FACTS Reports

Field Actions Science Reports
The journal of field actions

Special Issue 5 | 2012
Women's and Children's Health

Integrated management of childhood illness within communities in Togo

Prise en charge integree des maladies de l'enfant au niveau communautaire au Togo

Apoyo integrado a las enfermedades infantiles en el ámbito comunitario en Togo

Perrine Savoie and Mathilde Lambert

OpenEdition Journals

Electronic version
URL: http://journals.openedition.org/factsreports/1905
ISSN: 1867-8521

Publisher
Institut Veolia

Electronic reference
Perrine Savoie and Mathilde Lambert, « Integrated management of childhood illness within communities in Togo », *Field Actions Science Reports* [Online], Special Issue 5 | 2012, Online since 07 September 2012, connection on 30 April 2019. URL : http://journals.openedition.org/factsreports/1905

http://factsreports.revues.org/1905
Published 3 September 2012

FACTS Reports

Integrated management of childhood illness within communities in Togo

Savoie Perrine[1] and Lambert Mathilde[2]

[1] Project Officer, Programmes Department, Plan France
[2] Trainee, Programmes Department, Plan France

Abstract. Togo is one of the poorest countries on our planet. The lack of knowledge of good hygiene practices compounded by the scarcity of resources in health facilities affects the chances of survival for children and pregnant women. Plan France and its partners developed a 42 month pilot project aimed at reducing mortality in children under five years of age and pregnant women in Togo by teaching good practice guidelines in prevention and care developed by the WHO. The project, which was implemented in the East Mono district (Plateau region), required a high level of involvement from the beneficiary communities as well as from representatives of the Ministry of Health. Three hundred and ten community health agents received training in the prevention of health risks in children under 5 and pregnant women as well as the management of simple cases of illness in children and newborns. They were provided with educational material, mosquito nets for demonstration, bicycles and pharmacy boxes. The main target groups for the project were children under 5 years of age (more than 17,000) and pregnant women (over 1600). Close to 90,000 inhabitants from 52 communities benefited indirectly from the project, through awareness-raising, the improvement of skills among health centre personnel and better access to drugs. The final evaluation of the project showed that the involvement of all actors was considerable. Many positive impacts were observed both in prevention and care practices in the communities involved and the state of health of the target groups. For instance the proportion of children under the age of five who sleep under ITMN increased from 9.5% in 2004 (before the project) to 88.7% in 2010 (end of project). The Ministry of Health wishes to extend the project to other health districts throughout the country, but one of the difficulties will be the compensation of CHAs which requires financial resources that are not available.

Keywords. Togo, health, mortality in children, children under five years of age, pregnant women, Integrated Management of Childhood and Neonatal Illnesses, Community Health Agent, prevention, community mobilisation.

1 Introduction

The Togolese republic is a West African country bordered by Ghana to the west, Benin to the east and Burkina Faso to the north. It extends south to the Gulf of Guinea. The capital city is Lomé, located in the south of the country. Togo has a population of approximately 6.7 million. The per capita income in 2008 was $844[1].

The Human Development Index ranks Togo 139th out of 169 countries[2], placing it among the least developed countries (low life expectancy, very low per capita income and low level of education in the population[3]).

The low educational level of the population – which is often reflected in poor knowledge of hygiene practices – compounded by the lack of resources in health facilities, affects the chances of survival for children and pregnant women, who are the most vulnerable to most communicable diseases because of their weak natural defences.

This is why the infant and child mortality rate is rather high in Togo: 123 per 1000[4]. Deaths in children under the age of 5 are usually due to common illnesses such as malaria, malnutrition, diarrhoea, respiratory infections, etc. Yet these diseases may be avoided by relatively simple means.

[1] UNDP, 2010.
[2] UNDP, 2010.

Corresponding author:
sophie.chamard@plan-international.org

[3] This indicator is measured by years of schooling and literacy rate in the population.
[4] National Survey whith multiple indicators, Togo Ministry of Health, March 2007.

Acronyms

ANV	Antenatal visits
ARI	Acute Respiratory Infection
CHA	Community Health Agent
CAMEG	Centrale d'Achat des Médicaments Essentiels and Génériques – Central Purchasing Office for Essential and Generic Drugs of Togo
C-IMNCI	Community IMNCI
COGES	Management committee (of a peripheral care unit)
COSAN	Community Health Committee
FHD	Family Health Division
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMNCI Committee	Committee whose role is to promote the work of the CHA in the communities. This committee is composed of influential people, usually a female leader,a representative of the chiefdom and a person responsible for health in the village, and covers 4 villages
ITMN	Insecticide-Treated Mosquito Net
KAP	Knowledge, Attitudes and Practices
NACP	National AIDS Control Programme
NMCP	National Malaria Control Programme
ORS	Oral Rehydration Salts/Solution
ORT	Oral Rehydration Therapy
PCU	Peripheral care unit: rural health care centre/dispensary; a health district comprises a referral health care centre (district hospital) and several PCUs
VDC	Village Development Committee
WHO	World Health Organization

To confront this situation, Togo–like most countries in West Africa–adopted in the late 1990s the "Integrated Management of Neonatal and Childhood Illnesses (IMNCI)" strategy. This approach was defined by the WHO, UNICEF and the Pan American Health Organization in 1990. It has three components:

- clinical IMNCI,which aims at improving the skills of health care professionals;
- institutional IMNCI, which seeks to reinforce the material resources of health care facilities;
- community IMNCI, which enables the development of preventive behaviour. promoting the survival and health of children in families and communities.

This community component is crucial even though it may have been neglected initially by the Togo Ministry of Health, which focused on the first two components. Nevertheless in the absence of tangible positive results, the different technical divisions of the Togo Ministry of Health (Nutrition Service, Malaria Programme, Diarrhoeal Diseases Programme, and Expanded Programme on Immunization) eventually recognized the fact that health risks would not be reduced by purely vertical measures, in particular without the participation of the communities concerned.

