



# An exploration of the political economy dynamics shaping health worker incentives in three districts in Sierra Leone



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## ABSTRACT

The need for evidence-based practice calls for research focussing not only on the effectiveness of interventions and their translation into policies, but also on implementation processes and the factors influencing them, in particular for complex health system policies. In this paper, we use the lens of one of the health system's 'building blocks', human resources for health (HRH), to examine the implementation of official policies on HRH incentives and the emergence of informal practices in three districts of Sierra Leone. Our mixed-methods research draws mostly from 18 key informant interviews at district level. Data are organised using a political economy framework which focuses on the dynamic interactions between structure (context, historical legacies, institutions) and agency (actors, agendas, power relations) to show how these elements affect the HRH incentive practices in each district. It appears that the official policies are re-shaped both by implementation challenges and by informal practices emerging at local level as the result of the district-level dynamics and negotiations between District Health Management Teams (DHMTs) and nongovernmental organisations (NGOs). Emerging informal practices take the form of selective supervision, salary supplementations and per diems paid to health workers, and aim to ensure a better fit between the actors' agendas and the incentive package. Importantly, the negotiations which shape such practices are characterised by a substantial asymmetry of power between DHMTs and NGOs. In conclusion, our findings reveal the influence of NGOs on the HRH incentive package and highlight the need to empower DHMTs to limit the discrepancy between policies defined at central level and practices in the districts, and to reduce inequalities in health worker remuneration across districts. For Sierra Leone, these findings are now more relevant than ever as new players enter the stage at district level, as part of the Ebola response and post-Ebola reconstruction.

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## 1. Introduction

In recent years, there has been increasing attention paid to the need for evidence-based practice to improve health outcomes worldwide (Pang et al., 2003). Research has focused on identifying which policies work, but has also explored the processes by which knowledge is translated to highlight potential bottlenecks for evidence-based policy (Oliver et al., 2014). While a growing literature exists to explore the use of evidence in policy-making, there is limited knowledge on how policies can be successfully translated into effective practices. However, several studies (Chaudoir et al., 2013; Durlak and DuPre, 2008) confirm that implementation does

influence the outcomes of an intervention and highlight the importance of understanding which factors affect implementation by looking at elements both in the context outside the organisation of focus and within the cultural and management features of the organisation. The importance of filling the knowledge gap seems even more relevant for complex health system interventions, where the wider context can play a major role in influencing the outcome of the policies. It is therefore essential to look beyond policy-making to reflect on actual practices, and on how, by whom, and why policies are potentially reshaped in the translation process.

In this paper, we aim to analyse how features relating to the context (structure) and the actors (agency) in three districts in Sierra Leone influence the implementation of health workers' incentive policies and define HRH practices at local level. Our

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research question focuses on if and how the local political economy features and dynamics, and in particular the interactions between District Health Management Teams (DHMTs) and nongovernmental organisations (NGOs), may have effects which contribute to shape incentives for health workers in public facilities and, thus, the functioning of the local health systems. Our focus is not on a specific intervention, but broadly on HRH incentives, including the official policies in place to regulate the incentive package for public health workers, as well as the actual practices that influence the financial and non-financial incentives effectively available for those health workers. We believe that HRH incentive issues make a useful case study to reflect on how deeply structural and agency features can influence local-level practices in a key area, such as HRH. In order to analyse the translation process at local level, we adopt a political economy framework. The framework allows us to explore the policy implementation, going beyond a static view of one organisation (usually the DHMT), to look at the dynamics between the layers of the structural context and the multiple actors and organisations that shape practices and define the incentive package differently in each district.

This research was conducted just before the Ebola virus epidemic started in Sierra Leone, in May 2014. Our findings highlight some of the factors that may have played a role in the collapse of the health system, as we point to in the concluding section. Moreover, our research contributes to the reflection on the consequences of the changing local dynamics as new players enter the stage at district level as part of the Ebola response and post-Ebola reconstruction, of which HRH incentive practices are an essential component.

## 2. Context

Sierra Leone is a West African country of 6 million people, with a GDP per capita of 613 USD in 2012 (IMF, 2013). Between 1991 and 2002, the country was ravaged by a civil war which left the public health system in ruins (Gberie, 2005). Over the last decade, Sierra Leone's health system underwent a process of reconstruction and reform. However, the Demographic and Health Survey (DHS) for the 2008–2013 period finds that maternal mortality remains high at 1165 deaths per 100,000 live births, while under-five mortality is estimated at 156 per 1000 live births (SSL & ICF International, 2014). In terms of health workforce, in 2011 there were an estimated 0.0071 doctors and 0.0631 nurses per 10,000 people in the public sector (Wurie et al., 2014). The distribution of health workers remains inequitable with major imbalances between rural and urban areas, and health workers attraction, retention and motivation are a challenge (Witter et al., 2015).

