



## **Appendices: Local Government Authority (LGA) fiscal inequities and the challenges of 'disadvantaged' LGAs in Tanzania**

Per Tidemand (team leader), Nazar Sola, Alloyce Maziku, Tim Williamson, Julia Tobias, Cathal Long and Helen Tilley

# Table of contents

<b>Appendix 1 : Terms of Reference</b>	<b>1</b>
1.1 Background	1
1.2 Objectives of proposed assignment	3
1.3 Scope of work	3
1.4 Methodology	4
1.5 Timeframe	5
1.6 Reporting arrangements and deliverables	6
1.7 Consultants' inputs	6
1.8 Arrangements for procurement of consultancy services	6
<b>Appendix 2 : Analysis of fiscal inequities across LGAs</b>	<b>7</b>
2.1 Analysis of fiscal transfers to LGAs for education sector	7
2.2 Analysis of fiscal transfers to LGAs for health sector	17
2.3 Analysis of fiscal transfers to LGAs for agriculture sector	26
2.4 Own revenue generation in LGAs	35
<b>Appendix 3 : Summary of patterns of within-district inequities</b>	<b>38</b>
3.1 Primary education	38
3.2 Secondary education	46
3.3 Health	53
3.4 Agriculture	56
3.5 Individual profiles of the 11 fieldwork LGAs	57
<b>Appendix 4 : Relationship between LGA fiscal allocations and service delivery</b>	<b>91</b>
4.1 Relationship between primary education spending and service delivery	91
4.2 Relationship between secondary education spending and service delivery	96
4.3 Relationship between health spending and service delivery	100
<b>Appendix 5 : Selected data on staff allocations to LGAs</b>	<b>102</b>
<b>Appendix 6 : Staff questionnaire</b>	<b>132</b>
6.1 Method	132
6.2 Findings	132
<b>Appendix 7 : Selection of most needy LGAs for priority support</b>	<b>151</b>
<b>Appendix 8 : Attracting, retaining and improving the productivity of human resources in Kigoma DC</b>	<b>153</b>
Workshop - LGA fiscal inequities and hard to reach areas (26 March, 2014)	153
<b>Figures</b>	
Figure 1: Education total transfers by district	8
Figure 2: Education recurrent transfers by district	9
Figure 3: Education sector block transfers by district	10
Figure 4: Education development transfers by district	11
Figure 5: Education budget execution	12
Figure 6: Relationship between education recurrent and development transfer, TZS	15

Figure 7: Relationship between primary education PE and OC, TZS	15
Figure 8: Relationship between secondary education PE and OC, TZS	16
Figure 9: Relationship between population and education total transfers, TZS	16
Figure 10: Relationship between budget execution and education total transfers, TZS	17
Figure 11: Health total transfers by district	18
Figure 12: Health recurrent transfers by district	19
Figure 13: Health sector block transfers by district	20
Figure 14: Health development transfers by district	21
Figure 15: Health budget execution	22
Figure 16: Relationship between health recurrent and development transfers, TZS	24
Figure 17: Relationship between health PE and OC, TZS	24
Figure 18: Relationship between population and health total transfers, TZS	25
Figure 19: Relationship between population and health total transfers, TZS	25
Figure 20: Relationship between budget execution and health total transfers, TZS	26
Figure 21: Agriculture total transfers by district	27
Figure 22: Agriculture recurrent transfers by district	28
Figure 23: Agriculture sector block transfers by district	29
Figure 24: Agriculture development transfers by district	30
Figure 25: Agriculture budget execution	31
Figure 26: Relationship between agriculture recurrent and development transfers, TZS	33
Figure 27: Relationship between agriculture PE and OC, TZS	33
Figure 28: Relationship between rural population and agriculture transfers, TZS	34
Figure 29: Relationship between rural population and agriculture staff	34
Figure 30: Relationship between budget execution and total agriculture transfers, TZS	35
Figure 31: Own source revenues by district	37
Figure 32: Relationship between own source revenue and general purpose transfers, TZS	37
Figure 33: Minimum, mean and maximum pupil teacher ratios by district	40
Figure 34: 20 <sup>th</sup> percentile, mean and 80 <sup>th</sup> percentile PTRs by district	40
Figure 35: 10 <sup>th</sup> percentile, mean and 90 <sup>th</sup> percentile PTRs by district	41
Figure 37: 20 <sup>th</sup> percentile, mean and 80 <sup>th</sup> percentile PSLE pass rates by district	42
Figure 36: Minimum, mean and maximum PSLE pass rates by district	41
Figure 38: Relationship between primary school pass rate and PTR across surveyed districts	42
Figure 39: Relationship between primary school pass rate and PTR (<100) across surveyed districts	43
Figure 40: Relationship between distance and PTR for surveyed districts	43
Figure 41: Relationship between accessibility and PTR for surveyed districts	44
Figure 42: Minimum, mean and maximum PTR by accessibility for surveyed districts	44
Figure 43: Relationship between distance and pass rates for surveyed districts	45
Figure 44: Relationship between accessibility and pass rates for surveyed districts	45
Figure 45: Minimum, mean and maximum pass rates by low, medium and high accessibility districts	46
Figure 46: Minimum, mean and maximum PTR by district	48
Figure 47: 10 <sup>th</sup> percentile, mean and 90 <sup>th</sup> percentile PTR by district	48
Figure 48: Minimum, mean and maximum CSSE pass rates by district	49
Figure 49: Relationship between CSSE pass rate and PTR across surveyed districts	49
Figure 50: Relationship between distance and PTR for surveyed districts	50
Figure 51: Relationship between accessibility and PTR for surveyed districts	50
Figure 52: Minimum, mean and maximum PTR by accessibility for surveyed districts	51
Figure 53: Relationship between distance and CSSE pass rates for surveyed districts	51
Figure 54: Relationship between accessibility and CSSE pass rates for surveyed districts	52
Figure 55: Minimum, mean and maximum CSSE pass rates by accessibility for surveyed districts	52

Figure 56: Minimum, mean and maximum OSR by district	54
Figure 57: 20 <sup>th</sup> percentile, mean and 80 <sup>th</sup> percentile OSR by district	54
Figure 58: Relationship between distance and OSR for surveyed districts	55
Figure 59: Relationship between accessibility and OSR for selected districts	55
Figure 60: Minimum, mean and maximum OSR by low, medium and high accessibility districts	56
Figure 61: Primary education outcomes by district, 2012	92
Figure 62: Primary education outcomes by district, 2013	93
Figure 63: Relationship between primary education recurrent spending and pass rates at district level	94
Figure 64: Relationship between primary education PE spending and pass rates at district level	94
Figure 65: Relationship between primary education OC spending and pass rates at district level	95
Figure 66: Relationship between rural primary education recurrent spending and pass rates at district level	95
Figure 67: Secondary education outcomes by district, 2012	97
Figure 68: Relationship between secondary education recurrent spending and pass rates at district level	98
Figure 69: Relationship between secondary education PE spending and pass rates at district level	98
Figure 70: Relationship between secondary education OC spending and pass rates at district level	99
Figure 71: Relationship between rural secondary education recurrent spending and pass rates at district level	99
Figure 72: Relationship between health PE spending and deliveries at district level	100
Figure 73: Relationship between health OC spending and deliveries at district level	101
Figure 74: Relationship between health subvention and basket spending, and deliveries at district level	101
Figure 75: Number of health staff positions allocated in 2011/12 relative to past over/under funding of the LGAs in 2010/11*	125
Figure 76: Respondents by district, district type and occupation (% of total respondents)	133
Figure 77: Respondents by gender, marital status, age and experience (% of total respondents)	134
Figure 78: Respondents by previous and current postings (% of total respondents)	135
Figure 79: Respondents by reason for posting and location of spouse	136
Figure 80: Respondents by mode, time and distance of commute (% of total respondents)	137
Figure 81: Satisfaction with present deployment / location	138
Figure 82: Satisfaction by age	140
Figure 83: Perception of staffing levels in the district compared to other districts	140
Figure 84: Future plans	141
Figure 85: Willingness to relocate to a more remote location	141
Figure 86: Factors affecting satisfaction with location / deployment	143
Figure 87: Factors affecting satisfaction with location / deployment	144
Figure 88: Factors affecting satisfaction with location / deployment	145
Figure 89: Questionnaire	145

## Tables

Table 1: Distribution of sector (recurrent) budgets at LGAs in 2012/13	2
Table 2: Trends of allocation to top 5 and bottom 5 districts	5
Table 3: Total education allocations by type in nominal prices, TZS billion	13
Table 4: Education transfers by type in mean per capita 2013/14 prices, TZS	13
Table 5: Education transfers by type and index of fit to official formula	14
Table 6: Total health allocations by type in nominal prices, TZS billion	23
Table 7: Health transfers by type in mean per capita 2013/14 prices, TZS	23
Table 8: Health transfers by type and index of fit to official formula, TZS	23
Table 9: Total agriculture allocations by type at nominal prices	32

---

Table 10: Agriculture transfers by type in mean per capita 2013/14 prices	32
Table 11: Agriculture transfers by type and index of fit to official formula	32
Table 12: Size and composition of LGA own revenue budgets 2012/13	35
Table 13: Local own source revenues, 2005/06 – 2010/11	36
Table 14: Agriculture statistics	56
Table 15: Individual profiles of the 11 fieldwork LGAs	57
Table 16: Correlation coefficients of spending and service delivery	100
Table 17: Relative level of over/understaffing of primary schools by LGA 2013	103
Table 18: Agriculture sector staff posted to LGAs	110
Table 19: Data on health sector staff allocations to LFAs FY 2011/12	119
Table 20: Summary of approved PE – annual estimates 2012/13 establishment strength for period ending 30 <sup>th</sup> June 2013	126
Table 21: Number of respondents by district and facility type	132
Table 22: Satisfaction levels by district type	138
Table 23: Satisfaction level by occupation	139
Table 24: Willingness to relocate by age	142

---

# Appendix 1 : Terms of Reference

Terms of Reference for a Consultancy Assignment to Review Efforts for Addressing LGA Fiscal Inequities and the Challenges of 'Disadvantaged' LGAs

## 1.1 Background<sup>1</sup>

- These Terms of Reference should be read in conjunction with the companion report: 'A Stocktaking of Recent Experiences with PETS and Recommendation for Future Surveys' (Tidemand 2013) which analyses key challenges in the Tanzanian Local Government financing system and methodologies for analysing underlying causal factors in relation to each. The present Terms of Reference focus on the specific issue of disparities. Further complementary studies would be required to address the full range of challenges summarised in the stocktaking report.
- Local Government Authorities (LGAs) manage a range of basic services – in particular, basic education, basic health, rural roads, agriculture and water services. Funds for provision of these services are foremost provided by Central Government through a system of recurrent and development/capital grant transfers. LGAs own revenues from local taxes and other local revenues such as fees and licences account for less than 10 of total expenditure at LGA levels – the remaining is provided as fiscal transfers from Central Government.
- The fiscal transfers for recurrent financing (PE and OC) have over the last three years accounted for 70-83% of total LGA budgets. These funds are not distributed in accordance with the formula, but allocated primarily in accordance to the number of staff posted and existing facilities in respective LGAs. It is recognised that these patterns of unequal allocation of recurrent grants across LGAs persist through years and remain a critical issue for access and quality of basic social services – in particular for health, education and agriculture (other sectors such as water and roads are not financed by recurrent grant allocations to the same degree). Health and education recurrent (PE and OC) allocations in 2012/13 amount to approximately TZS 2 trillion (TZS 1 615 billion for education and TZS 354 billion for health). This represents about 60% of total allocations to the LGAs<sup>2</sup>.
- For instance, average health and education recurrent allocations per capita to urban councils are TZS 68,000 and TZS 45,000 for rural councils. As shown in Table 1, the extreme cases this year are Bukoba, where basic services are provided with TZS 126,224 per capita and Kasulu, which gets only TZS 22,373 per person.

---

<sup>1</sup> The first detailed study of the underlying problems in Tanzania's situation is found in the 2005 study on 'the staffing problems of peripheral or otherwise disadvantaged local government authorities' (Crown Management Consultants Limited, 2005 for PMO-RALG/LGRP). The most recent comprehensive analytical update is found in: URT/PSRP: Tanzania Public Service Situation Analysis: Towards A Revised Public Service Pay Policy 2009 – A report by Crown Management Consultants, Ltd.

<sup>2</sup> Figures on budget allocations and quantitative aspects of inequalities are based on the Rapid Budget Analysis for 2012/13.

**Table 1: Distribution of sector (recurrent) budgets at LGAs in 2012/13**

	All recurrent	Health	Education	Edu and Health OC	Edu and health PE
Average	49 738	8 997	40 741	7 241	42 497
Top decile	86 349	20 077	71 812	17 038	75 032
Bottom decile	27 928	3 891	22 687	3 522	23 769
Highest	126 224 (Bukoba)	30 755 (Pangani)	111 643 (Bukoba)	29 284 (Longido)	110 599 (Bukoba)
Lowest	22 373 (Kasulu)	2 810 (Lushoto)	18 483 (Kasulu)	2 640 (Nzegu)	18 607 (Kasulu)

- **The biggest disparities appear to be in health OC**, where the top decile (13) councils receive five times more funds than the bottom decile councils. Disparities in allocations have persisted for years, and have apparently worsened over the past three years. Some variation in per capita allocations could be desirable – i.e. if the variation corresponded to a similar variation in the cost of provision of services – for example, as reflected in the (in principle) agreed formula for recurrent grant allocations (for the health sector based on population, mortality rates and health mileage). The detailed extent to which actual grant allocations are aligned with the formula will be explored in the study – but it is evident from the current patterns of disparity (e.g. relative over funding of urban LGAs) that actual grant allocations at present divert significantly from the formula.
- Inequities in the education sector and agricultural sector are also significant – with an urban bias in a similar way as for the health sector. There is some evidence that teacher allocations gradually have become more equal<sup>3</sup> – but inequalities continue to be distinct – both across LGAs as well as within individual LGAs, where some parts (typically near urban centres) are better served than others (typically remote and rural).
- **In addition, it is acknowledged that budget allocations also are unequally distributed within many LGAs:** typically the most remote areas of a LGA will receive less funds than the areas near urban centres. This is for example reflected in the pupil-teacher ratio in schools and staffing patterns in health facilities. However, this problem is not substantially quantified. It is also acknowledged that a potential factor contributing to inequitable service delivery is variability in the efficiency of expenditures at local level.
- The Government has been aware of these inequities for several years and in various ways has tried to address the problem. It has for some time been discussed how these recurrent funds can be distributed in a more transparent and equal manner – possibly by the use of the formula.<sup>4</sup> However, it has been realised that such an approach is difficult in the absence of a devolved staff management system and that PE therefore only can be allocated where staff already are in place. In a similar manner, other funds for recurrent expenses (OC) are meant to cover cost implications of past investments (existing health facilities, schools and funding the activities of the staff already in place etc.). The main strategies for addressing the inequalities have therefore focused on more equitable distribution of staff and been twofold: (1) for recruitment of new staff, priority has been given to LGAs with the most significant deficit and (2) development funds have been allocated to allow LGAs to create a more enabling and attractive environment

<sup>3</sup> See for example Evaluation of General Budget support in Tanzania 2013. See data for PT ratios.

<sup>4</sup> The Government agreed in principle on a system of formula-based recurrent grants for education, health, agriculture, water and roads in 2004/05. The background analysis and recommendations are found in the report from Georgia State University (GSU) 2003. *Final Report: Developing a System of Intergovernmental Grants in Tanzania*. The details of the agreed formula and initial implementation experiences are contained in the report: *Local Government Reform Programme (PMO-RALG). 2007. Adherence to the Formula-Based Recurrent Block Grant System and the Allocation of Personal Emoluments in Tanzania. Technical Note 2007-6*.

---

for staff – as staff otherwise in the disadvantaged LGAs have tended to resist placements or leave shortly after reporting. Other proposals, such as the possible introduction of special allowances for staff in disadvantaged districts or a special fund for these LGAs have been discussed for long but not pursued<sup>5</sup>.

- The recent Public Service Pay and Incentive Policy Implementation Strategy for 2012/13 2016/17 (May 2012) deals with the issue of staff disparity, and establishes – as one of its key policy objectives – to ‘attract staff to work in LGAs with staffing problems and ensure they are equitably distributed’. The policy document proposes two implementation strategies. First, the strategy document calls for ‘locally grown incentive schemes specific to a local authority designed and implemented to attract staff for underserved areas’. Second, the document calls for the ‘Central Government to develop preferential allocation of staff to LGAs’. The proposed study will provide practical recommendations for how these strategies can be supported through reformed fiscal LGA allocations.

## 1.2 Objectives of proposed assignment

- The initial analytical objective of the assignment is to analyse progress, achievements and challenges of the current strategies for addressing inequalities of recurrent grant allocations across LGAs. The analysis should take account of service delivery on the ground, be forward looking and provide recommendations for significant improvements that can be implemented practically.
- The overall aim of the assignment is to develop practical guidance on how the declared Government policy of more equitable LGA staff and fund allocations, for the purpose of achieving more equitable service delivery, can be supported through the LGA grant system (both recurrent and development grant systems) and other relevant measures.

