July 2015

Our FNS approach emphasizes production, consumption, and conservation of crops rich in vitamin A and iron to address the micronutrient deficiencies that contribute to malnutrition. Our approach also emphasizes income generation through the promotion of cash crops, which can generate income to produce and purchase nutrient dense foods and help cover non-food expenditures, such as health care. Women’s empowerment is integral to both production and income pathways. FNS contributes to women’s empowerment through targeting primarily female members, but also including men. When women are involved in gardening activities, they can wield greater decision-making power over food produced, consumed, and sold.

⁵ All agricultural assessments are summarized in an unpublished draft report, “Maraichage dans la Région de Mopti.” While the report was unpublished, the findings were used to define our agricultural activities. The final draft of the report will be provided to USAID, AVRDC, and Care-PHN as part of a package of SPRING final documentation.

While encouraging greater women’s involvement, our approach aimed to reduce women’s share of physical labor, especially for pregnant and lactating women with children under 2 years of age, by promoting increased participation of men in land preparation and other physically demanding tasks.

To better understand the role of gender in gardening, we completed a literature review of gender,⁶ addressing the issues of women’s empowerment and workload. A follow-up qualitative analysis through focus group discussions would have been implemented in FY16. We had set a target of establishing 25 village savings and loan associations (VSLA) in FY15 to improve women’s access to credit. A local implementing partner was selected towards the end of the fiscal year, but SPRING did not award a contract due to the uncertainties of FY16 funding.

In May 2015, we convened a workshop in Severé with local partners, including the World Vegetable Center (AVRDC), l’Institut de l’Economie Rurale (IER), World Vision, Save the Children, and the Ministry of Rural Development (MRD), to exchange best practices and lessons learned on horticulture production and agriculture techniques and technologies. The training briefed participants on nutrition-sensitive agriculture concepts and trained them to apply the conceptual pathways to improving nutrition through agriculture. During the workshop, participants developed training materials to promote nutrition-sensitive agriculture practices during FNS sessions.

We created an integrated training package of improved production and nutrition-sensitive agriculture practices. The four FNS training sessions rolled out in Mali included the following topics:

Table 3. Integrated FNS Topics: Sessions 1-4

Session	Agriculture Topics	Complementary Topic
1	Crop selection, plot layout, row-making, planting, and transplanting and nursery management	Increasing knowledge of nutritious crops. Increasing production and consumption of nutrient dense crops. Reducing women’s labor by increasing the role of men in land preparation, repairing fencing, etc.
2	Soil fertility management, pesticide management, water management, farming, and harvest	Handwashing with soap following handling of manure, biological pesticides and other phytosanitary products Reducing women’s labor by increasing the role of men in hauling manure and water Installation of tippy taps
3	Seed multiplication, storage, conservation, marketing, food diversity	Food hygiene during harvest and post-harvest processing Cooking demonstrations promoting preparation methods of a nutrient dense and diverse diet
4	Planting and maintenance of tree saplings	Use of moringa, baobab, and papaya

We implemented FNS sessions 1-3 during the rainy/cold season from July to October and session 4 during the cool season from November to February. In FY16, SPRING planned to develop additional modules covering marketing, business planning, farm management, and household budgeting for nutritional needs. The planned

⁶ SPRING will provide the gender assessment report to USAID, AVRDC, and Care-PHN as part of our package of final documentation.

training package⁷ would have included additional topics, such as post-harvest conservation, utilization of income for food, maintenance of a healthy environment, and nutrition-specific behaviors (see Objective 2 below) during the hot/dry season from April to June when crop planting is limited.

Objective 2: Increased access to quality nutrition services

With Global Health/Nutrition funds from USAID/Mali, we rolled out trainings in ENA/EHA at both the facility and community level. The ENA framework is an integrated package of preventive and curative nutrition actions that includes IYCF, micronutrients, and women's nutrition. The framework promotes a "lifecycle" approach to nutrition and has been implemented across Africa since 1997 (CORE Group 2011). In light of new evidence linking WASH to nutritional outcomes, SPRING added hygiene education to the nutrition actions to create an integrated ENA/EHA package.

Before rolling out trainings to health facility staff and community volunteers, our staff coordinated with the MOH&H to update the GOM-endorsed 2008 ENA national training module for health facility staff and community volunteers to include EHA (See Annex 6 for SPRING/Mali training guides and reference manuals). The integrated curriculum includes the nutrition and hygiene actions listed below and provides health facility staff and community agents with the training and capacity to deliver quality nutrition and hygiene services and counseling.⁸ At the facility level, the integrated ENA/EHA curriculum helps to build capacity of facility staff, strengthen health service delivery and integrate quality improvement mechanisms for nutrition and hygiene. At the community level, the curriculum builds the capacity of community agents to use interpersonal communication and group facilitation techniques to promote and support the adoption of key nutrition and hygiene behaviors.

The Essential Nutrition Actions (CORE Group 2011)⁹ are:

- Women's nutrition
- Exclusive breastfeeding 0-6 months
- Complementary feeding 6-23 months
- Feeding during illnesses
- Prevention and control of Vitamin A deficiencies
- Prevention and control of anemia
- Prevention and control of iodine deficiency disorders.

The Essential Hygiene Actions (CORE Group 2015) are:

- Household treatment and safe storage of drinking water
- Handwashing at five critical occasions (after defecation; after cleaning child who has defecated; before preparing food; before feeding child; before eating)

⁷ SPRING will provide the FNS training package (which includes the FNS trainer's guide and the FNS training modules) to USAID, AVRDC, and Care-PHN as part of a package of final documentation.

⁸ SPRING will provide the 4 ENA/EHA training guides and reference manuals to USAID, AVRDC, and Care-PHN as part of a package of final documentation.

⁹ http://www.coregroup.org/storage/Nutrition/ENA/Booklet_of_Key_ENA_Messages_complete_for_web.pdf

- Safe storage and handling of food
- Safe disposal of feces through the use of latrines and promotion of open defecation free communities
- Creating barriers between toddlers and soiled environments and animal feces.

Objective 3: Increased demand for key agriculture, nutrition, and water, sanitation, and hygiene (WASH)-related practices

SPRING/Mali integrated WASH activities into both the FNS and ENA/EHA trainings, including education on handwashing with soap and other critical hygiene behaviors. Additionally, SPRING implemented community-led total sanitation (CLTS) activities in key project villages. CLTS is an approach that mobilizes community members to generate collective action in achieving open defecation free (ODF) status.

We followed the 2011 UNICEF CLTS guide, or *Guide Pratique de l'Assainissement Total Piloté par la Communauté au Mali*,¹⁰ to implement CLTS, which includes seven key steps (See Annex 7 for UNICEF CLTS guide):

1. Overview/state of the community
2. Mobilization/Pre-triggering
3. Triggering
4. Establishment of sanitation committees
5. Identification and training of the local masons
6. Post-triggering monitoring
7. Evaluation and ODF certification.

We worked closely with local sanitation authorities, the Direction Régionale de l'Assainissement et du Contrôle des Pollutions et des Nuisances (DRACPN), to evaluate which SPRING communities fit the criteria for participation in CLTS. In selecting eligible communities, we evaluated the following criteria:

- Less than 60 percent coverage rate of latrines
- Population between 200-2,000 inhabitants
- Population concentrated rather than dispersed
- Absence of other CLTS partners
- Community has not yet received CLTS
- Community resides within the 100 SPRING target villages
- Community has no recent history of conflict
- Community does not exhibit difficult terrain (e.g., hard rock, flood zones).

In order to select communities that fit the specified criteria, we covered both entire villages and subsets of certain villages (or *hamlets/hameaux*). Because some villages are much larger than others and exceed the ideal population size for CLTS, we worked in village hamlets where appropriate.

¹⁰ SPRING will provide the *Guide Pratique de l'Assainissement Total Piloté par la Communauté au Mali* to USAID, AVRDC, and Care-PHN as part of a package of final documentation.