We analysed elsewhere the trajectory and drivers of HRH policy-making in the post-conflict period (Bertone et al., 2014). It emerged that the launch of the Free Health Care Initiative (FHCI) in 2010 provided the momentum for the approval of a series of HRH reforms, which included a substantial salary uplift for all technical staff of the Ministry of Health and Sanitation (MoHS), and the cleaning of the MoHS payroll to eliminate 'ghost workers' and add those working as 'volunteers'. The HRH reform process continued with the introduction of a Performance-based Financing (PBF) scheme in 2011 (which includes a staff bonus) and a Remote Allowance for health workers based in rural areas, in 2012. In parallel to their support to the design, and in some cases the funding, of these reforms, certain donors and NGOs adopted measures to ensure the alignment and rationalisation of the health workers' incentive package. In particular, the World Bank and Global Fund abolished supplementary payments to health workers in charge of HIV/AIDS services. However, despite the relative success of the decision-making process and the design of reforms, their

implementation remained filled with challenges (Witter et al., 2015).

## 3. Methods

The present research was undertaken in the districts of Kenema, Bo and Moyamba (Fig. 1), which were purposefully selected to maximize differences in poverty, urbanisation, type and remoteness of facilities, as well as number of NGOs.

This paper draws on a series of key informant interviews at district level ( $n = 18$ ), carried out in September–November 2013. The interviews aimed to be as comprehensive as possible of actors at local level, including DHMTs, as well as donors and local and international NGOs' staff (Fig. 2). One NGO in Bo was not included as not available for interviewing at district level, although some information was collected from its representative at central level and from secondary sources, and triangulated during interviews with other actors in Bo. Moreover, key actors such as Members of Parliament and politicians, civil society members and representatives of Local Councils, who have some authority over health issues under the on-going decentralisation process, were not interviewed, nor have we included in the analysis private and informal providers of healthcare which also influence the incentives in the public system (Ensor and Witter, 2001). This is due to the fact that initially key informant interviews aimed solely at providing a background to the broader research, focused on health workers at individual level. However, the interactions between DHMTs and NGOs became such a relevant and recurring theme that it was later developed into a specific research question. The omission of actors external to the health system and non-public providers is a major limitation of our work.

The key informant interviews at district level are embedded in a larger mixed-methods research, which aims to investigate the health workers' 'complex remuneration' by quantifying their overall income and exploring the consequences of income levels and fragmentation. The broader research makes use of other data. A longitudinal survey was carried out to collect information on revenues (salary, remote allowance and PBF, as well as per diems and salary top-ups, and informal incomes) for 266 primary healthcare workers (90 in Kenema, 96 in Bo, 80 in Moyamba). The research also involved prolonged fieldwork (September 2013–May 2014), a series of in-depth interviews with health workers ( $n = 39$ –13 in Kenema, 12 in Bo, 14 in Moyamba), as well as an earlier documentary review and 23 key informant interviews at central level. Although this study relies mostly on key informant interviews at district level, the other sources of information were important to inform the analysis. For example, preliminary results from the health workers survey are included to support the findings from key informant interviews. Ethical clearance for all research components was obtained from the London School of Hygiene and Tropical Medicine and the Sierra Leone Ethics and Scientific Review Committee.

In order to map the emerging elements and themes, the analysis makes use of a political economy framework. This framework is based on that proposed by Harris (2013), but slightly adapted to take into consideration the fact that this research is not driven by a pre-identified problem, but is rather exploratory in scope (Fig. 3).

Two main areas are identified as the subject of analysis – on the one hand, the *structural features* which include the historical, cultural, geographical context and the relevant 'rules of the game' (institutions), such as policies, regulations and social norms; on the other, the *agency features* relating to the main actors, their interests, incentives and relations of power, and the analytical concepts that may explain actors' decision logics and behaviours. In particular, as analytical concept, we apply 'agency theory', which describes a