This is also what the WHO demonstrated: the adoption of certain health practices by families can make a considerable contribution to lowering infant and child mortality. For example, exclusive breastfeeding for the first 6 months of life would reduce world neonatal mortality by 16%; between 30 and 60% of neonatal deaths would be prevented by the rigorous implementation of home health care visits[5].

With this in view, Plan France[6] and its partners developed a 42 month pilot project aimed at reducing mortality in children under 5 years of age and pregnant women in the East Mono district, Plateau region, in Togo. This region is among the poorest and most isolated of Togo. About 73% of the population is classified as poor and 63% as extremely poor. The preliminary study of Plan Togo showed that 60% of households have no education. The East Mono District has only very little social and health infrastructures. In addition, the project area is vast: the distances to get to health facilities are quite large for many families.

The main causes of mortality (irrespective of age) identified in this geographic area are in descending order of importance: severe malaria (35.5%), meningitis (9,5%), pneumonia (8,5%), hepatitis viral (7,5%) and gastroenteritis (4,5%)[7]. Pregnant women and children under 5 years of age are the most vulnerable groups when confronted with these illnesses as their immune systems are less resilient. Thus, in 2010, 89.5% of death cases caused by malaria were from children under 5 years of age[8]. Moreover, during the project implementation, most cases of children under 5 years of age treated by CHAs were first related to malaria (more than 70%), anaemia (12%), severe respiratory infections (10%) and diarrhoea[9].

The project required a high level of involvement from the beneficiary communities as well as representatives of the Ministry of Health, particularly at the local level (health district), under the context of a 3-level pyramidal organisation of the health system in Togo[10].

[5] WHO website: http://www.who.int/cxhild_adolescent_health/documents/who fch cah 09 02/en/index.html.

[6] Founded in 1993, Plan Fance is a French non-state organisation whose main objective is to help communities in developing countries, especially children and young people, to sustainably improve their living conditions. Thanks to its 40,000 donors and the support of public and private institutions, Plan Fance funds numerous programmes to give children and their families a better future.The actions of Plan Fance are part of Plan International network, present in 50 countries in Latin America, Africa and Asia, reaching more than 1.3 million children and their families.

[7] Annual review of the Prefecttural Directorate of Health, 2010.

[8] Annual review of the District hospital, 2010.

[9] Cabinet d'Etudes Nahaza, Final evaluation report, p.19.

[10] The central level whith the Ministry, a general direction of Health and central directions; the intermediate or regional level consists of fie regional directorates of health and corresponding regional hospitals; and a

The project was carried out over 3½ years, from late 2007 to June 2011. The budget amounted to more than €600,000 funded by the European Union, a private company called Natixis, and individual donors. The Ministry of Health in Togo provided mainly human resources: trainers (from a pool of national and regional trainers in IMNCI), supervision of CHAs (through nurses), technical support, and supervision by the national and district focal points in IMNCI, as well as at the very end of the project, financial compensation of 17 CHA.

2 The objectives

The project funded by Plan France in the East Mono district of Togo is in line with the strategy promoted by the WHO as well as by the Ministry of Health in Togo, with the general objective of reducing the mortality rate in children under 5 by 30%[11].

More specifically, the project aimed to strengthen the ability of families to implement best hygiene practices for the benefit of children under 5, and to encourage their involvement in the management of health care services in the East Mono district.

Promotion of better practices was based on the 17 prevention and care behaviours that are recommended in Togo (16 behaviours recommended by WHO worldwide and one additional behaviour selected by the Togo Ministry of Health). They concerned 5 main themes:

- promotion of the physical and mental development of the child;
- disease prevention;
- appropriate home care;
- seeking care outside the home;
- and care of mothers and newborns.

3 The implementation of the project

The reinforcement of the skills of the Community Health Agents (CHA), the development of Information, Education and Communication tools, the promotion of links between the community and the health care system and the collection and analysis of information on best practices for replication (process of capitalising) are the 4 structural components of the project.

3.1 The CHA, keystone of the community mechanism

3.1.1 The role of the CHA

CHAs are Ministry of Health volunteers who play the role of interface between the health care system and the community. In particular, they accompany parents in the process of acquiring the key behaviours. In addition, they treat uncomplicated cases of diarrhoea, malaria, acute respiratory infections and anaemia in children. Serious cases and pregnant women are referred to the peripheral care unit (PCU)[12]. CHAs are supervised and supported in their actions by the Ministry of Health (at the level of the prefecture and health care centres) as well as in the context of the project, by the local partner NGO SOS Vita Togo (specialists in the implementation of health projects in the Plateau Region).

CHAs are elected by their communities (all adults and children over 10). First, an awareness-raising meeting is held, assembling the entire village, to explain what community IMNCI is, the role of the CHA and the eligibility criteria. These include in particular the level of education (knowing how to read and write), having a good reputation and availability (having a flexible income-generating activity). Socio-demographic characteristics of CHA are described in the table below.

In terms of relationships between CHAs and the professional medical staff, a strong collaboration has been developed over the years as CHAs appeared in Togo in the 1970s-1980s and were set up by the Ministry of Health and its partners. CHAs closely work with nurses at the level of the peripheral care unit: monthly meetings at the PCU, field supervision by nurses and staff of the prefectural directorate of health. This is why CHAs are mostly welcomed, all the more as they are considered as decreasing the workload of health centres through sensitisation and management of basic cases of childhood illnesses. CHAs are considered part of the PCU team. They benefit from the recognition of the community, free health care and receive payment of 5 euros per month, corresponding to the expenses incurred while travelling. There is approximately 1 CHA for 50 households, for a total of 310 CHAs in the East Mono district.

3 1.2 Reinforcing the skills of the CHAs

Before the reinforcement of CHA skills, all individuals involved in supervising their work, in other words health care professionals (nurse-supervisors – nurses responsible for PCUs – midwives and officers of the local NGO SOS Vita Togo) received instruction in community IMNCI and training techniques so that they themselves could train CHAs and ensure the monitoring of their activities.

