

# COMMUNITY-BASED RESULTS-BASED FINANCING IN HEALTH IN PRACTICE. A discussion piece reflecting on the recent implementation of programmes and policies supported by the World Bank in Benin, Cameroon, the Republic of Congo, the Democratic Republic of the Congo, The Gambia, and Rwanda

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## Executive summary

This report discusses *Community Results-Based Financing* (cRBF), a 'close to client' approach whereby community actors are paid based on the activities they undertake. The focus is on six developing cRBF experiences that have started in Cameroon, The Gambia, Benin, the Democratic Republic of the Congo (DR Congo), Rwanda, and the Republic of Congo. The report's main aim is to cast light on the success and difficulties encountered in the implementation of such a programme.

The report is based on a participative process that included a short review of the existing literature on cRBF, a review of the manuals of procedures and reports produced in each country case, in-depth interviews with a focal point in five countries, and two workshops with practitioners.

*Do cRBF schemes work?* It is too early to say: most schemes are still in their infancy. An impact evaluation of the Rwandan scheme found mixed effects. The Cameroon, Congo, and the Gambia schemes integrate rigorous impact evaluation mechanisms and the first results should be available in two to five years. At this stage, the main discussion is on the *implementation* of cRBF.

*Who is the community in 'community RBF'?* The term cRBF is used to categorise a wide variety of schemes that have in common the contracting of a community actor on the basis of performance indicators –e.g. the delivery of a service. This community actor can be a group of or individual *Community Health Workers* (CHWs - Congo, Benin, Cameroon, and Rwanda), a *Health Facility Committee* (in DR Congo), or any other local committees (*Voluntary Support Groups* in the Gambia).

*What is cRBF for?* Depending on the case, cRBF is typically envisaged as (1) a way to provide services at the most peripheral and decentralised level; (2) a way to stimulate the demand side through in-kind or financial incentives, either to the population directly (Rwanda, The Gambia, Congo) or to CHWs who will then sensitise the population to the use of services; or (3) a tool to achieve more fundamental health-related behavioural changes. In some cases, cRBF is also seen as a way of improving the 'voice' of the population within the HF-level RBF (Cameroon, DR Congo) or re-vamping a malfunctioning, but potentially promising, CHW system (Benin, Cameroon, Congo).

*What are the expected 'results' in cRBF?* Most indicators are related to health awareness and promotion and the use of services (including referral of patients). Schemes usually target a limited number of indicators to increase efficiency. The choice of indicators is often a top-down decision involving the donor and health authorities: more community engagement in this process may be desirable but has to be accepted by the Ministry of Health.

*Architecture of cRBF schemes.* Pre-cRBF community engagement in health-care varies a lot and successful implementations of cRBF have built on those features and peculiarities. cRBF schemes

distinguish between the different health system functions (purchaser, provider, regulator, and verifier) but the institutions or people exerting these functions vary from one country to another, and so do the payment (almost always in cash) and verification systems. Each arrangement comes with its own set of advantages and drawbacks. cRBF is usually implemented in combination with a Health Facility-level RBF programme.

The scale of the cRBF schemes, which often contract a plethora of agents, is a challenge. Solutions to this problem include HF to subcontracting and/or managing the CHWs and/or contracting groups of CHWs. This does not solve the problem of the complicated verification of services delivered at the community level and the management and monitoring of the data collected by community actors. Information and Communication Technology is not a panacea for improving data collection and analysis: it requires a strong system in place, simple tools, and trained, supervised, and monitored actors—three conditions rarely met in the field

Timely payment is crucial in a context where community actors often live in poverty; forms of prepayment or fixed parts in the premium may improve retention and motivation.

*Quality assurance.* Central to quality is the training and monitoring of community actors, which is easily undermined by the low commitment of district officers and chief nurses. Certification and focus on the lower levels of 'cascading' training may improve quality, as well as testing the knowledge of community actors. Traditionally, CHWs and HFC members are elected by the population, but most of the cRBF models select their CHWs using a range of objective criteria and procedures. This leads to a better control of the quality and level of competence of the CHWs but also increases the risk of selecting individuals who have little legitimacy in their community or little interest in their community's health.

*Integration into the health system.* cRBF schemes are part of wider community health policy reforms and can represent an entry door to revitalise the often neglected sector of community health. cRBF appears as an opportunity to create a common platform for interventions relying on CHWs and a space for integrating traditional actors such as traditional birth attendants into the health system (e.g. Burundi, Rwanda, The Gambia). However, an important –and often unaddressed– question that comes with cRBF is what will happen with the rest of the (non-incentivised) community actors. How they will react, in the medium and long run, to the introduction of cRBF is unclear.

The amount of work expected from the CHW varies a lot from case to case and in some contexts (for instance the CHWs that take part into the *Arc-en-Ciel* in Congo) it leans towards a full-time activity. Whether CHWs should be considered as proper front-line service providers also raises questions of potential competition between CHWs and HFs. Some emulation between same-level agents can improve the quality of services but competition between different levels puts users at risk. Innovative designs can reduce that risk, as in the case of Congo and DR Congo where HF and CHWs incentives are closely aligned.

*National Politics and Policies.* Finally, this report stresses that cRBF is not only a technical question. It often fits into the broader agenda adopted by governments, in particular the Sustainable Development Goals, and may be used to deal with political issues. It may allow countries to *de facto* increase the health workforce without increasing the number of civil servants. Another set of political issues is linked to the more local political economy cRBF can potentially create. Politicians around the world promise jobs, especially during election time, and the risk that 'paid' CHWs may be hijacked by unscrupulous politicians is, therefore, not trivial.

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## List of abbreviations

|          |  |
|----------|--|
| ANC      | Antenatal Care   |
| BFCI     | Baby-Friendly Community Initiative                         |
| CBO      | Community-Based Organisation                               |
| CCT      | Conditional Cash Transfer                                  |
| CHW      | Community Health Worker                                    |
| Congo    | Republic of Congo  |
| CPBF     | Community Performance-Based Financing                      |
| DR Congo | Democratic Republic of the Congo                           |
| HF       | Health Facility (primary health care centre in most cases) |
| HFC      | Health Facility Committee                                  |
| IE       | Impact Evaluation  |
| MCNHRP   | Maternal and Child Nutrition and Health Results Project    |
| MoH      | Ministry of Health   |
| MOHSW    | Ministry of Health and Social Welfare                      |
| NGO      | Non-Governmental Organisation                              |
| PBF      | Performance-Based Financing                                |
| PDSS-II  | Second Health Systems Development Project                  |
| PNC      | Postnatal Care   |
| RBF      | Results-Based Financing                                    |
| TTL      | Task Team Leader   |
| UCP      | <i>Unité de Coordination du Projet</i>                     |
| VDC      | Voluntary Development Committee                            |
| VSG      | Voluntary Support Group                                    |

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## Introduction

Community participation is commonly presented as a key element for improving people's health. Building on the 1946 World Health Organization constitution and early community health experiences in low-income countries, the 1977 Alma-Ata Conference stressed the role of communities as active participants in improving their own health. The conference still influences the organisation health systems today. Around the world, networks of non-medical professionals such as CHWs or HFCs have been created to promote health and the use of health services, and sometimes even deliver those services. These community actors are almost always volunteers and the funding of their activities generally comes from aid projects or vertical programmes. Many observers of the health systems of low-income countries have, however, come to question the efficacy and commitment of the CHWs and other community actors. They point out their chronic underfunding, their poor level of competence, and their lack of motivation, possibly due to over-reliance on voluntarism.

In recent years, the emergence of ideas such as 'close to client systems' and community accountability have renewed the interest for community-level actors and led to new strategies for organising and funding them. One such strategy, whereby community actors are paid based on the activities they undertake, is cRBF. The approach seeks to bolster the demand for health care through introducing incentives for CHWs and other community-based actors. It is typically implemented in combination with a Results-Based and Performance-based Financing (RBF or PBF) programme. Indeed, cRBF is often presented as a necessary complement to RBF as it may resolve some of the bottlenecks encountered when seeking to improve access to care through HF-level RBF, such as the lack of information about HF users or issues in reaching remote populations, as well as to address behaviour change at the community and household level.

RBF has become a common approach for reforming and revitalising health systems in Africa, and in low- and middle-income countries in general. While a growing literature has analysed the successes and shortcomings of RBF at the HF level, almost nothing exists regarding Community RBF specifically.

The present report looks at six developing cRBF experiences in Cameroon, The Gambia, Benin, DR Congo, Rwanda, and Congo. It seeks to shed light on the theories of change behind cRBF and the success and difficulties encountered in the implementation of cRBF programmes or policies. **The aim is to document existing experiences and single out a series of discussion points that appear to be key elements to consider for policymakers, cRBF implementers, and researchers alike. It does not provide a recipe to implement cRBF and is not an impact evaluation:** an impact evaluation already exists for Rwanda, and impact studies are ongoing in Cameroon, Congo, and The Gambia. They should be available in three to five years.

Since the results on almost all cRBF schemes are still pending, the focus of this report is on operational lessons. Comparing different cases will help researchers and policymakers interested in RBF mechanisms at the community level identify the main challenges and understand the main choices that have been made in terms of cRBF architecture in different countries facing different sets of constraints. Caution is necessary, for the effects of the schemes on health, communities, and health system remain almost totally unknown. As highlighted by many of the people interviewed for this research study, cRBF schemes are often at a pilot or preliminary stage.

The report is structured as followed: the next section clarifies the key concepts that are used and what is understood by cRBF. Section two briefly presents the methods. Section three reviews the existing, thin, literature on cRBF. Section four is the core of the report, it examines and contrasts the main features of the different cRBF programmes along key themes: (a) the typology of cRBF programmes,

(b) the rationale for setting such programme, (c) their indicators and objectives, (d) their architecture, and (e) how they fit in national policies and politics. Section five highlights extra challenges, opportunities, and threats. Section six provides recommendations and areas for future research and section seven concludes.

The report focusses on the key findings from the different case studies. The different cases are not presented in the core text; they can be found in the appendix.

## 1. Community-based RBF: clarifying the key concepts

Each of the six cRBF programmes has its own understanding of cRBF. However, their approaches as found in both official documents and interviews broadly reflect one idea: the HF-level RBF approaches that are implemented in the field face difficulties improving the use of primary health care services beyond a certain threshold, and it is hypothesised that a deeper engagement with the users of health services will further improve access to those health services.<sup>1</sup> This engagement is enacted through a contract between a purchasing agency and community actors, who are expected to be close to the HF potential users such as Community Health Workers (CHWs) or Health Facility Committee (HFC) members. None of the programmes defines the concept of 'community'. Direct contracts with individuals also exist; however, these cases generally fall under the umbrella of Conditional Cash Transfer mechanisms and will not be the focus of the present report.

The main community actors are:

- **The CHWs:** a broad category of community-based actors. They are typically community members who perform specific tasks, such as leading health awareness and vaccination campaigns. Different systems of CHWs, inherited from different vertical programmes, often co-exist in the same country (e.g., DR Congo and Benin), and CHWs may or may not be attached to a specific HF;
- **The HFCs:** representative bodies made up of elected committee members that are supposed to be co-managers of a HF. Their exact responsibilities may vary from one case to another, but the idea is that they represent the 'voice' of the population at the HF;
- **Community-level representative bodies:** unlike the HFCs, these were not specifically set up for improving health. They include Village Development Committees and Village Support Groups (as in the case of The Gambia is presented below);
- **Local civil society** (grassroots and community-based organisations, or CBOs) and Non-Governmental Organisations (NGOs): these represent a third actor at the community level. They traditionally are not part of the health system, although they may have health-related activities. In RBF systems, they typically perform support tasks such as patient tracing and community satisfaction surveys; and
- **Traditional healers and birth attendants:** these are also present in most communities and are rarely integrated into the biomedical health system.

Most of the above-mentioned actors existed before the introduction of cRBF. (c)RBF mechanisms have however often led to their reorganisation, and sometimes introduced new players at the community level (e.g., new CHWs and committees in Cameroon).

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<sup>1</sup> Of course, this does not mean that more engagement with the community is the sole way to further improve the use of services in an RBF context (other elements such as human resources, drugs supply, or the general organisation of the health system are also expected to be key).