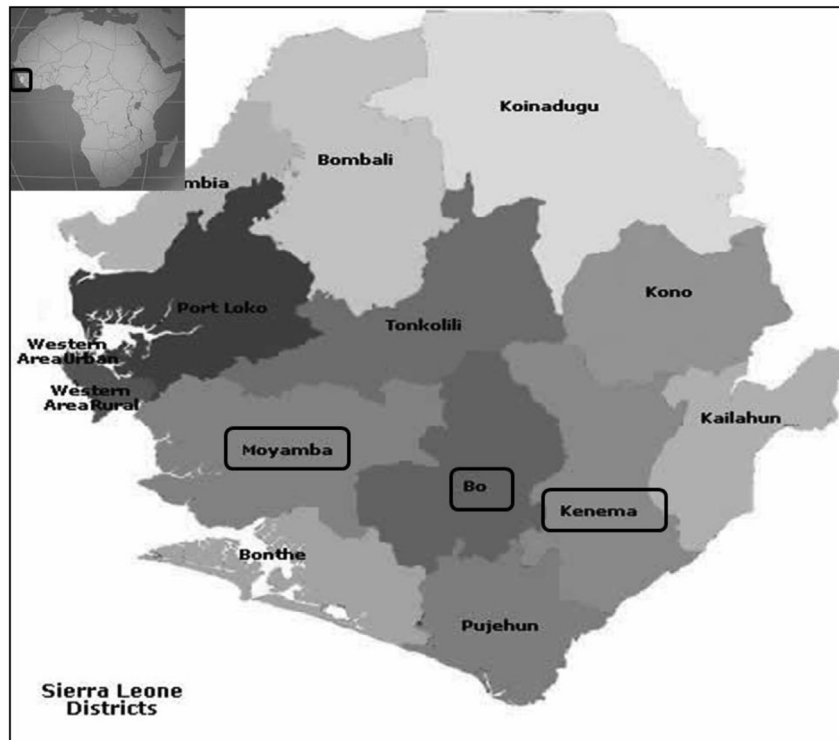


Fig. 1. Maps of Sierra Leone's districts.

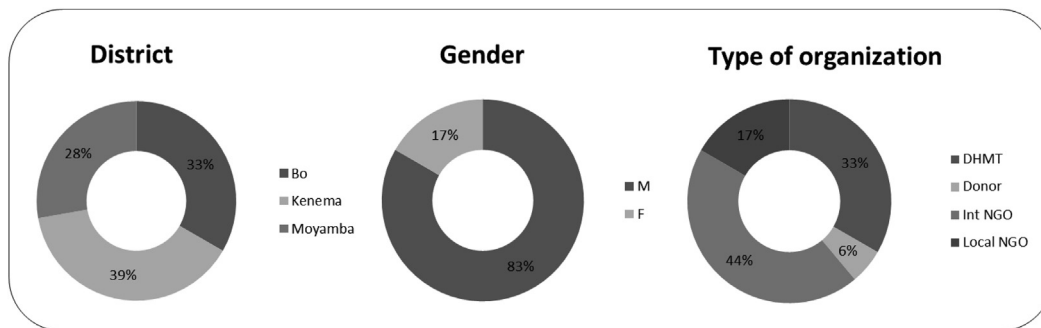


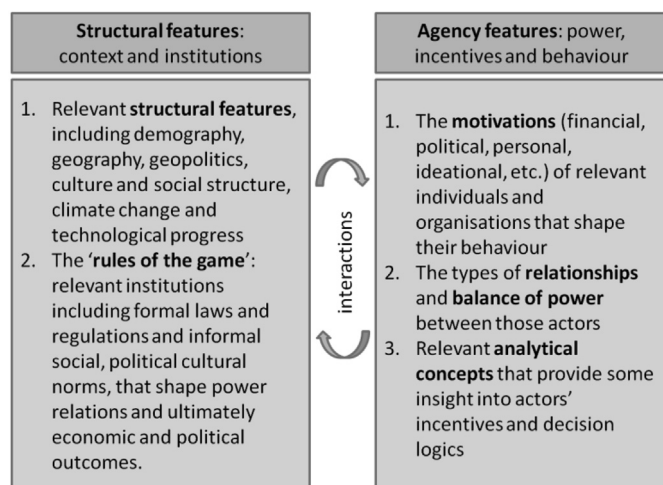
Fig. 2. Summary of characteristics of key informants at district level ( $n = 18$ ).

situation where someone (principal) delegates a task to another person (agent). The principal typically faces problems in controlling the agent, as (i) the agent's interest may differ from the principal's, and (ii) the agent has better information than the principal on her actions (Kiser, 1999). In economic theory, to minimise these issues, a monitoring system and/or the alignment of incentives are needed (Eisenhardt, 1989). Sociological and management theories deal with more complicated situations as they loosen assumptions allowing for multiple principals, multiple agents (which leads to 'collective action problems'), as well as multiple interests of both principals and agents – for example, agents may not be necessarily self-interested, utility maximisers (which leads to 'stewardship theory' (Perrow, 1986)). In our analysis, we will find two interrelated sets of principal–agent relations, each ridden with its specific problems. Some of the dimensions indicated in the framework (e.g., cultural, social, geopolitical factors, climate change, technology) are relatively little explored as our focus rests on the health sector-specific dynamics.

## 4. Findings

### 4.1. Structural features and context

Despite their proximity and the fact that they are all predominantly Mende in ethnic composition, the three districts are rather different for historical legacies and contextual features, including socio-economic and health indicators (Table 1). Kenema is a fairly large district with vast rural areas, although Kenema Town is the third city of Sierra Leone. Some of the diamond mining areas are located in Kenema and the district was severely affected by the conflict, with destruction of infrastructure and population displacement. Bo is the second city of Sierra Leone and the most urban and least poor district among the three (WB & SSL, 2013). During the war, internally displaced people (IDP) camps were set up and Bo witnessed the presence of health NGOs (one of which still operating) engaged in directly providing health services to those populations. Moyamba is the most rural and poorest district among the three (second poorest in Sierra Leone) (WB & SSL, 2013).