## 1.3 Scope of work

The consultancy team will analyse the efforts made for the last five years regarding ways of addressing inequalities in LGA recurrent funds, with special emphasis on health, education and agriculture sectors, and including water and rural roads. This will include analysis of progress, achievements and challenges. More specifically the team will:

- Document and quantify trends in per capita allocation for recurrent transfers (PE and OC) – both budget figures and actual transfers – primarily (though not exclusively) for health, education and agriculture over the last five years. The analysis should also include comparisons between grant allocations, funds actually received and agreed formula for the respective sectors (analyses of index of fit)<sup>6</sup>; and whether higher grant allocations are justified due to higher costs of service provisions.
- Analyse and document progress regarding staff deployment and effective retainment of staff in disadvantaged LGAs. This will initially involve a mapping of staff allocations and retention in LGAs over the last five years and subsequent exploration of qualitative issues in selected LGAs. To what extent has the situation improved over the last five years? To what extent do financial and non-financial factors explain patterns of staff deployment?
- On a sample basis (8 LGAs) analyse patterns of inequities within LGAs: measured in terms of allocations per ward and relative allocations per facility (e.g. allocations per enrolled child etc.), and as far as possible track the extent to which funds are arriving and being spent in an efficient

---

<sup>5</sup> Crown Management 2009 op.cit and related draft Pay Policy 2010.

<sup>6</sup> Apply methodology as in Boex and Omari: *Strengthening the Geographical Allocation of Resources within the Health sector in Tanzania: Towards greater equity and performance – draft March 2013.*

---

manner (the consultants will in their inception report propose a methodology for assessment of effectiveness and efficiency of grant expenditures).

- Document and quantify efforts for supporting disadvantaged LGAs to attract and retain staff. This will include a mapping and quantification of financing of staff houses and other Central or Local Government financed initiatives in support of attracting staff to ‘disadvantaged LGAs’.
- Analyse the extent to which patterns of development grant transfers support a more equal development by (a) analysis of the extent to which these development funds are targeting poor and disadvantaged districts and (b) the extent to which these development funds finance facilities that are perceived to have significant impact on staff location patterns (e.g. staff houses).
- Review the Public Service Pay and Incentive Policy Strategies that deals with the issue of staff disparity and provide practical recommendations for how these strategies can be supported through reformed fiscal LGA allocations. Consideration will also be given to other factors such as non-monetary, incentives/disincentives.
- Based on the analysis the team will prepare a set of practical recommendations for significant improvements to the current situation. This is foreseen to include detailed guidance on how the LGA grant allocations can be reformed in a realistic and practical manner in order to support the Government Policy for more needs-based staff allocation in LGAs (and subsequent alignment of existing PE allocations with the agreed sectorial LGA grant formula for PE/OC). Where appropriate, recommendations will be developed for further follow-up analysis of expenditure efficiency and value-for-money issues, drawing on the recommendation of the stocktake analysis.
- The findings and recommendations will be presented in an inclusive workshop (composition and format to be proposed in the Inception Report) that will facilitate policy consensus and agreement on practical implementation.

## 1.4 Methodology

- Based on the Terms of Reference, the team will prepare a detailed methodology including a plan for fieldwork that will be presented in the Inception Report.
- It is foreseen that the work will include (1) desk analysis of previous studies, (2) compilation of national level data from PO-PSM, sector ministries, PMO-RALG and MOF regarding staff allocation and budget allocations and (3) fieldwork in selected LGAs that represent the variation in recurrent grant allocations.
- Fieldwork will be undertaken in a sample of a minimum of 8 LGAs. The sample will be drawn from a short-list of most ‘advantaged’ and ‘disadvantaged’ LGAs (in terms of how much they annually receive as recurrent grants), and will include examples of ‘middling’ LGAs chosen as far as possible to reflect variation in expenditure efficiency. The list will be based on historical fiscal recurrent grant allocations and take account of own revenues as far as possible. For illustrative purposes, Table 2 shows the top and bottom five districts over the past three years in terms of per capita recurrent allocations only. An early task will be to refine the shortlist to take account of other resource available to LGAs, perceived efficiencies/inefficiencies, and make detailed analyses for each of the major recurrent grants.

**Table 2: Trends of allocation to top 5 and bottom 5 districts**

	2010/11	2011/12	2012/13
TOP 5	Kibaha DC	Kibaha DC	Bukoba MC
	Korogwe TC	Korogwe TC	Kibaha DC
	Pangani DC	Bukoba MC	Iringa MC
	Bukoba MC	Mwanga DC	Korogwe TC
	Mwanga DC	Moshi MC	Mwanga DC
BOTTOM 5	Tabora	Mpanda	Kasulu
	Kigoma	Biharamulo	Nzega
	Bukombe	Tabora	Tabora
	Mpanda	Nzega	Kigoma
	Kasulu	Kigoma	Kahama

- In addition to the review of the experiences of LGAs it is also deemed relevant to review the positive experiences of some of the LGAs that have experienced some equalisation in the education sector (LGAs to be identified during the consultancy<sup>7</sup>). As a complementary task, an explanatory analysis will be provided in relation to the highest and lowest LGAs shown in Table 1.
- The suggested sample of LGAs to be analysed will be presented in the Inception Report and approved by the Taskforce (see section 6 of Terms of Reference) before the fieldwork is initiated.

## 1.5 Timeframe

The assignment will be undertaken over a period of ten weeks, with the following tentative schedule:

- Inception period: two weeks for a review of background literature and the development of the consultants' detailed work plan and methodology, including the identification of relevant data sources and selection of sites for fieldwork.
- Desk analysis: two weeks: (1) compilation and analysis of fiscal transfer data for the last five years: actual and budget allocations for LGAs recurrent (PE and OC) and (2) analysis of data on staff allocations across LGAs for the last five years.

<sup>7</sup> Analyses of PTR in LGAs over the last five years suggest that some of the previously under-staffed LAGs have been relatively successful in 'catching up'.

- 
- Fieldwork for three weeks in eight selected LGAs: three ‘top performers’ and three ‘bottom performers’ (Table 3) and two LGAs that have been relatively successful in catching up with the backlog of teachers.
  - Draft report by week 8 and workshop in week 9.
  - Final report after comments and workshop – week 10.

## 1.6 Reporting arrangements and deliverables

- The consultant team will report to an interministerial task force composed of: PMO-RALG (chair), MOF, PO-PSM and DP representations including DFID, who are leading this study from the DP side. PMO-RALG will inform and invite sector ministries as relevant.
- The consultant team will prepare the following outputs: (1) inception report, (2) desk analysis (3) draft report and (4) final report, (5) policy brief and (6) subject to agreement with the taskforce, outline ToRs for future surveys of expenditure efficiency and value-for-money issues in the Local Government system.

## 1.7 Consultants’ inputs

- The consultant team will include one team leader, one senior LG PFM specialist and one senior HRM expert.
- The team leader will work for 10 weeks and coordinate the overall assignment. The team leader will hold a PhD or Master’s degree in a relevant discipline and have a minimum of ten years’ experience with LG HRM and LG Finance from international assignments and from previous work in Tanzania.
- The LG PFM specialist will work for 8 weeks on the assignment. He/she will have a minimum of 8 years’ experience with LG Finance from international assignments and from previous work in Tanzania.
- The LG HRM specialist will work for 8 weeks on the assignment. He/she will have a minimum of 8 years’ experience with LG HRM from international assignments and from previous work in Tanzania.
- At least one of the experts should be fluent in Swahili.
- International consultants will work to help build the capacity of local consultants and experts involved in the review.

## 1.8 Arrangements for procurement of consultancy services

- The assignment will be financed by DFID and procurement of consultancy services will be managed by DFID with Government participation in the selection process.

---

# Appendix 2 : Analysis of fiscal inequities across LGAs

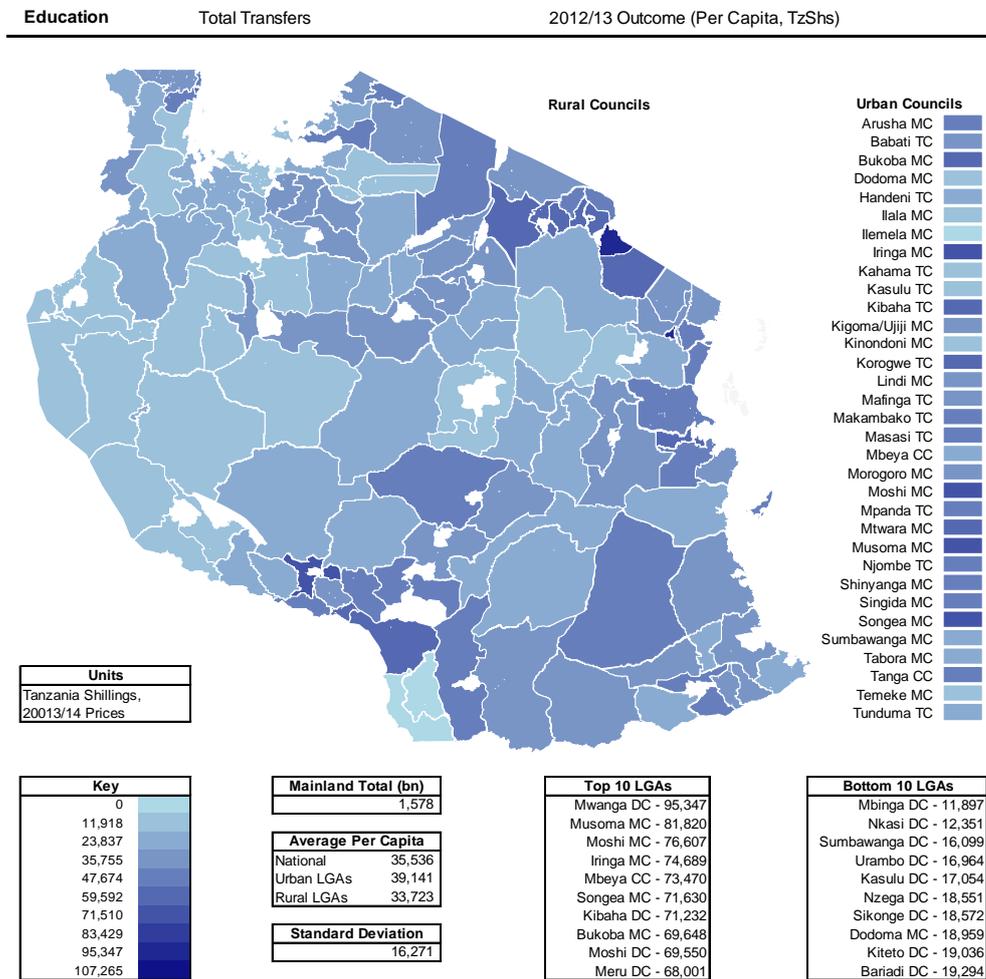
## 2.1 Analysis of fiscal transfers to LGAs for education sector

- Education funding at the LGA level displays high levels of inequity. In 2012/13 the highest funded LGA (Mwanga DC) received 8 times as much education funding per capita as the lowest funded LGA (Mbinga DC) (Figure 1).
- Data on sector block transfers (which aggregates PE and OC) for the 2013/14 budget confirm that some of this disparity is locked in at the budget stage (Figure 3). 5 of the top 10 LGAs in terms of sector block transfer outturns per capita in 2012/13 (Mwanga DC, Musoma MC, Mbeya CC, Moshi MC, and Kibaha DC) are among the top 10 in terms of per capita sector block transfer allocations in the 2013/14 budget.
- However, much of the root of the disparity can be traced to disparities in terms of budget execution (Figure 5). In 2012/13 budget execution varied from a high of 134% in Arusha MC to a low of 26% in Kigoma DC. 5 of the 10 lowest funded districts (Nkasi DC, Mbinga DC, Sumbawanga DC, Dodoma MC, and Kiteto DC) in terms of sector block transfers per capita are also among the 10 lowest in terms of budget execution.
- The correlation between mean budget execution for the 5-year period to 2012/13 and education total transfers per capita is found to be relatively strong (Figure 10). With the exception of Korogwe TC those districts with per capita transfers of TZS 20,000 in excess of the national average tend to have above-average rates of budget execution, while districts which receive per capita transfers of TZS 20,000 less than the national average tend to have below-average budget execution rates.
- As such, there appear to be two main reasons for the inequities at the Central Government level. First, some districts are being allocated more than their fair share, while other districts are being allocated less than their fair share. Second, even where some districts are allocated a fair share they may struggle to execute the spending. This is likely to arise from the inability of these LGAs to effectively attract and retain staff that they formally are allocated: thus an LGA may be granted a number of teachers who are included in the budget, but if the teachers do not report on duty in their designated LGAs they will not be included in the payroll and this will reflect on actual PE budget allocations and thus budget execution.
- The inequity is primarily being driven by disparities in recurrent transfers per capita (Figure 2), which accounted for 97% of total transfers in 2012/13, and more specifically by PE, which accounted for 83% of total recurrent transfers in 2012/13 (Table 3). Furthermore, in the case of secondary education OC transfers per capita are positively correlated with PE transfers per capita (Figure 8), although this relationship is ambiguous for primary education (Figure 7)).
- Development transfers, though significantly smaller in magnitude, also display high levels of disparity. The largest recipient in 2012/13 (Mwanga DC) receives over 180 times that of the smallest recipient (Serengeti DC) (Figure 4). One would expect that this disparity in development transfers would translate to a negative relationship with recurrent transfers – i.e. development transfers would flow to districts that are understaffed in order to fund the infrastructure required to attract and retain teachers.
- However, we can see that the relationship is in fact positive (Figure 6). There are higher concentrations of districts in the upper right quadrant and lower left quadrant, showing that

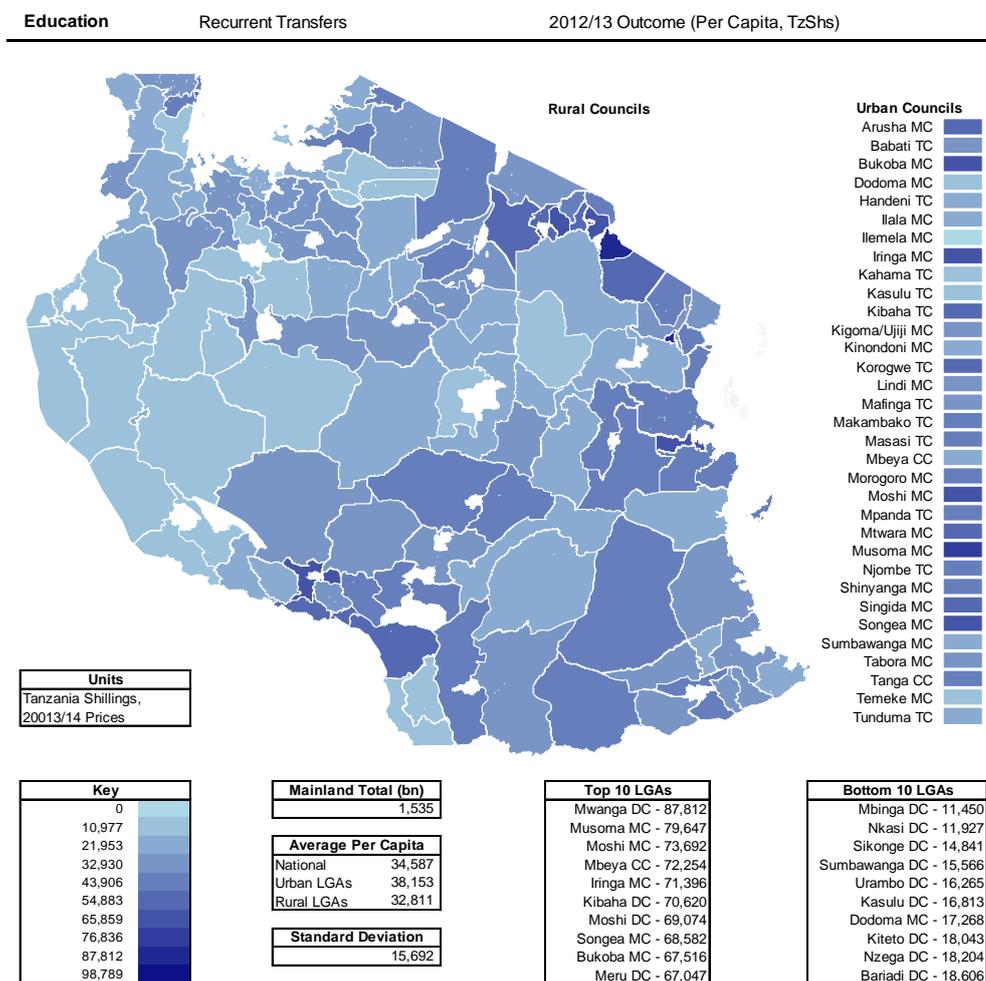
districts that receive above-average recurrent transfers also receive above-average development transfers. For example, districts such as Iringa MC and Korogwe TC, which received TZS 20,000 per capita in excess of the average level of recurrent transfers in 2012/13, also received above-average levels of development transfers, while there is only one example of a district which received TZS 20,000 per capita less than the average level of recurrent transfers while also receiving an above average level of development transfers (Sikonge DC).

