



**USAID**  
FROM THE AMERICAN PEOPLE



# How Do Community Health Workers Contribute to Better Nutrition?

## Mali



## **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.

## **About APC**

Advancing Partners & Communities (APC) is a five-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-12-00047, beginning. APC is implemented by JSI Research & Training Institute, Inc., in collaboration with FHI 360. The project focuses on advancing and supporting community programs that seek to improve the overall health of communities and achieve other health-related impacts, especially in relationship to family planning. APC provides global leadership for community-based programming, executes and manages small- and medium-sized sub-awards, supports procurement reform by preparing awards for execution by USAID, and builds technical capacity of organizations to implement effective programs.

## **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 United States Government.

## **Recommended Citation**

SPRING and APC. 2016. *How Do Community Health Workers Contribute to Better Nutrition?: Mail*. Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.

## **SPRING**

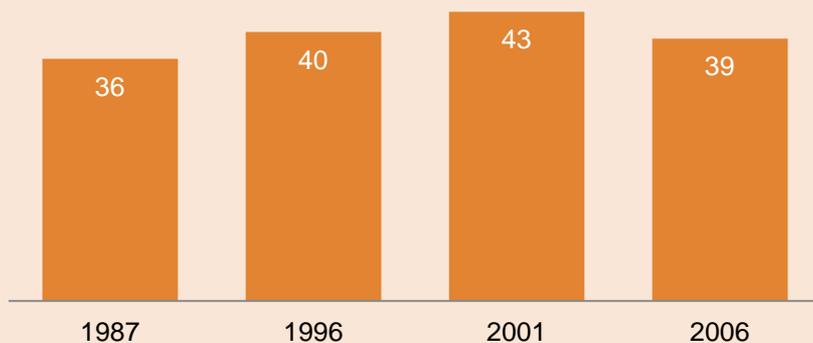
JSI Research & Training Institute, Inc.  
1616 Fort Myer Drive, 16th Floor  
Arlington, VA 22209 USA  
Phone: 703-528-7474  
Fax: 703-528-7480  
Email: [info@spring-nutrition.org](mailto:info@spring-nutrition.org)  
Internet: [www.spring-nutrition.org](http://www.spring-nutrition.org)

# In Mali, nutrition-related health issues persist.



% children under 5

According to most recent data, **stunting** remains a major challenge in Mali.



# 56%

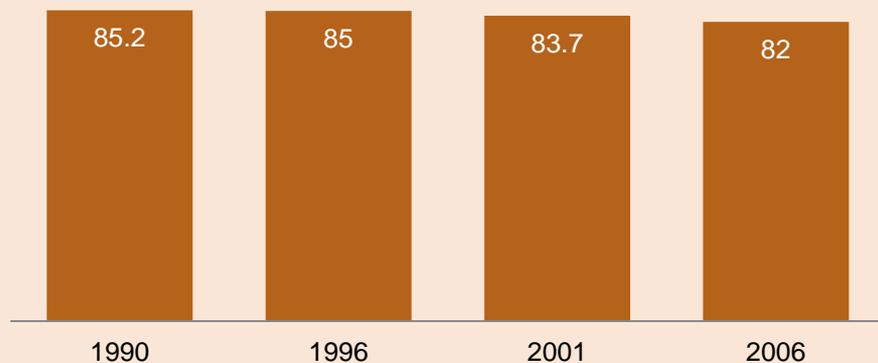
of women of reproductive age have anemia

That means **2 million** Malian women have a critical micronutrient deficiency (2011)



% children under 5

**Anemia** also persists as a major issue for Mali's children.



# only 34%

of infants are exclusively breastfed for 6 months (2006)

# We know **evidence-based, cost-effective interventions** can improve nutrition outcomes.

It is estimated that the following 10 evidence-based, nutrition-specific interventions, if scaled to 90 percent coverage, could **reduce stunting by 20 percent** and **severe wasting by 60 percent**.