310 CHAs (15 training sessions of 6 days per year were held, with an average of 20 people per session) were then trained over the 3½ years. To ensure a good level of participation from CHAs, the training focused primarily on interactive

prefectural level or health district, coposed of 30 prefectural directorates of health with respective district hospitals, private hospitals, social medical centres, health centres and more than 400 peripheral health units. For more information, see http://www.who.int/nha/country/Togo CNS NHA rapport final.pdf.

[11] The project takes up the objective of 30% reduction in mortality for children under 5 fixed by the national health policy of Togo, for the period 2002 to 2010.

[12] Peripheral care unit : rural health centre/dispensary; a health distric comprises a referral health care centre (district hospital) and several PCUs.

Table 1. Distribution (%) of a sample of 57 CHA part of the project according to their usual occupation, their seniority in the duties of CHA[13].

Socio demographic characteristics of Community Health Agents		
	%	**Effective**
Profession		
Farmer	70.2	40
Craftsmen	12.3	7
Merchant	5.2	3
Public sector official	7.1	4
Other	5.2	3
Total	**100.0**	**57**
Seniority		
0-3 years	50.9	29
4-6 years	15.8	9
7 years and over	33.3	19
Total	**100.0**	**57**
Seniority CHA IMNCI		
1-2 years	22.8	13
3 years and over	77.2	44
Total	**100.0**	**57**

and participatory methods, with teaching techniques such as the use of introductory presentations, directed and explanatory reading, sessions of questions/answers, discussions, brainstorming, group work, exercises, and video presentations. Each CHA has presented his/her work experience in terms of home visits, individual interviews and educational talks. The video exercises were case studies that have enabled CHAs to grasp and understand the danger signs in newborns and pregnant women, and the need to provide guidance to families.

A test prior to the training sessions was always carried out on the first day as to determine CHAs' level of knowledge and to adapt the training content. At the end of the training sessions, CHAs were tested again in order to identify weaker CHAs who needed additional support from professional medical staff and local NGO staff afterwards. Usually 80% of CHAs passed.

During the project implementation, 11 of the 17 practices recommended by WHO were studied in priority. Indeed, it turned out to be necessary to teach fewer practices than had been originally planned for a better understanding and retention on the part of the CHAs. Therefore the behaviours identified as priorities (in view of the health statistics for the health district) were taught.

The 11 practices taught each year were as follows:

Year 1:

- Behaviour N°3: Ensure that children receive appropriate quantities of micronutrients in their diets and through the administration of supplements.
- Behaviour N°5: Ensure children have all their vaccinations (BCG, Pentavalent, Oral Polio Vaccine, measles and yellow fever) before their first birthday.
- Behaviour N°7: Protect children from malaria by ensuring they sleep under mosquito nets treated with insecticides.
- Behaviour N°8: Adopt appropriate behaviour with regard to the prevention of HIV/AIDS and support people affected by HIV/AIDS, including orphans.
- Behaviour N°10: In the homes of sick children, give appropriate treatment for infections and ensure that the mothers buy medicines from the village pharmacy.

Year 2:

- Behaviour N°6: Dispose of faeces, including those of children, in a safe place; wash hands after defecation and before preparing food and feeding the child.
- Behaviour N°11: Take appropriate steps to prevent and treat children's injuries and accidents.
- Behaviour N°17: Ensure that the registry office is notified of all births.

Year 3:

- Behaviour N°1: Breastfeed babies exclusively until the age of 6 months.
- Behaviour N°4: Promote the physical, mental and social development of the child, by responding to his needs through conversation, play and a stimulating environment.
- Behaviour N°16: Ensure that every pregnant woman benefits from adequate antenatal care, that she is monitored for danger signs during labour and after delivery and that every newborn receives appropriate care.

In addition, during these sessions, CHAs also learned to organise their activities and to ensure the continuity of their community visits and meetings. At the end of training, the CHAs were required to draw up a three-month plan, presented in the form of a table comprising:

[13] Bureau d'Etudes Nahaza, Report of an Analysis on Knowledge, Attitudes and Practices in the East Mono district, 2010, p. 11.

- the period envisaged
- the objectives to be reached
- the activities to be set up
- the resources available

The preparation of this action plan was supervised by the instructors.

CHAs also received a kit to enable them to work effectively with families: an insecticide-treated mosquito net for demonstrations, a pharmacy box and a bicycle to facilitate visits to families.

3.1.3 Awareness-raising activities and illness management by CHAs

The first task of CHAs was to carry out a census of the households under their responsibility. The objective was to find out the number of people in the zone of each CHA, particularly the number of children under 5 and the number of pregnant women.

Once the census was completed, the CHA's work consisted in particular in raising the community's awareness about the good prevention and care behaviours to adopt, through home visits, educational talks and mass community mobilisations.

Home visits: Every week, CHAs visited each of the priority households in their zone, according to their action plan. While with these families, they raised the awareness of family members about good prevention and care practices, checked the health records of children under 5 years of age and pregnant women, ensured that the obligatory health visits have been attended, checked the state of health of children under 5 and pregnant women. If necessary, the CHA referred cases requiring further treatment to the health care centre. A referral card enabled the CHA to send the individuals concerned to the health centre and to follow them up.

Educational talks (community-based activity in small groups): Once or twice a month, the CHA chose a certain number of households and brought them together to raise their awareness about good prevention and care practices.

Mass community mobilisations: Once a year, all the families in the village gathered together to discuss the IMNCI, under the supervision of the village CHA, the partner NGO SOS Vita and representatives of PLAN in Togo. During these mass awareness-raising sessions, one theme dealing with a recurrent health problem in the community was chosen for debate. Advice was then given to the community. The project team also learnt about the community's concerns and conveyed them to the district health authorities.

Apart from awareness-raising activities, the CHAs were also responsible for treating uncomplicated cases of childhood illness: pneumonia, malaria, diarrhoea and anaemia.