RBF is a health financing approach where an agent (under cRBF circumstances specifically, this will be a community actor) is contracted on the basis of performance indicators usually related to the provision and use of health care services. The World Bank officially defines RBF as 'a cash payment or non-monetary transfer made to a national or subnational government, manager, provider, payer or consumer of health services after predefined results have been attained and verified. Payment is conditional on measurable actions being undertaken' (Musgrove, 2010). The expected advantages of the RBF approach include new incentives for local actors to use the strategy that best fits their context (as they are not solely funded on the basis of input and are free to find the best way to deliver results), a clarification of the roles and functions of each actor in the health system, and new tools for policymakers to orientate the health system. The potential drawbacks of RBF, which are still valid for cRBF, include the crowding out of intrinsic motivation (monetization of the motivation), a focus on subsidised activities that may come at the detriment of non-subsidised activities, and resource-heavy verification systems.

It is important to note that cRBF is *not* understood as the use of community actors to perform verification and community surveys as part of an RBF programme. cRBF can, however, include such verification mechanism.

## 2. Situation at present and literature review

cRBF has been piloted as a strategy to improve access to health care in different parts of the world. It seeks to combine elements of the 'old' paradigm of community participation inherited from the 1988 Bamako Initiative and the 1977 Alma-Ata conference with more recent ideas of contracting and results-based financing. There is a dearth of research and reporting on cRBF initiatives. At the time of writing this report, there existed almost no scientific literature on cRBF, and no impact evaluation of cRBF exists, apart from the case of Rwanda. Rigorous impact evaluation of the projects currently piloted in Cameroon, The Gambia, and Congo, which are discussed in the present report, should provide the first robust evidence of the effect of cRBF schemes on the use and provision of primary health care services. These results will, however, not be available for at least a couple of years.

A few papers have considered the case of Rwanda, where a cRBF system was put in place over a decade ago. The outcomes of this policy, where groups of CHWs were contracted out to provide basic health services and raise health awareness, are at best mixed. Langston et al. (2014) find 'plausible' positive effects, but the World Bank impact evaluation reported in the next section finds none. What is more, any result is hard to disentangle from the general effects of RBF as both strategies were applied at the same time. Studies of the verification mechanisms in the Rwandan cRBF find that accurate performance reporting is poor (Renaud and Semasaka, 2014). A recent study by Sarriot et al. (2015) stresses that cRBF is nonetheless essential to the Community Case Management (iCCM) of malaria, pneumonia and diarrhoea.

There is also a literature on the effects health-facility RBF programmes have on community actors and the interactions between RBF and HFCs and the community. Falisse et al. (2012) and Newton-Lewis et al. (2015) argue that RBF could, potentially, reinforce HFCs as the committee members are provided with new responsibilities and more funding, but both articles also insist on the necessity of more rigorous impact evaluations in the area. Although the present report does not discuss the use of community-based organisations as verifiers in health-facility RBF, it is worth mentioning that recent research has pointed out that this (popular approach) is not necessarily the most efficient (see Antony et al. 2017 on Benin). What is more, it can have quite disruptive effects on the functioning of those community-based organisations (see Tremblay et al. 2017 on Burkina Faso).

Finally, there is a well-developed literature on Conditional Cash Transfers (CCT), a mechanism close to cRBF that will not be discussed here (see for instance Rawlings and Rubio, 2005 for a review of the early literature). This report will instead focus on cRBF and contracts with community actors, but not individuals in particular. A literature review taking the angle of individual contracts could usefully build on the work done by Fiszbein, Schady, and Ferreira (2009).

### 3. Methods

The report is based on a short review of the existing literature on cRBF and, more importantly, a review of the manuals of procedures and reports produced in each of the countries under review. In addition, in-depth interviews have been conducted with a focal point in five countries (Cameroon, Benin, DR Congo, Rwanda, and Congo). The reviews and interviews took place between February and May 2016. The country Task Team Leaders (TTLs) designated the focal point, naming the person they believed to be most knowledgeable on cRBF in their country of assignment. The same TTLs commented on the interview guide.

A first report titled 'Community-based Results-based Financing in practice: a discussion piece' was produced ahead of a cRBF workshop held in Harare 18-20 September 2016. The different cRBF teams had a chance to react to this report and were offered the opportunity for present specific aspects of their programmes, as well as key questions and grey areas, during the workshop.

Based on the discussions and exchanges of the workshop, a follow-up document was shared with the participants. It looked at a series of key points for discussion: payment, indicators, quality, data storage and collection, verification, and outreach. The different country teams then prepared another round of presentations exposing their views and experience with those questions and an online workshop with country teams was held 19 January 2017. A series of e-mail exchanges followed and a 4-page knowledge brief recapping some key 'lessons' was published in June (in French and English).

**The present report consolidates those different documents (and especially the first report) and rounds of discussions and finalises, for the time being, the collective learning process about the challenges of implementing cRBF. The different sections of the findings reflect the main points of the discussion and the area.**

### 4. Key findings

This section sums up the key observations and points suggested as critical during the different phases of the research, it is organised with the idea of contrasting the different experiences. The specifics of each case is found in the appendix.

#### a. A typology of cRBF programmes

It is essential to first point out the diversity of meanings of cRBF across the different cases. 'Community' is a loosely-defined term and, as mentioned earlier, the element that links the cases is the idea of going beyond the HF in approaching health care financing. The six cRBF examples are also a loosely-knit set of interventions that have a lot more dissimilarities than similarities in design and implementation. Depending on the case, cRBF is seen as a contract with individuals or a group of:

- **CHWs** (Benin, Cameroon, Rwanda), sometimes through a HF. This is the simplest case and is, in a sense, a simple extension of RBF to an even more peripheral actor. The indicators



are then usually 'quantitative' and similar to those used in HF-level RBF, in the sense that most evaluate the provision of a service. Contracting groups has a clear practical advantage and is in line with the logic that prevails the HF-level: the choice is to incentivize teamwork rather than individual effort. It also comes with clear risks that some of the agents will free-ride, especially since CHWs' work may, in fact, imply less team work than that of the HF staff. The only existing IE of a CHW-level cRBF is from Rwanda. In the case where the contract is through the HF, it is typically about a 'household visit'. The challenge with the purchase of such a 'household visit' is putting content to the action of the visit, to strengthen its effects. Examples of such programmes can be found in Burkina Faso, Nigeria and Cameroon. A programme in which a system of vouchers and health behaviour change is introduced through household visits is the *Arc-en-Ciel* programme in Congo (*rainbow* in French, the local cRBF scheme). The amount of work expected from the CHW varies a lot from case to case: in Benin and Rwanda, CHW is clearly a side activity, it can take more time in Congo for the CHWs who take part into the *Arc-en-Ciel*;

- **HF committee members** (DR Congo). This can be done in two different ways: either the HFC receives part of the (HF-level) RBF premium to acknowledge its participation in the effort to improve HF service delivery, or it is directly contracted to perform well-identified managerial tasks at the HF; and
- **The community directly or community organisations** such as village committees and other governmental or non-governmental bodies (The Gambia, and to a certain extent, Congo). The mechanism comes close to a CCT when the contract is directly with individuals. Vouchers or gifts can be offered instead of cash, but the idea is the same: it is the behaviour on the demand rather than the supply side of health care that is targeted. There is a wealth of literature on the effects of CCT and vouchers (see the literature review).

**The Gambia, Burundi, and Rwanda cRBF cases also present interesting features in terms of integrating traditional actors into the health system.** The contracting of CHWs led them to organise in associations (or cooperatives as they are called in Rwanda) that also included traditional birth attendants. From a situation where the traditional birth attendants were seen as potentially undermining the efforts of the HFs, they became their allies, working together with HF staff in promoting better health behaviours. In The Gambia, Village Support Groups already included traditional birth attendants and the cRBF may have improved their integration by formally contracting them. This simple feature of some cRBF schemes has potentially huge consequences in sub-Saharan contexts, where traditional healers are central to the community but often off the radar.

## b. Rationales for setting up cRBF schemes

Programme documents rarely give details about the exact rationale for implementing cRBF approaches. Most introduce the poor health situation of the population in the country, identify bottlenecks at the levels of the access to and information about health care services, and suggest that a cRBF approach would remove these bottlenecks. Three, non-mutually exclusive, objectives are typically attached to cRBF:

- **cRBF can be a way to stimulate the demand side, to improve the use of HF by the population.** Through awareness meetings and contacts with the population, CHWs and HFC members can facilitate access to services. Stimulating the demand side has been using in-kind incentives in Rwanda and is being piloted using vouchers in Congo.

- **cRBF can be a way to provide services at the most peripheral and decentralised level.** It is, for instance, the case of cRBF systems in Rwanda, Burundi, Burkina Faso, Nigeria, Congo or Cameroon. CHWs are provided with some basic training and tasked with providing basic services such as medical screening, first aid for minor injuries, or the treatment of minor illnesses. More often than not, these cRBF programmes are attached to full-fledged PBF programmes at health centre level and form part of a larger ecosystem of performance contracting that include health centres, hospitals and health administration all the way up to the MoH. Across all the cases, there is the persistent idea that the demand for services needs to be boosted, and that this can be done through providing in-kind or financial incentives to the population directly (the 'quasi-CCT' cases of Rwanda and The Gambia, and the voucher scheme in Congo) or to CHWs who will then sensitise the population to the use of services (and often even bring it to the health centre).
- **cRBF is sometimes seen as a tool to achieve more fundamental health-related behavioural changes.** All cRBF programmes have this objective but it is only in a few cases that it is explicitly stated. This is, for instance, the case of the programmes implemented in The Gambia and in Congo, where the contract is essentially about changes in behaviour defined in very concrete terms (e.g. sanitation, nutrition, maternal care, use of mosquito nets, etc.).

**Table 1 Rationale for cRBF** (from existing documents and interviews)

|   | The Gambia | Rwanda | Congo | DR Congo | Benin | Cameroon |
|---|------------|--------|-------|----------|-------|----------|
| HF-level PBF or RBF programme implemented at the national level (N) or on the part of a territory (P)?  | P          | N      | P     | P        | N     | P        |
| cRBF should boost the demand for services: contracted community actors sensitise the population and bring it to the HF                                    | x          | x      | x     | x        | x     | x        |
| cRBF comes to complement HF-level PBF: some indicators can only be improved with interventions that are at the community level (rather than the HF-level) | x          | x      |       |          | x     | x        |
| cRBF strengthens people's voice, which is not heard enough in HF-level PBF, and thereby contributes to more responsive services                           |            |        |       | x        |       | x        |
| cRBF 'fixes' the broken but promising CHW system  |            |        |       | x        | x     | x        |
| cRBF provides a 'course of action' and incentives that help households escape 'traps' of poor health behaviour  | x          | x      | x     |          |       | x        |

In most cases, and especially Cameroon, Benin, Rwanda, and to a certain extent in The Gambia and Congo, there is a clear acknowledgement that cRBF is a complement to HF supply-side PBF interventions. Often, cRBF comes after a few years experimenting with HF-level PBF with some frustration over some of the results achieved, in particular in terms of preventative care. cRBF is then expected to 'naturally' complement HF-level PBF and boost the demand for services by “making people leave their houses and go the HF when they are unwell” (interviewee from Benin).

In Cameroon, but also in DR Congo, cRBF mechanisms are also envisioned as a way to further improve the 'voice' of the population within the HF-level PBF, through the reinforcement of the HFCs that are community representatives or through community meetings. In this case, the rationale is that the old Bamako Initiative-inspired community voice paradigm (if users can voice their preferences, services will become more responsive to them, and use will increase) is potentially promising but is not working and needs to be fixed, with one twist: community representatives ought to be externally incentivised to fully play their role.

Similarly, and very explicitly in the case of Cameroon, Benin, and Congo, cRBF is presented as a way to re-vamping a malfunctioning, but potentially promising, CHW system. Again, the theory of change is not new: it is the 'old' Alma-Ata inspired the idea of health promotion through CHWs, with the exception that CHWs are not this time unpaid volunteers (volunteers are seen as lacking motivation) but rather individuals or groups of individuals who respond to financial incentives.

Finally, the Rwanda, The Gambia, and the Congo schemes seem driven by a more refined understanding of household level barriers to accessing health care. The programmes, therefore, include a focus on those barriers that cannot be lifted unless clear incentives and even action plans in the case of the *Arc-en-Ciel* programme in Congo are provided to the community actors.

In practice, the **different rationales that underpin the architecture of the different cRBF schemes are intimately linked to local contexts**. For example, the Republic of Congo barely had household visits and CHWs prior to cRBF, hence, in consultation with the different stakeholders, the *Arc-en-Ciel* programme set up a system of household visits by newly trained CHWs. Conversely, in Benin and Cameroon, CHWs have existed for a long time but their activities have often been inconsistent, the approach has therefore been to train them on a package of activities and sub-contract them through their local health centres. In the Gambia, community meetings led to deciding that the best architecture would be to contract the existing, and already well-functioning, village *Voluntary Development Committees*.