- Management of severe acute malnutrition
- Preventive zinc supplementation
- Promotion of breastfeeding
- Appropriate complementary feeding
- Management of moderate acute malnutrition
- Periconceptual folic acid supplementation or fortification
- Maternal balanced energy protein supplementation
- Maternal multiple micronutrient supplementation
- Vitamin A supplementation
- Maternal calcium supplementation

Studies have demonstrated the effectiveness of community health workers in achieving demonstrable health benefits directly related to the Millennium Development Goals (MDGs), including reducing child malnutrition and both child and maternal mortality.

- Perry and Zulliger (2012)

# Community health workers play a critical role in providing these proven, evidence-based, cost-effective interventions.

By making basic primary care available at the community level, CHWs make it possible for women and children to receive the services they need for better health outcomes.

Frequently based in the communities where they are from, community health workers (CHWs) have direct access to the community and can link with other nutrition-related community-based service providers. They can provide clients with a range of services such as medical care, information, counseling, and referral.

However, CHWs are often expected to carry out a wide range of interventions with limited time, resources, and remuneration. They need appropriate academic curricula, training programs, and support systems – including systems for monitoring, supporting, and mentoring. Countries like **Mali** must take this into consideration as they scale up and expand the services provided by CHWs.



**Information** on the services that community health workers provide and the systems that support them in doing their work **is often hard to find.**

To begin to fill this void, the two USAID-funded projects - **Advancing Partners and Communities (APC)** and **Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING)** - collaborated to conduct a desk review of existing policies and documents related to community health systems.

Due to the diversity and magnitude of community health programs in a given country, we collected information based on individual country policies/strategies that comprise the key areas of a community health system and not the realities of program implementation. Due to funding and timing, we focused on national public sector programs, and only when possible, captured community-based private sector health programs operating at scale.



These are our findings:

This is what community  
health workers can do in  
Mali, according to  
government policy.

See the Data Notes at the end for more on how data were collected and analyzed.

Community health service delivery in Mali is guided by **multiple policies**.

Relevant Government Policies Reviewed	Last Updated
Decennial Health and Social Development Plan	Unknown
Decennial Health and Social Development Program	Unknown
Essential Community Health Care: ASC Handbook	2015
SEC National Implementation Guide	2015



# Mali has **two distinct cadres** of community health workers.

**1. Community Health Agents (ASC)** – salaried and have had previous training as nurses' aides or auxiliary midwives, and deliver basic reproductive, maternal, newborn, and child health, nutrition, and WASH interventions within their coverage areas, known as ASC sites.

**2,317** in country\*

1: 700 people (southern Mali)

1 : 100-500 people (northern Mali)

**2. Relais Communitaires (Relais)** – volunteers who assist the ASC in health promotion, community mobilization, and service delivery.