In this context, some CHAs had been equipped with pharmacy boxes. This box contained generic drugs for treating each of the diseases the CHA was responsible for, in particular antimalarials, oral rehydration salts, paracetamol, folic acid, antiparasitics, etc.

With the input of these drugs to the pharmacy box, it was possible to establish a stock to last about 3 months. The income generated by the sale of these drugs enabled CHAs to renew their stocks from the Centrale d'Achat des Médicaments Essentiels and Génériques in Togo (CAMEG).

3.1.4 The monitoring of CHA activities

Permanent monitoring of the work of CHAs was ensured on two levels:

- by the nurse supervisors, during a monthly visit to a village
- by officers of the NGO SOS Vita Togo, twice a month in each village in the intervention zone.

In addition, each month, a meeting was held in the PCUs, with members of the COGES, the CHAs and officers of SOS Vita Togo. This meeting was the occasion for all stakeholders to present their work and the results they had obtained.

Once a trimester, the PCUs, SOS Vita Togo and the communities, represented by members of the IMNCI committee, considered the renewal of the action plans of the CHAs.

Finally, once a year, each Village Development Committee evaluated the work of the CHAs and decided whether or not to renew their contracts. If a CHA contract was not renewed, the community held a new election.

3.2 The Information, Education and Communication (IEC) tools that enable the promotion of good prevention and care practices

These tools play an essential role in raising awareness in communities.

The key messages to deliver to families were identified before the project began. Indeed, a number of people at national level worked for several months on making an inventory of the CHAs' existing communications tools[14].

Based on these messages, a picture box, posters and radio spots were designed by a working group comprising representatives of PLAN in Togo, the national IMNCI Coordination (Ministry of Health) and doctors in the intervention zone. The tools developed were adapted to the actual cultural and social context of the households, which have a very low level of education. All the tools therefore used a visual or oral medium, so that the messages were easily perceived and understood by the population.

The picture box was used by the CHAs during community activities. This box comprised images showing good prevention and care practices for all the illnesses concerning children under 5 years and pregnant women. The CHAs received prior training in the use of this tool.

The posters were displayed in health care centres, schools and other public places.

The radio spots of short duration (less than one minute) were broadcast on local radio stations.

[14] A database of these messages was developed by the regional Directorate of Health for the Central Region in March 2007.

3.3 Reinforcing the capacities of IMNCI Committees and health care centre management committees (COGES) to develop links between the community and the health care system

In the framework of the project, IMNCI committees were reminded once a year about community IMNCI and their role with respect to the CHAs, which was to facilitate the activities of the latter. Indeed, IMNCI committees are responsible for promoting the work of the CHA in families and for reporting any problems that may have arisen in implementing their activities. This awareness-raising session was organised each year by SOS Vita Togo in collaboration with Plan Togo and the PCUs.

The COGES, responsible for the management and administration of health care centres (peripheral care units), received training, in the context of the project, on:

- Stock management and renewal of consumables
- Account keeping
- Service management (quality of reception and care services).

These training sessions were led by instructors from the Prefectural Directorate of Health, the Regional Directorate of Health and Social Action.

Every six months, the IMNCI committees, in collaboration with the COGES, organised a public meeting within the communities. The aim of this meeting was to review the situation regarding the different health issues in the community. The members of the community, and in particular the children, were encouraged to express themselves freely about their experiences and their impressions as far as the work of CHAs and health care professionals was concerned.

At the end of these meetings, recommendations were made, the role of the COGES being to ensure the subsequent application of these recommendations.

This structure of participative management of the health care system aims to bring populations and health care actors closer for better transparency and accountability of public services.

3.4 Capitalising achievements, and collecting and analysing information on best pratices in order to extend the project to other health districts in Togo

At the start of the project, a planning workshop was held to put into operation the action plan with the project's partners and associates. It thus enabled the study of the activities that had been set up and to review certain points of the action plan where necessary. The project leader ensured the monitoring of the activities by collecting every month quantitative and qualitative data on the implemented activities; and financial information regarding the committed expenses.

In addition, 2 evaluations (an internal evaluation midway and an external evaluation at the end of the project) were conducted during the project.

At the end of the project, an experience capitalisation document was prepared by an external consultant on the basis of a review of the project documents and interviews with all stakeholders in the project. A validation workshop for the capitalisation document was held to share the conclusions about this work and brought together numerous actors in the development and health sectors[15].

As the project should extend to other health districts, expected difficulties must be addressed. Few issues are expected as the project is mostly carried out at the community level with few permanent costs. It mostly requires community support/adherence, but there is no complex mechanism. Yet, it needs the Ministry of Health's continuous involvement and support (particularly for facilitating training sessions and supervision). Furthermore, another issue would be compensation of the CHAs. This is partly sustainable through benefits from the sale of basic drugs that CHAs are in charge of. Besides, the Ministry of Health is in the process of finalising a strategy on community-based interventions that plans to compensate CHAs.

4 Obstacles and their management

Like all projects, that implemented in the East Mono district met with several difficulties and underwent modifications with respect to what had been originally planned.

The first problem concerned the lack of resources and capacities of health care professionals. The project envisaged that they would undertake the training of the CHAs. The lack of availability of a number among them (unable to undertake training sessions lasting several days) and the limited level of knowledge of others necessitated a change of strategy. The Regional Directorate of Health and the National IMNCI Coordination provided instructors to replace the nurse-supervisors.

In addition, it was initially planned to involve existing structures, the Community Health Committees (COSAN), in the different activities. The COSAN were village-based committees, dependant on the Ministry of Health, composed of people from the community designated to take care of health matters for the village. Present in each village in the project intervention zone for several years, the COSAN fulfilled however only the mission they had been given, or were no longer in operation.