- Funding for education has been increasing over the last 5 years both in absolute (Table 3) and in real mean per capita (Table 4) terms, although there was a slight fall in 2011/12.
- However, the increased funding is further increasing inequalities across LGAs, with the index of fit to the official formula declining (Table 5) over the last 5 years.
- Overall, the relationship between population and total education transfers is quite strong (Figure 9). However, significant outliers exist.

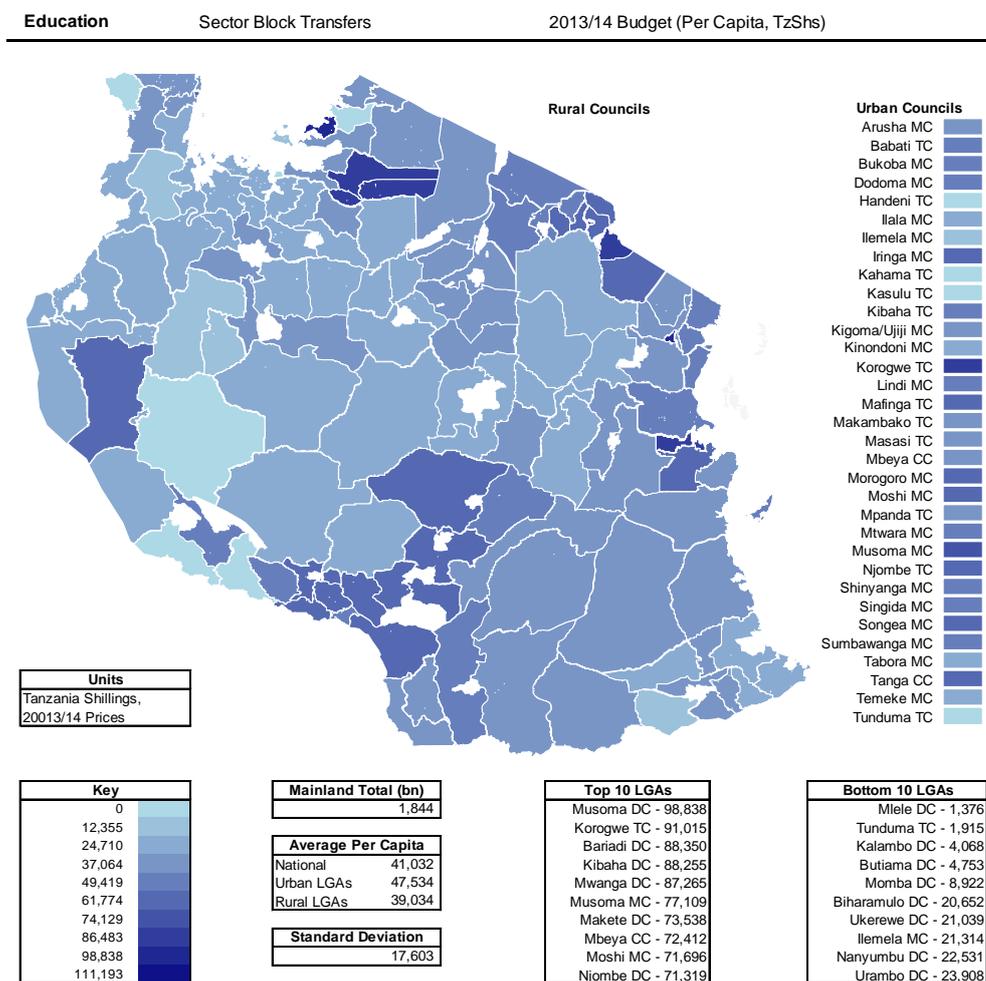
**Figure 1: Education total transfers by district**



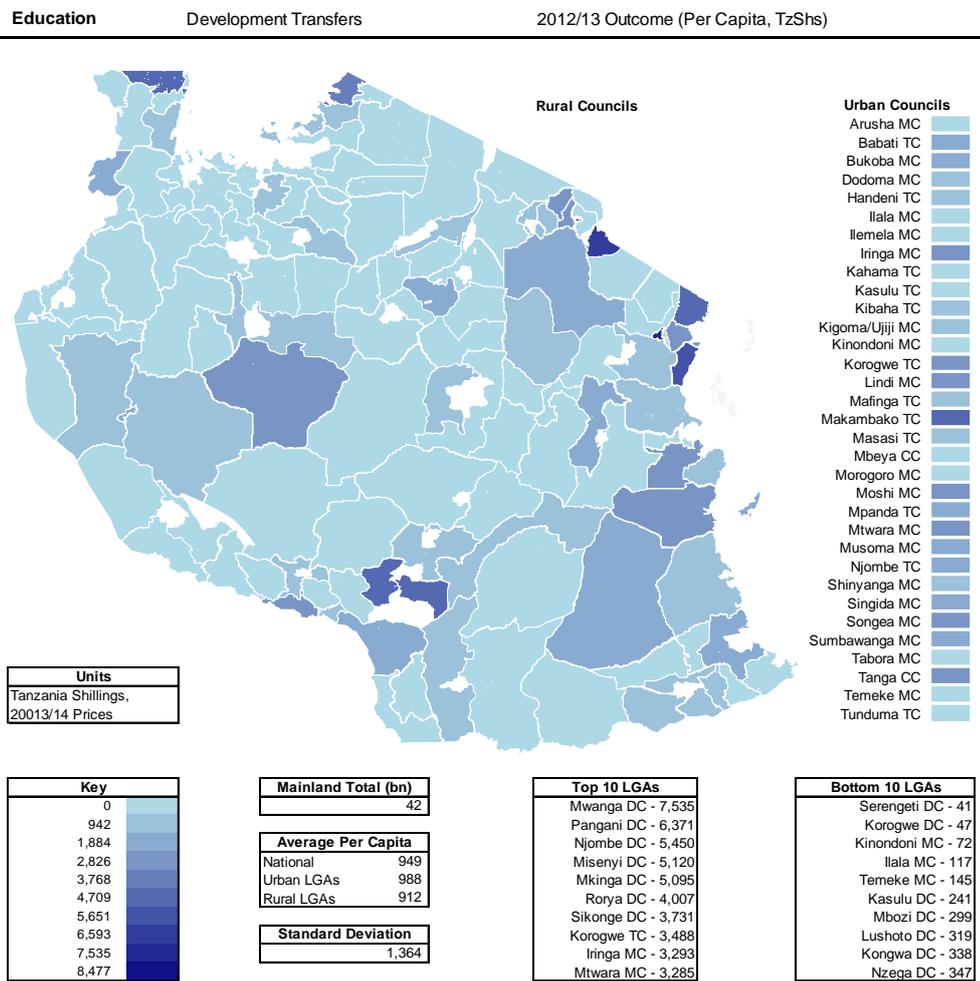
**Figure 2: Education recurrent transfers by district**



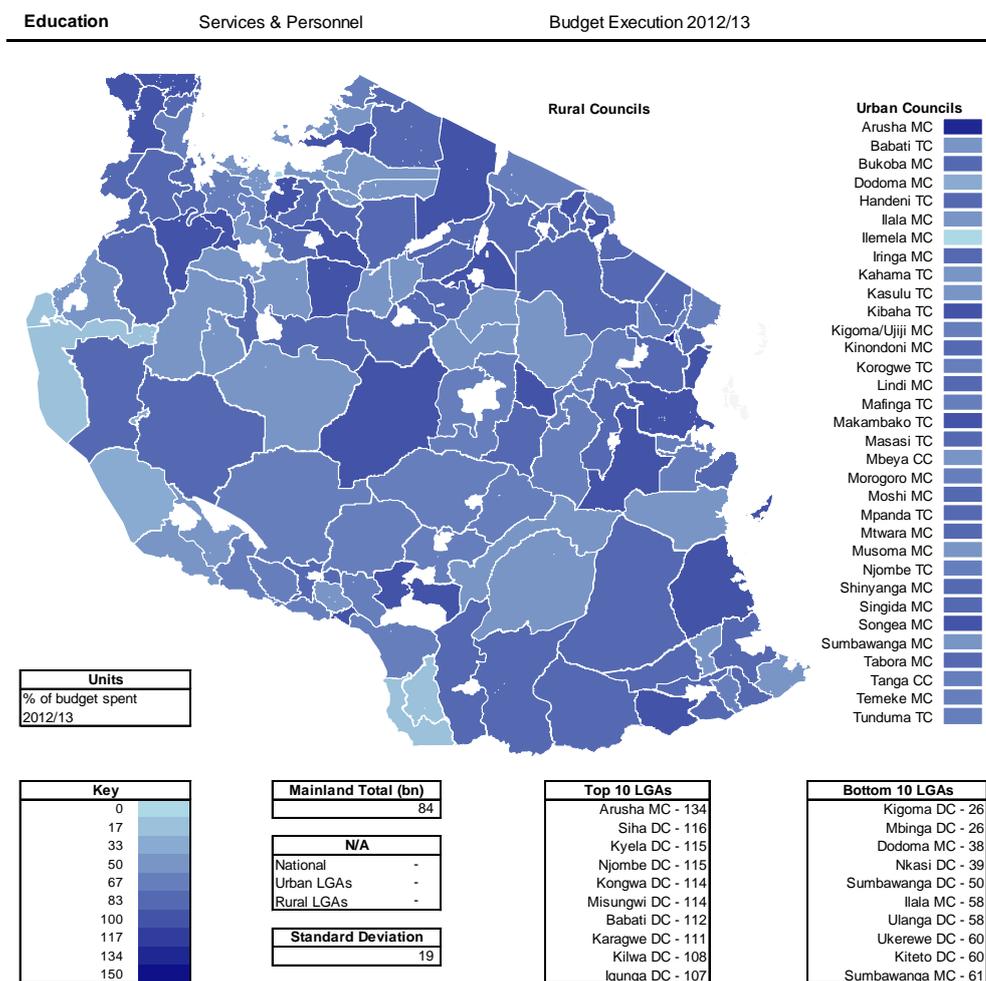
**Figure 3: Education sector block transfers by district**



### Figure 4: Education development transfers by district



**Figure 5: Education budget execution**



**Table 3: Education total allocations by type in nominal prices, TZS billion**

<i>Total Nominal (TzShs Bn)</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget
<b>R0 Revenues</b>	<b>592.96</b>	<b>624.95</b>	<b>1,092.29</b>	<b>874.46</b>	<b>1,198.95</b>	<b>1,113.14</b>	<b>1,559.63</b>	<b>1,211.13</b>	<b>1,857.37</b>	<b>1,497.70</b>	-
R1 Total Transfers	592.96	624.95	1,092.29	874.46	1,198.95	1,113.14	1,559.63	1,211.13	1,857.37	1,497.70	-
R2 Recurrent Transfers	572.43	617.75	1,052.42	852.63	1,153.98	1,092.48	1,498.34	1,195.50	1,784.22	1,457.69	-
R3 Sector Block Transfers	557.71	604.34	1,023.71	834.51	1,129.17	1,081.11	1,478.93	1,188.48	1,751.00	1,441.76	1,843.61
<i>Primary PE</i>	466.31	500.84	671.32	571.75	728.97	753.32	969.41	794.46	1,136.89	929.28	-
<i>Primary OC</i>	91.40	100.11	137.33	133.98	144.70	99.23	144.35	102.85	144.32	128.89	129.68
<i>Secondary PE</i>	-	2.83	119.32	85.77	181.99	165.74	276.60	216.83	370.73	291.35	-
<i>Secondary OC</i>	-	0.56	95.73	43.01	73.51	62.82	88.57	74.34	99.07	92.24	91.96
R4 Subventions and Basket Funds (OC)	14.72	13.41	28.71	18.13	24.81	11.37	19.41	7.02	33.22	15.93	-
<i>Primary OC</i>	14.57	13.08	17.29	10.57	15.11	4.43	8.85	2.71	22.21	7.97	-
<i>Secondary PE</i>	0.15	0.33	11.42	7.55	9.71	6.94	10.56	4.31	11.01	7.96	-
R5 Development Transfers	20.53	7.20	39.87	21.82	44.97	20.65	61.29	15.63	73.15	40.01	-

**Table 4: Education transfers by type in mean per capita 2013/14 prices, TZS**

<i>Mean Per Capita 2013/14 Prices</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget								
<b>R0 Revenues</b>	<b>24,204.58</b>	<b>25,510.29</b>	<b>39,529.91</b>	<b>31,646.40</b>	<b>38,468.48</b>	<b>35,715.11</b>	<b>42,621.23</b>	<b>33,097.67</b>	<b>44,070.17</b>	<b>35,536.21</b>	-
R1 Total Transfers	24,204.58	25,510.29	39,529.91	31,646.40	38,468.48	35,715.11	42,621.23	33,097.67	44,070.17	35,536.21	-
R2 Recurrent Transfers	23,366.38	25,216.41	38,086.94	30,856.70	37,025.62	35,052.47	40,946.41	32,670.42	42,334.56	34,586.95	-
R3 Sector Block Transfers	22,765.56	24,669.14	37,047.84	30,200.74	36,229.47	34,687.67	40,415.95	32,478.52	41,546.40	34,208.88	41,032.27
<i>Primary PE</i>	19,034.62	20,444.27	24,295.10	20,691.44	23,389.23	24,170.52	26,491.89	21,710.80	26,975.18	22,049.26	-
<i>Primary OC</i>	3,730.94	4,086.60	4,969.92	4,848.62	4,642.71	3,183.83	3,944.73	2,810.74	3,424.24	3,058.11	2,886.19
<i>Secondary PE</i>	-	115.33	4,318.19	3,103.98	5,839.07	5,317.71	7,558.81	5,925.48	8,796.35	6,913.03	-
<i>Secondary OC</i>	-	22.94	3,464.63	1,556.70	2,358.45	2,015.63	2,420.53	2,031.50	2,350.62	2,188.48	2,046.74
R4 Subventions and Basket Funds (OC)	600.82	547.26	1,039.10	655.96	796.15	364.79	530.46	191.90	788.16	378.07	-
<i>Primary OC</i>	594.70	533.93	625.85	382.68	484.65	142.22	241.95	74.09	526.95	189.21	-
<i>Secondary PE</i>	6.12	13.33	413.25	273.28	311.50	222.57	288.51	117.81	261.21	188.86	-
R5 Development Transfers	838.20	293.89	1,442.97	789.69	1,442.86	662.65	1,674.83	427.25	1,735.61	949.26	-

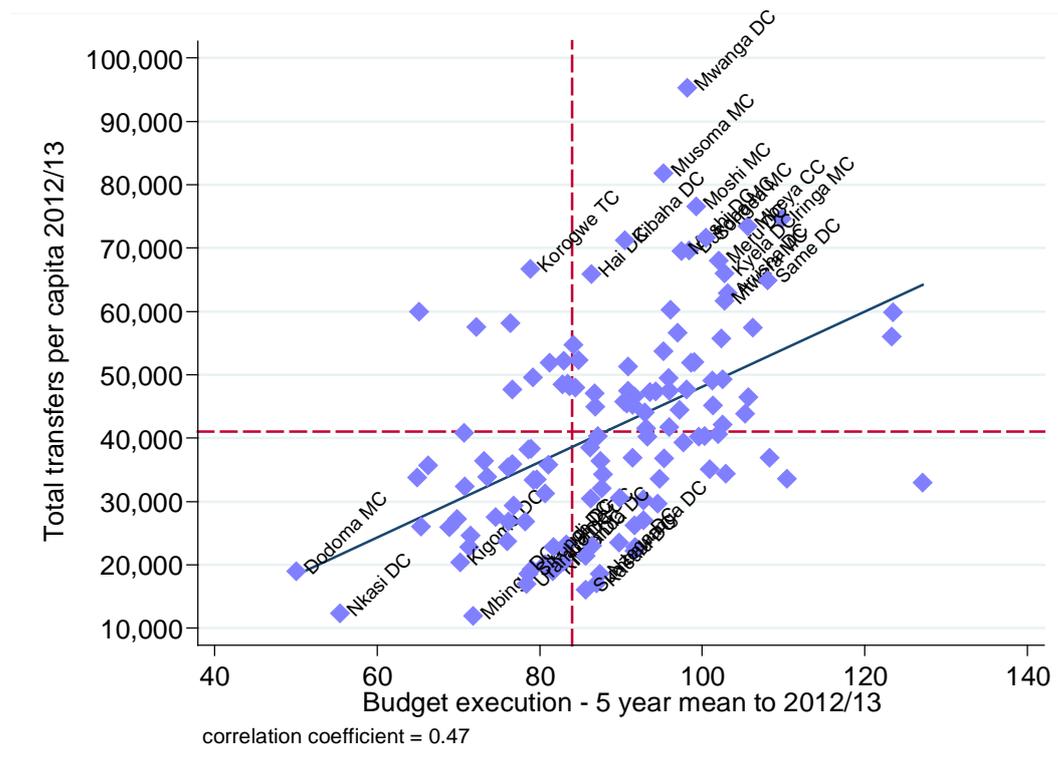
**Table 5: Education transfers by type and index of fit to official formula**