**Fig. 3.** Analytical framework to explore the political economy dynamics at local level. Source: Adapted from Harris (2013).

In all three districts, the local health system is organized in a pyramidal way with a district hospital (and a second NGO-run hospital in Bo – see below) and three types of primary-level facilities (Peripheral Health Units – PHUs).

#### 4.2. Relevant formal institutions

Institutions are “the ‘rules of the game’ in a society or, more formally, are the humanly devised constraints that shape human interaction” (North, 1990: p.3). They can be formal, such as laws and regulations, and informal, i.e., accepted and stabilized political, social and cultural practices, such as ‘patronage’ or the practice of ‘tipping’. For HRH in Sierra Leone, in spite of the on-going decentralisation process, formal institutions are mostly set at central level and apply uniformly across districts. The institutional framework to regulate HRH issues is delineated in the *Human Resource for Health Policy and Human Resource for Health Strategic Plan 2012–2016*. However, our research highlights discrepancies between centrally-defined policies and practices on the ground as it reveals that formal institutions (i.e., official policies) defining the HRH incentive structure are re-shaped both by implementation challenges common to the three districts, and by informal HRH incentive practices at local level. Below we describe the implementation challenges first, then the district-specific actors, before exploring the dynamics between them and the informal practices that emerge.

HRH reforms described in the context section have been implemented in a very centralized way. Salary uplift and payroll updating were managed by the Office of the Payroll within the

MoHS. Little HRH management is performed at district level, although in theory it is a function that has been devolved to Councils and DHMTs. The DHMTs are responsible for the deployment of health workers within their district, but HRH management is not performed systematically as no staff within the DHMT is specifically in charge of HRH. DHMTs have no control over other HRH issues, including the skill mix of the staff they are allocated, career progression and payment. Meanwhile, the payroll in Freetown is increasingly imprecise and our survey found that 15% of the sampled health workers are not paid. At the same time, the PBF scheme's external verification, carried out in April 2014, reports delays of more than one year in payment of PBF bonuses (Cordaid, 2014). As a consequence, health workers have no insight into the relation between performance and payment. Internal verification of PBF indicators is supposedly done quarterly and jointly by DHMT and Local Councils. In practice, only one third of Councils is involved (Cordaid, 2014), while DHMTs face numerous logistic and time challenges to carrying it out regularly. As a result, the verification process is weak and the external verification found figures between 12% and 73% different to those of the internal one (Cordaid, 2014). As for the remote allowance, most respondents were unaware of its existence altogether or of the ways it works. Cross-checking between survey, health workers' interviews and key informant interviews, it emerges that payments were delayed since mid-2012 (soon after its beginning) because of cash-flow issues, and they stopped by the end of 2012.

This description highlights the challenges in the implementation of the official HRH policies, which are related to operational issues at central level, and in particular the slowness in administrative procedures, funding gaps and cash-flow problems. However, the general narrative from actors at central level remains one of ‘success’ of the FHCI and related reforms (Witter et al., 2015). On the other hand, for actors operating at local level, the implementation failures and the detachment of policy-makers from the reality of the field are a cause of frustration:

“The real key issue is that with all of these policies and all of these strategies, none of them have been properly operationalised and none of them have stayed around. Like, in 2002, there was a free health care policy announced for pregnant women, lactating mothers, under 5, the elderly, disabled, all this, right, and then it just didn't happen. So free health care is announced again in 2010, and it's like, OK, it's happening, but is that going to slowly start to fall apart? If PBF is announced, it's like, oh it comes and then it stops, you know.” (international NGO).

As formal institutions fail (and are expected to fail), informal institutions and practices emerge at local level. We introduce below the main actors present at local level, their objectives and relationships, before turning to the informal institutions.

**Table 1**  
Summary of basic socio-economic, demographic and health system information for the three districts.

District	Area (Km <sup>2</sup> )	Population (World Pop, n.d.) <sup>a</sup>	Poverty headcount (WB & SSL, 2013) <sup>b</sup>	Rural HH (WB & SSL, 2013) <sup>b</sup>	Num. Of PHUs (MoHS)	Average remoteness of PHUs <sup>c</sup> (health worker survey)	Tot num. Of health workers (MoHS 2013 – DHTM, hospital and PHU staff)	Deliveries in a health facility (SSL & ICF International, 2014)	Under 5 mortality (deaths per 1000 live births) (SSL & ICF International, 2014)	Nutrition (children under 5 years who are stunted) (SSL & ICF International, 2014)
Kenema	6053	569,300	62%	59%	116	2.01	1134	77%	224	39%
Bo	5219	524,500	51%	55%	131	1.74	908	72%	173	45%
Moyamba	6902	320,900	71%	92%	99	2.66	346	33%	199	34%

<sup>a</sup> Projections for 2010 based on 2004 census.

<sup>b</sup> Data from Sierra Leone Integrated Household Survey 2011

<sup>c</sup> Scale from 0 (urban) to 4 – facilities included are a random sample of all PHUs in the district.