Complementing the implementation of CLTS, we promoted handwashing with soap through the construction of handwashing stations called tippy taps. SPRING field agents and SPRING-trained *agents de santé communautaire*/community health worker (ASC) and *relais communautaires*/community volunteers (RC) conducted handwashing demonstrations throughout Mopti using tippy taps and encouraged community members to construct tippy taps at two key locations in the household—near the latrine and near the kitchen.

Interventions and Coverage

SPRING implemented nutrition-specific and nutrition-sensitive community level interventions across 20 Feed the Future communes in Mopti and supported 33 health facilities (29 CSComs, 4 CSRefs) to improve nutrition services through ENA/EHA trainings. We worked closely with *directeurs technique du centre* (DTCs) and nutrition focal persons to ensure integration of nutrition and hygiene messages into health contact points such as antenatal care (ANC) and routine visits for mothers of CU2.

Major Accomplishments

Integrated, Nutrition-Sensitive Agriculture Approach

To implement our FNS approach in each of the 20 target communes, SPRING signed agreements with the garden’s management committees in each project village and established 20 FNS community gardens (1 per project commune) to serve as demonstration plots during the FNS training sessions. The demonstration plots also doubled as individual gardening spaces for participants to practice their learned techniques and cultivate their own crops. Using specific selection criteria, we then identified 500 FNS leaders (418 women and 82 men) from the 100 intervention villages (5 leaders per 100 villages) to build the pool of lead farmers (See Annex 8 for Protocol for Selecting FNS Participants).

We trained all 500 FNS leaders in each of the four modules. Each of those FNS leaders then returned home and trained another 10 farmers in his/her respective village. Thus, the 500 SPRING-trained FNS leaders reached an additional 5,000 beneficiary farmers (4,824 women and 176 men) with nutrition-sensitive agriculture messages through the cascade approach, yielding a total of 5,500 participants trained between June 2015 and February 2016.



FNS leader Denis Dougou tends to her garden in Koro

Table 4. FNS Training Participants

Leaders/commune	# of Communes	Leaders Trained	Farmers Trained/Leader	Total Farmers Trained by Leaders	Total Participants Trained
25	20	500	10	5,000	5,500

The SPRING/Mali program also completed follow-up visits primarily focused on the production and post-harvest stages through two agricultural seasons (the rainy season and cool season). We distributed tree saplings (11,000 moringas, 2,750 papayas, and 2,750 baobabs) to all FNS beneficiaries as a follow-up to training in the fourth FNS module focusing on agro-forestry and the nutritional value of moringa consumption.

FNS Success: SPRING/Mali field agents stressed the importance of reducing women’s workload to allow time for nursing children and physical rest. The sessions were well-received and staff observed families adopting the practice.

Although we were unable to conduct an evaluation of the impact of the integrated FNS approach, anecdotal evidence along with observations from follow-up visits suggest that several aspects of the training resonated with participants. Our staff noted that with the development of agricultural techniques, beneficiaries’ production improved in both quantity and quality. Additionally, after SPRING agriculture field agents conducted awareness

sessions for young boys and husbands about supporting women’s work in the gardens, they noticed a positive shift in the families’ distribution of work.

To evaluate progress against the Feed the Future indicators, in late January 2016, we developed a data collection methodology and visited a sample of FNS beneficiaries residing in all four districts of the zone of influence. The

FNS Success: Through the promotion of nutrient-dense vegetables, FNS members planted more orange squash. (Staff observation)

survey included questions for the rainy/cold season from July to October, as well as the dry season from November to March, and incorporated sections to inform Feed the Future indicators. Findings from this sample enabled us to extrapolate the results to all 5,500 beneficiaries within a 10 percent margin of error (See Table 5) and a 90 percent confidence interval (in line with the Feed the Future indicator guidelines).

For the rainy/cold season, farmers grew the following crops widely: squash, okra, leafy vegetables (namely sweet potato, cowpea, and sorrel leaves), pepper, and eggplant. Of the nutrient-rich commodities planted, squash had the highest gross margin, at \$7,137.68 per hectare. Gross margins for okra and leafy greens were \$3,698.71 per hectare and \$1,590.78 per hectare, respectively. Pepper and eggplant do not qualify as nutrient-rich but had high gross margins: per hectare, \$9,401.97 for peppers and \$6,558.70 for eggplant.

During the rainy/cold season, one or more improved technologies/management practices were applied on a total of 134 hectares of land. These included cultural practices, pest management, soil-related fertility and conservation, and irrigation. Cultural practices, soil-related fertility and conservation, and irrigation were applied almost universally (133, 132, and 133 hectares of land, respectively), while improved pest management practices covered 111 hectares.

Baseline sales for the rainy season have been established as follows: \$82,431.79 for squash (1,386 farmers); \$75,050.17 for okra (2,212 farmers); \$1,373.64 for leafy greens (260 farmers); \$105,200.49 for peppers (1,083 farmers), and \$31,941.94 for eggplant (1,039 farmers). Overall, 351,008 kg of squash, 281,230 kg of okra, and 58,657 kg of leafy greens were set aside for home consumption.

FNS Success : « Les différentes formations reçu par le projet SPRING mon permis de connaitre d’avantage le rôle que jouent les différents produits dont nous cultivons et qu’on ignorait leur valeur nutritionnelle. » -- Denis Dougon, FNS leader

During the dry season, significantly fewer farmers planted around their home (12 percent compared to 88 percent in the rainy season). Activity in the community gardens, on the other hand, diminished only slightly, with 56 percent of farmers planting in the dry season in comparison to the rainy season’s 67 percent. One or more improved technologies or agricultural management practices were implemented on a total of 31 hectares. Specifically, farmers applied cultural practices, pest management, soil-related fertility and conservation, and irrigation nearly

universally: 31 hectares for cultural practices and irrigation, and 29 hectares for soil-related fertility and conservation and pest management.

While many of the farmers selected for the survey planted crops for the dry season, few had harvested and none had sold their yields at the time of data collection in late January. It was not possible, therefore, to calculate and extrapolate results for the gross margin, incremental sales, and nutrient-rich value chain commodity set aside for home consumption indicators.

Table 5. SPRING/Mali Feed the Future Outcomes

Feed the Future Indicator	Rainy/Cold Season (FY15)	Dry Season (FY16)
Indicator 4.5.2(2) Number of hectares of land under improved technologies or management practices as a result of USG assistance	Cultural practices:133 Pest Management: 111 Soil-related fertility: 132 Irrigation: 133 One or more: 134	Cultural practices:31 Pest Management: 29 Soil-related fertility: 29 Irrigation: 31 One or more: 31
Indicator 4.5(16) Gross margin per hectare	Squash: \$7,137.68 Okra: \$3,698.71	N/A

Feed the Future Indicator	Rainy/Cold Season (FY15)	Dry Season (FY16)
	Leafy vegetables: \$1,590.78 Peppers: \$9,401.97 Eggplant: \$6,558.70	
Indicator 4.5.2(23) Value of incremental sales (collected at farm-level) attributed to Feed the Future implementation;	Squash: \$82,431.79 Okra: \$75,050.17 Leafy vegetables: \$1,373.64 Peppers: \$105,200.49 Eggplant: \$31,941.94	N/A
Indicator (FTF 4.5.2(7)) Number of individuals who have received USG supported short-term agriculture sector productivity or food security training	5,500	5,500
Indicator 4.5.2.8 (TBD3) Total value of targeted nutrient-rich value chain commodities set aside for home consumption by direct beneficiary producer households.	Squash: 351,008 kg (3248 people) Okra: 281,230 kg (5197 people) Leafy greens: 58,657 kg (1992 people)	N/A

Increased Access to Quality Nutrition Services

SPRING/Mali initiated ENA/EHA trainings with a training of trainers (TOT) for local government officials and health facility staff, namely *directeurs techniques du centre* (DTC) and nutrition focal persons. We followed-up the TOT with a training of community agents, including agents de santé communautaire/community health worker (ASC) and *relais communautaires*/community volunteers (RC). This training served as practice for newly trained trainers and was conducted under the supervision of master trainers. The main objective of the TOTs was to equip participants with the knowledge, skills, and tools to guide them to support MOH staff, health workers, and community actors on ENA/EHA.