<i>Index of Fit - to Official Formula</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget								
<b>R0 Revenues</b>	<b>0.89</b>	<b>0.87</b>	<b>0.88</b>	<b>0.84</b>	<b>0.87</b>	<b>0.85</b>	<b>0.86</b>	<b>0.83</b>	<b>0.87</b>	<b>0.84</b>	-
R1 Total Transfers	0.89	0.87	0.88	0.84	0.87	0.85	0.86	0.83	0.87	0.84	-
R2 Recurrent Transfers	0.89	0.87	0.88	0.84	0.87	0.85	0.86	0.83	0.87	0.85	-
R3 Sector Block Transfers	0.89	0.87	0.87	0.84	0.87	0.85	0.86	0.83	0.87	0.85	0.86
<i>Primary PE</i>	<i>0.88</i>	<i>0.85</i>	<i>0.89</i>	<i>0.86</i>	<i>0.89</i>	<i>0.87</i>	<i>0.89</i>	<i>0.84</i>	<i>0.90</i>	<i>0.84</i>	-
<i>Primary OC</i>	<i>0.87</i>	<i>0.82</i>	<i>0.84</i>	<i>0.84</i>	<i>0.85</i>	<i>0.82</i>	<i>0.85</i>	<i>0.81</i>	<i>0.87</i>	<i>0.84</i>	<i>0.90</i>
<i>Secondary PE</i>	-	<i>0.06</i>	<i>0.68</i>	<i>0.65</i>	<i>0.74</i>	<i>0.71</i>	<i>0.72</i>	<i>0.69</i>	<i>0.76</i>	<i>0.74</i>	-
<i>Secondary OC</i>	-	<i>0.04</i>	<i>0.60</i>	<i>0.53</i>	<i>0.67</i>	<i>0.63</i>	<i>0.70</i>	<i>0.68</i>	<i>0.72</i>	<i>0.70</i>	<i>0.70</i>
R4 Subventions and Basket Funds (OC)	0.34	0.33	0.38	0.39	0.29	0.27	0.25	0.19	0.19	0.27	-
<i>Primary OC</i>	<i>0.33</i>	<i>0.32</i>	<i>0.37</i>	<i>0.33</i>	<i>0.25</i>	<i>0.22</i>	<i>0.13</i>	<i>0.14</i>	<i>0.14</i>	<i>0.17</i>	-
<i>Secondary PE</i>	<i>0.01</i>	<i>0.01</i>	<i>0.29</i>	<i>0.31</i>	<i>0.25</i>	<i>0.21</i>	<i>0.25</i>	<i>0.19</i>	<i>0.20</i>	<i>0.26</i>	-
R5 Development Transfers	0.32	0.42	0.63	0.62	0.52	0.54	0.53	0.47	0.52	0.60	-





**Figure 10: Relationship between budget execution and education total transfers, TZS**

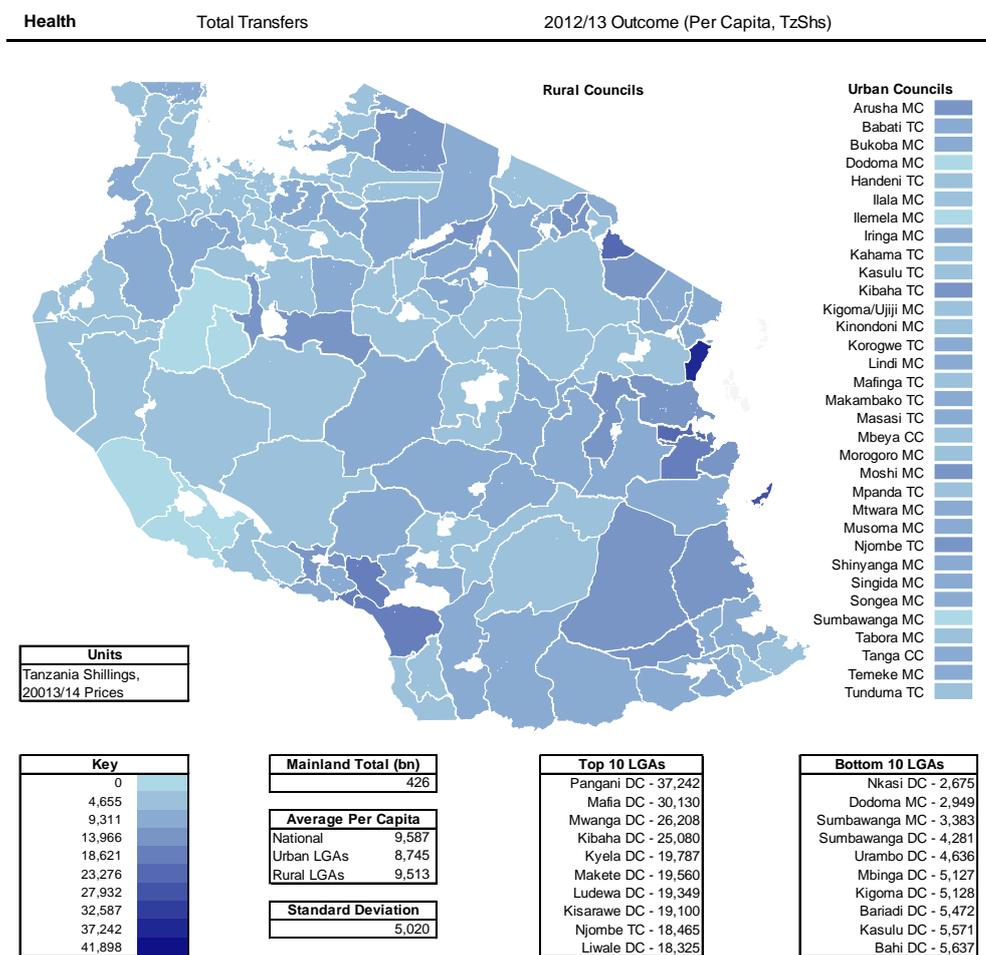


## 2.2 Analysis of fiscal transfers to LGAs for health sector

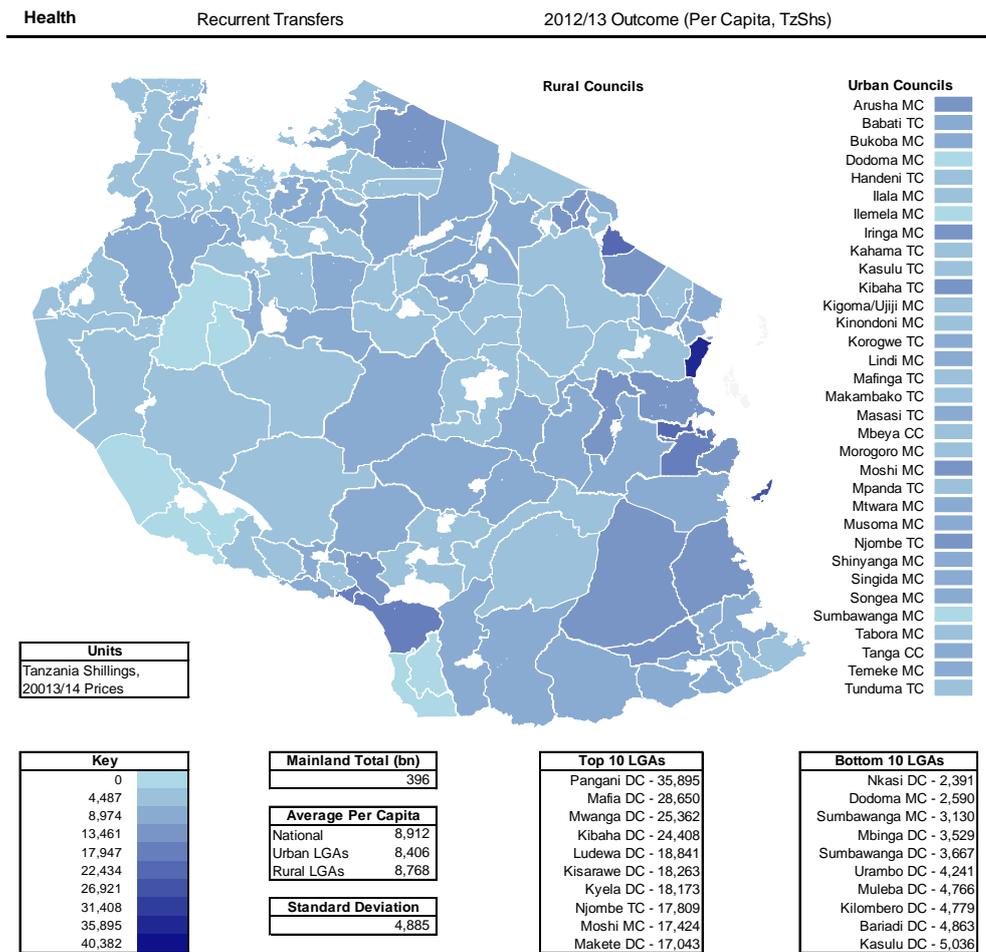
- Health funding at the LGA level displays high levels of inequity. In 2012/13 the highest funded LGA (Pangani DC) received almost 14 times as much health funding per capita as the least funded LGA (Nkasi DC) (Figure 11).
- Data on sector block transfers for the 2013/14 budget confirm that much of this disparity arises during the budget stage (Figure 13). 6 of the top 10 LGAs in terms of sector block transfers per capita in 2012/13 (Pangani DC, Mafia DC, Mwanza DC, Kibaha DC, Kisarawe DC, and Njombe TC) are among the top 10 in terms of per capita sector block transfer allocations in the 2013/14 budget.
- Budget execution is also an issue affecting inequities across districts (Figure 15). In 2012/13 budget execution varied from a high of 135% in Kilosa DC to a low of 23% in Dodoma MC, and 4 of the 10 lowest funded districts (Nkasi DC, Dodoma MC, Bahi DC, and Sumbawanga MC) in terms of sector block transfers per capita were also among the 10 lowest in terms of budget execution.
- However, the correlation between mean budget execution for the 5-year period to 2012/13 and total health transfers per capita was found to be relatively weak (Figure 20). For example, Pangani DC, which receives the highest amount of health transfers per capita, has a slightly below-average rate of budget execution.
- This inequity is being driven by the disparities in recurrent transfers per capita (Figure 12), which accounted for 93% of total health transfers (Table 6) in 2012/13, comprising PE (65%), OC (9%) and subventions and basket funds (24%). Although PE and OC are positively correlated, the relationship is relatively weak and it is notable that significantly overfunded districts in terms of per capita PE tend to receive OC allocations close to the national average – with some exceptions, including Mafia DC and Pangani DC. The relationship between PE and OC per capita is also weakly positive.

- Development transfers, although just 7% of total transfers (Table 6), also display high levels of disparity. The largest recipient in 2012/13 (Rungwe DC) receives over 31 times that of the smallest recipient (Kinondoni MC) (Figure 14). However, in contrast to the finding for education, the relationship between recurrent and development transfers per capita is ambiguous, showing only a weak positive correlation (Figure 16).
- Funding for health has been increasing over the last 5 years, both in absolute (Table 6) and per capita (Table 7) terms, although there was a slight fall in 2011/12.
- Inequalities in health funding across LGAs have remained high over the same period, with a corresponding decrease in the index of fit to the official formula for PE and OC. It should be noted that subvention, basket funds and development funds in later years appear to gradually become better aligned with the formula (Table 8).

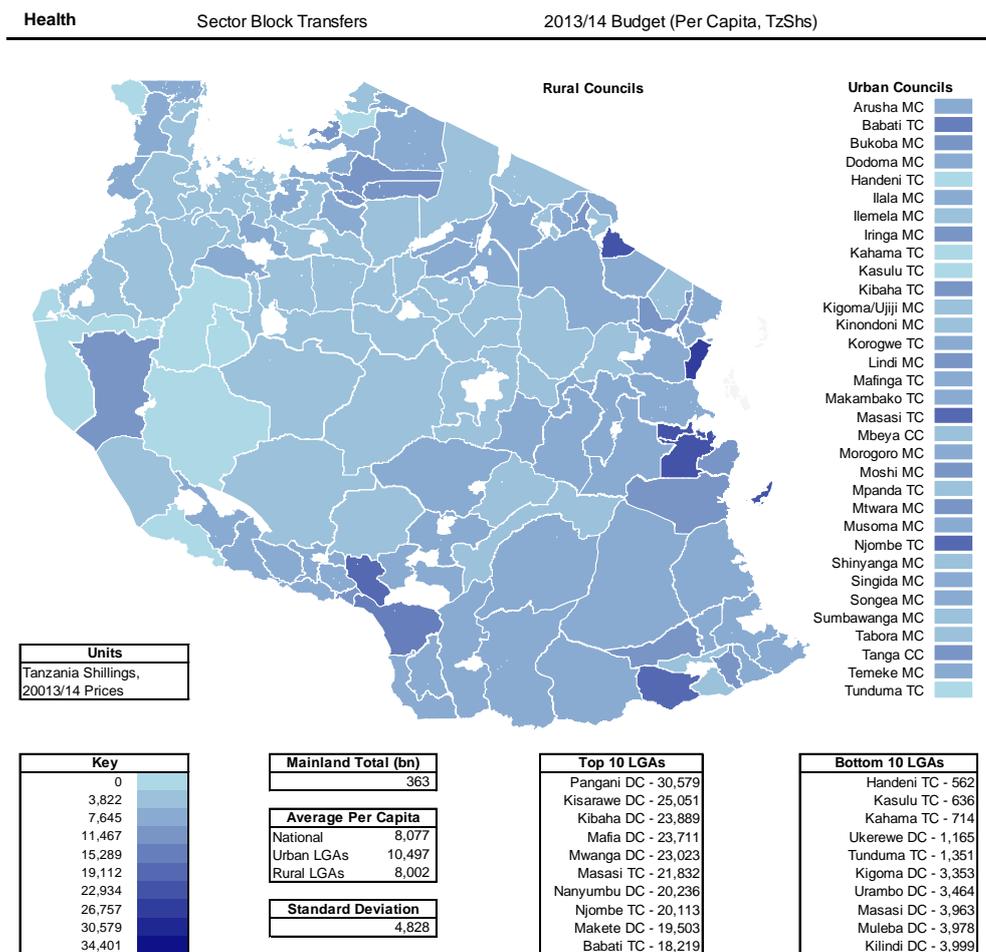
**Figure 11: Health total transfers by district**



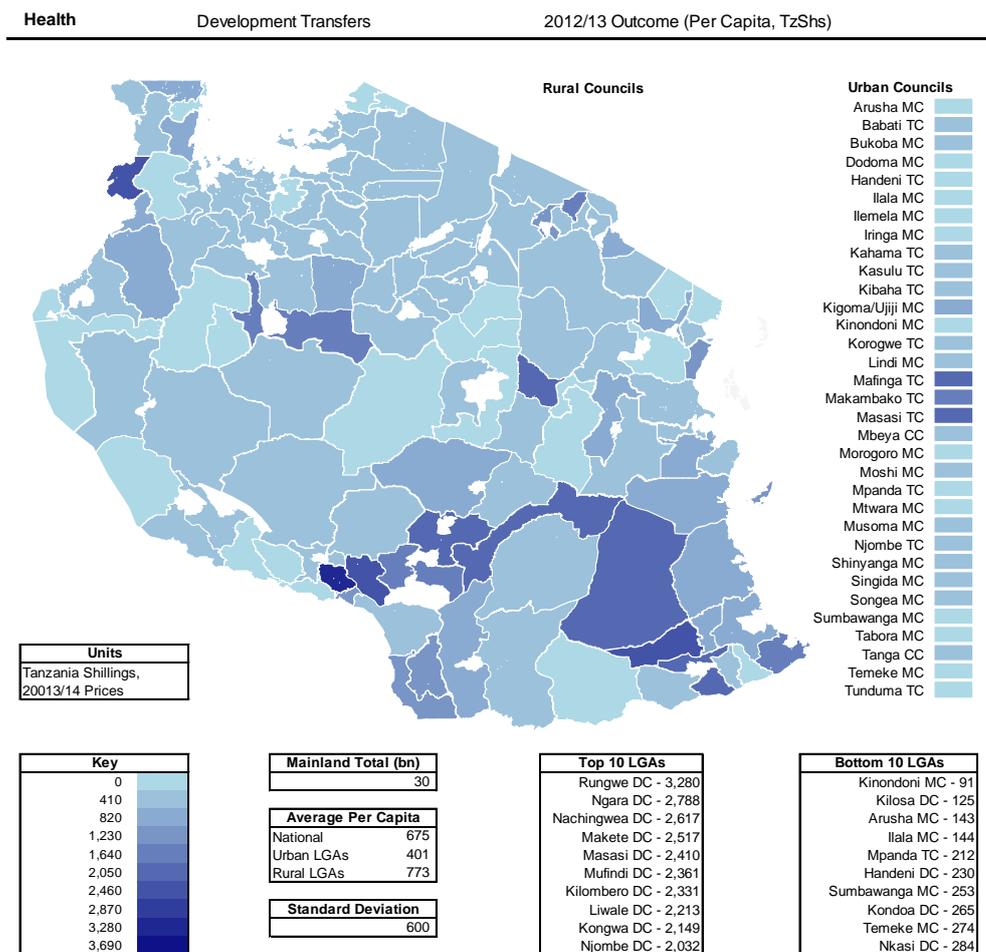
**Figure 12: Health recurrent transfers by district**