#### 4.3. Main actors at district level, their activities and agendas

In Kenema, a few local and two main international NGOs operate in the health sector. One of these, a large humanitarian NGO, has a holistic focus on the health sector and operates in three war-affected districts (including Kenema) since the end of the conflict. At the time of the research, its health activities were enacted through the support to the public health system, covering all 121 Peripheral Health Units (PHUs) in the district and focussing in particular on Maternal and Child Health (MCH). The NGO is recognised by the DHMT and other NGOs as the “driving force” in the district (key informant – international NGO). Its activities include provision of extra drugs and equipment for MCH, beyond those distributed under the FHCI, support to communication and referral system, including an ambulance for MCH emergencies. Looking specifically at HRH, the NGO provides training, which entails per diem payments to health workers, as well as supervision and coaching to PHU staff through monthly visits (the DHMT only visits facilities every quarter), which are focused on the same indicators and checklist of the PBF scheme. The NGO used to provide a salary supplementation to health workers employed in the public PHUs, but ended this practice once the PBF scheme was introduced to avoid the duplication (key informant – international NGO). However, the NGO still provides a monthly lump-sum payment to DHMT, Council and Hospital staff who do not receive PBF payments, as well as in-kind support for DHMT activities, such as vehicles, fuel, etc. for supervision and PBF verification.

In Bo, the context is more fragmented as several NGOs have divided up their activities roughly based on a geographical repartition of the chiefdoms, although not all PHUs receive external support. One international NGO with a humanitarian mission is present, but was phasing-out its activities. It still runs a hospital at the site of an IDP camp during the conflict where it provides clinical services, and, while it used to include 110 facilities, it now supports only a few public PHUs with drugs and equipment, and an ambulance referral system. The health worker survey revealed that this NGO is one of the few which still provides a salary supplement of about 5–6% of the monthly salary to public health workers in the supported PHUs. This payment has consequences for the DHMT's ability to regulate the distribution of staff, as some health workers refuse to move away from PHUs with where incentives (key informant – DHMT). There are two other main NGOs in Bo, an international and a local one. They both focus on MCH activities and provide rehabilitation of infrastructure, equipment and drugs, ambulance for referral, and mobile phones for communication to some of the PHUs in the district. In terms of HRH activities, while they both provide training and related per diems to the health workers, none pays supplementary incentives. While the first NGO admits not to be able to carry regular supervisions, the second, which only supports 13 facilities, is able to provide supervision and coaching, which also aims to “equip PHUs so they get more PBF money” (key informant – local NGO).

Finally, in Moyamba there are two main international NGOs in the health sector, both focussing exclusively on nutrition, and supporting 49 and 40 public PHUs respectively with overlaps in some facilities. Both NGOs visit the public PHUs either monthly or twice a month (while the DHMT reports to be visiting facilities quarterly), but only on ‘feeding days’ in order to supervise those activities. Joint NGO-DHMT supervisions also focus only on nutrition services. There are no external actors supporting MCH activities and therefore PHUs receive no (extra) drugs or equipment, and staff has little MCH supervision, training and no other payments from external organisations.

Overall, the distribution of the NGOs between districts seems to be defined by historical legacies and patterns which emerged

immediately post-conflict, with large humanitarian NGOs established in the conflict-afflicted districts of Kenema and Bo, and the relatively recent NGO presence in Moyamba. Additionally, the choice of focal activities and operational approaches seems to be based on the NGO's own missions rather than on local health priorities and needs.

#### 4.4. Relationships and balance of power

Relations between actors at district level are negotiated through various committees, as well as bilateral meetings between the DHMT and each NGO. Officially, DHMTs are required to chair the District Health Coordination Meeting (DHCC) which is supposed to meet quarterly and is the main coordination forum, including the DHMT, the Local Council and all health partners. In Kenema, the DHCC appears to be meeting regularly, but one key informant (DHMT) reports that this was not the case for the previous one or two years. While in Bo the DHCC is reported to meet regularly, in Moyamba it seems to have happened rarely, if ever. Other committees may be created *ad hoc* for different reasons, including addressing donor's requirements. For example, in Kenema, an NGO reported that another ‘stakeholder meeting’ is held quarterly and explained that:

“The stakeholder meeting, we wanted it because it is in our proposal to meet with district partners, whilst the DHCC is theirs [of the DHMT]. But it is almost just like the same thing; but the key difference is, ehm, this [stakeholder meeting] is mainly [NGO] kind of programme focusing on reproductive health issues. But the DHCC now is [focused on] all health things and matters” (international NGO).

In other cases, NGOs prefer to hold bilateral meetings with the DHMTs. In Moyamba, for example, the two main NGOs, although both working on nutrition issues, prefer to address their concerns directly with the DHMT rather than in multilateral meetings (key informant – international NGO).