### c. Objectives and indicators

**The choice of indicators is a clear policy tool that is used to set health-care priorities.** It is a domain that falls under the responsibility of the Ministry of Health (MoH). Since a smooth and successful implementation of cRBF requires the collaboration of many actors, most schemes include discussion mechanisms that bring together different divisions within the MoH as well as financial and technical partners. As in many RBF schemes, Indicators are typically defined through a MoH – purchasing agency – World Bank/partners discussion. Because a series of cRBF schemes are, at least partly, externally funded, donors usually have a decisive influence on the choice and pricing of indicators.

The discussion can also integrate representatives of the CHWs and community actors, as in the case of Benin and DR Congo. Greater inclusiveness is likely to increase the sustainability of the programme and its social acceptance, a non-trivial issue as shown with The Gambia case. However, in most cases, the **integration of the community is the choice of indicators is consultative rather than deliberative**. The community and local-level actors who lack representation in regional and national fora are the ones who face most difficulties having their voice heard. This also opens the question of whether some flexibility could be given to the HFs regarding the adoption or definition of indicators related to their local needs. In cases where targets rather than absolute numbers are used, some level of discretion for the HFs or at least districts seems necessary to avoid the system stalling. An interesting case in this respect is Cameroon, a cRBF scheme where the sub-contracting mechanism lets CHWs negotiate the contract, which is reportedly increasing adherence to the approach.

All schemes except Cameroon’s cRBF have **deliberately chosen to operate with less than ten indicators** (see table below). This is to **reduce costs, increase the monetary incentive attached to individual indicators, improve data quality and verification but also to set clear policy priorities and maintain the focus, and thereby quality, of the work of the community actors**. The indicators typically fall into one of three categories: health promotion and awareness, use of services, and health outcomes. Directly contracting health outcomes is uneasy as health ‘production function’ are often hard to define (unless the cases are very specific. Typically, a specific disease). Most indicators tend, therefore, to be related to the use of use of services and health promotion. Both have a relationship with health outcomes that is not necessarily straightforward. The use of services does not reflect the quality of services and its relation to general health outcomes in the population can go either way (an increase in use can reflect, for instance, an epidemic). Health promotion or awareness, the third category of indicators, is a natural choice for interventions at the community level but those indicators may be only weakly correlated to actual changes in health behaviour and outcomes (and/or these changes can take a relatively long time to manifest themselves).

**Table 2 cRBF indicators** (from existing documents and interviews, as of late 2016)

|  | Health promotion | Use of services | Health Outcomes |
|--|------------------|-----------------|-----------------|
| The Gambia                                   | 8                | 1               |                 |
| Congo  | 1                |                 |                 |
| DR Congo (+ 4 indicators on HFC functioning) | 4                | 1               |                 |
| Benin  | 1                | 7               | 1               |
| Cameroon                                     | 3                | 16              | 1               |

Most schemes focus on health promotion and patient referral (counted as use of services in the table above), with apparent success in some areas such as the community detection and referral of tuberculosis in Benin. In countries like Cameroon and Benin, there is an interest for potentially integrating more service delivery (including curative activities in Cameroon) in the cRBF package of activities. This is seen as potentially beneficial for the population that is not in frequent contact with health facilities but would also overstretch the role of the CHWs and begs questions about their level of training and qualification. It also risks exacerbating a real challenge in the field: to ensure that the CHWs do not overstep their assigned role and only provide the services that they are meant to provide and trained for.

cRBF is presented as benefitting the whole community, including the most vulnerable. In at least one case, Cameroon, it was reported that newly incentivized CHWs have started visiting nomadic people when they pass in the health center's area of responsibility, possibly improving vaccination coverage among that population. However, it is striking that the cRBF programmes that were reviewed pay **surprisingly little attention to specific vulnerable groups** –this despite cRBF being a potentially powerful tool to doing exactly that through indicators focusing on specific demographic. One notable exception is Benin, where CHWs receive a higher premium when they visit indigents in their home (home visits are known to be an opportunity for increasing health awareness among the most vulnerable).

That indicators should be SMART (Specific, Measurable, Accepted, Relevant and Time-bound) appears obvious to most practitioners involved in cRBF who called for indicators as specific as possible.

However, at the same time, arises the question of what is left apart, not contracted because it is hard to measure.

The interviews and existing reports do not mention crowding out effects arising from the focus on a handful of indicators. In the case of Cameroon, the programme implementer even suggested, based on a few anecdotes, that cRBF may increase CHW work in all domains, including in tasks that are not contracted for. That cRBF activities will 'pull' non-cRBF CHW activities is very much the assumption of most cRBF blueprints (Cameroon and Benin for instance), but strong evidence is missing. The Cameroon and Congo impact cRBF evaluation framework may help fill those knowledge gaps.

In line with the existing literature on RBF, cRBF seems to lead to a reorganisation of the function and a clarification of the roles of community actors. It gives a clearer place to the CHWs, who now work for the HFs. A key question the different case studies beg is the very *raison d'être* of contracting the community actors. If the aim is a simple service delivery, for instance, CHWs providing basic primary health care, the mechanism seems relatively simple. If the question is one of supervision, monitoring, or governance, such as in the case of the HFCs, cRBF may possibly only be an imperfect solution: the contract can only be on process indicators (expected elements of good governance) and not on the results ('good' monitoring is hard to define out of context). What is more, these governance process indicators are not necessarily easy to pin down. The case of DR Congo illustrates this difficulty: CHWs, who are also members of the Health Facility Committee members, are paid on 'governance' indicators but those are mostly procedural (e.g. meeting, minutes, updated list of members, etc.) and tend to be binary (existence versus non-existence). Defining more substantial indicators of governance has not been possible. The Gambia and the Congo cRBF cases also exhibit similar challenges. They intend to change people's behaviours (for example, to instil pregnancy and motherhood attitudes in line with global health standards, as in the case of The Gambia), which is also something that can be complicated to reduce to simple indicators. As a consequence, the architecture of these schemes ends up being somewhere midway between classic supply-side PBF and classic CCTs: the link with 'results' is very strong, but their actual verification is looser than in the HF-level RBF.

#### d. Architecture

All the cRBF cases under consideration in this paper exhibited, to a certain extent, the same basic principle of a separation of different health system functions (purchaser, provider, regulator, and verifier), but the institutions or people exerting these functions vary from one country to another, and so do the payment and verification systems. Each arrangement comes with its own set of advantages and drawbacks.

Table 3 cRBF architecture (from existing documents and interviews, as of late 2016)

|                         | The Gambia  | Rwanda  | Congo   | Cameroon  | Benin  | DR Congo  |
|-------------------------|---|---|---|---|--|---|
| <b>Fund holder</b>      | National Nutrition Agency                                       | Ministry of Finance and Economic planning                                 | Ministry of Finance?                              | Fund Holder Agency North West Region            | PBF Unit   | Cordaid (international NGO)                         |
| <b>Purchaser</b>        | RBF Committee, within the Ministry of Health and Social Welfare | Health Centre   | Purchasing agency                                 | PBF Technical Unit/PIU, MoH                     | PBF Coordination Unit (UCP)                        | MoH (district)                                      |
| <b>Provider</b>         | VSG (through VDC)   | CHW cooperative   | CHW (through HFs)                                 | CHWs (through HFs)                              | CHWs (through HFs)                                 | HFCs  |
| <b>Regulator</b>        | MOHSW   | MoH performance-based financing expert                                    | MoH   | Regional Delegation and District Health Service | MoH (district)                                     | MoH (province)                                      |
| <b>Verifier</b>         | National Nutrition Agency                                       | Health Centre (verified by Sector Steering Committee)                     | External verification agency (not contracted yet) | Performance Purchasing Agency North West Region | AEDES (international NGO)                          | MoH (district)                                      |
| <b>Counter-verifier</b> | CBOs, external verification agent                               | sector steering committees (purposive)                                    |   | CBOs  | CBOs   |   |
| <b>Indicators</b>       | Maternal nutrition<br>Institutional deliveries<br>Hygiene       | Reporting (CHW situation)<br>Referrals (TB, family planning)<br>Nutrition | Household visits                                  | Referrals to HF (range of 20 indicators)        | Referrals to HF (mostly maternal and child health) | HFC functionality<br>Sexual and reproductive health |

## Contracts and Payment

As mentioned at the beginning of this report, the contracted agents differ from one case to the other (CHWs, HFCs, community committees). The contracting party can also change. It can be, as in the 'standard' (HF-level) RBF, a purchasing agency, which gives policymakers more control over contracting. The contract can also be done at HF level, with the district team often associated with the process. The advantage of the HF subcontract model is that it reinforces and clarifies the link between the HF staff and the CHWs and allows more flexibility, in line with local realities, in the contract. It also reportedly increases the level of trust between HF staff and CHWs, as the different parties get to know and understand each other's work. cRBF systems are, as pointed out by the implementers of the Congo *Arc-en-Ciel* scheme, often heavy to set up and subcontract can somewhat spread the burden of implementation at the lower level. The drawback with this approach is that it adds levels to the

'pyramid', and anything coming from the top (especially payment) tends to take longer. The *Arc-en-Ciel* programme in Congo does not subcontract, but leaves the organisation of the work up to the *Arc-en-Ciel* teams. It is the HF that is contracted and receives a payment for each 'household visit'. Another, non-exclusive, option to deal with the challenge of contracting the many CHWs is to contract groups of CHWs rather than individuals (as in Rwanda).

**Clear and simple contracts have helped implementation in the various cases:** they entail being explicit with the community about the phasing out or discontinuation of programmes. **What is more, a good communication should also be sensitive to the characteristics of the local communities.** Good examples of this include the case of The Gambia where the premium is adjusted to the size of the community and DR Congo where equity criteria (e.g. distance from health facility) inform the payment of an extra bonus. In other countries, neglecting the variance in efforts to perform the contracted activities has, reportedly, led to uneasy relationships with contracted community actors.

**The cRBF premium payment is usually handled in cash** (Benin, DR Congo, Congo, Cameroon, The Gambia, Rwanda) but some mechanisms also include incentives in vouchers (DR Congo) or goods (Rwanda). This in itself seems not to be a major issue. The rationale behind using vouchers is to incentivise even more the use of services by the contracted party and play on the demand side. Vouchers or goods give more control on the use of the incentive reward. In Rwanda, the rationale behind the use of gifts was that it would be politically easier to stop such intervention. The gifts would also benefit the women more as money might need to be shared with their spouse or household, and some of the gifts would contribute directly to health (such as water purification pills). At the same time, since gifts, and even more non-fungible vouchers, constrain and orientate behaviours, they may also prevent local original solutions to develop. The size of the reward, as highlighted in the Rwanda CHW case, matters: incentives that are too low may not have any effect.

**With community actors often living in situations close to poverty, the timeliness of payment is fundamental.** In their first months, most schemes have known important delays that have led not only to discontent but also attrition of the (often trained) community actors willing to participate in cRBF. CRBF delays are reported to push CHWs, who often live close to the poverty line, to other activities and severely undermine their confidence in the system (as reported in the cases of Cameroon and Benin) –contrary to HFs that can often use their savings to cope with delays in RBF payment, CHWs often have no financial buffer. It is possible that delays are indeed more important than in the case of HF-level 'standard' RBF as the verification and contractual arrangement can be more complex. Slight changes in the cRBF architecture and increased experience of the implementers have usually led to resorbing those delays. Pre-payment mechanisms can also help. In Benin, health facilities reluctantly accepted to monthly pre-pay CHWs but, eventually, the pre-payment improved the motivation and retention of CHWs.

**Whether there should be a fixed, non-results based, part in the remuneration of the cRBF community actor is debated.** Most countries have suppressed this fixed part because it was not providing strong enough incentives. A fixed part may, however, help with retention. The experience of Cameroon has shown higher attrition of CHWs after the fixed part was suppressed. However, this approach makes the agent a *de facto* civil servant (a 'salary' is paid) and this could be legally and politically complicated, as explained in the Benin case study. The question of the fixed part ties into two other important issues.

First is the question of the 'amount' of indicators contracted actors routinely achieve: in Benin it was estimated that, at the end of the day, payment does not vary hugely between CHWs (but it varies between health zones) while in Cameroon it was reported that what varies most is the bonus based on technical quality.