Our staff and trained facility health workers, RC and ASC, continued to roll out ENA/EHA trainings via a cascade approach throughout the catchment area. Within SPRING-supported communities, SPRING-trained RC and ASC regularly engaged local support groups and led group discussions on a variety of ENA/EHA themed topics, such as exclusive breastfeeding, complementary feeding, handwashing with soap, and nutrition for pregnant and lactating women. Through the cascade approach, SPRING was able to go deep into communities and reach more beneficiaries with integrated nutrition and hygiene education than through direct trainings alone.

Facility Level

SPRING/Mali achieved the target of reaching 75 health facility staff from local CSComs and CSRefs in FY15 with training in ENA/EHA. SPRING staff conducted four five-day TOTs for 75 facility staff (24 DTC, 43 *chargés de nutrition*, 8 district focal persons) from April to August 2015 (Table 6). The TOT provided facility staff with the technical, action-oriented nutrition knowledge and counseling skills needed to support pregnant women, mothers with CU2, and other key family members in adopting optimal nutrition practices. The trainings emphasized the following themes:

- The essential nutrition actions and essential hygiene actions
- Nutrition for women: the intergenerational cycle of malnutrition
- Benefits, beliefs, and myths around breastfeeding and infant formula risks
- Breastfeeding practices from birth to six months
- Nutrition and family planning
- Using images for counseling/observing, reflecting, personalizing, and exploring action (ORPA)
- Negotiation with mothers, fathers and caretakers for the promotion of nutrition for women during pregnancy and optimal breastfeeding practices
- Prevention and management of micronutrient deficiencies
- Complementary feeding practices
- Child feeding when sick and danger signs
- Negotiation with mothers, fathers, caretakers for promotion of complementary feeding and nutritional care of the sick child
- Community support groups
- Integrated management of acute malnutrition (primarily through screening)
- Improved nutrition at community level
- Development of action plans.

Table 6. ENA/EHA TOT for Health Facility Staff

Training Theme	Location	Number Trained
1. Training of Directors and Nutrition Unit Managers in ENA/EHA	Mopti	8 (6 male/2 female)
2. Training of Directors and Nutrition Unit Managers in ENA/EHA	Bankass	23 (13 male/10 female)
3. Training of Directors and Nutrition Unit Managers in ENA/EHA	Koro	24 (23 male/1 female)
4. Training of Directors and Nutrition Unit Managers in ENA/EHA	Mopti	20 (7 male/13 female)

Community Level

We achieved our target of training 300 community agents (270 RC, 30 ASC) in FY15 through direct ENA/EHA trainings (See Table 7). Our ENA/EHA field agents led 16 three-day direct trainings to build the capacity of

community health workers and volunteers to deliver nutrition and hygiene messages. The trainings emphasized the following key themes:

- Nutrition of adolescent girls and pregnant women and the importance of micronutrients
- Practice of breastfeeding from birth to six months
- Negotiation with mothers, fathers, and caretakers
- Women's nutrition and breastfeeding practices
- Complementary feeding practices and nutrition of the sick child
- The essential hygiene actions (including the construction and use of tippy taps and latrines)
- Homestead food production and nutrition
- Support groups
- Development of action plans.

Table 7. ENA/EHA Training for RC, ASC, and Community Group Leaders

Training Theme	Location (Commune, Cercle)	Number Trained
1. ENA/EHA training for RC and ASC	Bankass, Bankass	20 (9 male/11 female)
2. ENA/EHA training for RC and ASC	Lessagou, Bankass	20 (12 male/8 female)
3. ENA/EHA training for RC and ASC	Kopora-Na, Koro	21 (13 male/8 female)
4. ENA/EHA training for RC and ASC	Koporo-Pen, Koro	22 (19 male/3 female)
5. ENA/EHA training for RC and ASC	Barapirely, Koro	21 (19 male/2 female)
6. ENA/EHA training for RC and ASC	Dialloube, Mopti	20 (12 male/8 female)
7. ENA/EHA training for RC and ASC	Segue, Bankass	20 (12 male/8 female)
8. ENA/EHA training for RC and ASC	Kani Bonzon, Bankass	20 (14 male/6 female)
9. ENA/EHA training for RC and ASC	Dougoutene, Bankass	22 (13 male/9 female)
10. ENA/EHA training for RC and ASC	Pel Maoude and Bondo, Koro	22 (17 male/5 female)
11. ENA/EHA training for RC and ASC	Dandoli, Bandiagara	20 (9 male/11 female)
12. ENA/EHA training for RC and ASC	Koro, Koro	26 (20 male/6 female)
13. ENA/EHA training for RC and ASC	Bankass, Bankass	26 (13 male/13 female)
14. ENA/EHA training for RC and ASC	Sio, Mopti	20 (14 male/6 female)
15. ENA/EHA training of support group leaders	Bankass/Bandiagara/Mopti/Koro	100 (4 male/96 female)
16. ENA/EHA training of support group leaders	Bankass/Bandiagara/Mopti/Koro	100 (2 male/98 female)

SPRING/Mali-trained ASC and RC extended their reach by creating 200 ENA/EHA support groups in the project cercles. To build the capacity of the support groups, we also trained the group leaders in a direct ENA/EHA training. Through our work with support groups, we were able to reach an additional 12,094 men, women, and children with ENA/EHA practices.

The ASC and RC also organized a total of 1,800 meetings in their respective communities, where they reached 54,554 women of reproductive age (including pregnant and lactating women) and 6,418 children under five with messages on exclusive breastfeeding, complementary feeding, handwashing with soap, and nutrition for pregnant and lactating women.

We reached an additional 42,500 individuals through radio broadcasts of breastfeeding messages that we developed in collaboration with our partners during World Breastfeeding Week in Mopti. We collaborated with local elected leaders, WASHPlus, CARE-USAID Nutrition & Hygiene Project, the Regional Health Directorate, and health districts in Mopti, Bandiagara, Bankass, and Koro to develop breastfeeding messages to disseminate throughout the week. Our community-driven cascade approach enabled us to increase the number of individuals with access to quality nutrition services and counseling. (See Table 8).

Table 8. SPRING/Mali ENA/EHA Achievements

Indicator	FY15 Achievement	FY16 Achievement
Number of individuals trained in child health and nutrition through USG supported programs	375: 75 DTC; 300 ASC/RC	200 support group leaders
Number of children under five reached by USG-supported nutrition programs	8,223	14,355
Number of women reached with education on exclusive breastfeeding	55,057	49,151

Increased Demand for Key Agriculture, Nutrition, and WASH-related Practices

Open Defecation Free Villages

After identifying the eligible villages and hamlets and gaining buy-in from community leaders, SPRING and the DRACPN mobilized 50 villages in CLTS. We then selected the most engaged and motivated communities for triggering. The goal of the triggering process is to generate shared disgust among community members by mapping the defecation areas in the community through “transect walks” and identifying fecal pathways.

Our staff conducted “transect walks” and asked villagers about defecation practices to motivate the community to end open defecation. After the triggering process, SPRING staff made routine visits to CLTS villages to monitor their progress towards achieving ODF status.



SPRING staff trigger a village in Koro, Sept 2015

Despite weather-related delays, SPRING successfully triggered 26 villages/hamlets in CLTS, ultimately certifying 20 of them (77 percent) open defecation free. Under the guidance of the DRACPN, we waited until the end of the rainy season (June-October) to begin triggering communities in CLTS. During the rainy months, we mobilized the 50 eligible villages and triggered the most qualified villages in September after the rains had passed.