As a result, the local partners of PLAN in Togo decided to create an ad hoc structure, the IMNCI committee, with an enlarged composition, to remedy this problem. The project was able to adapt itself by training these new committees in their role and responsibilities. Nevertheless, the reinforcement of

[15] In particular the representatives of the General Directorate of Health, the Central Directors in charge of differents health programmes such as the NMCP, NACP, FHD, Nutrition, Epidemilgy, National IMNCI Coordination, the 6 Regional Directorates of Health and the 5 Health Districts of the zones of intervention of PLAN in Togo. Also present were the Attache of the Head od Operations of the European Delegation to Togo and representatives of several NGOs working in the sector of child and maternal health at community level.

capacities should continue, since at the end of the project, certain IMNCI committees were not functioning well.

As for the CHAs, their selection did not always adhere to the criteria of eligibility, the communities not always having received adequate information. In addition, the under-representation of women in the CHA group did not facilitate work in the community, since some families would not accept being treated by male CHAs[16]. Finally, the low level of education of certain CHAs was sometimes a hindrance during training, and for the application of recommendations and the use of manuals.

There were sometimes drug stock-outs among CHAs, which created a feeling of frustration in the communities who had been taught the importance of care seeking. These stock-outs were due to the faulty estimation of needs made by the CHAs together with the COGES and the PCUs as well as an inadequate revolving drug fund. It is planned to increase this fund at a later date.

Finally, the resources allocated to this project were sometimes inadequate. Certain costs were underestimated, or not included in the provisional budget. For example, the institutional capacities of the NGO SOS Vita Togo were limited at the start of the project (especially in terms of means of transport and IT equipment). In addition, the number of SOS Vita Togo instructors in the field could have been higher, one instructor being responsible for about 77 CHAs. Finally, under-budgeting also led to a lowering of ambitions as far as the equipping of CHAs was concerned (116 CHAs not equipped with a pharmacy box). Additional funds were granted by Plan France to resolve this problem. This enabled in particular the equipping of SOS Vita with appropriate material, the purchase of 3000 ITMNs for families in the intervention zone, the production of IEC tools about C-IMNCI standardised at the national level (Advice Cards for the CHAs and Memory Aids for health care service providers in health training sessions), the purchase of refrigerators to strengthen the cold chain and enable the correct storage of vaccines, etc.

5 The results obtained

Measurement of the project impacts were mainly based on 3 studies identifying elements of Knowledge, Attitudes and Practices of communities in terms of health (prevention and resort to care), particularly as regards pregnant women and children under the age of 5. All 3 surveys were household-based. The first one occurred in March/ April 2004 (11 days) and was conducted by the Ministry of Health, in all Plan Togo's intervention areas, among which the East Mono district (and with disaggregated data per district). In addition, 983 households (proportional distribution among the different prefectures) were interviewed for this survey which was published in 2004. Then a complementary research was conducted by the Ministry of Health for 5 days in July 2006 to obtain additional data on the same geographical area (on a reduced sample of 250 households). In 2010 the final survey was specifically conducted in the East Mono health district. The cluster sampling considered all 17 PCU with 2 levels of selection: first some communities were proportionally selected among the seven cantons (sub-division) of the district; then, households were identified within selected communities. About 17% of households living in the East Mono district, i.e 510 households, have been interviewed. Within each selected household, data were collected on 564 children under the age of 5, and 514 child carers were interviewed (94% were women).

Table 2.[17] Population reached by CHA awareness-raising activities each year.

	2008	2009	2010
Educational talks	57,446	69,848	77,264
Individual counselling	10,555	14,170	13,692
Home visits	29,907	14,828	12,535
Total	97,908	98,846	103,491

5.1 In terms of reinforcing skills

34 health care agents (17 PCU supervisors and 17 midwives) were trained in the notions of Community IMNCI and monitoring/supervision of CHAs, as well as 6 officers of the partner NGO SOS Vita Togo.

310 CHAs were trained of which 194 designated "treating" CHAs (equipped with a pharmacy box) and 116 "non-treating" CHAs (without a pharmacy box). All were equipped with a bicycle and a picture box.

156 members of IMNCI committees were instructed as to their role and responsibilities.

85 members of 17 COGES (including nurse-supervisors, pharmacy managers and community representatives) were trained in primary health care management/ Bamako Initiative.

5.2 In terms of raising awareness

600 posters were produced and distributed in PCUs. They dealt with the following themes:

- advice on feeding sick and healthy children
- tetanus immunisation for pregnant women
- malaria control
- intermittent preventive treatment in pregnant women

In addition, 18 radio spots were produced and translated into the 6 local languages and broadcast by 4 partner radio stations.

[16] Bureau d'Etudes Nahaza (evaluation consultancy company), Capitalisation Reort, p. 25

[17] Final evaluation report, p. 17.

Table 3.[18] Number of patients (all ages) treated by CHAs per year.

	Malaria	Diarrhoea	Anaemia	ARI
2008	7,341	325	1,055	1,225
2009	10,467	450	1,112	1,805
2010	8,868	747	1,303	1,574
Total cases	26,676	1,522	3,470	4,604

Table 4.[19] Children under 5 years of age treated by CHAs.

	Malaria	Diarrhoea	Anaemia	ARI
2008	3,852	ND	ND	ND
2009	5,685	291	656	814
2010	4,905	456	795	683
Total cases	14,442	747	1,451	1,497

Families also benefited from awareness-raising sessions concerning the implementation of the 11 key behaviours, through the organisation of educational talks, home visits and counselling. These sessions were conducted by both CHAs and local C-IMNCI committees with the support of the NGO SOS Vita Togo during the mass awareness-raising programme in the 52 communities participating in the project.

5.3 In terms of treatment

In total, over 3½ years, more than 36,200 patients were treated by CHAs, mainly for malaria and principally children under 5 years of age.

The percentage of child carers who responded appropriately facing the illness of a child has increased: in 2004, only 29.4% of mothers sought help from a health centre or CHA; in 2010, 17.7% of persons in charge of children went to a CHA and 34.2% to a health centre, i.e. a total of 51.9% of appropriate responses. This increase is statistically significant[20]. These figures also prove that the referral mechanism has been enhanced.