Second is whether being a contracted cRBF actor is, in practice, a full-time activity. The amount of money cRBF actors can expect to earn varies hugely between countries. In Cameroon, many consider the price of indicators too low, but being a contracted CHW can nonetheless provide a sizeable complementary income to people living in situations close to poverty. This is less the case in Benin or with the HFC members of DR Congo and the Committee members in the Gambia. It is important to note that the living conditions of the community actors do not seem to play too important a role when deciding the price of indicators. In most cases, the price of an indicator is set according to (1) the total available budget and (2) the potential positive and cumulative externalities of the activity (in the Gambia, a pricing consultant helped the exercise).

**The contracting of community actors also poses the question of where to stop. Indeed, crediting CHWs or even the community for their efforts in improving community health with financial incentives creates great extrinsic motivations, but it also opens the door to include even more actors.** This can be seen at play with non-contracted actors also asking to be contracted (e.g., HFC members) on the basis that they too contribute to improvement in the different indicators.

### Verification and Data Analysis

**Verification mechanisms are often challenging to set up in 'standard' RBF; they are even more challenging in the case of community RBF.** The very reason cRBF mechanisms are set up is often that parts of the population are hard to reach, and it is therefore not surprising that activities and results in these communities are also hard to verify. This is the core of a debate currently going on in Benin about the verification of community-level activities that are not monitored or registered at the HF (essentially, anything that is not a form of referral). In DR Congo, community patient tracing does not exist for practical and budgetary reasons, which probably weakens the reliability of the cRBF mechanism. In all cases, typical RBF-style verification and patient tracing are tricky and the cRBF approach will need to be innovative: what can be reasonably, and adequately, measured? Could non-exhaustive (census) methods, such as proxies or samples, be used to estimate the delivery of services? How can verification be made lighter?

**Quality is hard to check given (1) the often high number of community actors and (2) the fact that most activities are scattered across the health centres' responsibility areas. Verification of randomly selected patients through CBOs (patient tracing) remains possible but is likely to be resource-hungry.** District assessment exists in all schemes and community monitoring is being experimented in Cameroon and Benin with local Community-Based Organisations (CBOs) that check entries in CHW registers used by the CHWs and assess user satisfaction (the same surveys have been, reportedly, used to identify areas of improvement for health facility staff). This system required well-trained and literate CBOs that are not always in high supply in rural areas.

An option could be a more intensive use of mobile phones for beneficiary tracking, but it would de facto limit verification to a biased, wealthier, sub-sample of beneficiaries. Using robust and scientific methods for verification and data collection is also an area where most cRBF schemes could improve. However, there is no panacea. The Gambia cRBF scheme has innovated in data collection and verification with the use of survey-based Lot Quality Assurance Sampling (LQAS). The model is quite appealing at first glance but the solution may not fit other cases: it does not provide detailed community-level data, it is costly, and it is technically complicated to implement (for instance, it is necessary to know the population size).

The belief that Information and Communication Technologies (ICT) automatically improve data collection and quality seems often misplaced. For this to happen, the data collection mechanism in



place must be strong already, and it must be simple enough to be accessible for people with potentially low ICT literacy. Training is also required as shown by the examples of the Gambia and Benin. These conditions are simply not met in many cases, making the use of ICTs at best a waste of energy –and at worst creating more problems by adding another layer of complexity in a system many already find complicated.

**Practitioners are still exploring ways to best use community-level data to inform and influence activities and policies.** RBF schemes typically underuse the data they collect. At the micro-level of a health facility, a huge, largely untapped, potential is the use of data analysis by local nurses and CHWs to identify and act upon local problems. RBF data is potentially not only useful for payment but also for understanding the local health situation. In most cases reviewed for this report, there is, however, no real management or analysis of the cRBF data by CHWs, HF or even district staff. This would require skills that are simply usually not available at that level.

In a perfectly functioning cRBF scheme, quality issues would be identified in real time, by an efficient data-based monitoring system. This, however, appears to be quite challenging. **Too often, (data collection) tools are too complex to be meaningfully used at the community-level and there is little and sometimes no integration between cRBF data collection and other health information systems** –with some notable exceptions such as Benin and the Gambia where cRBF data collection is fully integrated into DHIS II.

#### e. Quality Control and Retention

**Quality comes, first and foremost, from the appropriate training of the community actors that are contracted.** This has been raised as a possible issue in many of the schemes. Indeed, the ‘cascading’ or ‘snowball’ training model that is used, and understandably so given the high number of actors involved, has too often meant that training at the community level are of poor quality –when it is precisely that level that is in contact with the users. Solutions to this problem include (1) proper certification by third-party (Benin) and badge schemes that signal quality training; and (2) supervision mechanisms and re-cap session (yearly session in Cameroon). Both mean that it is important to (regularly) test the knowledge CHWs have of the different activities they are supposed to undertake (quality CHWs are those who are, for instance, able to correctly identify an illness in the community and refer the patient to the health centre). District teams are a prime candidate for providing additional training and refreshers, and they have been supported in that sense in DR Congo. However, in other contexts, local governments have high turnover, limited capacity for supervision and have displayed very little enthusiasm to monitor CHWs, leading cRBF implementers to consider alternative channels such as municipalities.

cRBF is a great opportunity for training CHWs, who can even become, as in the case of Congo and Cameroon, ‘quasi’ health staff in the sense that they deliver front-line basic primary health care services. In both countries, cRBF CHWs are trained for such tasks. In Cameroon, the population reportedly called these newly trained CHWs ‘doctors’ as they indeed provide some form of care. This evolution asks the question of the place of the CHWs within the health system and illustrates their potential for freeing up busy HFs and reaching remote communities. However, there exists no assessment of the quality of care in this system. It is useful to note that, in some of the cases, CHWs can receive up to two or three weeks of training, which is probably more than unqualified staff members in HFs receive (such as nursing auxiliaries hired on the fly).

Traditionally, CHWs and HFC members are elected by the population, but most of the cRBF models have a clear selection process of CHWs using a range of objective criteria and procedures. The

advantage of this system is, obviously, better control over the quality and level of competence of the CHWs. The drawback is that the selected CHWs may not be fully recognised by the community. The shift from election to selection will necessarily alter the type of individuals who become CHW and HFC members, probably leading to community actors that are more competent but also, possibly, more interested in remuneration (see Bishai et al., 2002 for the discussion of a similar case in Nepal).

The important attrition of cRBF-trained CHWs in some countries **raises questions about the best way to efficiently use and retain cRBF-trained/aware individuals and groups**. Timely payment is, as mentioned earlier, a key option to tackle this problem. Another possibility that was discussed earlier in this report is to include a more or less fixed part in the payment. This way, contact can be maintained during periods of lower workload and the agents will have fewer reasons to quit the programme. The payment of a fixed part is also subject to a less cumbersome administrative procedure (verification can be very basic).

## 5. cRBF and national policies

**cRBF is not only a technical question. It often fits into the broader agenda adopted by governments, in particular, the Sustainable Development Goals.** CHWs, although widely recognised as being important in reaching public health goals, have typically not been well-funded in the past. Mostly relying on community volunteers, CHW programmes have usually been planned around necessary training, input (kits, consumables), a referral function, and reporting. Quite a few CHW programmes have put a strain on the workload of CHWs, and often the expectations of what these CHWs might do and what they should do may have been unrealistic. cRBF programmes are an eclectic mix of approaches that attempt to bring in more funding through various incentive systems, to strengthen this aspect of health programmes. Community engagement remains crucial in expanding coverage of essential health services in a cost-efficient manner, especially in situations of limited fiscal space for health. 'cRBF' programmes should be seen in this light: as an attempt to enhance financing in a tangible and results-focused manner for these crucial delivery mechanisms.

### Community Health

A key question is the **integration of cRBF within the existing community health system**. CHWs and HFCs pre-exist cRBF, and most approaches seem to have tried to integrate these community actors rather than setting up new ones. **Ideally, a cRBF system should come as part of a wider reform of community health care.** The cases of Benin, the Republic of Congo, and Cameroon illustrate how cRBF can be an opportunity to 'rationalise' the CHWs and HFC members in terms of clarifying their roles and ensuring that they have adequate skills, but also bringing them closer to health centres.

Not all the actors can be integrated, however, which leads to the question of what to do with the 'old school' CHWs: should they be kept as a reserve workforce or dropped altogether? What about the cases where CHWs may function without strong financial incentives (Perry, Zulliger, and Rogers, 2014; Kok et al. 2014). Discussion with teams in Benin and DR Congo, to take only two examples, suggest a high variance of situations pre-intervention. The HFCs, very much part of all African health systems, are also absent from most cRBF schemes, and not necessarily integrated convincingly into RBF mechanisms (Falisse, 2016). New cRBF schemes, and especially new community meetings such as the ones planned in the case of Cameroon, clearly constitute new fora for community accountability system – and may question the role of the HFC.

**Community health and governance strategies need to be comprehensive to achieve their goals. HFCs or non-cRBF-incentivised CHWs may, in some cases, no longer be relevant, but in these cases, a clear and concerted decision is important** to avoid perpetuating the many stories of the all-too-familiar many vertical programmes leading to the CHW systems now qualified as 'ghosts' by field actors. In the medium run, it probably makes sense to think about suppressing duplication of functions (or at least harmonising them) within the health system.

**cRBF may also represent an opportunity to create a common platform for interventions relying on CHWs.** When more advanced, the Congo experience, where the scheme essentially set up a CHW network where none existed, will be interesting to compare with countries with a stronger tradition of CHWs. cRBF approaches are generally horizontal, in the sense of an integration in the local health system. It remains unclear how new vertical programme would fit in such model. Would they use the same CHWs and add tasks indicators (as suggested by the experience of Benin) or develop in parallel to the cRBF CHWs? The Gambia's case could be interesting in this respect; it is focused on maternal and child health, with a clear nutrition angle, but at some point other partners or units within the ministries might be interested in adopting this innovative strategy, bringing the question of integration to the forefront.

**Whether CHWs should be considered as proper front-line service providers (something they may de facto become in Benin) also raises questions of potential competition between CHWs and HFs.** In the case of Benin, CHWs receive some basic drugs, which they have been authorised to sell to patients for minor pathologies for some profit. At the same time, the CHWs are expected to refer patients. Anecdotal evidence shows that CHWs tend to first try to sell drugs before referring the patient to the HF, even when the case for referral is obvious. In other words, cRBF, if not conceptualised very carefully, could lead to a situation of competition between different levels of the health system, which is obviously not desirable. Some emulation between same-level agents can improve the quality of services, but competition between different levels puts users at risk. Innovative designs can reduce that risk. In Congo, the contracting and organisation of CHWs goes through HF, which increases the likelihood that incentives will be aligned. In the new DR Congo PBF programme (that covers 24% of the population), CHW 'fixed' health posts are sub-contracted by HFs and individual CHWs are engaged through the 'household visit'. These cRBF activities are therefore also expected to be better aligned with HF activities.

## A Political Economy of cRBF

It is worth noting that cRBF has been used, and will probably keep being used, to deal with more political issues. In Benin, for example, cRBF allowed a *de facto* increase in the health workforce without increasing the number of civil servants. This was important in a context where Benin had agreed not to increase the payroll in exchange for World Bank and International Monetary Fund loans. Generally speaking, cRBF can be an entry point to fund groups that are not (yet) on the payroll.

Another set of political issues is more local. Although not mentioned in reports and interviews, it seems clear that cRBF CHWs can become financially interesting positions, and are, therefore, exposed to forms of nepotism and neo-patrimonialism. Politicians around the world promise jobs, especially during election time, and the risk that 'paid' CHWs may be hijacked by unscrupulous politicians trying to directly or indirectly control such appointments is therefore not trivial and should be monitored closely.

Finally, the question of the sustainability of cRBF programmes is currently barely mentioned in existing documents. Most schemes integrate a part of domestic funding, which can be quite substantial in

cases such as Congo. The Rwanda case, however, pushes the question further. After years of successful implementation, the authorities have decided to scale down cRBF, essentially considering that the RBF has only been a transitory strategy for revamping and revitalising the health system and community health actors. This decision as to the objective of cRBF may be useful to set at the onset of programmes, as it necessarily guides the implementation strategy.

## 6. Recommendations and areas for future research

Several ongoing studies on CRBF schemes are being implemented in the context of the portfolio of impact evaluations funded through the Health Results Innovation Trust Fund. In the Republic of Congo and the Democratic Republic of Congo, the research will focus on incentivizing health facilities to conduct home visits. A study in Cameroon will evaluate a mechanism through which health centres subcontract community health workers. In Gambia, a model of performance payments to community organizations will be studied. The studies employ both quantitative and qualitative methods and are expected to be completed in the next three years.