We worked closely with the DRACPN and community leaders to monitor communities as they worked to build and rehabilitate their latrines. Between February 8 and February 21, 2016, a team of evaluators from the DRACPN visited each SPRING CLTS community to conduct a final assessment. In total, SPRING facilitated the repair and

establishment of nearly 1,000 latrines across 2,285 households and declared 20 communities ODF (See Table 9 for list of ODF villages/hameaux and Annex 5 for the full list of CLTS outcomes by village).

Table 9. SPRING Villages/hameaux Declared ODF and Number of Latrines

Cercle	Commune	Village	Hameau	# of Existing Latrines	New Latrines Achieved	Total Latrines
Bankass	Bankass	Sogou Toum	Fangadougou	3	22	25
Bankass	Bankass	Sogou Toum	Rakounda	1	28	29
Bankass	Bankass	Sogou Toum	Densagou	3	30	33
Bankass	Bankass	Kouyentombo	Sarale	5	18	23
Bankass	Bankass	Noumoudama	Noumoudama	50	24	74
Bankass	Dimbal Habbe	Kounsagou	---	20	105	125
Bankass	Dimbal Habbe	Kounsagou	Badiaganda	8	24	32
Bankass	Dimbal Habbe	Kounsagou	Dianweli	6	21	27
Bankass	Dimbal Habbe	Konsagou	Ongonbira	2	39	41
Bankass	Dimbal Habbe	Dimbal Habbe	Madina	3	57	60
Bankass	Dimbal Habbe	Dimbal Habbe	Manahody	6	23	29
Bankass	Dimbal Habbe	Dimbal Habbe	Flandana	5	43	48
Bankass	Dimbal Habbe	Sokanda	Sokanda	10	25	35
Koro	Koporo-pen	Gomou	Gomou-Kana	3	32	35
Koro	Koporo-pen	Koporopen	Komogourou	21	53	74
Koro	Pel-maoude	Sogourou	Sogourou-Kanda	8	14	22
Koro	Pel-maoude	Pel-maoude	Barakoun	24	19	43
Koro	Pel-maoude	Pel-maoude	Monibouro	44	16	60
Koro	Pel-maoude	Barali-Niongolé	Wilwal	19	16	35
Koro	Koporokendie-na	Temena	Temena	22	26	48

Handwashing with Soap / Tippy Taps

SPRING helped construct 4,894 tippy taps across 2,447 households during the life of the project (see Table 10). Tippy taps were also established at the FNS community garden sites and at *tougounas*, public meeting places where villagers gather for storytelling and shared meals.

Additionally, we helped to commemorate World Handwashing Day on October 15, 2015 by organizing a celebration in Koro district in collaboration with WASHPlus and USAID-CARE



Tippy tap demonstration, April 2015

Nutrition & Hygiene Project. The event helped us organize, mobilize, and sensitize 45 villages of Koro and reach an additional 8,500 villagers with critical hygiene information.

Table 10. SPRING/Mali WASH Outcomes

Indicator	FY15 Achievement	FY16 Achievement
Number of households with soap and water at handwashing station commonly used by family members	1,083	1,364
Number of villages supported with CLTS activities	50 pre-triggered	26 triggered
Number of communities certified open defecation free as a result of USG assistance	0	20 certified
Number of people gaining access to an improved sanitation facility	0	5,215

Best Practices, Challenges, and Recommendations

Lessons Learned/Best Practices

Collaboration

- By collaborating with the DRACPN, SPRING/Mali more precisely and efficiently targeted and implemented CLTS activities. The DRACPN helped us identify which villages and hameaux were ideal for CLTS implementation. Many villages were ineligible for CLTS as they were already targeted by other projects; others did not meet the criteria the DRACPN recommends for participation in CLTS. Additionally, the DRACPN requested that we delay our CLTS implementation, correctly noting that the rainy season would prevent villages from undertaking construction of new latrines.
- SPRING leveraged AVRDC's knowledge of agricultural practices in the Mopti region by collaborating closely with them when creating our FNS curriculum.

Integration

- The process we used to identify and integrate nutrition-sensitive agriculture messages and ENA/EHA messages into the stages of the agricultural cycles enabled us to identify deeper barriers within agricultural systems and strategies to contribute to better nutrition outcomes through adoption of key nutrition-sensitive and nutrition-specific practices.
- Combining ENA with EHA and training both for facilities and community members through a cascade approach allowed us to promote ENA and EHA behaviors through multiple channels across our targeted communities.
- By involving men and boys in the FNS sessions, we were able to educate them on women's workload, which provided an opportunity to improve norms about gender balance in household work.

Challenges and Recommendations

- We underestimated the challenge of access to water for gardening at the commune level. Although our plans called only for minor improvements to existing wells, our initial assessment did not sufficiently detail the extent of the work needed. By working through the *Service Hydraulique*, we were able to complete a detailed assessment of the water point rehabilitation needs. Because the identified needs rose to the level of "construction," which is not permitted under the SPRING Cooperative Agreement, we learned only late in FY15 that we would not be able to provide the kind of water access needed to be successful in all of our target communes. Moreover, there was miscommunication with USAID/Mali about the level of support SPRING was to provide. We understood that our assistance was limited to the wells that provide water to the commune-level gardens and did not include potable water within each village.
- We did not procure seeds in time for the June/July planting season due to miscommunication about USAID regulations, which require an environmental mitigation and monitoring plan (EMMP), and due to a change in regulations on procuring seeds, which are a restricted commodity. We did not procure seeds for the October planting season due to delayed communication about FY16 funding; ultimately, permission to procure seeds arrived too late in the season to be useful. As noted above, for both seasons,

we relied on seeds already available to farmers, and we substitute procurement of saplings, which could be planted later.

- SPRING missed opportunities to communicate more clearly with USAID/Mali. Unfortunately, our chief of party resigned after only eight months. Although our interim COPs were able to complete many of the project tasks and reach targets and objectives, we failed to develop a mutually supportive, collaborative relationship with USAID/Mali.
- Based on SPRING's experience, and especially upon the challenges we faced, we recommend establishing project targets after conducting a more detailed initial assessment of the project's catchment area. Many of SPRING's five-year targets, such as declaring 180 villages ODF, were revealed as unrealistic once the project began implementation and learned of particular limitations (e.g., villages ineligible for CLTS, dynamic security considerations). Additionally, by establishing only five-year targets, the accomplishments in FY15 for the number of hectares improved, tippy taps established, and villages declared ODF seem less significant and under-represent the project's efforts and achievements.

Conclusion

In the 15 months that we actively worked to implement integrated programming in nutrition, agriculture, and WASH, SPRING was able to:

- Establish a presence in Mopti, hire 25 local staff, and assess the nutrition-related needs of 100 target villages in 20 communes in the Feed the Future zone of influence.
- Adapt and use the farmer nutrition schools (FNS) model implemented by SPRING in Bangladesh as the point of entry into each community and add nutrition-sensitive agricultural messaging to our training curriculum on vegetable gardening. Through the FNS training we were also able to promote behavior change in hygiene.
- Promote the ENA agenda, adding essential hygiene actions, at both the facility and community levels. For both FNS and ENA/EHA, we used a cascade training approach, leveraging training to 500 FNS leaders to reach an additional 5,000 FNS members. In the case of ENA/EHA, we trained 375 health care workers in facilities and the communities, leveraging these individuals to build a network of more than 200 ENA/EHA support groups, which reached more than 12,000 people.
- Meet our first-year targets for capacity building. In agriculture, WASH, and nutrition, our successes came not from one-off training, but in training over time accompanied by regular follow-up visits by staff.
- Use existing CLTS materials to pre-trigger more than 50 communities (whole villages or hamlets, which was the target for the year), trigger 26 of these, and successfully celebrate the ODF status of 20. Also in the area of WASH, we additionally promoted, through both ENA/EHA and FNS, the creation of tippy taps, resulting in the creation of more than 4,500 handwashing stations in our target villages.