Cases treated by CHAs are as follows:

5.4 The positive impacts

5.4.1 In terms of behaviours

Two studies of health behaviours in families in the project zone were conducted in 2004 and 2010, enabling some highly positive changes to be demonstrated. More precisely, of all 11 practices taught during the course of project implementation, 8 key behaviours – behaviours 4, 6, 7, 8, 10, 11, 16 and 17 – showed a significant improvement in indicators. Only the behaviours 1 (exclusive breastfeeding), 3 (good diet, in particular no deficiency in micronutrients) and 5 (complete vaccination) did not show a clear progression.

Thus, we observed[21]:

- Behaviour N°4: Promote the physical, mental and social development of the child, by responding to his needs through conversation, play and a stimulating environment: the proportion of parents singing to their children was 73.5% compared with 57.8% in 2004. The proportion of children playing games increased: early learning games: 55.2% versus 36.3%, games of skill: 43.7% versus 36.3% and memory games: 11.3% versus 1.5%. The percentage of parents who felt that this type of activity helped the child to learn was 29.8% compared with 14.3% in 2004.
- Behaviour N°6: Dispose of faeces, including those of children, in a safe place; wash hands after defecation, before preparing food and feeding the child: the use of public latrines by families was multiplied by ten and in 2010, 24.9% of households were using family latrines[22]. The rate of disposal of children's faeces by throwing them in latrines increased from 1.7 to 29.4% and the rate of disposal of faeces by throwing them outside the compound dropped from 88.3 to 70.6%.

[18] Final evaluation report, p. 19.

[19] Final evaluation report, p. 19.

[20] Bureau d'Etudes Nahaza, reort of Analysis on Knowledge, Attitudes and Practices in the East Mono distric, 2010, Summary.

[21] Bureau d'Etude Nahaza, Report of an Amalysis on Knowledge, Attitues and Practices in the East Mono district, 2010, summary.

[22] No documented in 2004.

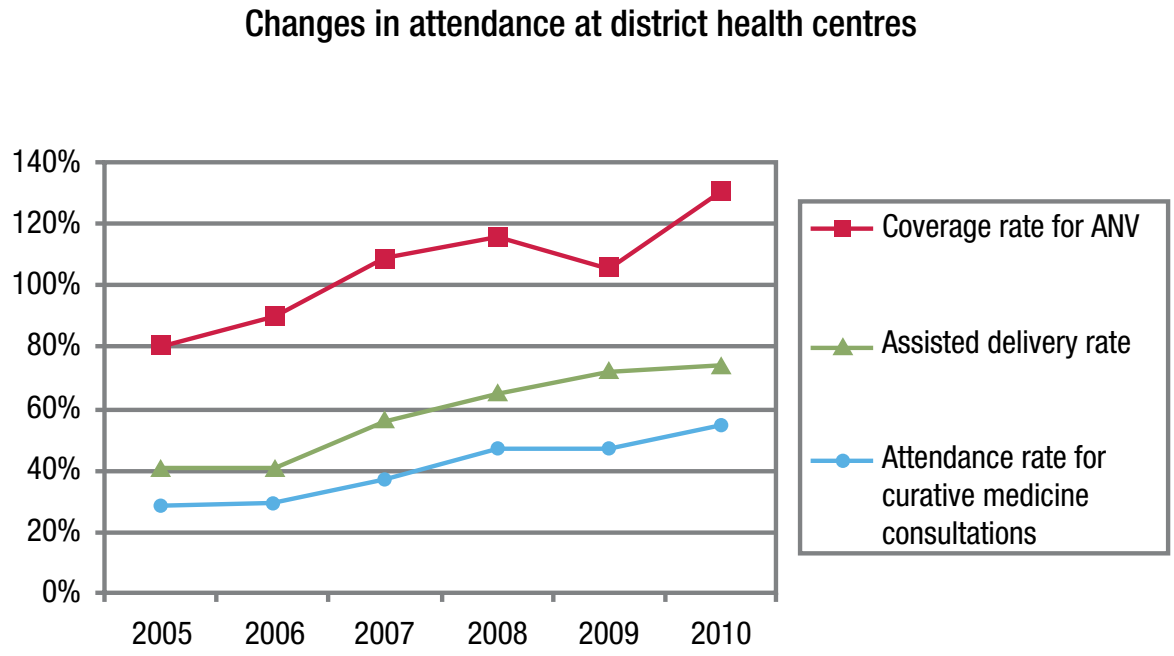

Figure 1.[23] Impact on attendance at district health centres.

- Behaviour N°7: Protect children from malaria by ensuring they sleep under mosquito nets treated with insecticides: the two indicators selected showed improvements. The proportion of children who slept under insecticide-treated mosquito nets (ITMN) the previous night increased from 9.5 to 88.7%, that of households possessing an ITMN from 12.6 to 86.3%. The differences were statistically significant.
- Behaviour N°8: Adopt appropriate behaviour with regard to the prevention of HIV/AIDS and support people affected by HIV/AIDS, including orphans: There were improvements in most of the indicators of HIV control with statistically significant differences. The proportion of heads of households citing condom use as a means of prevention rose from 30.4 to 76.3%. The proportion of heads of households agreeing that HIV screening should be performed before and during pregnancy increased from 15.1 to 31.8%.
- Behaviour N°10: In the homes of sick children, give appropriate treatment for infections and ensure that the mothers buy medicines from the village pharmacy: the proportion of persons in charge of children who know the role of oral rehydration salts (ORS) was 26.3% versus 9.1% in the population in 2004. The percentage of persons in charge of children who reacted in an appropriate manner when dealing with a sick child increased: in 2004, only 29.4 % of mothers sought care at a health care centre or from a CHA; in 2010, 17.7% of persons in charge of children consulted a CHA and 34.2% a health care centre, for a total of 51.9% appropriate reactions. This increase is statistically significant. Regarding ARI, CHAs were trained to count babies' respiratory rates. They were also able to provide the antibiotic Cotrimoxazole, which was part of the pharmacy box. Therefore they could either use antibiotics or refer the child to the health centre in case of fast respiration.
- Behaviour N°11: Take appropriate steps to prevent and treat children's injuries and accidents: the proportion of parents who placed dangerous objects out of the reach of children represented 24.0% versus 3.3% in 2004.
- Behaviour N°16: Ensure that every pregnant woman benefits from adequate antenatal care, that she is monitored for danger signs during labour and after delivery and that every newborn receives appropriate care: All indicators showed favourable changes. The proportion of pregnant women having attended antenatal visits (ANV) was 96.4% versus 78.6%; on average the women had attended 5 ANVs during their last pregnancy compared with 3.75 in 2004; the use of iron and folic acid rose from 72.9% to 99.0%; tetanus vaccination was performed in 97.0% of women compared with 74.3% in 2004 and the use of intermittent preventive treatment of malaria[24] was 95.3% versus 66.0%. The differences are statistically significant.