In addition to the need to soundly evaluate the impact of cRBF schemes, further research is required to better understand a series of key issues, among others:

- The link between cRBF and other demand-side approaches (including vouchers);
- The links between cRBF and primary health-care approaches, also in terms of coordination of the different stakeholders (and in terms of community participation in cRBF verification)
- The role of non-monetary incentives for CHWs;
- Community feedback mechanisms, including those enabling vulnerable and marginalized groups to be heard in the public sphere; as well as the mechanisms that empower communities and make them recognised;
- The extent to which CHWs can be used as frontline providers, especially for family planning (e.g. distributing pills);
- The mechanisms capable of compelling households into action following a CHW's household visits. More broadly, the best ways to incentivize behavioural change and community action;
- Potential systems for regular community-level data collection, monitoring, and quality control –and the role of technology in them;
- The effects and sustainability of projects undertaken with or support by community subsidies; and
- The medium and long-run viability of cRBF schemes, both within communities and as national schemes, and in terms of both community financing and support from local actors.

## 7. Concluding remarks

Community engagement is crucial for expanding coverage of essential health services in a cost-efficient manner, especially in situations of limited fiscal space for health. cRBF schemes are an eclectic mix of approaches that attempt to bring in more funding to community actors through various incentive systems. It is too early to tell whether the different approaches covered in this brief are effective. What seems clear at this stage is that cRBF approaches lead to re-thinking, and possibly revitalising, a community health sector that is often been neglected. By doing so, cRBF also asks

questions about health (and RBF) system, among other in terms of roles of the community actors or quality assurance. There is no one-size-fits all and successful implementations have built on local realities and institutions and adjusted and learned from the field. There remain many more questions and unknowns than answers about cRBF and it will be crucial that experiences are well documented and researched in order to push the global reflection on the topic forward.

The Gambia MCNHRP and the Congo *Arc-en-Ciel* programmes are ambitious social engineering schemes. They may have important positive impacts in terms of health-seeking behaviours, using the strength of the community to show people the way to safer health behaviours, but they also raise questions about social control and individual agency. As The Gambia's case suggests, peer pressure and social control are heightened under such 'population RBFs': reaching a result or a target is not only about financial reward, but also about participating in new social norms. Local communities are, however, shaped by uneven structures of power (based on gender, wealth, or birth, for example) and it is crucial to ensure that the situation does not spiral out of control, becoming overwhelming or coercive for some community members (especially since cRBF programmes often target the poorest). The Gambia cRBF (MCNHRP) identified this issue and stressed the need for the genuine empowerment of women. Participatory schemes relying on community mobilisation or peer pressure are too often hijacked by local elites (Platteau, 2004; Heller and Rao, 2015). More generally, work at the community level should be undertaken with a good understanding of power structures: e.g., who controls what, who the local leaders are, and what influence women and minority groups have. This could, however, be challenging as part of a very structured programme.

It is important to remember that as yet very little evidence is available about the effects of cRBF. The different cases mentioned in this report will, ultimately, contribute to building this body of evidence. The only impact evaluation is from Rwanda, and it is clearly too early to draw general conclusions based on this single case. The Rwanda case is encouraging when looking at demand-side cRBF, but not when considering supply-side cRBF. This does not mean that one is superior to the other: the objectives of the two were very different, and the lack of visible effects on the supply side could have something to do with the way the scheme was implemented and its interactions with contextual factors (for example, an already highly incentivised supply side). The results may, however, be interesting to take into account in cases where either model could be used to pursue the same objective.

cRBF systems are recent but the question of both their sustainability and their resilience to emergency situations –such as epidemics– is already being raised. Part of the answer may lie in mechanisms discussed in this report: fluid payment systems, integration of cRBF into national health policies, and strong quality assurance mechanisms.

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## Appendix: Case Studies

Six cRBF programmes/policies are presented in this section. The aim is not to provide a comprehensive account of the situation in each country, but rather to flag the main features of each case to prepare and feed into the next section, which will highlight key questions around cRBF. Details about the exact functioning of each cRBF mechanism are found in the 'Sources' section at the end of each case.

### Cameroon

Cameroon faces important issues of population access to primary health care. In particular, there are strong disparities between rural and urban areas and the important shortage of funding and doctors has led the government to reintroduce user fees for treatment and services. At the same time, the government has also committed to moving towards Universal Health Coverage through the simplification and merging of different health policies, including RBF.

Historically, community-level structures have included CHWs as well as Health Area (management) Committees (known as HFCs in the literature). The CHWs are attached to specific health centres and their efficacy is said to be limited by the fact that they are only volunteers who are motivated by goodwill and community recognition (from time to time, they may also receive 'gifts' from the community or support from vertical programmes). The CHWs are active in vaccination campaigns (including against polio) and social mobilisation. The HFCs are made of elected community members coming from the different quarters or villages of a health area (health staff of the local health centre are also ex officio members of the committee).

'Since early 2012, the Cameroon Health Sector Support Investment Project has been implementing PBF in public, private and faith-based organization facilities across 26 districts in the Littoral, North West, South West and East regions of Cameroon, covering a total population of approximately 2.5 million [the population of Cameroon is estimated to be 22.5 million]' (cPBF Manual, 2015). There are plans to scale up this approach to the entire country. Many citizens, however, still lack access to many health services. The reasons advanced for this include the inability to travel to clinics because of lack of funds, transportation, and/or time. CHWs are a possible answer to this problem. Indeed, they are able to deploy in remote areas and provide front-line curative treatment as well as referrals to clinics that community members may otherwise forego.

Previous attempts to involve community actors, however, have failed, especially in the aftermath the 1987 Reorientation of Primary Health Care. The reasons advanced for why the community actors' 'enthusiasm had given way to despair' is that the volunteers, faced with an increasing workload and seeing the growing HF income, requested compensation which they never received. The government's introduction of PBF in 2011 has been presented as an attempt to overcome these shortcomings (see Shu et al., 2014).

Against this background, a cRBF trial where CHWs were contracted for a range of services was developed and implemented in 22 HFs of the North West Region of Cameroon in 2015. The theory of change was in line with the classic RBF theory of change, and echoed experiences in Rwanda and India: 'formal contracting and incentivise performance, along the lines of providing curative care and referrals to clinics, follow the basic insights about one mechanism that drives success in PBF by linking incentives to results' (cPBF Manual, 2015).

In addition to contracting the CHWs, there was a second arm in the trial: a new system of community evaluation was set up in 22 other HFs. The community evaluation rested on RBF as it used community



scorecards informed by RBF data. Its underlying assumption was that CHWs and HF workers are more efficient when under public scrutiny. The theory of change, as in the case of the CHWs, started with the assumption that poor access to health care is a matter of poor connection to the HFC. The idea is that community oversight or 'voice' will improve the relationship between users and HF.

### Architecture and functioning

'Community PBF' (cRBF) was designed to improve health-seeking behaviour and geographical access to preventative and curative health services through the provision of health services at the community level. In this model, the CHWs refer patients, find drop-outs, and visit households. Curative activities including the management of diseases such as malaria, acute respiratory infection and diarrheal illnesses among children will potentially be implemented in the future. The cRBF programme built upon existing models already in place in Cameroon and implemented by UNICEF, the World Food Programme and Plan International.

A particularity of the Cameroon cRBF programme is that HFs directly subcontract CHWs to provide services at the community level, refer patients for complicated cases, and support sensitisation and outreach campaigns organised by associated HFs. There is some degree of negotiation between the HF staff and the CHWs about the 'price' and timing of each indicator.

The HF selects its CHWs using criteria of literacy and 'morality' (does the individual have a good reputation?). This selection is normally done with the community, but there is no requirement for the CHWs to be elected. There seems to be a partial overlap between old, pre-cRBF, and new cRBF CHWs. The training and certification of the CHWs is also undertaken at the local level, under the responsibility of HF staff who are themselves trained by the district staff and purchasing agency.

The list of indicators is determined through consultation with the different actors at the regional and national level (but not the CHWs directly). The latest list comprises no fewer than 20 indicators:

- Malnutrition cases confirmed by the facility;
- Pregnant women received in the facility for delivery, referred by CHW;
- New acceptors of family planning;
- Postnatal care (PNC) consultation;
- Prenatal Consultations, 1st trimester;
- Recovery of Family Planning drop-outs;
- Recovery of antenatal care (ANC) drop-outs;
- Immunisation drop-out under 18 months;
- Recovery of anti-tetanus vaccine drop-outs (Pregnant women);
- Recovery of drop-out cases of acute malnutrition;
- Household visit (with health worker);
- Public sensitisation event;
- Provision of micronutrient powders through community distribution;
- Indigents referred to health centre;
- Referrals for consultation referred by CHW;
- ANC referrals by CHWs in the 2nd and 3rd trimester;
- Minor Surgery cases referred by CHW;
- Minor Surgery cases for indigents referred by CHW;
- Referral for delivery for indigents by CHW; and
- Diseases under surveillance, identified and referred by CHWs.

The CHWs report their activity to the HF staff using dedicated log books recording the people they referred to HFs. These books are verified by the HF staff, who then transfer the information to the purchasing agency for verification and validation. The validation is done through classic RBF procedures, including specific patient tracing of a sub-sample of patients visited/supported by the CHWs by a contracted local Community-Based Organisation.

The cRBF purchaser is the independent Performance Purchasing Agency of the North West Region, while the Regional Delegation and the District Health Service act as regulators. The funds are held by the government's Fund Holder Agency in the North West Region.

Cameroon's cPBF programme is added to a generic HF PBF approach. One of its particularities is the comprehensiveness of the services for which CHWs are contracted (other approaches work with fewer services, and often against lesser unit fees). In addition, two other innovations of the Cameroon cRBF are the community score cards and the community meetings. Such score cards and community meetings were also tested at scale in the Rwandan cPBF approach. They are facilitated by local NGOs and, according to the guidelines, involve the following people: a traditional leader, a local council representative, one disabled representative, two community members who have used the HF within that quarter, two community members who have received the services of the CHW, two mothers' representatives, two youths representatives (one male and one female), two adult representatives from the community, two elderly representatives, and up to six HFC members (these must not be CHWs).

The idea of these meetings is to provide community members with a chance to react to the performance and general situation of the CHWs and the HF. For this purpose, they are provided with a list of local health and HF staff and CHW performance indicators and the business plan of the HF. The resulting scorecard is then discussed by the HF staff, the CHWs, and representatives of the community during an interface. During this meeting, the HF business plan is presented and discussed and community members are given a chance to give feedback on the proposed investments and strategies to improve utilisation. The community members have a say in the priority setting and resource allocation defined in the business plan. The meeting is also an opportunity to discuss issues with the realisation of the last quarter's plan. The meeting attendees do not receive any fee, but their travel expenses are repaid.

## Effects

It is too early to assess the changes resulting from the implementation of cRBF in Cameroon, but there seems to be a consensus about the fact that CHWs are better organised and more efficient as a result of it. Comparison of data from before and after the CHW component of cRBF was introduced shows a clear increase in children's vaccination (VAT 2–5). In addition to the clear financial motivation, a few mechanisms seem to be at play:

Contracting and training seem to have brought the CHWs closer to the HF. They are now more present at the HF and better informed;

The HF staff and the CHWs cooperate more, which seems to have led to an increase in human resources at the HF and more attention being given to the patients;

The CHWs talk more to the community;

The CHWs say they are more recognised by the community and the HF, which has been helped by minor details of the cRBF implementation such as the distribution of badges to CHWs; and

Coaching has also been identified as a crucial factor in changing the CHWs' behaviour (this is very much in line with broader observations on the effects of introducing RBF systems: see for instance Bertone and Meessen, 2013).

It is reported that the CHWs have improved their general efforts and performance, and not only in areas related to the contracted indicator. This is obviously a crucial element that the impact evaluation will need to explore.

Much less is known of the behavioural changes induced by the community meetings. The take-up and attendance have been good and the new forum may, in some instances, have provided an interesting platform for the most vulnerable. There are reports of HFs deciding to provide free health care to the poorest as a consequence of the meetings they have had with the community. It is unclear what has happened with the old HFCs, which have monitoring functions similar to the community committee and were said to be dysfunctional even before the cRBF. The people who are CHWs, attendants to the community meetings, and HFC members overlap and are said to collaborate, although it is not clear what this means in practice.