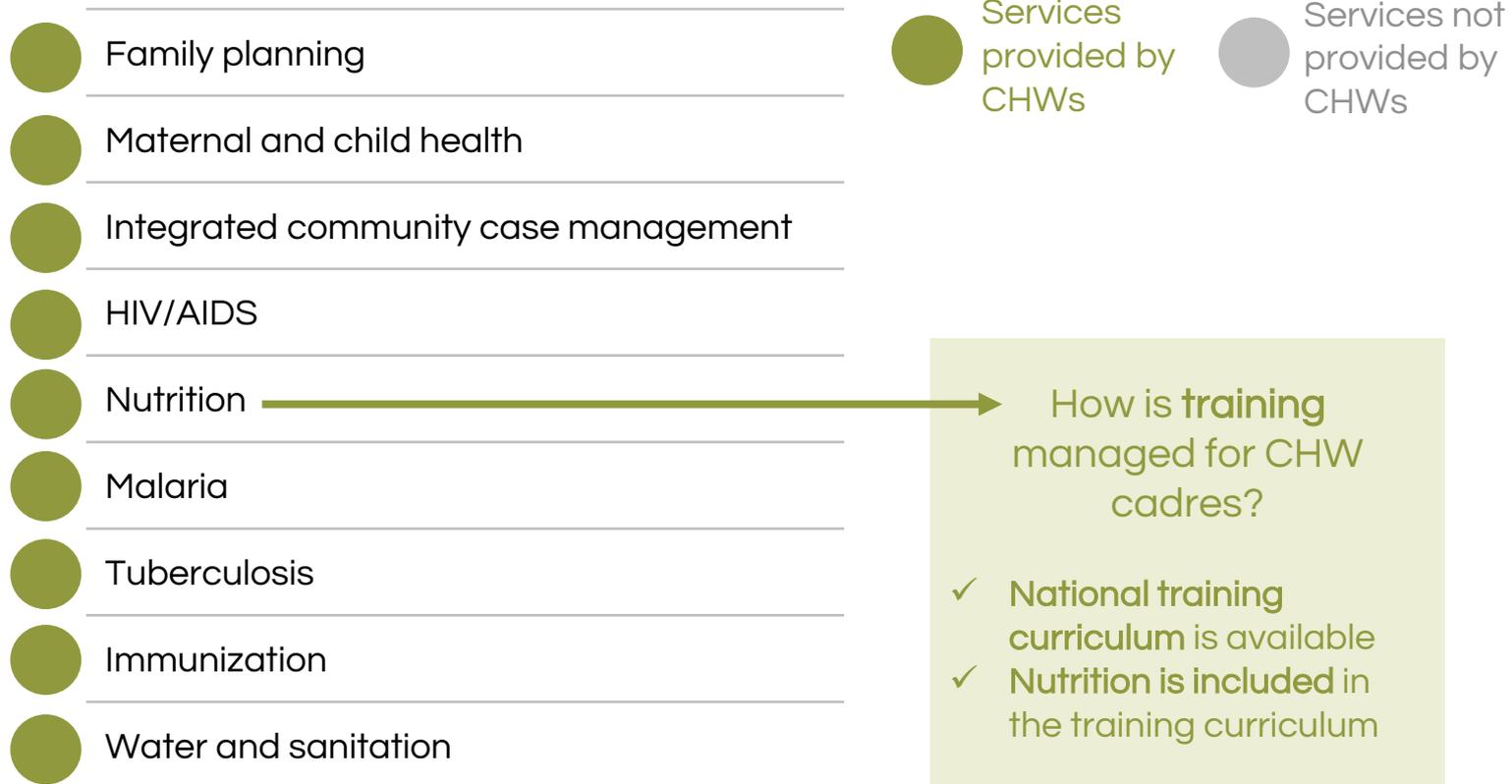
**26,939** in country

1: 50 households

\*Data from 2014 shows that 2,317 ASC were trained in community integrated management of childhood illness. Data on the total number of ASC is not available.



# Community health workers in Mali provide services in **multiple health service delivery areas.**



Community health workers  
in Mali support improved  
nutrition outcomes  
throughout the continuum  
of care.



# How we present our findings on nutrition services provided by community health workers.

Services, listed in tables, are categorized as nutrition **assessment**, **counseling**, or **support** actions.

Assessment	
<i>Activity / action to be taken</i>	● <i>Cadres of CHWs who conduct this task</i>
	●

Counseling	

Support	

The tables presented for each stage of life across the continuum of care include specific nutrition-related services queried as part of the Community Health Systems Catalog Assessment.

For each stage of life, we indicate if the service is provided by community health workers and which cadres have the responsibility to provide that service.

Community health workers who provide services are identified by cadre:  
**ASC**– Community Health Agents  
**Relais**– Relais Communitaires

- Services provided by CHWs
- Service not provided by CHWs or not clearly specified in policy

# For adolescents

## Counseling

Provide information/education/counseling (IEC) on iron/folate for women who are not pregnant and adolescent girls



ACS / Relais

## Support

Provide/administer iron/folate for women who are not pregnant and adolescent girls



Relais



# For pregnant women

## Assessment

Monitor weight gain during pregnancy	●	--
Measure mid-upper arm circumference (MUAC) screening for pregnant women	●	--
Give information on hemoglobin testing for women who are pregnant	●	--
Test blood for hemoglobin levels	●	--