[23] Bureau d'Etudes Nahaza, Capitalisation Reort, p. 24.

[24] In 2004, women used chloroquine for the prevention of malaria during pregnancy. At present, sulfadoxine/pyrimethamine is taken in the presence of the health agent.

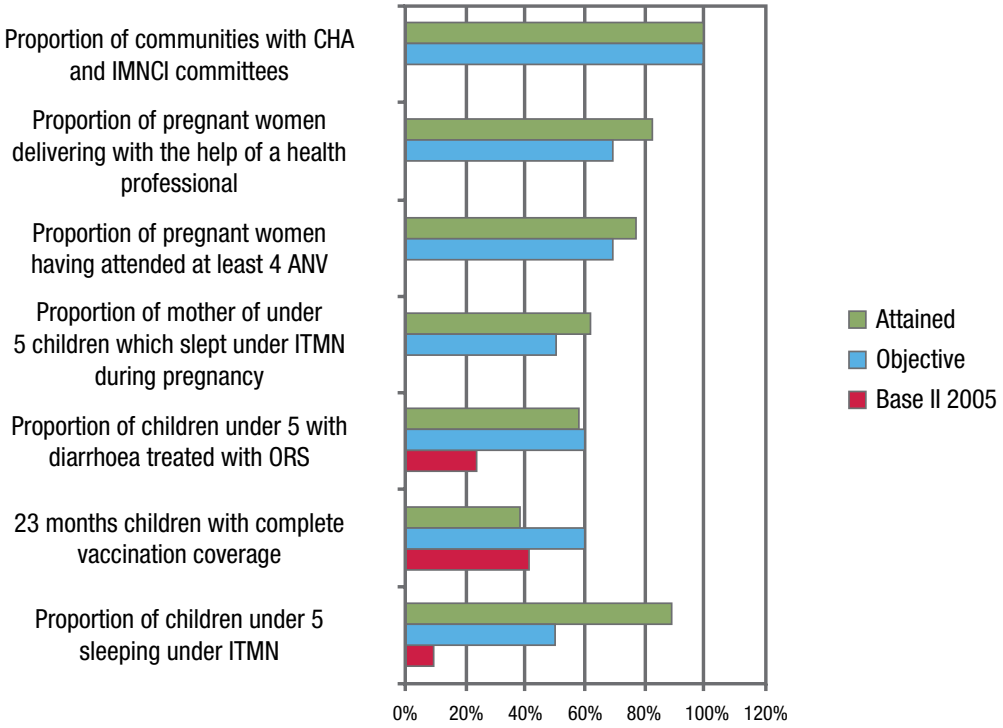

Figure 2. Comparison of the objectives fixed at the start of the project and the results obtained according to the Knowledge Attitudes and Practices study (2010)

- Behaviour N°17: Ensure that the registry office is notified of all births: 87.1% of children had a birth certificate compared with 82.1% in 2004.

Another consequence of this strategy for the integrated management of neonatal and childhood illnesses is to promote care seeking, the effect of which was to increase the attendance rate at health care centres in the East Mono district (blue line in the figure below) as well as the number of assisted delivery rate (yellow line) and the coverage rate for antenatal visits (orange line). The latter rate is above 100% as some pregnant women attend more than the recommended 4 antenatal visits (but 25% of interviewed women still attend less than the 4 minimal visits).

Most of the objectives fixed at the start of the project were attained or surpassed in a highly significant manner (proportion of children sleeping under insecticide-treated mosquito nets, pregnant women having delivered with the assistance of a health care professional, etc.). Only 2 objectives were not reached: the proportion of mothers with children under 5 treated for diarrhoea with ORS was 58.3% (the objective was 60%). This situation can be explained by stock-outs of ORS and zinc. Larger stocks of these treatments must be maintained in the future. The difference is greater for the proportion of children aged from 12 to 23 months with complete vaccination coverage but this indicator is difficult to measure due to the inconsistent use of immunisation record books. Children often present for vaccination without their record books, which poses a real problem for monitoring.

The graph below shows changes in the main indicators and compares the actual figures with the baseline study carried out in 2005 (Base II).