### Implementation features

The main issue with cRBF is technical: subsidies often come late and there are irregularities in payment. The payment model is said to be the cause of these problems, and the question is one of long-term management of the programme and the mobilisation of funding and money flow. As of August 2016, the payment method has been revised, with CHWs now being paid every month by the HFs out of their general revenue (PBF subsidies, cost recovery, etc.), independent of the PBF payment schedule. This seeks to ensure timely routine payment to CHWs.

The Cameroon cRBF pilot is part of the government strategy to achieve universal coverage. It remains nonetheless highly dependent on donor's money and is still very much in an inception phase. As mentioned earlier, the Cameroon cRBF programme is part of a rigorous impact evaluation whose results will be available in 2018.

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## Benin

The performance of the Benin health system is described by the cRBF manual of procedures as 'weak'. The key issues are the delayed access to health services (patients arriving when their medical condition is already well developed: for instance, 65% of children's deaths happen at home)<sup>2</sup>, the lack of motivation of the health workforce, and a general poor quality and provision of services. Crucially, the engagement of community actors in the health system seems particularly weak, causing a clear break in what is expected to be a continuum between the community and the different levels of HFs.

Since 2012, the World Bank has been supporting RBF initiatives in eight health zones. These were scaled up to the entire country in 2015. The programme targets the HF level (health centres and hospitals). The mid-term evaluation of the programme however suggested that, while the quality of care seemed to have improved, there were still difficulties in improving the use of services. Alongside a possible issue with the level of autonomy of the HFs, the disconnection between patients and health centres was advanced as a prime hypothesis for explaining this poor performance: operating at the HF-level may not be enough as 'people do not leave the villages' (as one interviewee put it). Together with the MoH, the RBF partners have therefore decided to develop a community-orientated component in the RBF system. They have a double objective: to boost referral through better community information, and improve the detection of pathologies in the community and their treatment by the appropriate agent in the health system.

Benin has inherited a classic 'Bamako initiative type' community health system whose roots go back to the 1980s. It comprises HFCs (the *Comités de Gestion*), whose quality of functioning is highly variable and that have been described as 'ghosts' (in the sense that some of them only exist in name), and CHWs. The whole system relies on volunteering, with the communities responsible for identifying and designating (often via elections) community health actors. As in other cases discussed in this report, the different vertical programmes have each developed their own CHW network (the CHWs are called 'community relays', *relais communautaires*) and the cRBF manual of procedures identifies no fewer than 20 different types. On the ground, an important variety of situations is also visible in terms of actual commitment of the CHWs. It seems to depend upon an individual's intrinsic level of motivation, the quality of past training, and the level of extrinsic incentives left in the system. In recent years, the MoH has harmonised the CHW frameworks, creating unified guidelines that encompass no fewer than 41 areas of activities for the CHWs across different areas of primary health care. The challenge has been to keep skills while also working on consistency.

In addition to a Belgian Technical Cooperation 'classical' (input-based) CHW project, a pilot project implemented by UNICEF in recent years (the *Approche de Financement Basé sur la Performance*) has already tested the ground for cRBF. CHWs were divided between those in charge of preventative care and those in charge of preventative and curative care. The municipalities (*mairies*) then contracted the CHWs. CHWs received a fixed payment of XOF 10,000 a month (US\$10.73), and could earn another XOF 5,000 depending on their performance. The project has not been subjected to a proper impact evaluation, but the before and after comparison suggests that the strategy could be promising. It constitutes the main inspiration for the cRBF programme.

The cRBF programme started in January 2015 in Okt health zone, and is being progressively implemented in the eight zones where the World Bank implements RBF.

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<sup>2</sup> Kpatchavi, A. (2016) PowerPoint presentation on cRBF.

## Architecture and functioning

The key actor of cRBF in Benin is the CHW. CHWs are described in official documents as 'dépisteurs et rabateurs', literally 'scouts and beaters', in the sense that their mission is to detect and identify medical conditions in the population and refer the patients to the appropriate HFs and agents.

The focus of the CHWs is probably best summed up by the indicators of their contract. In a first phase of the project, eight basic indicators were defined, all focusing on referral:

- Screened and referred cases of malnutrition (6–59 months);
- Children screened and referred by the CHWs for severe acute malnutrition;
- Children under 5 who are at risk referred in a health centre;
- Newly accepting a family planning method received and referred by CHW;
- Fully immunised children aged one and below, with involvement of CHW;
- Pregnant women sent to HF for antenatal consultation;
- Women sent to HF for postnatal consultation;
- Number of indigent patients sent by the CHW to the HF; and
- Number of patients with chronic cough sent by CHW (and tested positive for chronic cough).

The addition of new indicators as part of a second phase of the project is still under discussion. The indicators under discussion are related to child and maternal health, malaria, and water and sanitation. Not all the CHWs indicators are cRBF indicators. The idea is that contracted indicators would strengthen the other, non-cRBF, indicators. There is however no evidence that such a mechanism is at play.

Not all the official CHWs can become cRBF CHWs. A list of eligible CHWs is established by the cRBF programme. It includes literacy, experience as a CHW (minimum two years) and past training as key criteria. The list is validated by community leaders and a joint cRBF programme: the health authorities team train the CHWs who would like to be part of cRBF on two aspects, RBF procedures and the most common pathologies. It was highlighted that is difficult to organise a proper election, and that being a CHW is not lucrative enough to make it a full time job.

To ensure a smooth continuum between the community and the local HF, the CHWs are directly contracted by their local HFs. The classic RBF architecture was adapted to this effect, and in practice the contract with the CHWs is a subcontract.

The purchasing agency (the Unité de Coordination du Projet, UCP) is under the MoH and contracts the HFs, which then contract the CHWs to carry out certain tasks. In this respect, the contract with the CHW is a form of subcontract with the purchasing agency. The health authorities at the district level are the regulators. The verifiers are contracted by the UCP and, very much as in a classic HF-level RBF system, use HF registries to check the results of the CHWs, for example whether the patient was correctly referred and well-identified (name and address). At the community level, CBOs perform a patient tracing, which is, again, similar to standard HF-level RBF patient tracing: 10 CHWs are randomly selected, and two patients identified and referred by each of these 10 CHWs are found and checked in the community.

For the new set of indicators that should be introduced in a near future, and includes services outside the HFs, verification and patient tracing have been described as really challenging, especially in areas where the HF is far from the community and has few qualified health workers. The limited number of

staff members at the HF makes it really hard for them to properly to perform a first and simple verification of the services delivered in the community.

Finally, it is useful to mention that 'standard' RBF may also have improved the situation of the HFCs, as they now receive bonuses.

## Effects

A short assessment/monitoring report was carried out at the beginning of 2016. It highlights the good functioning of the cRBF programme and the appropriate targeting on improving access to care.

The report also flags issues. An important one is that only one third of the cRBF-trained CHWs are active. Delays and sometimes lack of payment are brought up as the main reason for this attrition. Other possible explanations include the important delay between the CHW training and the beginning of the programme and the lack of understanding and poor literacy of the CHWs. The report underlines that CHWs often still lack basic knowledge, and this is illustrated by the important rate of wrong referrals: almost 30% of the cases were invalid (found to be inappropriate) in the first months of the project. The situation seems to have improved, however, with this rate now 4–5%. Finally, the report suggests that the lack of fixed remuneration can also explain the important attrition, especially since some CHWs have borne in mind the fixed remuneration they used to receive when part of the UNICEF project mentioned above.

In the community, the CHWs are said to be well known but there is still a confusion between the HFC and different programmes and partners. The 2016 report argues that the population understands issues in child and maternal health well and that cRBF seems to have narrowed the gap between the CHWs and the HF staff and brought people closer to their HFs. Behavioural changes seem underway, both in terms of attitude of the HF staff and in terms of attitude of the population.

## Implementation features

An interesting feature of the cRBF programme in Benin is that it has been done at the same time as (and in dialogue with) the MoH's reform of the CHW system. The cRBF packages of activity is then, de facto, a sub-set of the broader CHW package of activities. The programme claims, but do not have strong evidence, that the cRBF CHW package has a positive impact on other, non-cRBF, activities. The cRBF approach has been validated by partners and the MoH and implemented with a maximum of local partners and human resources, which has created indigenous expertise in (c)RBF.

As noted in the official cRBF guidelines, the future of cRBF in Benin is very much tied to 'standard' RBF. The key challenge, the guidelines further note, is the integration of the cRBF system within the community and socio-administrative tissue. In particular, the relation between cRBF and the HFCs, municipalities, and local civil society remains unclear.

Finally, cRBF was described as providing a solution to a more 'political' problem. The government of Benin has long recognised that relying only on volunteer CHWs may limit their efficacy, but paying the CHWs would have meant considering them as de facto civil servants. This was not an option for Benin (and for other countries), for budgetary reasons and also because of promises made to international organisations such as the Union Monétaire Ouest-Africaine and the Bretton Woods institutions not to increase the civil servant workforce. cRBF provides a workaround for this problem. It also paves the way to targeting Millennium Development Goals and Sustainable Development Goals, elements that are crucial to the political partnerships of Benin. At the local level, however, it seems that the CHWs

are not seen as political agents, unlike the HFCs that have been elected inside their communities for decades.

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## The Gambia

Note: the very recent 2016 World Bank report, *The Gambia's Community-Based RBF Scheme: Contracting Communities to Boost Demand*, provides a comprehensive discussion of the elements discussed hereunder. Excerpts are referenced 'World Bank, 2016'.

'The Gambia's performance with regard to nutrition and health-related Millennium Development Goals (MDGs) has been modest: under-nutrition persists, and under-five and maternal mortality rates remain high' (World Bank, 2016). Progress related to these indicators is generally uneven, and the main constraints are both on the supply and demand sides. On the supply side, key issues appear to be the training and motivation of the staff, as well as the availability of equipment and infrastructure. On the demand side, attitudes towards patients, patients' perceptions, and cultural norms regarding childbirth are seen as key issues.

'The Maternal and Child Nutrition and Health Results Project (MCNHRP) of The Gambia uses RBF to directly address challenges related to maternal and child nutrition and health, including sanitation and hygiene' (World Bank, 2016). The MCNHRP combines a supply-side PBF mechanism with a community-based RBF (cRBF) mechanism designed to foster stronger links between communities and HFs, and a conditional cash transfer (CCT) for women to use timely ANC services. 'Its innovation further stems from the specific nature of its demand-side financing approach: the community-based RBF scheme in The Gambia implies contracting communities to create demand [and address health and nutrition behaviours at community level] – rather than contracting households as is typically done in demand side RBF interventions around the world.' (World Bank, 2016)

The MCNHRP 'was initially piloted in the North Bank West Region from November 2014 to December 2015. Based on lessons learned, it was subsequently extended to cover three regions, namely the Central River, North Bank West and Upper River regions. The extended MCNHRP was launched in March 2015.' (World Bank, 2016). An additional two regions – the North Bank East and Lower River regions – were added in July 2016.

## Architecture and functioning

In addition to introducing a HF-level PBF system, The Gambia MCNHRP also puts in place a community-based RBF scheme and a CCT programme. The cRBF is the main interest of this report. The MCNHRP programme also includes various trainings on RBF for the different health actors and social and behaviour change communication. The cRBF and CCT components seek to 'both mobilize and empower individual women and communities to partake in improving nutrition and health outcomes' (World Bank, 2016).

'At community level, the cRBF part of MCNHRP is delivered through existing community structures. These structures include the Voluntary Development Committee (VDC) and the Voluntary Support Group (VSG). [The latter was] originally created to roll out the longstanding Baby-Friendly Community Initiative (BFCl) and promote exclusive breastfeeding. It is elected by the community and composed of community members, including the traditional birth attendant (TBA) – now titled 'community birth companion'. Readily operational and rooted in communities, these entities and actors provide a unique entry point for community interventions' (World Bank, 2016).

Through a dedicated unit, the RBF Committee, the MoH acts as the purchaser and contracts the VDCs to 'coordinate and oversee the achievement of predefined performance thresholds' (World Bank, 2016). In turn, the VDCs subcontract VSG members to operationalise activities related to primary health care (hygiene, referral) and the BFCl, which mostly consists in nutrition-related activities. Originally, only three activities were subsidised in North Bank West Region as part of a pre-pilot:

- At the individual level: ANC (visits at the HF), which is essentially a CCT programme that will not be the focus of this study; and
- At the community level: the number of children between 0 and 6 months who are breastfed and the number of pregnant woman at risk who are identified as such and referred to the HF. This activity was discontinued at the end of the pre-pilot phase.