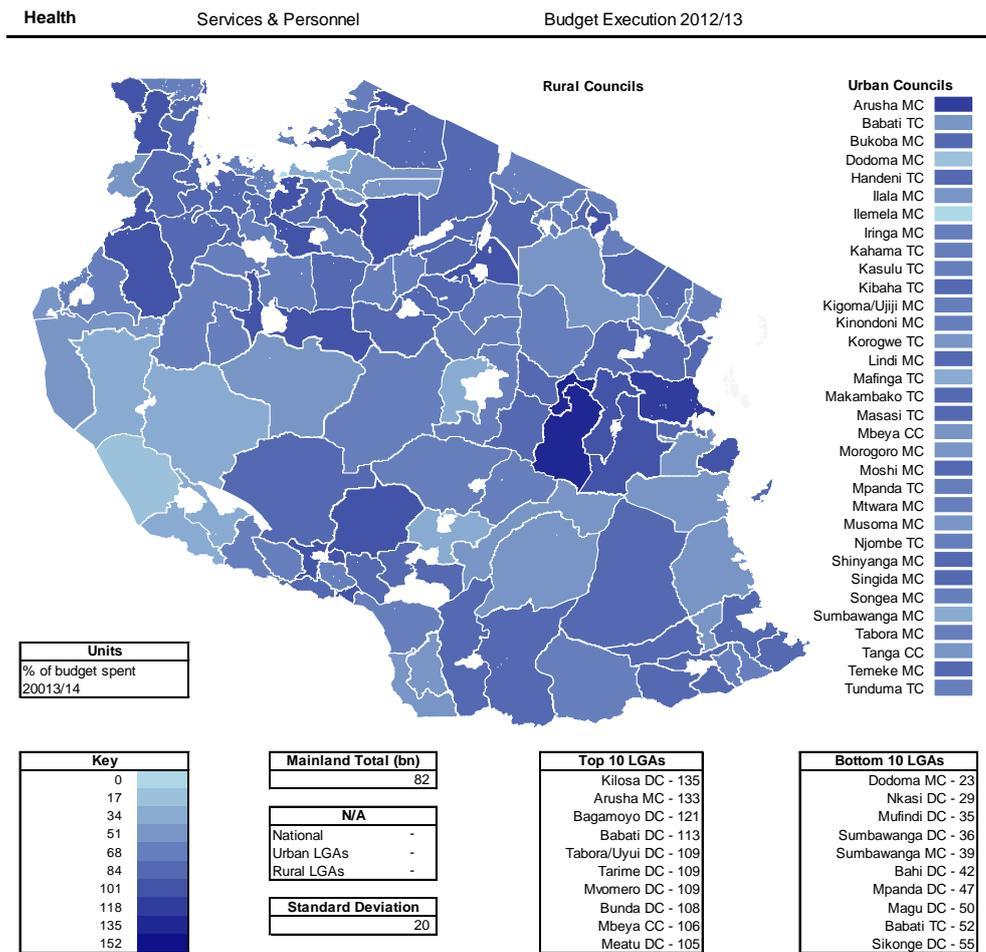
### Figure 13: Health sector block transfers by district



### Figure 14: Health development transfers by district



**Figure 15: Health budget execution**



**Table 6: Health total allocations by type in nominal prices, TZS billion**

<i>Total Nominal (TzShs Bn)</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget								
<b>R0 Revenues</b>	<b>242.55</b>	<b>233.57</b>	<b>339.41</b>	<b>263.43</b>	<b>358.07</b>	<b>309.68</b>	<b>426.65</b>	<b>334.25</b>	<b>504.17</b>	<b>404.04</b>	-
R1 Total Transfers	242.55	233.57	339.41	263.43	358.07	309.68	426.65	334.25	504.17	404.04	-
R2 Recurrent Transfers	226.90	223.33	300.88	235.34	321.88	277.31	394.64	322.69	466.21	375.59	-
R3 Sector Block Transfers	148.35	154.49	210.32	156.83	229.18	200.62	299.76	234.26	355.65	277.99	362.91
<i>Health PE</i>	<i>119.41</i>	<i>122.84</i>	<i>175.39</i>	<i>129.87</i>	<i>193.43</i>	<i>178.75</i>	<i>264.48</i>	<i>198.11</i>	<i>315.84</i>	<i>243.87</i>	<i>330.58</i>
<i>Health OC</i>	<i>28.94</i>	<i>31.65</i>	<i>34.93</i>	<i>26.96</i>	<i>35.75</i>	<i>21.87</i>	<i>35.29</i>	<i>36.15</i>	<i>39.80</i>	<i>34.12</i>	<i>32.33</i>
R4 Subventions and Basket Funds (OC)	78.55	68.83	90.56	78.51	92.70	76.69	94.87	88.43	110.56	97.60	-
R5 Development Transfers	15.65	10.25	38.53	28.10	36.19	32.37	32.01	11.55	37.96	28.45	-

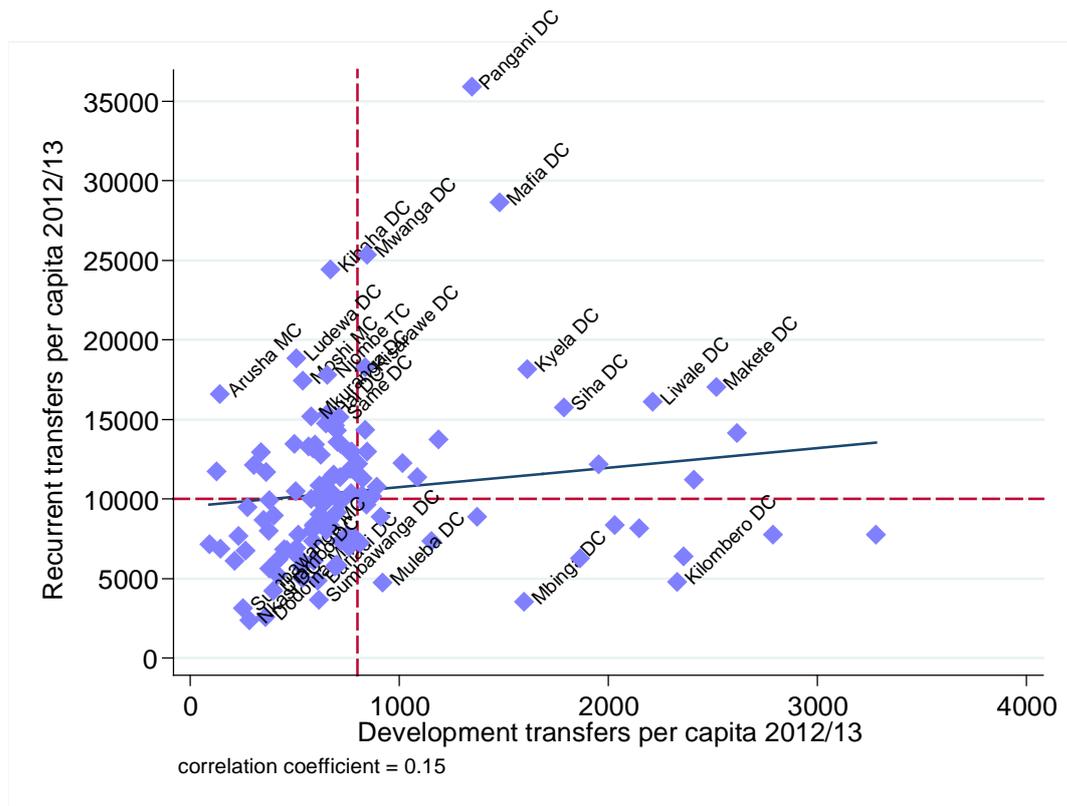
**Table 7: Health transfers by type in mean per capita 2013/14 prices, TZS**

<i>Mean Per Capita 2013/14 Prices</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget
<b>R0 Revenues</b>	<b>9,900.81</b>	<b>9,534.46</b>	<b>12,283.35</b>	<b>9,533.62</b>	<b>11,488.84</b>	<b>9,936.12</b>	<b>11,659.44</b>	<b>9,134.24</b>	<b>11,962.49</b>	<b>9,586.86</b>	-
R1 Total Transfers	9,900.81	9,534.46	12,283.35	9,533.62	11,488.84	9,936.12	11,659.44	9,134.24	11,962.49	9,586.86	-
R2 Recurrent Transfers	9,262.01	9,116.22	10,888.94	8,516.83	10,327.68	8,897.52	10,784.61	8,818.47	11,061.81	8,911.72	-
R3 Sector Block Transfers	6,055.53	6,306.41	7,611.42	5,675.56	7,353.27	6,436.94	8,191.89	6,401.84	8,438.48	6,595.94	8,077.02
<i>Health PE</i>	<i>4,874.19</i>	<i>5,014.44</i>	<i>6,347.33</i>	<i>4,700.06</i>	<i>6,206.30</i>	<i>5,735.11</i>	<i>7,227.59</i>	<i>5,413.98</i>	<i>7,494.06</i>	<i>5,786.47</i>	<i>7,357.44</i>
<i>Health OC</i>	<i>1,181.33</i>	<i>1,291.98</i>	<i>1,264.09</i>	<i>975.50</i>	<i>1,146.97</i>	<i>701.83</i>	<i>964.30</i>	<i>987.86</i>	<i>944.42</i>	<i>809.46</i>	<i>719.58</i>
R4 Subventions and Basket Funds (OC)	3,206.49	2,809.81	3,277.53	2,841.28	2,974.41	2,460.58	2,592.72	2,416.63	2,623.34	2,315.78	-
R5 Development Transfers	638.79	418.24	1,394.41	1,016.79	1,161.16	1,038.60	874.82	315.77	900.68	675.15	-

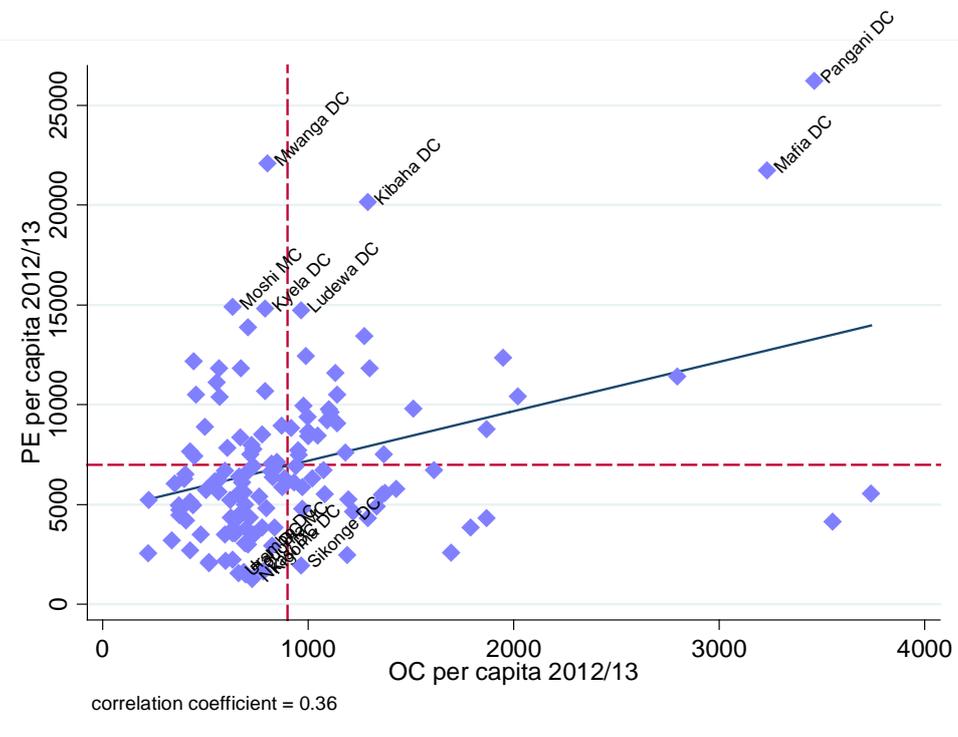
**Table 8: Health transfers by type and index of fit to official formula, TZS**

<i>Index of Fit - to Official Formula</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget								
<b>R0 Revenues</b>	<b>0.86</b>	<b>0.83</b>	<b>0.86</b>	<b>0.86</b>	<b>0.88</b>	<b>0.87</b>	<b>0.86</b>	<b>0.85</b>	<b>0.87</b>	<b>0.85</b>	-
R1 Total Transfers	0.86	0.83	0.86	0.86	0.88	0.87	0.86	0.85	0.87	0.85	-
R2 Recurrent Transfers	0.86	0.83	0.86	0.86	0.87	0.85	0.86	0.85	0.87	0.85	-
R3 Sector Block Transfers	0.85	0.81	0.84	0.84	0.86	0.82	0.84	0.83	0.85	0.82	0.83
<i>Health PE</i>	<i>0.81</i>	<i>0.77</i>	<i>0.82</i>	<i>0.81</i>	<i>0.84</i>	<i>0.80</i>	<i>0.83</i>	<i>0.81</i>	<i>0.83</i>	<i>0.80</i>	<i>0.82</i>
<i>Health OC</i>	<i>0.88</i>	<i>0.82</i>	<i>0.83</i>	<i>0.86</i>	<i>0.85</i>	<i>0.80</i>	<i>0.84</i>	<i>0.84</i>	<i>0.80</i>	<i>0.80</i>	<i>0.88</i>
R4 Subventions and Basket Funds (OC)	0.82	0.76	0.81	0.83	0.81	0.82	0.85	0.85	0.88	0.85	-
R5 Development Transfers	0.34	0.37	0.66	0.63	0.66	0.66	0.63	0.33	0.59	0.71	-

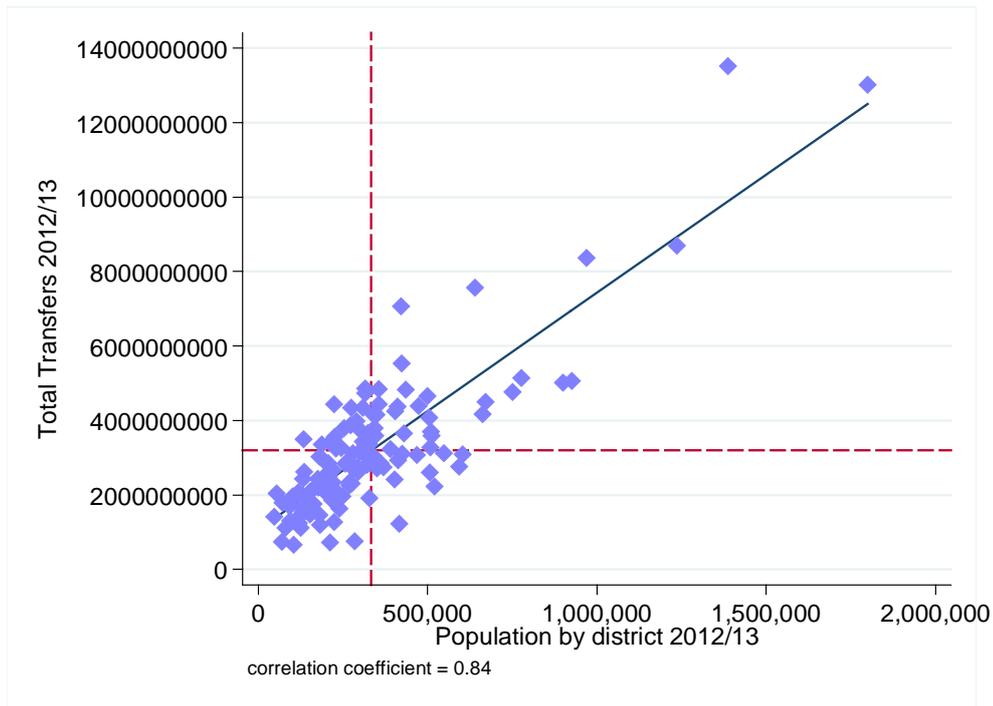
**Figure 16: Relationship between health recurrent and development transfers, TZS**