Our primary challenge was the lack of access to water for gardening, so the selection of target villages by the follow-on projects under AVRDC and CARE in the current 20 communes and the 11 remaining communes will be critical. We recommend that it should be based on foreknowledge of the extent to which construction will be required to ensure that water for gardening will be available during two and preferably three planting seasons.

Despite the challenge of access to water for gardening, we made far more progress toward the Feed the Future indicator targets than anticipated during the first year. Our work plan indicated that 5 hectares of gardens would

be influenced by our work each season (assuming that 5,500 gardens of roughly 9 square meters are established). But our data indicate that more than 130 hectares were under an improved technique in only the single season of FY15, nearly 25 times the expected number of hectares and our data indicate that farmers did implement what they had learned from the technical assistance SPRING provided.

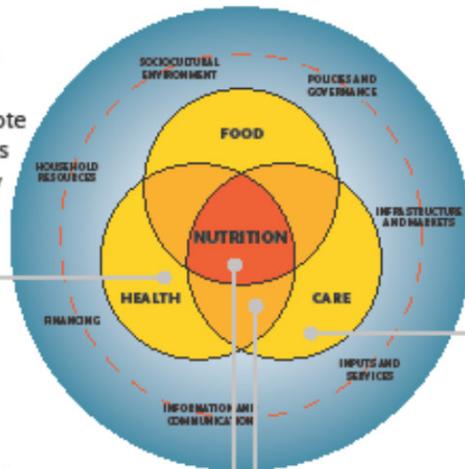
Having not met all of USAID/Mali's expectations of the project in FY15, funding for FY16 was shifted to other USAID-funded partners. SPRING will provide the successor projects with complete project documentation and materials, so they can build off of the agenda we initiated, to include activities SPRING was not able to undertake, such as the establishment of VSLA groups, provision of quality seeds to promote nutrient-rich varieties, creation of seed multiplication groups, and the promotion of ENA/EHA behaviors through mass media, particularly community radio.

SPRING is grateful to the USAID Mission in Mali for the opportunity to begin this interesting and important work, and most especially we are grateful to our local colleagues and counterparts. We wish the Mission, AVRDC, and CARE every success in the continued *déroulement* of effective, coordinated efforts to link agriculture, nutrition, and WASH for the people of Mopti Region.



SPRING IS WORKING TO STRENGTHEN THE NUTRITION SYSTEM IN MALI

Following facility-level ENA/EHA trainings, conducted supportive supervision visits using tablet computers that provide real time feedback to help promote improved staff practices and monitor the quality of nutritional services received by clients



In collaboration with the regional government, triggered community-led total sanitation in 15 villages and established 1,557 tippy taps at the household level

Initiated training for 500 leaders in nutrition-sensitive agriculture through of 20 commune-level Farmer Nutrition Schools who in turn trained an additional 5,000 farmers to increase access to diverse and quality foods

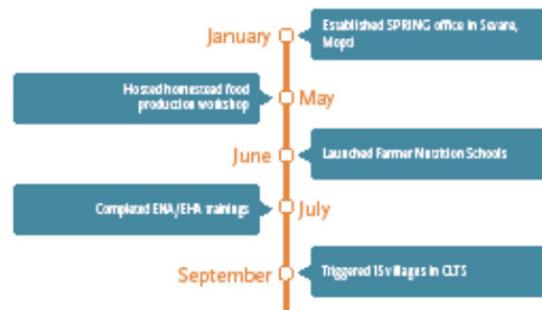
Completed cascade trainings on the Essential Nutrition Actions and Essential Hygiene Actions (ENA/EHA) for 375 facility-based health workers and community actors

REACHING PEOPLE



SPRING is working across 4 cercles, 20 communes, and 100 villages in Mali, reaching community leaders and health workers with nutrition-sensitive agriculture, ENA/EHA, and WASH interventions.

EXERTING INFLUENCE: HIGHLIGHTS



This graphic is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI). The contents are the responsibility of JSI and do not necessarily reflect the views of USAID or the United States Government.

References

CORE Group. 2011. *Booklet on Key ENA Messages*.

http://www.coregroup.org/storage/Nutrition/ENA/Booklet_of_Key_ENA_Messages_complete_for_web.pdf

CORE Group. 2015. *Understanding the Essential Nutrition Actions and Essential Hygiene Actions Framework*.

http://www.coregroup.org/storage/documents/Resources/Tools/ENA_EHA/Understanding_ENA_EHA_Framework.pdf

Direction Nationale de la Statistique et de l'Informatique (DNSI)- Ministère de l'Economie, du Plan et de l'Intégration. 2011. *Recensement Général de la Population et de l'Habitat 2009*. Mali: Direction Nationale de la Statistique et de l'Informatique. DDI-MLI-DNSI- RGPH-2009-V01.

Annex 1: Indicator Matrix

Indicator	FY15 Achievements	FY16 Achievements	Comments
Indicator 1: Prevalence of children 6-23 months receiving a minimum acceptable diet (MAD) (FTF 3.1.9.1(1))	NA	NA	This is an outcome level indicator--measurable change cannot be demonstrated after one year of project implementation.
<i>Disaggregated by male, female</i>			
Indicator 2: Prevalence of underweight children under five years of age (FTF 3.1.9(16))	NA	NA	This is an outcome level indicator--measurable change cannot be demonstrated after one year of project implementation.
<i>Disaggregated by male, female</i>			
Indicator 3: Prevalence of wasted children under five years of age (FTF 3.1.9(12))	NA	NA	This is an outcome level indicator--measurable change cannot be demonstrated after one year of project implementation.
<i>Disaggregated by male, female</i>			
Indicator 4: Prevalence of anemia among women of reproductive age (FTF 3.1.9(6))	NA	NA	This is an outcome level indicator--measurable change cannot be demonstrated after one year of project implementation.
<i>Disaggregated by pregnant, non-pregnant</i>			
Indicator 5: Prevalence of children under six months of age exclusively breastfed	NA	NA	This is an outcome level indicator--measurable change cannot be demonstrated after one year of project implementation.
<i>Disaggregated by male, female</i>			
Indicator 6: Number of hectares under improved technologies or management practices as a result of USG assistance (FTF 4.5.2(2))	134	31	FY16 figure is lower because data reflect dry season only.
<i>Disaggregated by male, female, joint, association-applied</i>	Female: 127 Male: 7	Female: 30 Male: 1	

Indicator	FY15 Achievements	FY16 Achievements	Comments
<i>Disaggregated by technology type</i>	Cultural practices: 133 Pest Management: 111 Soil-related fertility: 132 Irrigation: 133	Cultural practices: 31 Pest Management: 29 Soil-related fertility: 29 Irrigation: 31	
Indicator 7: Total quantity of targeted nutrient-rich value chain commodities set aside for household consumption by direct beneficiary producer households (FTF 4.5.2.8(TBD3))	690,895 kg	NA	
<i>Disaggregated by commodity</i>	Squash: 351,008 kg (3,248 people) Okra: 281,230 kg (5,197 people) Leafy greens: 58,657 kg (1,992 people)	NA	
Indicator 8: Gross margin per hectare of product (FTF 4.5(16))		NA	
<i>Disaggregated by targeted commodity</i>	Squash: \$7,137.68 Okra: \$3,698.71 Leafy vegetables: \$1,590.78 Peppers: \$9,401.97 Eggplant: \$6,558.70	NA	Less than 5% of SPRING beneficiaries are male. Sample findings enabled extrapolation to female farmers but were not sufficient to allow extrapolation to the minority of male farmers.
<i>Disaggregated by sex of farmer : male, female, joint, association-applied</i>	Results apply to female farmers only.	NA	
Indicator 9: Value of incremental sales (collected at farm level) attributed to Feed the Future implementation (FTF 4.5.2(23))	\$295,998.03	NA	
<i>Disaggregated by commodity</i>	Squash: \$82,431.79 (1,386 people) Okra: \$75,050.17 (2,212 people) Leafy vegetables: \$1,373.64 (260 people)	NA	