In March 2015, two additional regions were added to the programme, and the set of cRBF indicators was expanded for the main roll-out to include:

- Proportion of mothers of 6–23 month old babies who consumed recommended food in the last day (there are four groups of recommended food);
- Proportion of mothers of 6–23 month old babies, who can cite at least three practices of good complementary feeding;
- Proportion of women aged 15–49 who can cite the danger signs in pregnancy;
- Proportion of women aged 15–49 who can cite four advantages of breastfeeding;
- Proportion of women aged 15–49 who consumed food from four appropriate groups;
- Proportion of women aged 15–49 with access to a toilet;
- Proportion of women aged 15–49 with access to an equipped hand-washing station;
- Communities having at least one properly managed dump site; and
- Number of pregnant women referred to the HF for delivery.

The Regional Health Directorate is in charge of regulation. The cRBF community premia are paid quarterly to the communities' bank accounts and the money is spent between the VDCs (70%) for village development activities as laid out in the quarterly business plan and VSGs (30%). In the latter case the money can be used to incentivise the volunteers.

The National Nutrition Agency, which is part of the programme together with the MoH, leads the verification of the cRBF results. Specifically, the verification of quantity is carried out through monthly community visits and builds on community registries and reports, detailing the number of outreach activities carried out and the number of 'at risk' patients referred to the nearest HF. An external verification agency is also contracted to perform biannual random checks, including on the samples of beneficiaries surveyed by the CBOs.

## Effects

A rigorous impact evaluation is undergoing. The baseline is completed and midline data collection underway. Anecdotal evidence suggests that the cRBF programme generates positive outcomes in



terms of perception of maternal health and social mobilisation, with some communities 'embracing new concepts, behaviours and practice [that] is gradually creating the appropriate social environment required to instigate individual changes'. (World Bank, 2016)

The impact evaluation will make it possible to disentangle the specific effects of the different parts of the intervention package (e.g. information and financial incentive). Interestingly, at least in a few communities, part of the community premium seems to be invested in productive assets, following the business plans established as part of the cRBF scheme. This investment could help the communities sustain their awareness raising activities. Another change that is reported to be underway is in the way the population and the HF staff interact: the programme circulates information about the different parties, which helps developing mutual understanding and aligning the interests of the different parties.

### Implementation features

A series of elements appear crucial for the efficiency and sustainability of community component of the programme (cRBF and CCT): the direct and explicit involvement of men, the social acceptance of the programme in the community, the health financing approach that goes across the health sector, and the social context and peer pressure. The latter is a double-edged sword: peer pressure could incentivise people to adopt 'better' health behaviour, but it also reduces their agency and begs the question of how 'genuine' the changes are.

'The community-based RBF scheme includes an important capacity building component, seeking to strengthen community leadership and governance to comply with RBF principles and processes as well as with national norms and guidelines. It supposes timely and accurate reporting, specifies the requirements for quality information dissemination as well as for community referrals. Nevertheless, gaps in community capacities remain: limited literacy constrains adequate and accurate reporting; misunderstood indicator definitions distort monitoring and incentive payments; the implementation has focused on quantity rather than quality, i.e. reaching the greatest number of beneficiaries rather than effectively instigating social and behavioural change' (World Bank, 2016).

'The MCNHRP is jointly implemented by the National Nutrition Agency (NaNA) and the Ministry of Health and Social Welfare (MOHSW), in consultation with a wide range of national and international partners and with the technical and financial support of the World Bank' (World Bank, 2016). The financial sustainability of the programme still depends on World Bank funding.

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### DR Congo

DR Congo is one of the poorest countries on earth. It ranks at the bottom of most international socioeconomic rankings and the situation of its health system is extremely worrying, at all levels: human and financial resources, equipment, infrastructure, quality of service, and governance.

Against this background, a wide variety of RBF programmes have been implemented in various locations in the country since 2000. These RBF programmes have varied strongly in design and implementation characteristics, and comparing them is not easy. For instance, the longstanding South Kivu PBF project managed by the Dutch NGO Cordaid has documented good results (Soeters et al., 2011), whereas a study of another project in Haut-Katanga reports implementation problems and shows no effects (Huillery and Seban, 2014). Design and implementation are expected to have a strong impact on results obtained through PBF programmes (Fritsche et al., 2014). The government, with support from the World Bank, UNICEF, Global Fund, Gavi and USAID is currently scaling up PBF to cover 24% of the DR Congo population. There is no cRBF component per se in this new RBF programme, but in the past years the World Bank has financed a programme to strengthen HFCs implemented by Cordaid that has cRBF features.

Community participation has been part of health policies in the DR Congo since the 1970s. In this vast and often hard to access territory, community actors often seem best-placed to facilitate access to health services. According to the MoH guidelines, CHWs (relais communautaires) are elected in each village. They elect HFC (Comités de Développement de Santé, CODESA) members among themselves. The efficiency and functionality of the community health system is undocumented, but anecdotal evidence suggest that it is often poorly functional, possibly because it is often not supported (Falisse, 2016). A baseline study conducted in four health zones of South Kivu in 2012 revealed that the HFC members were rarely involved in HF management, this despite their normally important role in designing HF business plans. On the CHW side, the situation was more confused: some CHWs were 'facades' but others were clearly involved in health promotion and hygiene and sanitation. The key determinants seemed to be the existence of support programmes and intrinsic motivation.

The rationale behind the Cordaid HFC strengthening was that the HFC was not yet a strong enough actor in the supply-side PBF. Also, the lack of funding and training of the HFC members was seen as preventing improvements in both the responsiveness of health services and the demand for them.

### Architecture and functioning

The HFC strengthening programme started in 2012 in four health zones of the Eastern province of South Kivu. It was implemented by the Dutch NGO Cordaid with the support of the World Bank Civil Society Fund. Its basic component is training the HFC members on their mission and the functioning of the HFs. A 2013 impact evaluation concluded that this training led to significant and positive changes in HF management of human resources, infrastructure, and stock-out of drugs. In 2015, with the support of the World Bank Global Partnership for Social Accountability, the project was extended to four other health zones in South Kivu and three others in the province of Bas Congo.

To maintain the functionality of the HFCs and push their development, the new programme has included incentive mechanisms borrowed from PBF schemes. Once their members are fully trained, the HFCs are invited to sign a contract with the health zone authorities. This contract is based on the standard RBF model that is in place, and uses the same architecture: the purchasing agency is the NGO Cordaid, which implements the project, and different health authorities are placed in charge of verification and monitoring.

The contract is divided into two parts. The first is a subsidy programme for the HFCs: it seeks to ensure that the HFCs meet basic functionality requirements. The following indicators have been used:

- Existence of community score cards and HFC terms of reference (yearly indicators);
- Display, at the HF, of HFC minutes, HFC agenda, and price of services;

- Existence of HFC sub-committees for resources, social mobilisation, and implementation of the HF minimal package of activities;
- Meetings between HFC and HF staff, between HFC and the population, and between HFC members; and
- Existence of an updated list of active and inactive CHW and HFC members.

The second part is linked to the CHW role HFC members also have, and the indicators reflect the CHW missions of information dissemination and basic service provision:

- Training on family planning delivered by HFC members (in their capacity as CHWs);
- Awareness sessions on family planning (in their capacity as CHWs);
- Adhesion to contraceptive methods in CHW books;
- Implication of men in family planning meetings; and
- Community activities carried outcomes.

Each indicator is divided into SMART (Specific, Measurable, Attainable, Relevant, Trackable) sub-indicators. There is a quarterly or yearly target for each indicator. Most of the indicators are binary and the maximum payment for the all yearly indicators is US\$250, while the maximum payment for all quarterly indicators is US\$67.50. It is an incomplete RBF in the sense that functions are not totally separated. The regulator, the Provincial Ministry of Health, is also the regulator. There is no proper patient tracing of the results: only one verification is done by the local health authorities. In this pilot scheme, the funds remained in the hands of Cordaid.

The HFCs also have the possibility to apply to a biannual HFC 'matching' grant. Through a competitive bidding process, the HFC submit a plan for a health-related project in the area. This has a triple objective: to improve access to health, reinforce debate and dialogue at the community level, and reinforce the legitimacy of the HFC. The grants are between US\$300 and 500, with a few 'super grants' of US\$1,000 given once a year. To apply, the HFC has to produce an application that demonstrates that it is functional; that the project is sound and appropriate; and that the community will contribute, in cash or in kind, to at least half the cost of the proposed project. The health authorities select the projects using a list of objective criteria, and the implementing NGO validates the list. The RBF system is used to verify that the money was spent on the project. The type of project varies between health zones, reflecting different local problems with infrastructure (buildings, sanitation, equipment, etc.).

## Effects

The impact of basic training on the HFC has been reported above: it leads to improvements in infrastructure, human resources, and communities' sense of ownership of their HFs. The effects of the matching grants and HFCs subsidies are harder to measure and have not been subjected to a proper impact evaluation, but the programme has proved popular with the HFCs and the grants have helped rebuild health centres while taking into account the priorities of the population (or at least its HFC).

The uptake of the different HFC support programmes has been excellent, but at the same time the HFCs and CHWs may also be reaching their limits as fundamental issues of the health system, especially resources, cannot be addressed through community management involvement only. HF-level RBFs/PBFs have often been interrupted in South Kivu, making the HFCs (and to a certain extent, the CHWs) irrelevant for some time.

## Implementation features

The HFC support programmes are only implemented in a handful of health zones of the vast territory of the DR Congo. They are clearly dependent upon external funding. The inexpensive HFC training package is, however, easy to scale up and is now being used by the South Kivu authorities in non-pilot zones.

The HFC support programmes are triggering a growing interest from national authorities, but they have not yet become part of national policy.

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## Congo

In Congo, community health has been neglected for decades, arguably even more so than in the other cases presented in this report. Clear guidelines about the work of the CHWs (and HFCs) do exist, but they do not reflect the situation in the field. Networks of CHWs are poorly developed and CHWs have received little support, even from vertical programmes.

This negligence means that there is, potentially, a lot of room for improving the population's awareness and engagement with health care providers, which could be crucial for improving general access to health services. A new US\$120 million PBF programme (the Second Health Systems Development Project, the PDSS-II) includes an important demand-side focus in addition to its (mostly supply-side) mechanism. The PDSS-II is a health reform which covers 86% of the health system, including the two largest cities Brazzaville and Pointe Noire. The PDSS-II intends to enhance access to a package of basic and complementary services in the entire service delivery network, both public and private (in the two cities, over 75% of all contracts are with the private sector).

One of the PDSS-II components, called Arc-en-Ciel (rainbow), aims to improve health-related behaviours through direct engagement with the population. Its backbone is home visits (visites à domicile) by a dedicated team to help household members identify areas where behavioural change is possible. The Arc-en-Ciel programme seeks to raise health awareness, increase the use of services, and facilitate access to care. Its design has been influenced by voucher, CCT, and social mobilisation and behaviour change programmes (for example in Latin America). It also incorporates lessons learned from experimenting with the purchase of a 'household visit' by HF staff and is designed to allow the national programme for Neglected Tropical Diseases to access the household level with a rapid-reaction package of drugs targeting relatively neglected conditions that widely affect public health status.

The theory of change behind the Arc-en-Ciel programme is that health-seeking behaviour will be improved by bringing essential public health advice to individual households; providing a non-

financial, tangible, incentive for change (vouchers and the contract that act as reminders and can be redeemed for services); and establishing a system whereby once an agreement on household health issues is reached, the promise for action by the household is verified (by returning to the household in case they do not).

### Architecture and functioning

Household visits are a standard part of the CHW package of activities around the world. They usually consist in updating population registries. PBF programmes in Burkina Faso, Cameroon and Nigeria have experimented with the purchase of a household visit, which replaced earlier attempts to purchase community-based activities such as the construction of latrines and distribution of impregnated mosquito nets. However, these experiences seem to indicate that the aim of household visits may need to be well-defined to see an impact on health. In the Arc-en-Ciel programme, the goal is clearly set: the visit is a targeted assessment of the health situation of the household, which then turns into a reflection with the household members on possible changes and a commitment, formalised by a contract, to implement these changes. The contract lists the commitments: for instance improving water and sanitation, hand-washing practices, and vaccination status, adhering to growth monitoring schedules for children, antenatal visits, and family planning, using of impregnated mosquito nets, etc. At the core of the Arc-en-Ciel programme is the flow of information from the household to the CHWs and the HF and back.