These interactions through bilateral meetings or committees are clearly characterized by a substantial asymmetry of power, both regarding financial resources as well as access to information between the parties. On the one hand, DHMTs struggle to ensure the coordination of activities to avoid duplications and balance priorities and they have no lever to enforce it when NGOs are not willing to engage. As they chronically lack funds even for tasks that they are mandated to carry out by the MoHS (e.g., routine supervision, PBF verification, etc.), they have to rely on NGOs for support. As one DHMT staff stated:

“[ ... ] at the end of the day, who pays the bride price calls for the tune. [ ... ] They have their own priorities. [So] at times, as head of the district, you need to strike the balance, because the NGO world is a very powerful world [ ... ], so our own duty is to see where you can tap into their resources” (DHMT).

On the other hand, depending on their approach or their donors' requirements, NGOs either seek to align with DHMT and MoHS policy or need, at least formally, the official support of the DHMT for their activities. Providing the DHMT with in-kind donations (vehicles, motorbikes, fuel, communication means, etc.) or cash allowances to support its tasks, or at least those that match the NGO's objectives and scope (geographical, disease-wise, mission-wise, etc.), becomes a bargaining tool to ensure the smooth running of both NGO and DHMT activities. In this ‘bargaining’, DHMTs have varying levels of oversight over the amount and timing of funding



and donations, as budgets are usually not shared or known in advance by NGOs:

“Even with our yearly planning, you ask them [NGOs] for their own budget, what they plan to do, and it is very, very difficult to get it from them” (DHMT).

The result of the differences in objectives, resources and power is an ‘unbalanced’ mutual dependency between DHMTs and NGOs, which often leads to frustration on both sides.

#### 4.5. *Relevant analytical concepts to explore actors’ incentives and decision logics*

To analyse these dynamics and the logic behind actors’ behaviours (the last element of our framework), we found helpful to explore elements of agency theory delineated above. While DHMTs and NGOs are co-dependent for the implementation of activities, they are not tied together in a principal–agent relation. Instead, they act (at least, in theory) as agents for two different principals, the MoHS and the funders/donors, respectively. Not only do the usual agency problems apply to both cases, but for the case of international NGOs an ample literature exists on the challenges presented by multiple principals and accountabilities, ‘steward’ behaviour coupled with financial, material pressures, and competitive incentives resulting in collective action problems (Cooley and Ron, 2002; Edwards and Hulme, 1996). Moreover, although all principals should share the same overall objectives and approaches, in reality these are slightly different, at least in the way they are operationalised. This results in differences between the two sets of principals and agents, for example, in activity focus (specific diseases/conditions versus system approach), geographical targeting, long versus short-term planning and budgeting, quantity of activities carried out versus quality, willingness to coordinate, etc. Moreover, objectives and incentives of NGOs and DHMTs are not perfectly aligned. For instance, some NGOs are rewarded to reach a large number of beneficiaries, a target which is not only difficult to measure, but also does not take into account quality issues and the specific features of the context, including the need to avoid duplication with other NGOs. Some NGOs may be required to coordinate with the DHMT and work in partnership, but the practice is rather unbalanced, as we showed, given the absence of common planning and budgeting tools. In other cases, especially if funded with own resources, NGOs have little reason to coordinate with DHMTs. In conclusion, the misalignment of agendas and incentives of DHMTs and NGOs, who are accountable to different principals, is reflected in their bargaining dynamics and objectives. In turn, the bargain shapes local-level practices, including HRH incentives.

#### 4.6. *Informal institutions and HRH incentive practices at local level*

Because formal institutions defining HRH incentives partially fail when implemented or are expected to fail and, at the same time, district-level actors continuously negotiate to achieve their objectives, a set of informal institutions (i.e., established and stable practices) emerge at local level. In the case of HRH incentives, informal institutions take the form of selective supervisions and support to some programs (e.g., PBF), as well as salary supplementations and per diems paid to individual workers to provide extra remunerations beyond those officially set. Salary supplementations and per diems have received attention in the health literature, mostly for their disruptive effect. Specifically, salary supplementations are discussed in relation to vertical disease-focused programmes because of their potential to create parallel

systems (Brugha et al., 2010; Hanson, 2012; Mussa et al., 2013). Per diems have been explored as ‘corrupt’ practices, with perverse consequences for the health system’s performance and governance (Chene, 2009; Ridde, 2010; Vian et al., 2013).