Indicator	FY15 Achievements	FY16 Achievements	Comments
	Peppers: \$105,200.49 (1,083 people) Eggplant: \$31,941.94 (1,039 people)		
Indicator 10: Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training (FTF 4.5.2(7))	5,500	5,500	
<i>Disaggregated by male, female</i>	Female: 5,242 Male: 258	Female: 5,242 Male: 258	
Indicator 11: Number of individuals trained in child health and nutrition through USG supported programs (FTF 3.1.9(1))	375	200	
<i>Disaggregated by male, female</i>	Female: 130 Male: 245	Female: 194 Male: 6	
<i>Disaggregated by post</i>	ASC/RC: 300 DTC/unit managers: 75	Community support group leaders: 200	
Indicator 12: Number of children under five reached by USG-supported nutrition programs (FTF 3.1.9(15))	8,223	14,355	
<i>Disaggregated by male, female</i>	Disaggregate not available	Disaggregate not available	
<i>Disaggregated by type of program</i>	FNS: 286 Support groups: 217 Tippy taps: 1,302 Community events: 6,418	Support Groups: 112 World Breastfeeding Week: 6,480 Tippy taps: 770 Latrines: 833 FNS: 6,160	Sex disaggregation was not collected across all activities.

Indicator	FY15 Achievements	FY16 Achievements	Comments
Indicator 13: Number of vulnerable households benefiting directly from USG assistance (FTF 4.5.2(14))		19,731	SPRING's multiple interventions overlap considerably to establish repeated contact with individuals and ultimately lead to change behavior. To avoid double counting the same households reached by these various interventions, SPRING selected the two most widespread of its interventions to estimate the number of households reached: number of households in the 20 villages declared ODF and, in all remaining villages <i>not</i> declared ODF, number of households targeted and reached by ASC/RC with repeated in-depth ENA/EHA discussions. Beneficiaries of other activities, such as FNS, are accounted for in this calculation, as they are targeted by ASC/RC. Vulnerable household were calculated at 55% of all households reached.
Indicator 14: Number of women reached with education on exclusive breastfeeding	55,057	49,151	
<i>Disaggregated by point of delivery</i>	Support groups: 503 Community events: 54,554	Support groups: 9,071; World Breastfeeding Week: 14,580; Radio broadcasts: 25,500.	
Indicator 15: Number of health facilities with established capacity to manage acute undernutrition (FTF 3.1.9.2(2))	4	4	
Indicator 16: Number of households with soap and	1,083	1,364	

Indicator	FY15 Achievements	FY16 Achievements	Comments
water at handwashing station commonly used by family members			
Indicator 17: Number of communities certified as “open defecation free” as a result of USG assistance	0	20	
Indicator 18: Number of people gaining access to an improved drinking water source	0	0	Given the terms of SPRING’s Cooperative Agreement, it was determined in FY15 that the project cannot engage in activities classified as construction, including well rehabilitation, thus SPRING was not able to increase access to improved potable water points.
Indicator 19: Number of people gaining access to an improved sanitation facility	0	5,215	IN FY16, 745 latrines were established or improved with SPRING’s assistance, reaching an estimated 5,215 number of people.
<i>Disaggregated by male, female</i>		Female: 2,637 Male: 2,578	

Annex 2: GIS Coordinates of 100 Project Villages

	REGION	CIRCLE	COMMUNE	VILLAGE	LONGITUDE X	LATITUDE Y
1	Mopti	Bandiagara	Dandoli	Dandoli	14.39722	3.54439
2	Mopti	Bandiagara	Dandoli	Pourali	14.38453	3.54831
3	Mopti	Bandiagara	Dandoli	Sincarma	14.37662	3.569
4	Mopti	Bandiagara	Dandoli	Dioubairou	14.31734	3.53707
5	Mopti	Bandiagara	Dandoli	Sókóló	14.32403	3.57363
6	Mopti	Mopti	Dialloubé	Kakagnan Peulh	14.91884	4.32662
7	Mopti	Mopti	Dialloubé	Saré Samba	14.85207	4.18243
8	Mopti	Mopti	Dialloubé	Toguéré mody	14.8599	4.1794
9	Mopti	Mopti	Dialloubé	Saba	14.94895	4.17174
10	Mopti	Mopti	Dialloubé	Dialloubé (mouyal)	15.01548	4.91884
11	Mopti	Mopti	Sio	Ngolobougou Hameau	14.18354	4.03191
12	Mopti	Mopti	Sio	Sirakoro	14.19348	4.04377
13	Mopti	Mopti	Sio	Perimpe	14.46229	4.08253
14	Mopti	Mopti	Sio	Soufouroulaye	14.40572	4.08201
15	Mopti	Mopti	Sio	Segué	14.39988	4.12856
16	Mopti	Mopti	Sio	Somadougou	14.17064	4.03514
17	Mopti	Mopti	Soye	Soye	14.13479	4.16442
18	Mopti	Mopti	Soye	Sorguéré	14.15492	4.16089
19	Mopti	Mopti	Soye	Songompa Ouro Amadi	14.17561	4.16032
20	Mopti	Mopti	Soye	Songompa Ouro Mayo	14.18146	4.15576
21	Mopti	Mopti	Soye	Megou	14.07595	4.202
22	Mopti	Bankass	Segue	Ségué plaine	13.84375	3.74272
23	Mopti	Bankass	Segue	Sounfourou peulh	13.82446	3.78281
24	Mopti	Bankass	Segue	Léguéré	13.86019	3.79725
25	Mopti	Bankass	Segue	Yélé	13.74108	3.7802
26	Mopti	Bankass	Segue	Kabara	13.78943	3.82016
27	Mopti	Bankass	Tori	Kouroukanda habé	13.67076	3.74767
28	Mopti	Bankass	Tori	Ogoboro	13.60937	3.7424
29	Mopti	Bankass	Tori	Berembe	13.60592	3.68232
30	Mopti	Bankass	Tori	Soguinadou	13.64993	3.77717
31	Mopti	Bankass	Tori	Tori	13.61955	3.7076