The teams implementing the programme are mixed: one member is a CHW who comes from the community, and the other member is a staff member from the local HF. It is close to a full time job: each duo is expected to cover 300–400 households, aiming at two to three visits a year (the first one is expected to last 45–60 minutes, and the subsequent visit should take only half that time).

At the end of the first visit, the contract is signed with the head of the household. The contract is essentially a formalised action plan: the household pledges to improve health behaviour aspects discussed with the visiting team. The household and the Arc-en-Ciel team keep a copy of this contract.

For each listed commitment, a voucher with a specific colour and tracking number is issued. The idea is that the vouchers tangibly identify a problem and the promise to go and seek care for this problem/condition. They are also expected to act as reminders of the commitment. The colours signal the different areas for improvement (e.g. hygiene, maternal health, etc.), hence the programme's name (Arc-en-Ciel). Certain vouchers can be redeemed for free access to health services (vaccination, curative care, contraception, nutrition, hygiene and sanitation, prenatal care, and malaria prophylaxis) and (b) lead to priority access to these services (skipping the queue on arrival). The vouchers are also used for monitoring: unused vouchers show where the household is struggling, and the number on the voucher allows the Arc-en-Ciel team to identify the household.

The Arc-en-Ciel teams are paid an attractive sum through the PBF programme to visit each household. The remuneration of CHW is through an index tool (outil d'indice) developed at the HF. The CHW 'household visit' is part of the list of HF's PBF indicators. The verification mechanism as well as the payment process of household visit declared is carried out according to the same frequency as that of other indicators of the minimum package of activities.

The households do not receive a monetary reward for using services, but they do benefit from the fee-exemption programme introduced through this voucher scheme and the low rates of out-of-pocket payments negotiated with providers contracted by the PBF programme.

## Effects

So far, the main challenge facing Arc-en-Ciel (which is still at its very beginning) seems to be that it requires a whole new CHW system where almost none existed before. The programme cannot build much on existing structures and needs to set up an entirely new structure with contact with a large number of agents. Another challenge, which is similar to the cases of Benin or Cameroon, is the necessarily high level of anticipation and planning to ensure that funding comes to health districts and eventually CHWs within a reasonable amount of time.

The PBF Programme including the Arc-en-Ciel component is the product of prolonged discussions with the MoH and the Government, which funds 86% of the project. The idea is that the programme should be able to survive without the World Bank's involvement; this aspect is also reflected in the choice of local partners for the implementation. The programme seems to have become a priority for the MoH, which is essential given the important logistical and administrative challenges (similar projects, such as Kore Famni in Haiti, never started given such challenges).

Arc-en-Ciel is part of a large randomised control trial, which should provide useful conclusions as to its final impact (the different arms are: PBF only, PBF with fee exemptions for the poorest of the poor (20–25% of the households), PBF with Arc-en-Ciel, PBF with Arc-en-Ciel and fee exemptions for the poorest, and control).

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## Rwanda

Note: The very recent 2016 World Bank report, Rwanda Community Performance-Based Financing: Impact Evaluation, provides a comprehensive discussion of the elements discussed hereunder. Most of this case study simply reproduces this excellent report's executive summary. Excerpts are referenced 'World Bank, 2016b'.

'Since June 2006, Rwanda has implemented a national supply-side performance-based financing (PBF) program in hospitals and health centers. This 'first generation' PBF program provided financial rewards to health facilities in order to promote maternal, child, and HIV/AIDS healthcare'. (World Bank, 2016b). An impact evaluation of this first scaled-up PBF program shows an increase in the number of institutional deliveries and preventive care visits of young children but no effect on prenatal visits and immunisation schedules (Basinga et al., 2011).

'In 2010 the "second generation" of PBF in Rwanda, the Community Performance-Based Financing (cPBF) program, was initiated to tackle the remaining issue of low utilization of health services by mothers and their children. The Community PBF implemented the following three interventions: (i) demand-side in-kind incentives for women, (ii) financial rewards for community health worker (CHW) cooperatives, and (iii) combined demand-side and CHW rewards. The three cPBF interventions were introduced in October 2010 in randomly selected sectors. A prospective, rigorous impact evaluation (IE) was developed with the commitment of the Government of Rwanda (GOR) to assess the impacts of PBF on health outcomes and determine the possibility of scaling-up the PBF initiative nationwide' (World Bank, 2016b).

The system builds on the pre-existing but partly functional CHW system and was implemented in a context where most of the rural population still lives far away from the health centre, and where the government recognised other barriers to accessing care, such as information and cultural norms.

The cRBF was part of the Health Sector Strategic Plan-II (2009—2010), the top priority areas of which included improving family planning, maternal and child health, and nutrition, especially among the under 5s. The plan was itself seen as a way to achieve bigger socioeconomic targets such as the Rwanda Vision 2020 and the MDGs. The ambition of the programme, as explained earlier, was that cRBF would increase access to the use of key maternal and child health services and help boost the number of visits, institutional delivery and modern contraceptive use that had remained low with PBF (Rwanda Ministry of Health, 2011).

### Architecture and functioning

Two cRBF approaches have been implemented in Rwanda.

The first is 'conditional in-kind incentives for women. The objective of the conditional in-kind incentive strategy for women is to increase early prenatal care utilization, institutional deliveries and postnatal care in order to diagnose and treat preventable threats to maternal health during delivery and immediate threats to infant and maternal health following delivery. This demand side approach endows mothers with gifts for receiving early antenatal and postnatal care, as well as delivering in a health center' (World Bank, 2016b).

In this first approach, the HFs distribute the goods using a distribution register that records users. A vouchers system, with carbon copies, is used to trace and audit the distribution process. Women can exchange the vouchers against goods (originally: adult cloth + water tablets, or baby cloth + water tablets). The reporting is largely done over the phone, and the verification of the quantity of in-kind incentives distributed is done, optionally, during monthly routine monitoring visits to health centers by the district hospital.

The second approach is a system of 'supply-side' financial incentives for CHW cooperatives. The objectives of the CHW incentives strategy include: (i) improve quality of data reported at the sector level, (ii) increase utilisation of key maternal and child health services, and (iii) improve motivation and behaviour of CHWs. The supply-side approach provides financial rewards directly to CHW cooperatives. There are two components to this model:

A 'pay for indicators' approach, whereby CHW cooperatives receive a quarterly payment based on performance in target indicators. The programme started with the following five maternal and child health incentivised indicators:

- Nutrition Monitoring: number of children (aged 6–59 months) monitored and referred for nutrition status;
- ANC: number of women accompanied/referred to the health centre for ANC before or during 4th month of pregnancy;
- Deliveries: number of women delivering at the facilities;
- Family Planning: number of new family planning users referred by the CHW to the health centre;
- Family Planning: number of regular users of modern contraceptives at the health centre; and

Under the 'pay for indicators' model, CHW cooperatives are paid a unit fee for each service referred to the HF in a quarter.

A 'pay for reporting' approach whereby CHW cooperatives receive a quarterly payment based on the timely submission of quality data reports related to 29 indicators. The 'pay for reporting' approach grew from lessons learned in an earlier phase with a (failed) experimentation with cPBF (2005–2008). It was decided to set up a 'pay for reporting' approach that would incentivise community health worker cooperatives (each consisting of about 150 CHWs) to collect timely and credible reports from their constituents. It was the original cRBF programme: the two other approaches, the in-kind demand-side incentives and the 'purchase of targets' were added on top of this nationwide 'pay for reporting' programme. The impact of the 'pay for reporting', which was scaled up nationwide in 2009, could not be assessed. The 2016 World Bank IE mentioned earlier could only report on the two 'cRBF' arms added over and above the cPBF 'pay for reporting' programme.

Four indicators, related to Tuberculosis and HIV, were added to the five maternal and child health indicators incentivised under the CHW cooperatives' part of cRBF (the 'supply-side' cRBF intervention). In addition, the incentive amounts progressively reduced. In 2011, the incentive amounts were about 50% of their level in 2010 and by 2014 they amounted to about 36% of the original rates. With respect to the demand-side in-kind incentives, there was a shift from central procurement of the gifts to individual procurement by the individual health centres. Many health centres experienced stock-outs of the gifts during the implementation of the programme, leading to eligible beneficiaries not receiving the transfers.' A possible cause for this is that the logistical burden of delivering the gifts to all health centres was too big for the community health desk at the ministry.

Since the indicators are about referral, the verification can easily follow relatively standard RBF procedures and includes: (1) a quarterly standard verification at the HF-level by 'a steering committee headed by the local government administration' (World Bank, 2016b); (2) a quarterly 'assessment of the quality of CHW cooperatives' (World Bank, 2016b) by the same committee; and (3) purposive or selective patient tracing by district and sector committee. A 2014 report by Renaud and Semasaka pointed out the need for more rigour and increased frequency in this patient tracing.

Health districts are in charge of supervision and monitoring. The National Treasury transfers the money to HF accounts and it is then up to the HF to transfer the money to the CHW cooperative accounts. The contracts are signed with the PBF sector steering committee at district level.

## Effects

The IE conducted in 2016 sums up the cRBF results the following way:

'The supply-side incentives to CHW cooperatives were not found to impact any of the outcome indicators. When comparing the supply-side intervention group to the control, there was no significant difference in the rate of women who report timely ANC and PNC or skilled-attended in-facility delivery. There is also no difference in self-reported behaviours of CHWs measures by indicators such as the number of hours spent on health work, the number of households visited or the frequency of consulting other CHWs. Also for measures of CHWs' satisfaction and motivation there was no effect observed although there is overall very little variation in responses to most of these questions.

The demand-side in-kind incentives, on the other hand, are found to have a significant positive impact on timely antenatal and postnatal. Compared to the control group, women in the study arm only implementing the demand-side intervention were 9.6 percentage points more likely to attend ANC during the first four months of their last pregnancy and 7.2 percentage points more likely to attend



PNC within the 10 days after delivery. These effects are significant at the 1% and 5% levels respectively. No significant effect was found on skilled-attended in-facility deliveries. In-facility deliveries continued to grow throughout the country, starting at low levels in 2005 (around 40%) and reaching levels of around 90% by 2015.

The impact of the in-kind incentives on timely ANC and PNC is remarkable given that the survey data show that the gifts were not always available. Eighty-one percent of the health centres in the two study groups implementing the programme reported experiencing stock-outs of gifts and 31% reports experiencing the stock-outs often or very often. Only a minority of women who reported eligibility for the transfers also reported receiving them. It is also important to note that some health centres implemented their own demand-side incentives as a strategy to increase the coverage of services incentivised under the national PBF scheme at the HF level. The impacts were detected although some of the control health centres implemented their independent incentive schemes.

There were no multiplicative effects on outcomes found when the demand-side and supply-side interventions were combined. Overall, the outcomes measured at the combined treatment group are very similar to those measured at the demand-side treatment group' (World Bank, 2016b).

### Implementation features

'The evaluation showed that demand-side incentives can increase health care seeking behaviors even if the incentives are in-kind and even if health providers are already incentivized for the coverage of the same targeted services. The strong impacts on timely antenatal and postnatal care were detected although many health centers experienced stock-outs of gifts and only a minority of eligible women reported receiving the transfers. Theoretically, it could be that an even larger impact on demand could be achieved if women were certain that they will receive the transfers when meeting the eligibility criteria. [...] Funding for the purchasing of the gifts stopped being transferred to the health centers around February 2013 [with some health centres continuing to procure gifts using their own resources for some time]. However, about a year later, facilities in the study arms implementing the demand-side incentives were still significantly more likely to provide gifts for the targeted services' (World Bank, 2016b).

The study proposes a few possible explanations for the lack of effects of the supply-side cRBF: in addition to potential flaws in the experimental design (confusion about the rules), the incentive amounts were potentially too low (at about US\$ 7.26 per CHW per term); the organisation in cooperatives could have weakened individual efforts: as 70% of the payments has to be invested in the cooperative anyway, free-riding behaviours may have developed; and it could be possible that the financial incentives for performance are simply not very effective when the CHWs are already contracted (and have been trained) for transmitting information on the same indicators (in short: the change in CHW behaviour resulting from information transmission offsets the cRBF pay for results effect).

Finally, it must be noted that Rwanda is a special case in terms of governance and politics, possibly more than other cases presented in this report. RBF (PBF) was part of a very carefully crafted management of aid inputs and new health policies controlled by the state, limited to a few external partners, and clearly orientated towards well-defined (development) goals set by the government. A multi-donor fund was established, and included the World Bank and the Global Fund. The (cRBF) schemes are now being scaled down as part of the new health system policy and probably as a consequence of new financial constraints.

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