## Counseling

Provide IEC on nutrition/dietary practices during pregnancy	●	ASC / Relais
Provide IEC on iron/folate	●	ASC / Relais
Provide IEC on insecticide-treated net use	●	ASC / Relais

## Support

Provide/administer insecticide-treated nets	●	ASC / Relais
Provide/administer iron/folate	●	ASC



# For breastfeeding women

## Assessment

Monitor nutritional status of women who are breastfeeding (e.g., using MUAC)



--

## Counseling

Provide IEC on correct positioning and attachment of the newborn during breastfeeding



ASC / Relais

Provide IEC on managing breastfeeding problems (breast health, perceptions of insufficient breast milk, etc.)



ASC

Provide IEC on nutrition/dietary practices during lactation



ASC / Relais



# For newborns

## Assessment

Weigh newborns



ASC / Relais

## Counseling

Provide IEC on skin-to-skin contact between baby and mother/caregiver



ASC

Provide IEC on breastfeeding within 1 hour of birth



ASC / Relais



# For children

## Assessment

Scales to measure weight of children up to 2 years of age	●	ASC
Use length boards to measure length of children up to 2 years of age	●	ASC
Measure MUAC of children	●	ASC / Relais
Screen children for bilateral edema	●	ASC / Relais

## Support

Provide/administer Vitamin A supplementation for children 6–59 months of age	●	ASC / Relais
Provide/administer micronutrient supplementation	●	ASC / Relais
Provide/administer deworming medication	●	ASC / Relais
Treating moderate acute malnutrition for children under 2 years of age	●	ASC / Relais
Treat severe acute malnutrition with ready-to-use therapeutic foods (RUTF) or ready-to-use supplementary foods (RUSF)	●	ASC

## Counseling

Provide IEC on Vitamin A for children 6–59 months of age	●	ASC / Relais
Provide IEC on general micronutrient supplementation	●	ASC / Relais
Provide IEC on de-worming medication	●	ASC / Relais
Provide IEC on complementary feeding practices and continued breastfeeding (6–23 months of age)	●	ASC / Relais
Provide IEC on exclusive breastfeeding (first 6 months of age)	●	ASC / Relais
Provide IEC on introduction of soft, semi-solid foods at 6 months of age	●	ASC / Relais
Provide IEC on continuing breastfeeding for children less than 6 months of age who have diarrhea	●	--
Provide IEC on increasing fluids and continuing solid feeding for children over 6 months of age with diarrhea	●	ASC



# For all stages of life

## Counseling

Provide IEC on handwashing with soap ● ASC / Relais

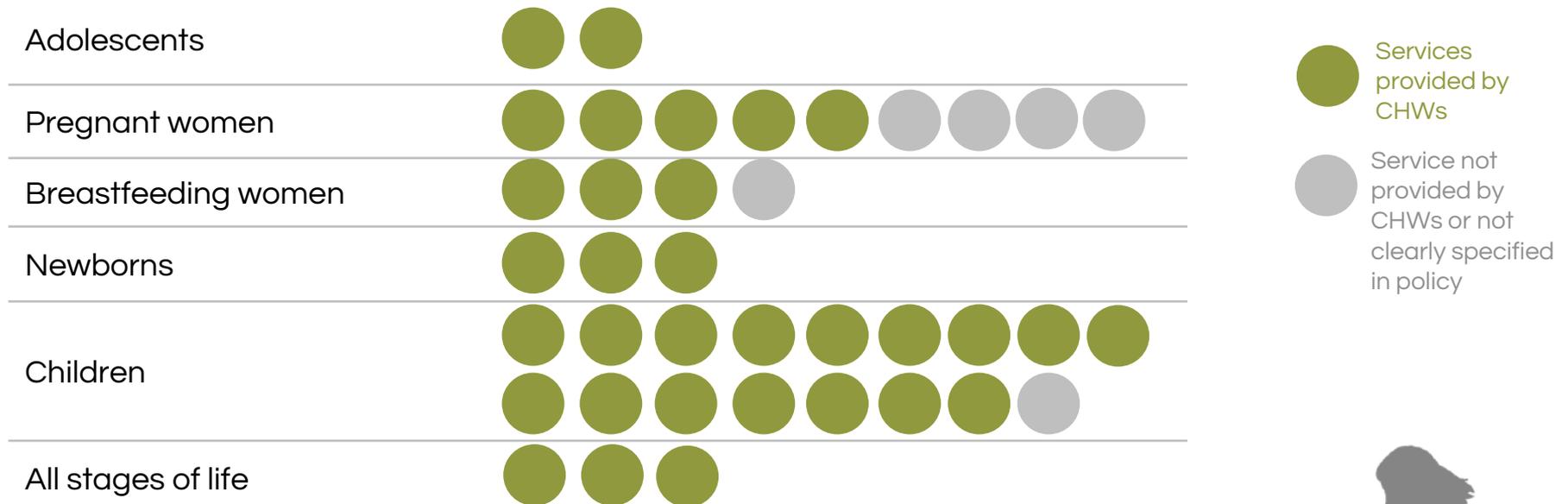
Provide IEC on community-level total sanitation ● ASC / Relais