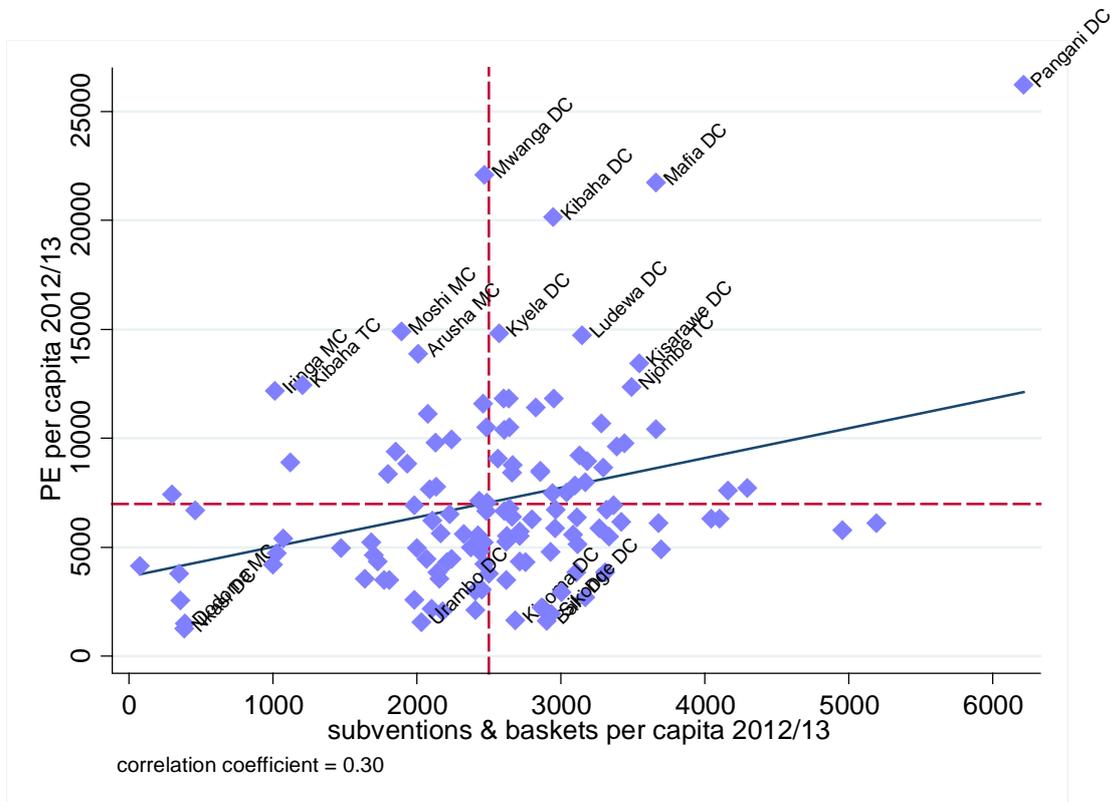
**Figure 17: Relationship between health PE and OC, TZS**



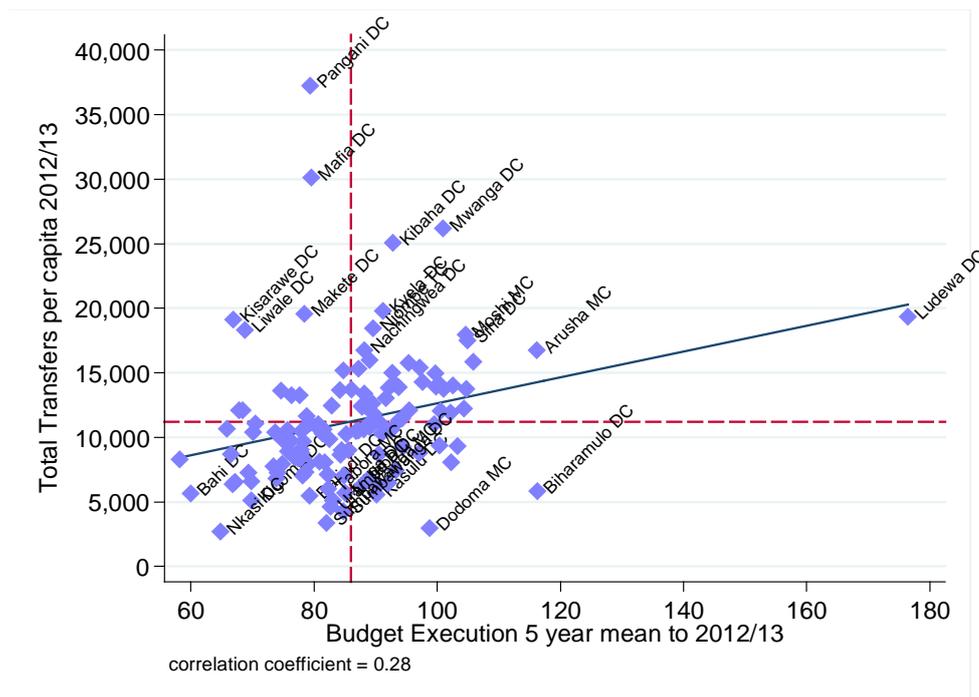
**Figure 18: Relationship between population and health total transfers, TZS**



**Figure 19: Relationship between health PE, and subventions and basket funds, TZS**



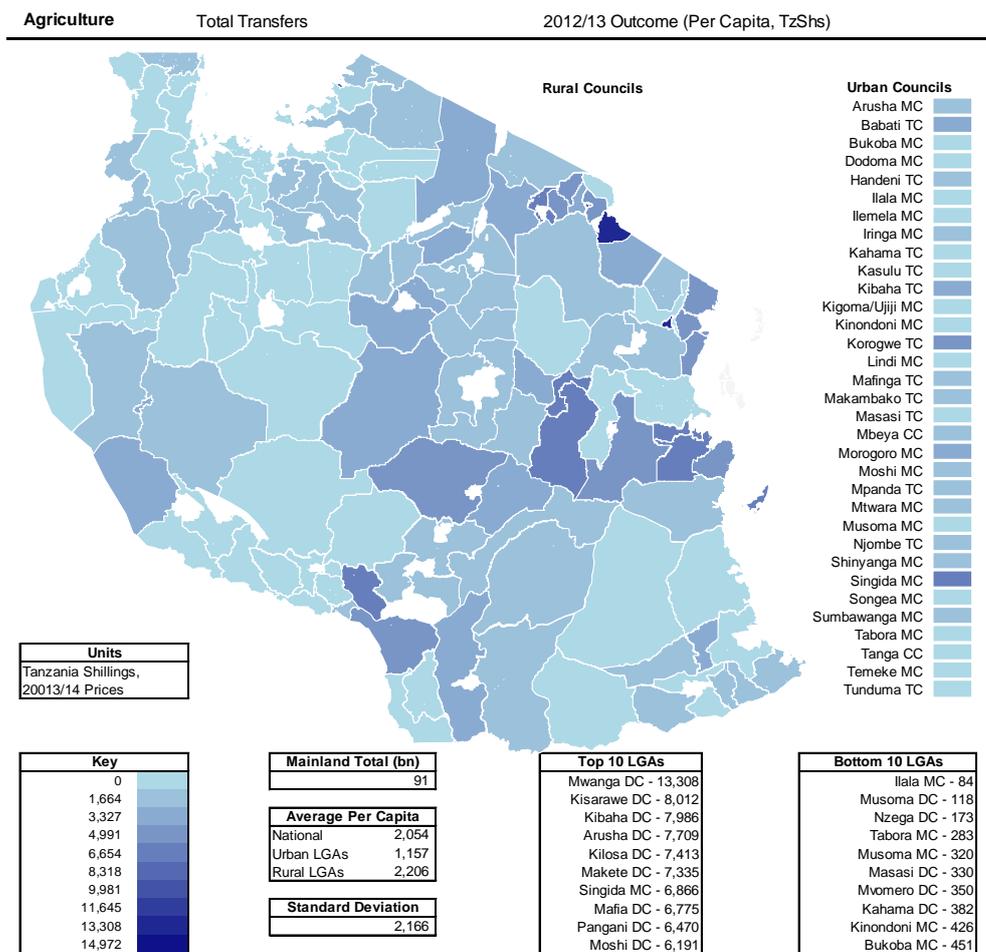
**Figure 20: Relationship between budget execution and health total transfers, TZS**



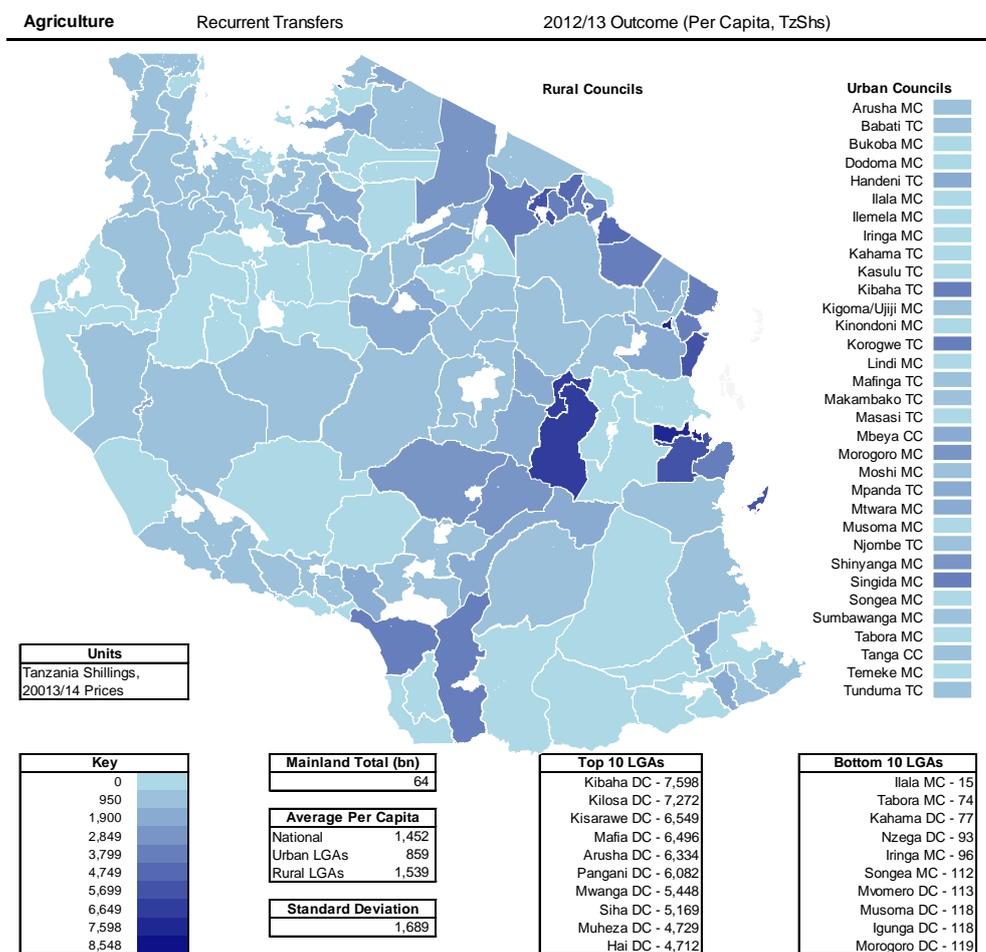
### 2.3 Analysis of fiscal transfers to LGAs for agriculture sector

- Agriculture sector funding at the LGA level displays high levels of inequity. In 2012/13 the highest funded rural LGA (Mwanga DC) received almost 118 times as much agriculture funding per capita as the least funded rural LGA (Musoma DC) (Figure 21).
- Data on per capita sector block transfers for the 2013/14 budget show that much of the inequity is locked in at the budget phase (Figure 23). 7 of the top 10 districts in terms of sector block transfers per capita in 2012/13 are among the top 10 districts in terms of sector block transfer budget allocations per capita in 2013/14.
- The average level of budget execution is higher than that observed for education and health, although the data also display high levels of variation (Figure 25), and there is a positive although weak relationship between total agriculture transfers per capita and budget execution (Figure 30).
- This inequity is being driven by the disparities in recurrent transfers per capita (Figure 22), which accounted for 71% of total agriculture sector transfers (Table 9), 87% of which are for PE.
- Development transfers, which accounted for 29% of total transfers in 2012/13 (Table 9), also display high levels of disparity. The largest recipient in 2012/13 (Mwanga DC) receives over 100 times that of the smallest recipients (Figure 24). The correlation between development transfers and recurrent transfers is relatively weak, however (Figure 26).
- Development transfers and OC transfers are allocated in accordance with formula. However, analysis of actual adherence to formula (Table 11) indicates that the fit with formula is relatively poor and has actually been declining over the last 5 years.
- While the relationship between rural population and staffing levels is relatively strong (Figure 29), the relationship between population and agriculture total transfers is only weakly positive (Figure 28).
- Funding for agriculture has been declining over the last 5 years both in absolute (Table 9) and per capita (Table 10) terms.

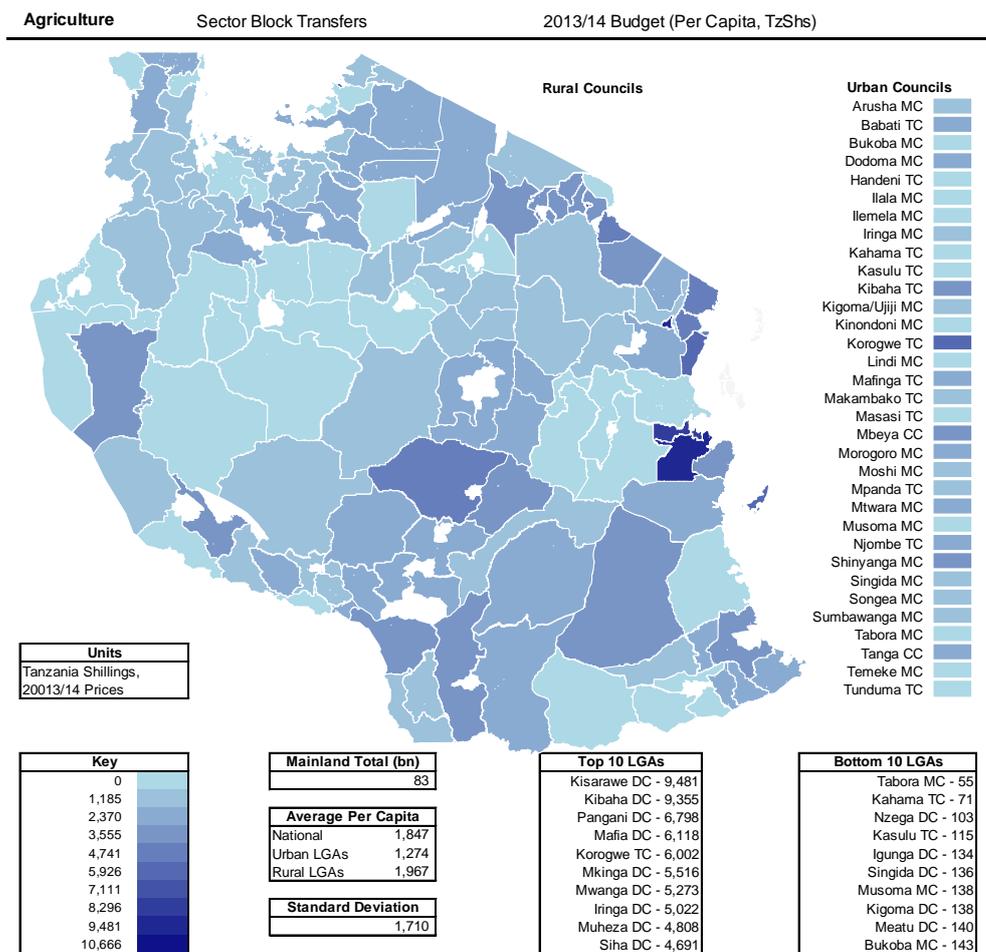
**Figure 21: Agriculture total transfers by district**