At district level, informal HRH incentive practices have a key function as they are used to achieve a better fit between the health workers’ incentive package and the NGOs’ objectives and agendas. Because of this, they are defined by the district-level actors’ motivations, resources and approaches, mediated by the negotiation processes with the other actors, including the DHMT. Indeed, our analysis shows that different local dynamics produce differential HRH practices, influencing financial and non-financial incentives. Provision of equipment and drugs, rehabilitation, and selective supervision and coaching can act as non-financial incentives, improving the working environment and motivating those health workers deployed where such support is in place and for the programmes/activities which have been selected. Moreover, access to drugs can be a powerful financial incentive for health workers if there is room for misappropriation and informal sale. Finally, such support can also entail a potential increase in PBF revenues, per diems and top-ups. Based on the survey data, we observed a variation between individual health worker remuneration across districts (although there are limitations to this analysis because sampling was representative of the entirety of PHUs in each district, regardless of the proportion of those supported by the different NGOs and because of other confounding factors), Table 2 provides preliminary evidence of the impact of local-level dynamics on individual health workers’ incomes. While the difference in salaries is non-significant across districts, in Kenema, the long-term presence of a large NGO, working closely with the DHMT, and expanding its coverage over time to include all PHUs with a clear focus on MCH activities results, at individual level, in higher income from PBF, whose indicators focus only on MCH, and higher per diems. In Bo, the fragmentation of the support, with many PHUs not covered by external organisations, results in substantially lower incomes compared to Kenema both for PBF individual bonuses and per diems. In Moyamba, where almost all PHUs are covered by NGOs with a focus on nutrition, the picture is mixed, with the lowest income levels from per diems, and PBF bonuses substantially lower than in Kenema but higher than Bo. Ultimately, the different levels of revenue for each component are reflected in the total income for health workers, which is found to be unequal across districts.

## 5. Discussion

The analysis of the district-level dynamics shows the effects of the interplay between structure (i.e., context, historical legacies and formal and informal institutions) and agency (actors, agendas and power relations) on HRH incentives. The ‘bargaining’ process between actors at local level and the informal practices it creates can modify, substantially in some cases, the individual health workers’ incentive package. The result is a discrepancy between official HRH incentive policies and actual practices.

The role of NGOs at district level emerges as one of the driving factors in shaping HRH incentives. Similarly, Pfeiffer (2003) describes the model of collaboration between international NGOs and primary healthcare in Mozambique. Although the focus is at individual level (expatriate personnel and their local counterparts) and on the social dynamics rather than political economy ones, he finds that official coordination coexists with behind-the-scenes deal-making which “hinged on the provision of extra financial benefits to health workers in a new aid-specific patronage system” (Pfeiffer, 2003: p.732). In his ethnography of an aid project, Mosse (2004: p.639) describes how development practices are “driven by a multi-layered complex of relationships and the culture of organizations

**Table 2**  
Average income of PHU staff from selected sources and total monthly income in the three districts (Leones).

District	Income from PBF			Income from per diems			Income from salary			Total income (incl. All sources of revenue)		
	Mean	[95% conf int]		Mean	[95% conf int]		Mean	[95% conf int]		Mean	[95% conf int]	
Kenema	102,392	79,387	125,398	207,722	160,331	255,114	491,276	445,702	536,851	849,903	763,069	936,737
Bo	57,112	40,258	73,966	134,132	91,974	176,289	516,984	467,925	566,044	786,986	694,985	878,986
Moyamba	92,985	72,196	113,773	109,966	85,512	134,421	484,913	444,007	525,819	719,854	653,579	786,130

Note: 1 USD = 4270 Leones (October 2013).

rather than policy". At the same time, "actors work hardest of all to maintain coherent representations of their actions as instances of authorized policy, because it is always in their interest to do so" (Mosse, 2004: p.639). Our cases highlight a similar pattern. The district-specific context and dynamics shape HRH practices and reshape the health workers' incentive package defined at central level in different ways, while most NGOs strive to maintain a narrative of alignment and harmonization with national policies and DHMTs. On the other hand, though, NGOs are also accountable to their funders. Often donors do not reward coordination (Pfeiffer, 2003) – or if they do (as in our case in Kenema, in line with Mosse's point), they impose coordination as a box to tick with the creation of a new 'inclusive' committee rather than by strengthening existing structures. The lack of coordination, combined with the unbalanced mutual dependency between NGOs and DHMTs, is a cause of constant frustration, as recounted by our key informants and described in other studies (Gilson et al., 1994).

Coordination of the 'unruly mélange' of external actors has long been recommended (Buse and Walt, 1997). Most NGOs are aware of this issue and some have signed a Code of Conduct (Health Alliance International, 2008). Tellingly, three articles out of the six which compose the Code refer to HRH practices, including hiring, remuneration and in-service training. However, such calls do not seem to be sufficient, if not accompanied at national level by strengthened effort for coordination between 'principals' to ensure alignment of incentives, and by the explicit consideration of the existence of local-level practices. At the other end of the 'bargaining' process, the role of the DHMT as agent for the MoH should be also carefully considered, as it is central for stewardship, coordination and priority-setting at district level. Since the Harare Declaration of 1987, the role of the Health District as a key agent for the functioning of health systems and the delivery of primary health care has been stressed, with the recommendation to decentralise financial and HRH management, and adopt district planning processes (CoP Health Service Delivery, 2013). DHMTs have also been at the centre of attention for their governance role to ensure accountability both upward, i.e. towards higher-level health administration agencies and the MoH, and downward, i.e. towards the communities they serve (Cleary et al., 2013; Van Belle and Mayhew, 2014). However, Van Belle and Mayhew (2014) note how "constrained decision-spaces, inadequate resources and capacity hamper public accountability practices" of DHMTs, while other studies highlight the prevalence of informal practices in HRH management, because of the lack of power, resources and institutional incentives to enforce formal rules (George, 2009).