Provide IEC on household point-of-use water treatment ● ASC / Relais



# Our key takeaways

In Mali, two cadres of community health workers provide **32** of the recommended **38** nutrition services discussed in this assessment.



# How to use this information

We invite in-country stakeholders to use this information to:



**Identify** which nutrition-related services CHWs can provide, according to policies;



**Prioritize** and/or reassign responsibilities to avoid overburdening CHWs;



**Build** a stronger foundation of policies, tools, and systems for CHWs to conduct their work;



**Plan** additional support to CHWs;



**Design** and conduct other in-depth assessments of community nutrition programs;



**Inform** program implementers to strengthen community health interventions.

This product was developed using information collected by APC, with input from SPRING, through a desk review of existing policies and documents related to community health systems. Due to the diversity and magnitude of community health programs in a given country, we collected information based on country policies/strategies that comprise the key areas of a community health system and not the realities of program implementation. Due to funding and timing, we focused on national public sector programs, and only when possible, captured community-based private sector health programs operating at scale. We encourage updates and validation to specific local contexts.

# Data Notes

This document includes rich information about community-level nutrition policies and services in Mali. The data represented here are based on a detailed analysis of survey responses and a review of select policies related to nutrition responsibilities of community health workers.

The data come with their own caveats. Policies do not always specify which particular actions CHWs are allowed or expected to perform, nor do they give any real indication of what actions CHWs actually do perform. Policies can be general, ambiguous, and/or contradictory. For instance, a policy might list "referral for antibiotics" but it doesn't specify which antibiotics.

Furthermore, Mali is a highly decentralized country. In some states the policies and guidelines reviewed may not be adopted at all, may be adapted, and/or may be integrated into other documents.

You can learn more about how to map health workforce activities with the SPRING Nutrition Workforce Mapping Toolkit, available at [spring-nutrition.org/publications/tools/nutrition-workforce-mapping-toolkit](https://spring-nutrition.org/publications/tools/nutrition-workforce-mapping-toolkit)

This effort was undertaken as part of the wider Community Health Systems Catalog data collection effort.

You can find more details on the Community Health System in Mali and data on other countries at: [www.advancingpartners.org/resources/chsc](https://www.advancingpartners.org/resources/chsc)

# References

Bhutta, Zulfiqar A., Jai K. Das, Arjumand Rizvi, Michelle F. Gaffey, Neff Walker, Susan Horton, Patrick Webb, Anna Lartey, Robert E. Black, The Lancet *Nutrition Interventions Review Group*, the *Maternal and Child Nutrition Study Group*. 2013. "Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?" *Lancet* 382 (9890):452-477. doi:10.1016/S0140-6736(13)60996-4. (<https://goo.gl/jrMUov>)

Global Nutrition Report. "2014 Nutrition Country Profile, Mali." 2014. (<https://goo.gl/AGNMv0>)