	REGION	CIRCLE	COMMUNE	VILLAGE	LONGITUDE X	LATITUDE Y
32	Mopti	Bankass	Soubala	Niondé- diaramassa	13.91757	3.53555
33	Mopti	Bankass	Soubala	Niondé-Seydou	13.91707	3.4945
34	Mopti	Bankass	Soubala	Soguina	13.92044	3.45952
35	Mopti	Bankass	Soubala	Oroteguéré	13.88299	3.47762
36	Mopti	Bankass	Lessagou-habe	Kikilé	13.80555	3.63586
37	Mopti	Bankass	Lessagou-habe	Kana	13.8611	3.59131
38	Mopti	Bankass	Lessagou-habe	Nassagou	13.85503	3.69847
39	Mopti	Bankass	Lessagou-habe	Toussagou	13.83739	3.67086
40	Mopti	Bankass	Lessagou-habe	Lessagou Habbé	13.81443	3.60414
41	Mopti	Bankass	Bankass	Sogotou	14.15477	3.49238
42	Mopti	Bankass	Bankass	Kouroundé	14.11964	3.52016
43	Mopti	Bankass	Bankass	Barapira	14.10131	3.54076
44	Mopti	Bankass	Bankass	Kouyentamo	14.08711	3.53449
45	Mopti	Bankass	Bankass	Noumoudama	14.10765	3.50467
46	Mopti	Bankass	Kani-bozon	Walia	14.17338	3.548
47	Mopti	Bankass	Kani-bozon	Dogolé	14.1296	3.67932
48	Mopti	Bankass	Kani-bozon	Yasso	14.12837	3.6656
49	Mopti	Bankass	Kani-bozon	Sadian - Dogon	14.08359	3.60277
50	Mopti	Bankass	Kani-bozon	Indé-Guinékanda	14.18136	3.53437
51	Mopti	Bankass	Dimbal-habe	Ambassa -Dogon	14.00675	3.66073
52	Mopti	Bankass	Dimbal-habe	Sonley	14.00275	3.61742
53	Mopti	Bankass	Dimbal-habe	Kounsagou	13.99981	3.63403
54	Mopti	Bankass	Dimbal-habe	Sokanda	13.99974	3.69547
55	Mopti	Bankass	Dimbal-habe	Dimbal Habbé	14.02869	3.61883
56	Mopti	Koro	Koro	Deguem-Bomo	13.57346	3.09039
57	Mopti	Koro	Koro	Pomorododiou koun	14.09394	3.09331
58	Mopti	Koro	Koro	Togo Tina	14.07283	3.12451
59	Mopti	Koro	Koro	Seguembegou	14.07283	3.12451
60	Mopti	Koro	Koro	Koro (Ama Iré)	14.0445	3.04082
61	Mopti	Koro	Youdiou	Oropa	14.11575	3.15434
62	Mopti	Koro	Youdiou	Ogodengou	14.12444	3.10452
63	Mopti	Koro	Youdiou	Tourou	14.12082	3.07443
64	Mopti	Koro	Youdiou	Youdiou	14.16415	3.10194
65	Mopti	Koro	Youdiou	Souan	14.14238	3.06483

	REGION	CIRCLE	COMMUNE	VILLAGE	LONGITUDE X	LATITUDE Y
66	Mopti	Koro	Barapireli	Barapireli	14.18274	3.03185
67	Mopti	Koro	Barapireli	Ouro-Koum	14.1501	3.03324
68	Mopti	Koro	Barapireli	Tantouma	14.18528	2.59511
69	Mopti	Koro	Barapireli	Ogoténé	14.1856	2.58151
70	Mopti	Koro	Barapireli	Sogou-Yaguem	14.20571	3.01229
71	Mopti	Koro	Bondo	Danadougourou	14.11202	3.03511
72	Mopti	Koro	Bondo	Anabéné	14.06442	3.0127
73	Mopti	Koro	Bondo	Bénébourou	14.09581	3.01355
74	Mopti	Koro	Bondo	Dangaténé	14.13582	3.58232
75	Mopti	Koro	Bondo	Bondo	14.08033	3.00172
76	Mopti	Koro	Dougoutene-1	Babourou	13.50017	3.15283
77	Mopti	Koro	Dougoutene-1	Boundoubourou	13.57391	3.10513
78	Mopti	Koro	Dougoutene-1	Douna (hameau)	13.54443	3.0959
79	Mopti	Koro	Dougoutene-1	Nema	13.53039	3.14459
80	Mopti	Koro	Dougoutene-1	Toroli	13.50221	3.13173
81	Mopti	Koro	Dougoutene-2	Ganaguinikoro	13.50425	3.20008
82	Mopti	Koro	Dougoutene-2	Boundo-Tena	13.51079	3.22218
83	Mopti	Koro	Dougoutene-2	Otekanda	14.00008	3.23189
84	Mopti	Koro	Dougoutene-2	Tinsagou	13.53055	3.23168
85	Mopti	Koro	Dougoutene-2	Andiagana	14.56045	3.22136
86	Mopti	Koro	Pel-maoude	Birga Dogon	14.02289	3.15386
87	Mopti	Koro	Pel-maoude	Temingolo	14.08226	3.15416
88	Mopti	Koro	Pel-maoude	Sogourou	14.02571	3.21591
89	Mopti	Koro	Pel-maoude	Barali-Niongolé	13.5958	3.14434
90	Mopti	Koro	Pel-maoude	Pel - Maoudé	14.05121	3.1614
91	Mopti	Koro	Koporo-pen	Bereli	14.16237	3.1315
92	Mopti	Koro	Koporo-pen	Gomou	14.1159	3.20068
93	Mopti	Koro	Koporo-pen	Komogourou	14.1159	3.15011
94	Mopti	Koro	Koporo-pen	Gueourou Dognon	14.1008	3.14242
95	Mopti	Koro	Koporo-pen	Koporopen	14.13369	3.17565
96	Mopti	Koro	Koporokendie-na	Balirou	14.07225	3.22207
97	Mopti	Koro	Koporokendie-na	Djimerou	14.09371	3.18521
98	Mopti	Koro	Koporokendie-na	Tendély	14.05331	3.24529
99	Mopti	Koro	Koporokendie-na	Téména	14.07302	3.20086
100	Mopti	Koro	Koporokendie-na	Koporo Na	14.07495	3.22207

Annex 3: SPRING-supported Health Facilities

Cercle	Commune	Health Centers	Total Number
Mopti	Dialoubé	CSCom of Dialoubé	1
	Soye	CSCom of Soye	1
	Sio	CSCom of Soufouroulaye and Somadougou	2
	Cercle Level	CSRef of Mopti	1
	Total SPRING-supported health facilities in Mopti		5
Bandia-gara	Dandoli	CSCom central of Bandiagara	1
	Cercle Level	CSRef of Bandiagara	1
	Total SPRING-supported health facilities in Bandiagara		2
Bankass	Kani-bonzon	CSCom of Kani-bonzon and Inde Guinekanda	2
	Dimbal	CSCom of Dimbal and Doundé	2
	Segué	CSCom of Ségué, Sama and Koulou	3
	Soubala	CSCom of Soubala	1
	Lessagou	CSCom of Léssagou and Gombossagou	2
	Tori	CSCom of Tori	1
	Bankass	CSCom central of Bankass	1
	Cercle Level	CSRef of Bankass	1
	Total SPRING-supported health facilities in Bankass		13
Koro	Koro	CSCom Central of Koro and Pomorododiou	2
	Youdiou	CSCom of Youdiou	1
	Barapireli	CSCom of Barapireli	1
	Bondo	CSCom of Bondo and Dangaténé	2
	Dougouténé I	CSCom of Toroli	1
	Dougouténé II	CSCom of Tinsagou and Andiagana	2
	Pel-Maoudé	CSCom of Pel-Maoudé	1
	Koporo-Na	CSCom of Koporo-Na	1
	Koporo-Pen	CSCom of Koporo-Pen	1
	Cercle Level	CSRef of Koro	1
	Total SPRING-supported health facilities in Koro		13
Total SPRING-supported health facilities		33	

Annex 4: Protocol for Selecting FNS Participants

Protocole d'entrée dans les villages du projet USAID/SPRING

Champs Ecole Nutritionnels

Objectif: Amélioration de l'accès à des aliments variés et de qualité

Résultats attendus

- ≥ 500 Femmes leaders participent dans les Champs Ecoles, maîtrisent les techniques de productions, de conservation et de transformation et transmettent dans les connaissances acquises dans leurs villages.
- ≥ 5000 ménages:
 - Ont été atteints par le projet et ont leur revenus améliorés et connaissent l'importance des produits maraichers dans l'alimentation humaine,
 - Utilisent plus fréquemment les légumes dans la confection des repas familiaux
 - Acquièrent des connaissances de production et de meilleure transformation et conservation des légumes
 - Adoptent des comportements positifs en matière de Nutrition et d'Hygiène.