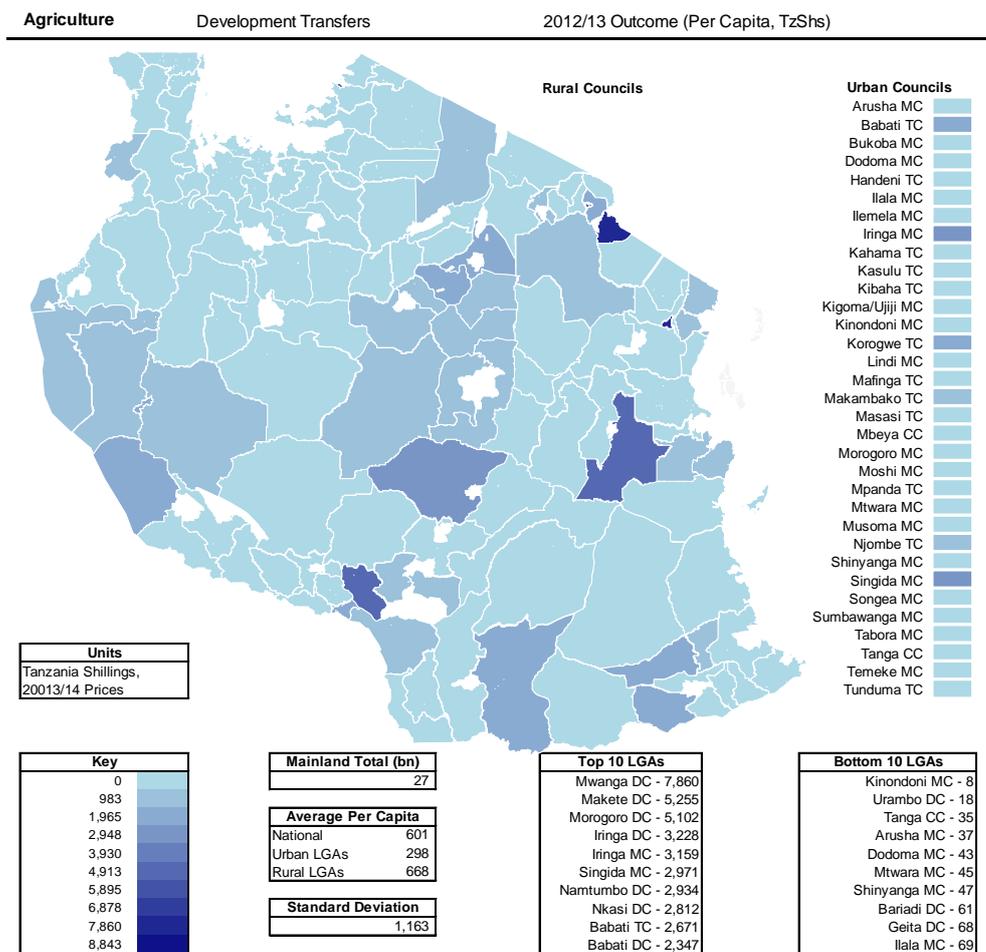
**Figure 22: Agriculture recurrent transfers by district**



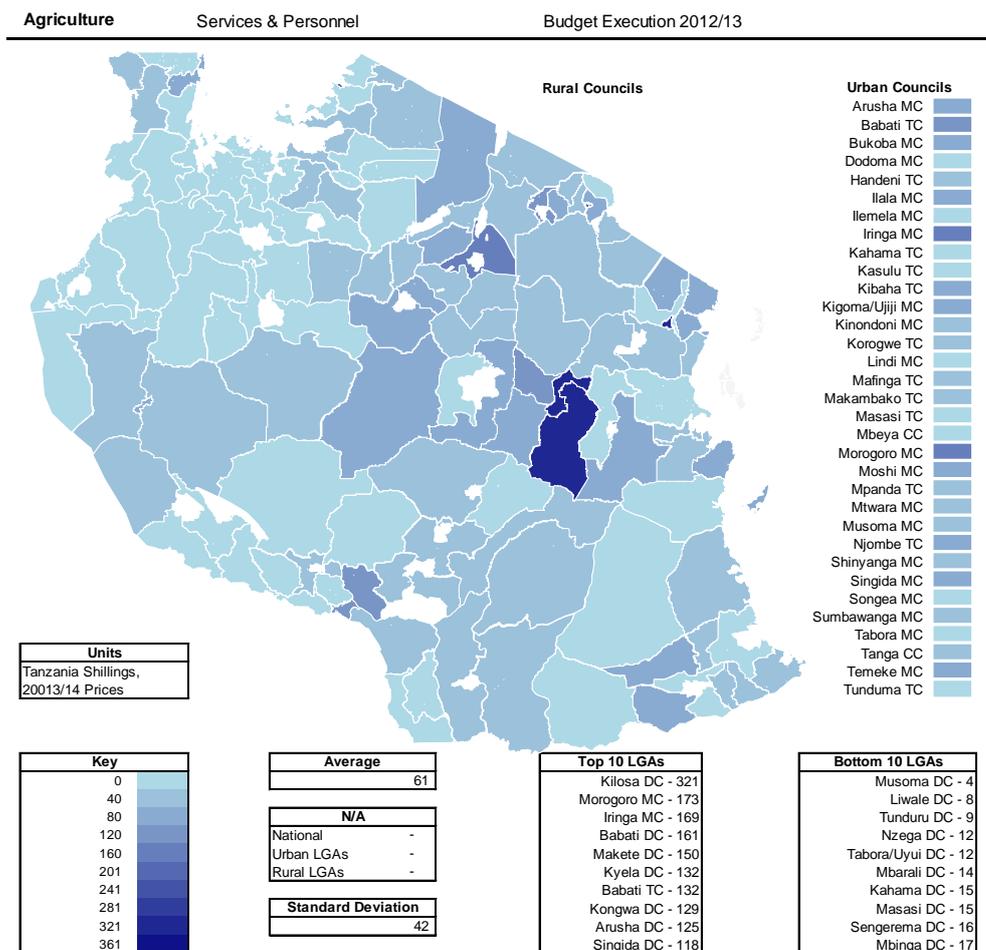
**Figure 23: Agriculture sector block transfers by district**



### Figure 24: Agriculture development transfers by district



### Figure 25: Agriculture budget execution



**Table 9: Agriculture total allocations by type at nominal prices**

<i>Total Nominal (TzShs Bn)</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget	Outcome	Budget
<b>R0 Revenues</b>	<b>105.03</b>	<b>90.37</b>	<b>117.22</b>	<b>111.71</b>	<b>138.22</b>	<b>116.39</b>	<b>129.49</b>	<b>112.01</b>	<b>168.87</b>	<b>86.55</b>	-
R1 Total Transfers	105.03	90.37	117.22	111.71	138.22	116.39	129.49	112.01	168.87	86.55	-
R2 Recurrent Transfers	23.81	22.61	33.98	29.64	42.66	40.00	58.51	46.79	77.58	61.21	-
R3 Sector Block Transfers	23.81	22.61	33.98	29.64	42.66	40.00	58.51	46.79	77.58	61.21	82.97
R2 Agriculture PE	-	17.77	28.46	23.20	36.10	33.35	51.52	37.86	69.60	53.41	76.56
R2 Agriculture OC	4.58	4.84	5.52	6.44	6.57	6.65	7.00	8.93	7.98	7.80	6.41
R4 Subventions and Basket Funds (OC)	-	-	-	-	-	-	-	-	-	-	-
R5 Development Transfers	81.22	67.76	83.24	82.07	95.55	76.39	70.98	65.22	91.29	25.35	-

**Table 10: Agriculture transfers by type in mean per capita 2013/14 prices**

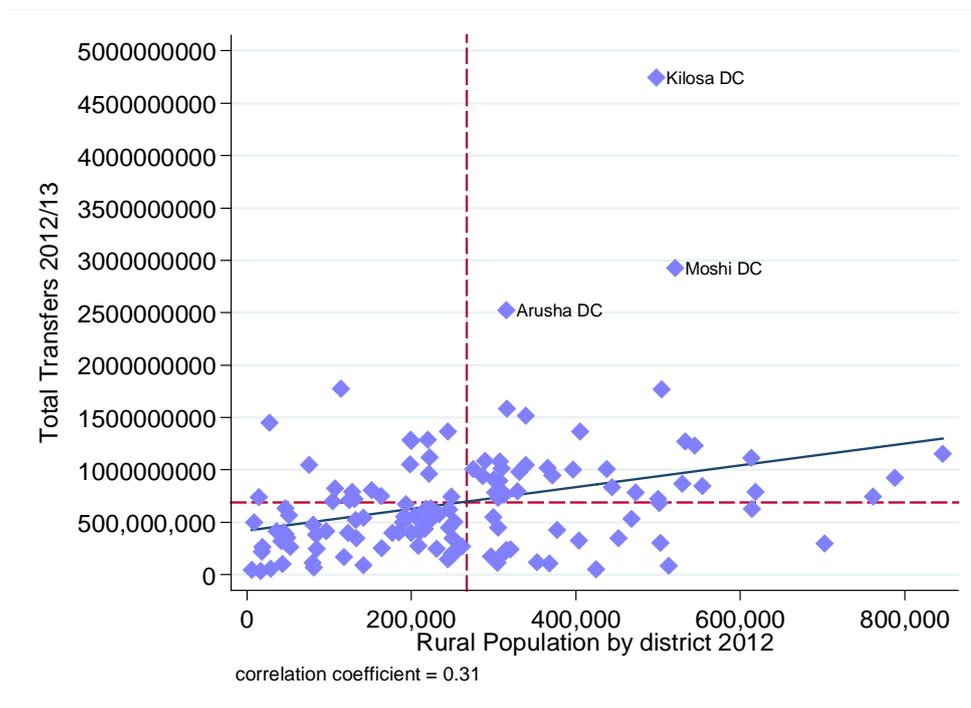
<i>Mean Per Capita 2013/14 Prices</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget								
<b>R0 Revenues</b>	<b>4,287.41</b>	<b>3,689.00</b>	<b>4,242.27</b>	<b>4,042.62</b>	<b>4,434.71</b>	<b>3,734.48</b>	<b>3,538.74</b>	<b>3,061.04</b>	<b>4,006.73</b>	<b>2,053.70</b>	-
R1 Total Transfers	4,287.41	3,689.00	4,242.27	4,042.62	4,434.71	3,734.48	3,538.74	3,061.04	4,006.73	2,053.70	-
R2 Recurrent Transfers	971.96	922.95	1,229.77	1,072.61	1,368.82	1,283.40	1,599.04	1,278.72	1,840.77	1,452.27	-
R3 Sector Block Transfers	971.96	922.95	1,229.77	1,072.61	1,368.82	1,283.40	1,599.04	1,278.72	1,840.77	1,452.27	1,846.57
R2 Agriculture PE	-	725.42	1,030.02	839.43	1,158.17	1,069.92	1,407.81	1,034.67	1,651.44	1,267.16	1,703.90
R2 Agriculture OC	186.99	197.52	199.75	233.18	210.64	213.48	191.23	244.05	189.33	185.10	142.67
R4 Subventions and Basket Funds (OC)	-	-	-	-	-	-	-	-	-	-	-
R5 Development Transfers	3,315.45	2,766.05	3,012.49	2,970.01	3,065.89	2,451.08	1,939.70	1,782.32	2,165.96	601.43	-

**Table 11: Agriculture transfers by type and index of fit to official formula**

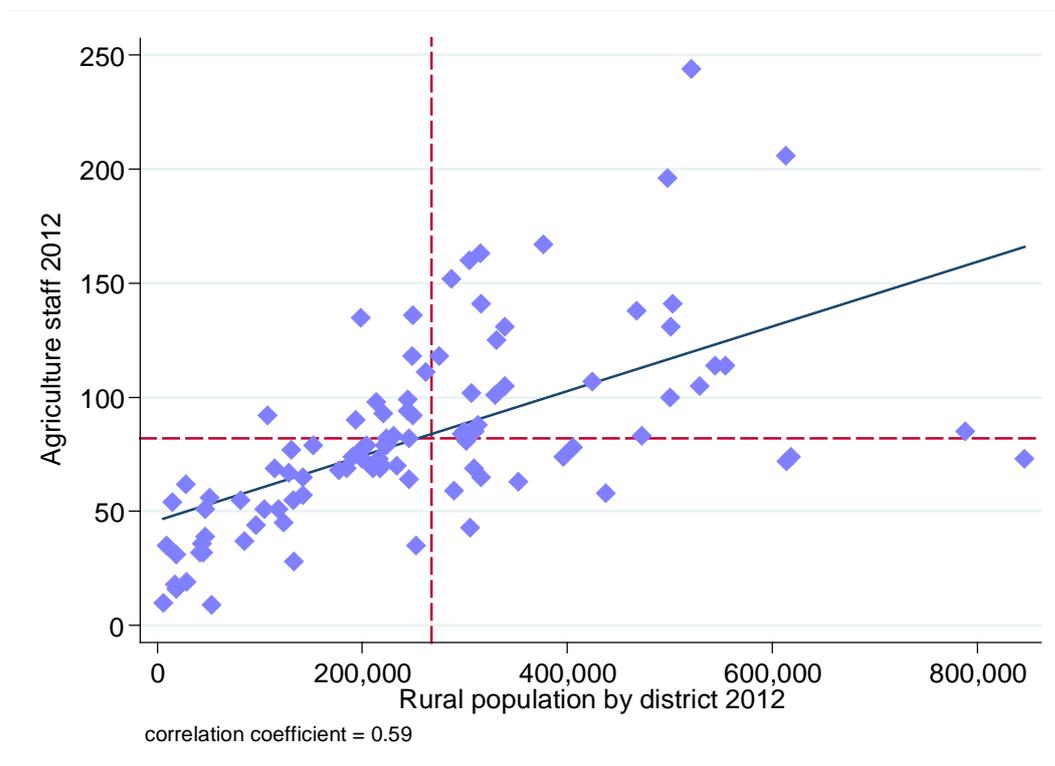
<i>Index of Fit - to Official Formula</i>	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14
	Budget	Outcome	Budget								
<b>R0 Revenues</b>	<b>0.75</b>	<b>0.77</b>	<b>0.77</b>	<b>0.75</b>	<b>0.78</b>	<b>0.75</b>	<b>0.74</b>	<b>0.72</b>	<b>0.74</b>	<b>0.69</b>	-
R1 Total Transfers	0.75	0.77	0.77	0.75	0.78	0.75	0.74	0.72	0.74	0.69	-
R2 Recurrent Transfers	0.62	0.60	0.63	0.64	0.68	0.65	0.66	0.66	0.70	0.64	-
R3 Sector Block Transfers	0.62	0.60	0.63	0.64	0.68	0.65	0.66	0.66	0.70	0.64	0.70
R2 Agriculture PE	-	0.52	0.57	0.54	0.63	0.61	0.62	0.60	0.67	0.61	0.68
R2 Agriculture OC	0.89	0.80	0.83	0.80	0.85	0.72	0.82	0.80	0.75	0.64	0.86
R4 Subventions and Basket Funds (OC)	-	-	-	-	-	-	-	-	-	-	-
R5 Development Transfers	0.74	0.75	0.75	0.71	0.74	0.70	0.70	0.66	0.66	0.52	-



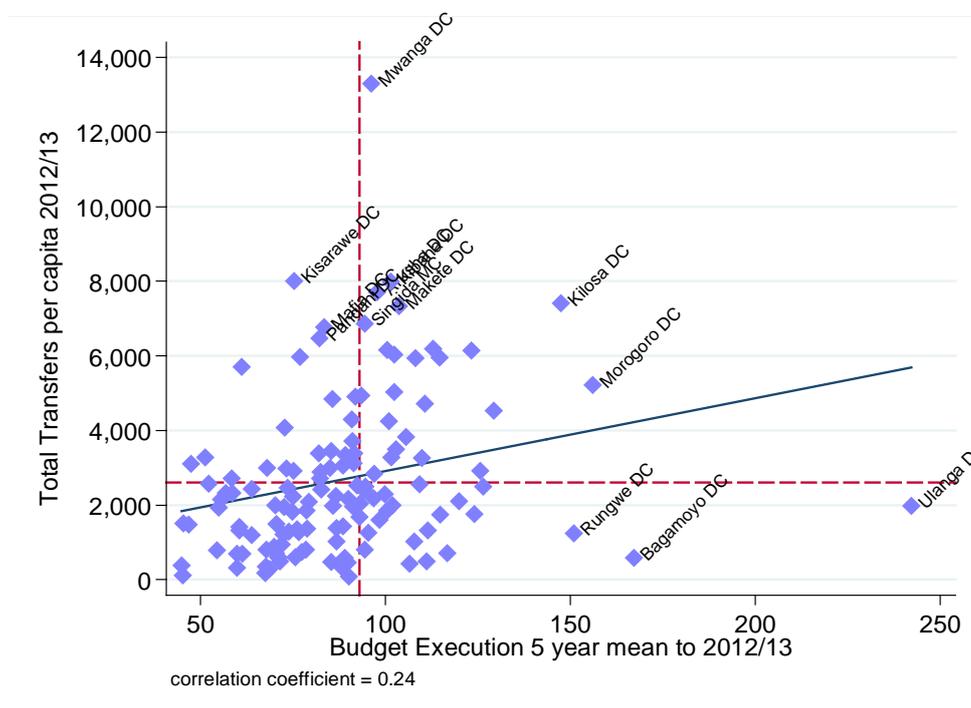
**Figure 28: Relationship between rural population and total agriculture transfers, TZS**



**Figure 29: Relationship between rural population and agriculture staff**



**Figure 30: Relationship between budget execution and total agriculture transfers, TZS**



## 2.4 Own revenue generation in LGAs

This section provides background data on LGA own revenue collections.

Unless otherwise stated, data are based on PMO-RALG’s published data<sup>8</sup>, which are, in turn, based on LGA self-reported budgets and accounts.