World Bank DataBank. "Health Nutrition and Population Statistics." 2016. World Bank Group: Washington, D.C. (<https://goo.gl/w1DrLr>)

Perry, Roger and Rose Zulliger. 2012. "How Effective Are Community Health Workers? An Overview of Current Evidence with Recommendations for Strengthening Community Health Worker Programs to Accelerate Progress in Achieving the Health-related Millennium Development Goals." JHU: Baltimore, MD. (<https://goo.gl/3x9K91>)

# Additional Resources on CHWs

[Community Health Systems Catalog](https://goo.gl/N1QKYK) - An innovative and interactive reference tool on country community health systems intended for ministries of health, program managers, researchers, and donors interested in learning more about the current state of community health systems. (<https://goo.gl/N1QKYK>)

[Essential Package of Health Services Country Snapshot Series](https://goo.gl/2M6FXr) - A series of country profiles that analyzes the governance dimensions of Essential Packages of Health Services (EPHS), including how government policies contribute to the service coverage, population coverage, and financial coverage of the package (<https://goo.gl/2M6FXr>)

[Community Health Worker \(CHW\) Central](https://goo.gl/dacnl5) - An online community of practice for sharing resources and experiences and discussing questions and ideas on CHW programs and policy. (<https://goo.gl/dacnl5>)

[The Community Health Framework](https://goo.gl/VZlmbm) - A framework developed for government decision makers to structure dialogues, answer questions, develop recommendations, and foster continuous learning about community health. (<https://goo.gl/VZlmbm>)

[Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems](https://goo.gl/5G0Vbc) - A systematic review of CHW programs and their impact on health-related Millennium Development Goals (MDGs) as well as eight in-depth country case studies in Sub-Saharan Africa (Ethiopia Mozambique and Uganda), South East Asia (Bangladesh, Pakistan and Thailand) and Latin America (Brazil and Haiti). (<https://goo.gl/5G0Vbc>)

[How Effective Are Community Health Workers? An Overview of Current Evidence with Recommendations for Strengthening Community Health Worker Programs to Accelerate Progress in Achieving the Health-related Millennium Development Goals](https://goo.gl/jKx2Zg) - An update and supplement to the previous paper on the effectiveness of CHWs in providing a range of health services and improving health and nutrition outcomes. (<https://goo.gl/jKx2Zg>)

# Additional Resources from Mali

[The role of 'hidden' community volunteers in community-based health service delivery platforms: examples from sub-Saharan Africa](https://goo.gl/JVRalk) - Conducted in three countries, this study focuses on the impact made by the first tier of Community based health workers, volunteers. Often overlooked in community-based research, the volunteer cadres have a strong focus on health promotion and disease prevention through different channels including, raising community awareness, mobilizing communities, sparking community dialogue, and promoting and demonstrating essential family practices such as long-lasting insecticidal nets, infant and young child feeding practices, proper hygiene, and immunization. The study highlights the need to better characterize the volunteers' work to improve volunteer systems, and incorporate their work into scale-up models. (<https://goo.gl/JVRalk>)

[The role of community health workers in improving child health programmes in Mali](https://goo.gl/V1t4P0) – This study provides the results of child health community programs in West Africa. It explores the type of training that CHWs receive, and the types of resources they have available and quantifies the impact they are having on households in rural areas. Ultimately, the study is a great example of the impacts in child health made by CHWs and suggests improvements so they can expand their impact. (<https://goo.gl/V1t4P0>)

[Etude de Cas sur le Fonctionnement des Relais Communautaires dans le Cadre de la Prevention de la Sous-Nutrition](https://goo.gl/Hsprg0) - This resource (in French) describes a study conducted to determine the effectiveness of community health workers in a few countries including Mali. The study explores different aspects of the functionality of health workers, and outlines the type of environment necessary for them to maximize their effectiveness (<https://goo.gl/Hsprg0>)

Learn more at:  
[www.spring-nutrition.org](http://www.spring-nutrition.org)



**USAID**  
FROM THE AMERICAN PEOPLE