5.4.2 In terms of the state of health of the population and particularly of the most vulnerable groups (pregnant women and children under 5 years of age)

The data collected from the health care centres showed a positive progression of health indicators in the communities of the East Mono district: 3,288 patients were admitted to the hospital in 2010, out of whom 107 died. Thus the hospital mortality rate dropped by more than 18% (from 40‰ in 2008 to 32.5‰ in 2010[25]). In the maternity units, the mortality rate dropped from 15.5‰ in 2008 to 2.4‰ in 2010, a 84% reduction in the number of deaths[26]. In paediatrics, the number of consultations increased (from 2,022 in 2008 to 2,467 in 2010 as did the number of hospitalizations (from 1,385 in 2008 to 1,475 in 2010). Yet the rate of hospital deaths in children under 5 years of age dropped from 62.8‰ to 46.7‰, i.e a reduction of 25%[27]. These figures tend to confirm that after the project implementation, communities went to care services more often. Besides, they seem to do so earlier than before (thanks to a better referral system through CHAs) which would explain to a certain extent the decrease in the proportion of hospital death cases. Limits of these data remain in the fact that most death cases used to (and probably still – even if it is likely to be less than before) occur at home or on the way to the hospital/health centres for which figures

[25] Annual review of the Prefectural Directorate of Health, 2010.
[26] Annual activity report of the District Referral Hospital, 2010.
[27] Annual activity report of the Distric Referral Hospital, 2010.

are not available. Yet with a 25% decrease in the number of hospital deaths in children under 5 years of age, it is reasonable to assume that the project is likely to have reduced the rate of out-of-hospital death cases, all the more as the project was targeting the community level (through sensitisation, community management of common illness, monitoring of health situation and increased referral by CHAs) rather than the PCU/health centre level.

The percentage of children under 5 years with serious malaria dropped by 28% (from 74% in 2008 to 53% in 2010). The case fatality rate for malaria decreased from 5.5% in 2008 to 3.8% in 2010.

Out of 2,882 deliveries in 2010, 300 children weighted less than 2,500 grams at birth. Therefore the percentage of underweight at birth remained around 10% in 2010 (as in 2008). Nonetheless the prevalence of malnutrition (underweight: ratio of weight relative to age) in children under 3 years of age in the East Mono district decreased from 12% in 2008 to 10% in 2010[28].

These results are encouraging and prove that it is necessary to continue the IMNCI activities that have been implemented in these communities to promote behaviour change and ongoing improvements in health indicators.

6 Discussion

The final external evaluation and the capitalisation of the project conducted by an external consultant enabled the strengths and weaknesses of the project to be examined. Thus the so-called promising practices – directly linked to the attainment of objectives – have been identified.

In this project, the most important elements are coaching between CHAs, the involvement of the entire community regardless of age or sex, the involvement of PCU supervisors, the training of two types of CHA (treating and non-treating) and the reinforcement of monitoring practices.

More specifically:

Coaching between CHAs: More skilled CHAs help other CHAs to better accomplish their mission in a given community. During meetings, it was observed that certain CHAs were more effective since they understood the explanations more rapidly than others who had difficulty carrying out their mission. In such situations, the more effective CHAs were designated to assist their peers in the same or a neighbouring community.

Continued training: To resolve the problems of low educational levels, the nurse-supervisors and members of the NGO SOS Vita Togo made use of the monthly meetings and revised the contents of several modules in the CHA manual to clarify certain points, which ensures continued training in the work of the CHAs.

The involvement of the entire community regardless of age or sex: During the awareness-raising meetings and CHA selection meetings, all members of the community were invited to take part, children included. This strategy enabled all individuals to be informed about the services available. Certain children reminded their parents of what should be done in certain circumstances. This attitude also constitutes an advantage with regard to the continuation of the project's achievements and learning to participate in community services. Children's clubs set up in schools were used to advantage in IEC activities (awareness-raising by peers at school through drawings, songs, etc.).

The priority offered to communities living further than 5 km from a PCU concerning the offer of services in the management of illnesses in children under 5 years of age: Given the financial constraints, the project managers funded the equipping of CHAs with pharmacy boxes in communities located furthest from PCUs. This approach was validated by health authorities and has even been taken up in the national policy on community-based interventions, a strategy recently developed by the Ministry of Health.

Reinforcement of monitoring activities: The monitoring of CHAs is crucial for the success of C-IMNCI activities. Conscious of this necessity, the project coordination team reviewed the budget to enable funds to be allocated to the reinforcement of CHA monitoring in the field. The number of visits by members of the NGO were increased and enabled the reinforcement of the skills of the CHAs, which will favour the chances of continuation in the long term.

The establishment of service contracts for CHAs: the receipt by CHAs of their service contracts boosted their motivation and led to improvements in the quality of their services. The contracts constituted for them a guarantee of payment and the recognition of their work.

7 Conclusion

The present project is a pilot project. It is sufficiently well documented to enable both PLAN and other actors in the development sector to draw lessons from this experience and to repeat the project in other zones of intervention, in Togo or in other countries.

During the capitalisation workshop, the Ministry of Health expressed its interest in the project and in its extension to the entire country. This may be explained by the positive and significant impacts of the project as well as by the permanent, vertical involvement of the Ministry of Health during its implementation and the close links between the Ministry of Health and PLAN in Togo.

A community-based intervention strategy has been adopted by the Ministry of Health in 2011. If this strategy is implemented, it would intensify IMNCI activities at the community level throughout Togo and would solve the problem of the continuation of CHA activities (the cost of which would then be supported by the Ministry of Health). The Ministry of Health is currently identifying technical and financial partners that could be associated with this course of action. For the moment, the discussions have involved WHO, the Global Fund, Unicef and PLAN in Togo.

Nevertheless, the endogenous funding of the health care system constitutes a real challenge in the mid-term: this is why PLAN in Togo encourages the creation of mutual health funds at the community level and advocates the establishment of a system of health insurance and mutual health fund

[28] Annual review of the Prefectural Directorate of Health, 2010.

at the national level. These issues are also addressed in the discussions conducted in the framework of consultative meetings on the new national health policy in Togo.

Acknowledgements

The Plan France team would like to thank its local partner NGO SOS Vita Togo, the Ministry of Health and the PLAN team in Togo. We are also grateful for the financial support of the European Union, the Natixis company and private donors.

References

Bureau d'Etude Nahaza, (2010), Final evaluation report, p.17,19

Bureau d'Etude Nahaza, (2010), Report of Analysis on Knowledge, Attitudes and Practices in the East Mono district, summary, p. 11

Bureau d'Etude Nahaza, (2010) Capitalisation report, p. 24,25

Annual review of the Prefectural Directorate of Health, (2010), East Mono district

Annual activity report of the District Referral Hospital, (2010), East Mono district