In light of our findings, it seems essential to empower DHMTs with tools to redress the power imbalances between them and the external actors at local level, in order to create a more effective and balanced 'mutual dependency'. These tools include transparency in budgeting and planning processes, increased financial and human resources, improved skills and capacity, widened decision-spaces, and openly shared objectives and agendas. The current planning process in Sierra Leone envisages a bottom-up approach with the preparation of district plans which should feed into a national plan. However, the preparation of district plans appears to the DHMTs

themselves a formal exercise based on pre-set and unrealistic items, rather than an essential and locally-adapted tool. The result is a wish-list of activities for which there is unsecure funding, given the meagre DHMT resources and the unknown or unpredictable NGOs activities and budgets (key informant—DHMT). In contrast, realistic and contextualized planning, budgeting and reporting should be strengthened under the DHMT leadership so that it would (i) define in advance a plan of activities and tasks, based on the nationally-defined health priorities (rather than NGO/donor-specific ones), adapted to the local context. Such plan should leave enough room for flexibility and adaptation to the evolving context and potential stressors or emergencies (such as the Ebola outbreak); (ii) identify those responsible to carry activities out and when; and (iii) include all resources available, from internal and external sources, in a transparent and predictable manner. The latter could be done through district-level 'basket funds', pooling resources available and envisaging a funding mechanism linked to the accomplishment of each task, which would hold actors accountable for their performance under the same contractual framework. While this process would dramatically reduce the influence of external partners, with reference to our HRH case, it would, in parallel, improve the alignment of HRH practices to the nationally-defined incentive package, eliminating the room for extra salary supplementation and differential support to national policies, and standardizing per diem payments. Limiting the unbalanced bargaining processes at local level would not only create a more equal partnership between actors in the local health system, which could benefit HRH and other practices (including priority-setting and service delivery), but could also improve governance at local level and ensure the responsiveness and accountability of DHMTs towards communities, civil society and patients alike.

From a methodological perspective, these findings stress the importance of looking at both structural and agency factors (related to multiple internal and external organisations), and exploring their variation across contexts. If policy is political, implementation is no less so (Morgan-Trimmer, 2014). This calls for the use of tools that allow a closer look into the political economy to unravel them in research programs, and to take them openly into consideration when implementing programs (Brinkerhoff and Bossert, 2013; Erasmus and Gilson, 2008). This analysis also shows that qualitative tools and a flexible political economy framework incorporating elements of institutional economics can be useful to illuminate these dynamics.

## 6. Conclusions

Our analysis looked at what happens in three districts of Sierra Leone when HRH incentive policies established at central level are translated into practice. We presented not only the formal institutions defining the incentive package and how effectively (or not) they are implemented at local level, but also analysed the informal institutions and practices that emerged as the outcome of the 'bargaining' process between the local health actors. We have shown how the political economy dynamics between those actors define incentives with effects that ultimately extend to the

individual health workers. Moreover, the comparison of the three districts shows how differences in contexts and actors lead to different HRH practices. The consequence is a discrepancy between policy and practice, and inequalities across areas of the country.

Some scholars conclude that this discrepancy is intrinsic and unavoidable (Mosse, 2004). We believe that it is possible to go beyond this, if key actors at central level (government, MoH and development partners) and at district level (local councils, DHMTs, local and international NGOs) remain aware of these dynamics and ensure that they are channelled in a way that, as much as possible, contributes to the reinforcement of the health system. A more careful attention to the role of DHMTs and NGOs as local health actors, as well as the balance of powers between them within a bargaining process turned into open and transparent planning, may improve policy implementation. Moreover, research focussing on the evaluation of interventions and their implementation must carefully investigate these dynamics and adopt tools that allow for their exploration.

In the current context of the Ebola virus epidemic afflicting Sierra Leone, our findings are particularly relevant. Indeed, some of the weaknesses we highlighted may have played a role in the collapse of health services induced by the outbreak. For instance, the disconnect between central authorities and districts, the poor provision of central support functions, the narrow mandates of NGOs, and the rigid incentives related to pre-determined results may have reduced the responsiveness and resilience of the local health systems in the face of the Ebola challenge. Some scholars have hinted at the heavy NGO involvement in healthcare in Sierra Leone and Liberia as one of the reasons for the delay in the control of the epidemic, because it removed from local governments the responsibility of coordinating a single healthcare policy and because of the lack of investment at the meso-level of health administration (Abramowitz, 2014). As this analysis illuminates the political economy dynamics that were shaped in the post-conflict period, their legacies and impact on local practices, it can also provide useful insights for the post-Ebola transition and health system reconstruction.

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