Méthodologie

Sélection des bénéficiaires directes et indirectes

- L'entrée dans le village se fera selon la procédure suivante :
 - Prévenir la mairie qui accompagne les agents du projet dans les villages cibles
 - Rencontrer le conseil villageois composé du chef de village et ses conseillers
 - Présenter les critères de choix des bénéficiaires au cours d'une réunion publique des groupes des femmes dans le village, convoquée par les conseils villageois
- Les bénéficiaires directs, sont ceux qui seront formés directement par les agents du projet selon le cas afin qu'une fois de retour dans leur communauté respective ils puissent restituer le savoir acquis auprès de leurs pairs ; ces derniers étant considérés comme bénéficiaires indirects. Les critères suivants devront être appliqués lors de la sélection des bénéficiaires directs :
- Les femmes et les hommes avec une préférence donnée aux femmes en âge de procréer (FAP) (≈ 80% de l'échantillon doit être les femmes, car elles sont les principales cibles du projet)
- Avoir un enfant de moins de 5 ans et de préférence de 6 à 23 mois, en avoir eu ou être gardien d'enfant de la même tranche d'âge.
- Être résident dans la localité pendant au moins une année
- Être dynamique et motivé
- Jouir d'un respect et d'une certaine aura dans son village d'origine

- Chaque village participant au programme enverra 5 leaders ou bénéficiaires directs participés aux formations dispensées par SPRING et son partenaire en charge de VSLA dans les villages de référence. Ces leaders ont la responsabilité de former au minimum 10 ménages soit 1 personne par ménage dans leur village après leur retour. Sur cette base, les participants aux formations dispensées par les leaders dans les villages formeront des groupes de 50 à 55 personnes en moyenne formées.
- Les bénéficiaires indirects des formations dans les villages seront sélectionnés sur la base des critères suivant :
- Les hommes et des femmes avec une préférence donnée aux femmes en âge de procréer (FAP) (\approx 80% de l'échantillon doit être les femmes, car elles sont les principales cibles du projet)
- Avoir un enfant de moins de 5 ans et de préférence de 6 à 23 mois
- Etre résident dans la localité pendant au moins une année

Annex 5: CLTS Outcomes by Mobilized Village

	Cercle	Commune	Village	Hameau	Existing Latrines	New Latrines	Total Latrines	Triggered	Declared ODF
1	Bankass	Bankass	Noumoudama	Noumoudama	50	24	74	Yes	Yes
2	Bankass	Bankass	Kourounde Sondo	---	---	---	---	No	No
3	Bankass	Kani-Bonzoni	Yasso	---	---	---	---	No	No
4	Bankass	Bankass	Barapira	---	34	3	37	Yes	No
5	Bankass	Bankass	Kourounde Sondo	Sondole	7	15	22	Yes	No
6	Bankass	Bankass	Sogou Toum	Fangadougou	3	22	25	Yes	Yes
7	Bankass	Bankass	Sogou Toum	Rakounda	1	28	29	Yes	Yes
8	Bankass	Bankass	Sogou Toum	Densagou	3	30	33	Yes	Yes
9	Bankass	Bankass	Kouyentombo	Sarale	5	18	23	Yes	Yes
10	Bankass	Bankass	Sogo Toum	---	30	2	32	Yes	No
11	Bankass	Segue	Leguere	---	---	---	---	No	No
12	Bankass	Segue	Sonfounou Peulh	---	---	---	---	No	No
13	Bankass	Segue	Kabara	---	---	---	---	No	No
14	Bankass	Dimbal Habbe	Kounsagou	---	20	105	125	Yes	Yes
15	Bankass	Dimbal Habbe	Sokanda	Sokanda	10	25	35	Yes	Yes
16	Bankass	Dimbal Habbe	Konsagou	Badjekana	8	24	32	Yes	Yes
17	Bankass	Dimbal Habbe	Konsagou	Dianweli	6	21	27	Yes	Yes
18	Bankass	Dimbal Habbe	Dimbal Habbe	Tobara	0	6	6	Yes	No
19	Bankass	Dimbal Habbe	Dimbal Habbe	Madina	3	57	60	Yes	Yes
20	Bankass	Dimbal Habbe	Dimbal Habbe	Manahody	6	23	29	Yes	Yes

	Cercle	Commune	Village	Hameau	Existing Latrines	New Latrines	Total Latrines	Triggered	Declared ODF
21	Bankass	Dimbal Habbe	Dimbal Habbe	Ongonbira	2	39	41	Yes	Yes
22	Bankass	Dimbal Habbe	Dimbal Habbe	Flandana	5	43	48	Yes	Yes
23	Bankass	Soubala	Niande Diaramas	---	---	---	---	No	No
24	Bankass	Soubala	Niande Seydou	---	---	---	---	No	No
25	Bankass	Soubala	Oroteguere	---	---	---	---	No	No
26	Bankass	Tori	Tori	---	---	---	---	No	No
27	Koro	Koro	Seguebengou	---	---	---	---	No	No
28	Koro	Dougoutene I	Douna	---	---	---	---	No	No
29	Koro	Dougoutene I	Babouro	---	---	---	---	No	No
30	Koro	Dougoutene I	Bondo Tena	---	---	---	---	No	No
31	Koro	Koporokendie-na	Téména	Temena	22	26	48	Yes	Yes
32	Koro	Koporokendie Na	Djimerou	---	---	---	---	No	No
33	Koro	Koporo-pen	Gomou	Gomou-Kana	3	32	34	Yes	Yes
34	Koro	Koporo-pen	Koporopen	Komogourou	21	53	74	Yes	Yes
35	Koro	Koporo-pen	Gueourou Dognon	---	53	3	56	Yes	No
36	Koro	Pel-maoude	Sogourou	---	10	26	36	Yes	No
37	Koro	Pel-maoude	Sogourou	Sogourou-Kanda	8	14	22	Yes	Yes
38	Koro	Pel-maoude	Pel-maoude	Barakoun	24	19	43	Yes	Yes
39	Koro	Pel-maoude	Pel-maoude	Monibouro	44	16	60	Yes	Yes
40	Koro	Pel Maoude	Birga Dogon	---	---	---	---	No	No
41	Koro	Pel Maoude	Temagolo	---	---	---	---	No	No

	Cercle	Commune	Village	Hameau	Existing Latrines	New Latrines	Total Latrines	Triggered	Declared ODF
42	Koro	Pel-maoude	Baraniongole	Wilwalo	19	16	35	Yes	Yes
43	Mopti	Sio	Somadougou	---	---	---	---	No	No
44	Mopti	Dialloubé	Sara Samba	---	---	---	---	No	No
45	Mopti	Dialloubé	Tokere Modi	---	---	---	---	No	No
46	Mopti	Dialloubé	Kakagnan Foulbe	---	---	---	---	No	No
47	Mopti	Dialloubé	Saba	---	---	---	---	No	No
48	Mopti	Soye	Soye	---	---	---	---	No	No
49	Mopti	Soye	Megou	---	---	---	---	No	No
50	Mopti	Soye	Songopa Ouro Mayo	---	---	---	---	No	No
TOTAL					397	690	1,087	26	20

Annex 6: List of Supplemental SPRING Documents

The documents in the list below are referenced as footnotes throughout this report. They are available to the USAID/Mali mission, AVRDC and USAID-CARE Nutrition and Hygiene Project.

1. Maraichage dans la Région de Mopti
2. Agriculture and Nutrition in Mali through a Gender Lens: A Qualitative Study Literature Review
3. *Guide du formateur pour le maraichage sensible à la nutrition* and *Les Modules de formation sur le maraichage pour les bénéficiaires*
4. 4 ENA/EHA guides and reference manuals
 - a. Guide de Formation : Agents de Santé et Responsables de Nutrition
 - b. Manuel de référence pour agents de santé et responsable de programme de nutrition
 - c. Guide de Formation: Agents Communautaires
 - d. Manuel de référence sur les pratiques Clés : Agents Communautaires
5. *Guide Pratique de l'Assainissement Total Piloté par la Communauté au Mali*



SPRING

JSI Research & Training Institute, Inc.
1616 Fort Myer Drive, 16th Floor ○ Arlington, VA 22209 ○ USA
Phone: 703-528-7474
Fax: 703-528-7480
Email: info@spring-nutrition.org
Internet: www.spring-nutrition.org