**Table 12: Size and composition of LGA own revenue budgets 2012/13**

Budget item	Annual budget plan, TZS	Relative importance %
Property taxes	18,500,200,078	5.4%
Land rent	8,835,182,867	2.6%
Produce cess	66,085,591,213	19.4%
Service levy	46,342,050,534	13.6%
Guest house levy	6,175,334,199	1.8%
Other levies on business activities	12,772,966,099	3.8%
Licences and permits	46,493,491,047	13.7%

<sup>8</sup> <http://lqinf.pmoralg.go.tz> and for previous years [www.logintanzania.net](http://www.logintanzania.net)

Fees and charges	48,114,673,481	14.1%
Other own revenues	87,213,084,245	25.6%
Total own revenues	340,578,800,131	100.0%

Source: computed from PMO-RALG data (<http://lginf.pmoralg.go.tz/>)

Table 12 shows the relative importance of different sources of revenues. The property tax and service levy are almost exclusively collected in urban LGAs, whereas rural LGAs rely more on produce cess. 'Other' own revenue has increased significantly in recent years and includes foremost income from the sale of plots in urban LGAs.

LGAs are often criticised for their inadequate revenue collection efforts, as local own source revenues only contribute a small share to the overall financing of local governments. However, there are a number of reasons why local own source revenues form only a small share of LGA resources, including that: i) revenue sources assigned to the local level often have a limited yield and are difficult to collect; and ii) economic activities in Tanzania are concentrated in urban areas. While rural local governments on average collect less than TZS 2,600 (US\$1.63) per capita in own source revenues, revenue collections in urban authorities average TZS 12,500 (US\$ 7.88) per capita.

**Table 13: Local own source revenues, 2005/06 – 2010/11**

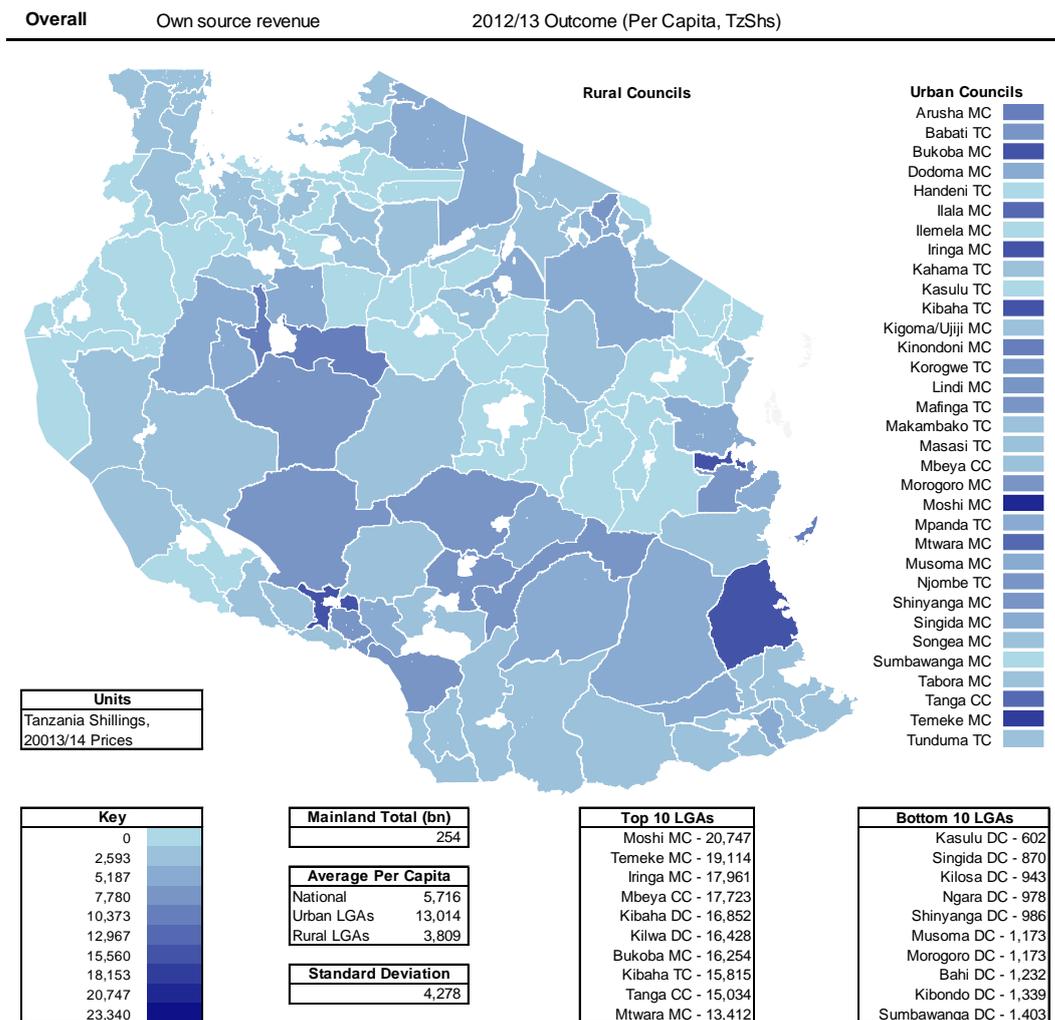
Per capita revenues, by type of LGA, TZS					
	Mainland	Urban	Urban ex DSM	Rural	DSM
2005-06	1,291	3,957	2,875	698	5,525
2006-07	1,599	4,957	3,426	851	7,177
2007-08	2,007	5,876	4,455	1,145	7,936
2008-09	2,700	7,773	5,828	1,571	10,590
2009-10	3,295	9,067	6,767	2,010	12,399
2010-11	4,398	12,499	10,042	2,594	16,060

Source: Boex and Tidemand 2012, computations of PMO-RALG data

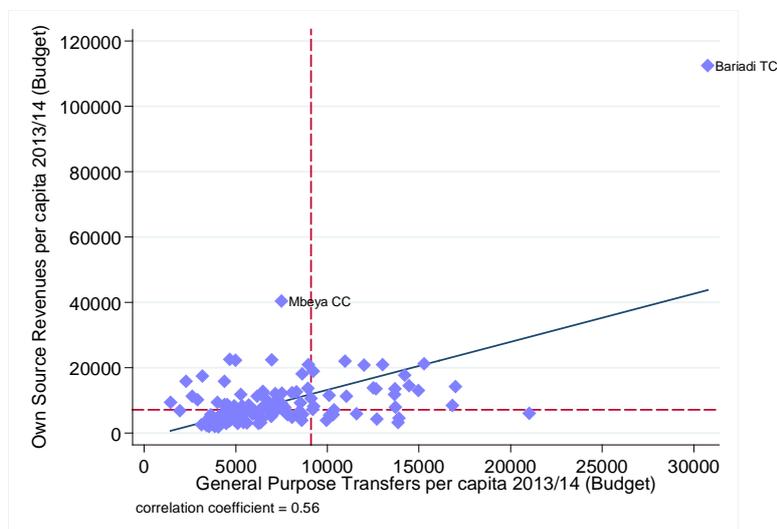
As is evident from Figure 31, there are also significant variations within the urban and rural categories of LGAs.

There is a very weak relationship between LGAs' own per capita revenue and total transfers. There is even a (very weak) positive relationship between own revenue generation and general purpose transfers (GPTs) to LGAs (Figure 32). One could have expected a negative relationship as GPTs can be seen to some extent as a transfer to compensate for local revenues.

**Figure 31: Own source revenues by district**



**Figure 32: Relationship between own source revenue and general purpose transfers, TZS**



---

# Appendix 3 : Summary of patterns of within-district inequities

The survey of the 11 LGAs indicated significant internal variations in resource allocation across facilities within the LGAs, with subsequent disparities in service delivery.

- Disadvantaged LGAs have on average higher pupil-teacher ratios (PTRs) and lower pass rates than non-disadvantaged LGAs.
- Within districts more remote schools have on average higher PTRs and lower pass rates compared with more accessible schools.
- Health staffing follows similar patterns across and within districts, with more remote areas being relatively poorly staffed.
- The lack of staff housing, social services and community support, and in some cases cultural issues, as well as inefficient allocations of staff from the central ministries, are common factors affecting the equitable distribution of staff within districts.

## 3.1 Primary education

### Staffing levels

- Analysis of the PTR shows deep inequities both across and within LGAs visited by the team.
- The 4 non-disadvantaged LGAs have average PTRs ranging from 25 (Korogwe DC) to 34 (both Bukoba MC and Kibaha DC). The disadvantaged LGAs have average PTRs ranging from 50 (Kigoma DC) to 87 (Uvinza DC) (Figure 33).
- Both disadvantaged and non-disadvantaged LGAs show high disparities in PTR levels within their districts. In Kibaha DC, the non-disadvantaged LGA with the widest disparities, the primary school with the highest PTR has 1 teacher for every 65 students while the primary school with the lowest PTR has one teacher for every 16 students (Figure 33.)
- However, these disparities are significantly wider in the disadvantaged LGAs. In Uvinza DC – the disadvantaged LGA with the widest disparities – the primary school with the highest PTR has 1 teacher for every 780 students, while the primary school with the lowest PTR has one teacher for every 19 students (Figure 33).
- Using this maximum-minimum analysis we can also see from Figure 33 that there are disparities in the PTR in Iramba DC, Sumbawanga DC, Kigoma DC, and Nzega DC.
- Interestingly, using a percentile analysis (Figure 34), similar patterns of inequities in staffing levels emerge across districts. In Sumbawanga DC and Nzega DC, where the average PTR is 69 in both cases, the PTR of schools in the 20th and 80th percentiles is also quite similar. The situation is also quite similar between Kibaha DC and Bukoba MC, as well as between Msalala DC and Ushetu DC. This pattern also emerges using the 10th and 90th percentiles (Figure 35). This seems to imply a given level of within-district inequity for a given level of cross-district inequity.

---

## Pass rates

- Analysis of pass rates also shows wide disparities in primary education outcomes, both within and across districts.
- The mean pass rate ranges from 37% (Mafia DC) to 86% (Bukoba DC) in the non-disadvantaged LGAs, and from 21% (Nzega DC) to 57% (Kigoma DC) in the disadvantaged LGAs. The minimum-maximum analysis shows that all districts have strong performing schools and weak performing schools (Figure 36). The clear exception is Bukoba MC, where the lowest pass rate is 67%, a higher outcome than the average pass rate in all of the disadvantaged LGAs as well as Mafia DC.
- Looking at the 20th and 80th percentiles (Figure 37), a clear pattern emerges of stronger performance in the non-disadvantaged LGAs – with the clear exception of Mafia DC.
- Interestingly, Uvinza DC performs a lot more strongly than would be expected, given its PTR levels.

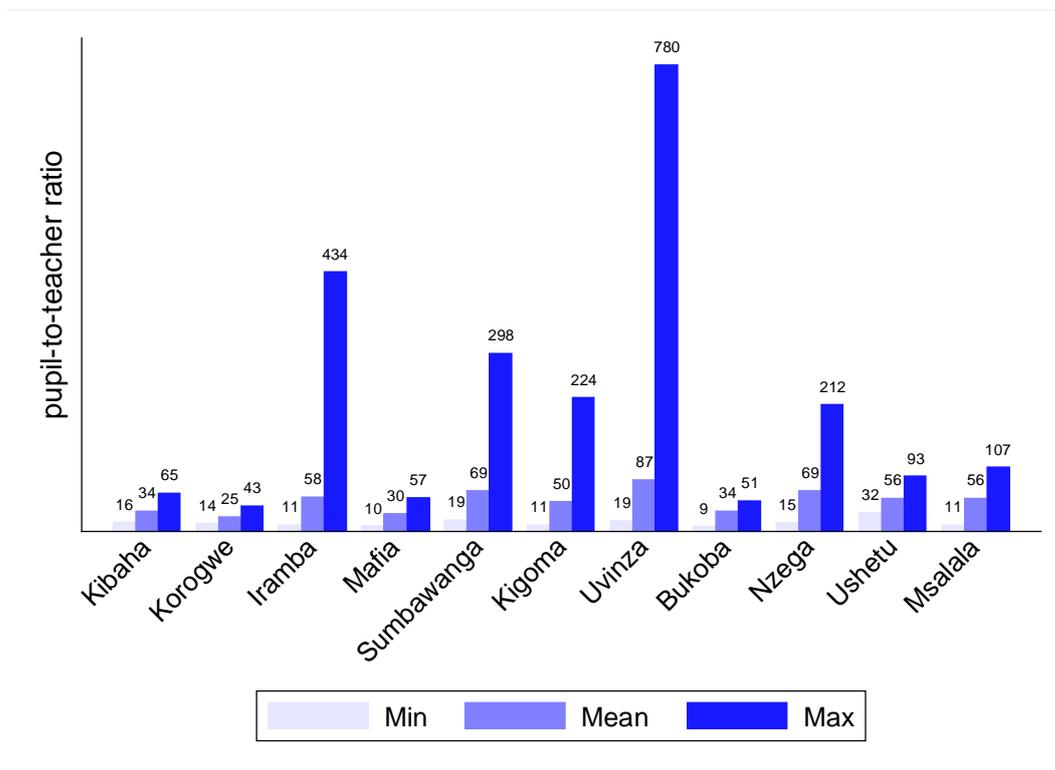
## Staffing and pass rates

- The above analysis has hinted at some linkage between staffing levels and pass rates and as would be expected, the correlation between the primary school pass rate and the PTR is negative (i.e. the higher the PTR the worse the pass rate), but only weakly, with a correlation coefficient of -0.16 (Figure 38).
- It seems that some students perform relatively well despite the complete lack of teaching resources they have at their disposal. To adjust for these outliers, we re-examine the relationship for those schools with PTRs not greater than 100 (Figure 39). The relationship is now found to be stronger (although still weak), with a correlation coefficient of -0.39.

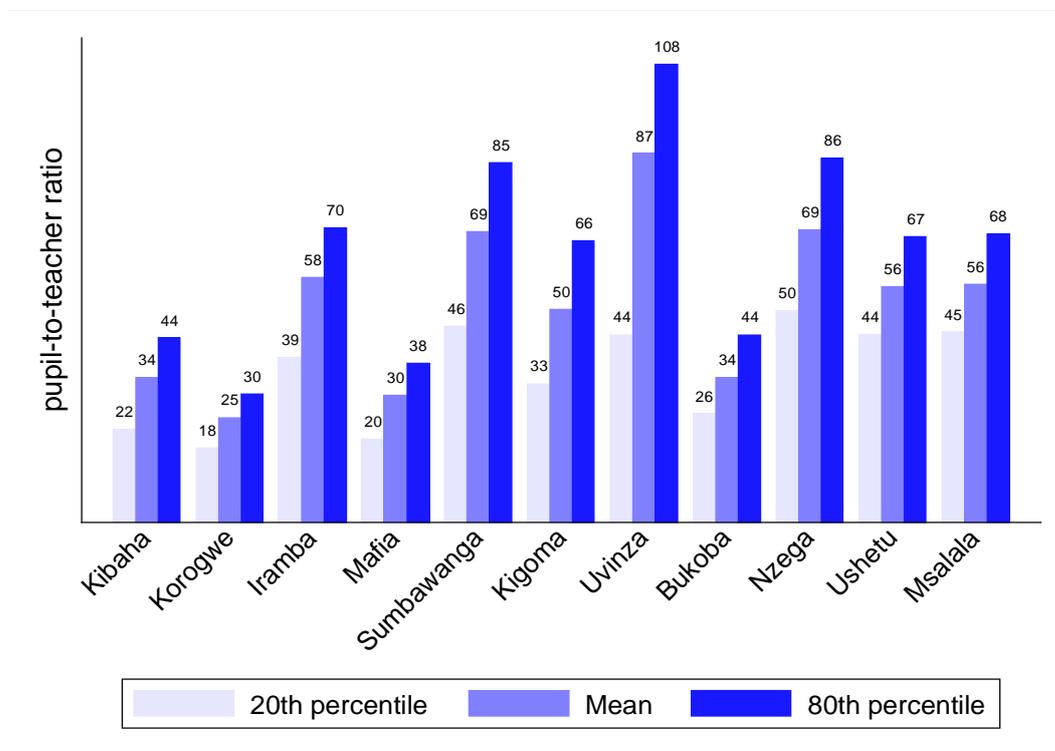
## Distance and accessibility

- Within districts some schools are located in wards that are less accessible to others. District council staff provided data on the distance from HQ to wards as well as on schools' accessibility. Low accessibility wards were scored 1, medium accessibility wards were scored 2, and easily or highly accessible wards were scored 3.
- The distance from HQ was found to be positively correlated with a higher PTR, with a correlation coefficient of 0.43 (Figure 40). Similarly, accessibility was found to be negatively correlated with a higher PTR, implying that the PTR is higher at more inaccessible schools (Figure 41). Figure 42 supports this by showing that the average PTR is significantly higher in HTRS areas.
- It is therefore not surprising that schools that are more remote and/or inaccessible perform less well than their counterparts in less remote or more accessible areas.
- There is a weak negative relationship between distance to HQ and primary school pass rates (Figure 43), while there is a weak but slightly positive relationship between accessibility and pass rates (Figure 44).
- Figure 45 highlights the lower levels of outcomes in terms of pass rates for the more inaccessible schools, where the average pass rate is just 31%, compared to 44% and 42% in medium and highly accessible areas respectively.

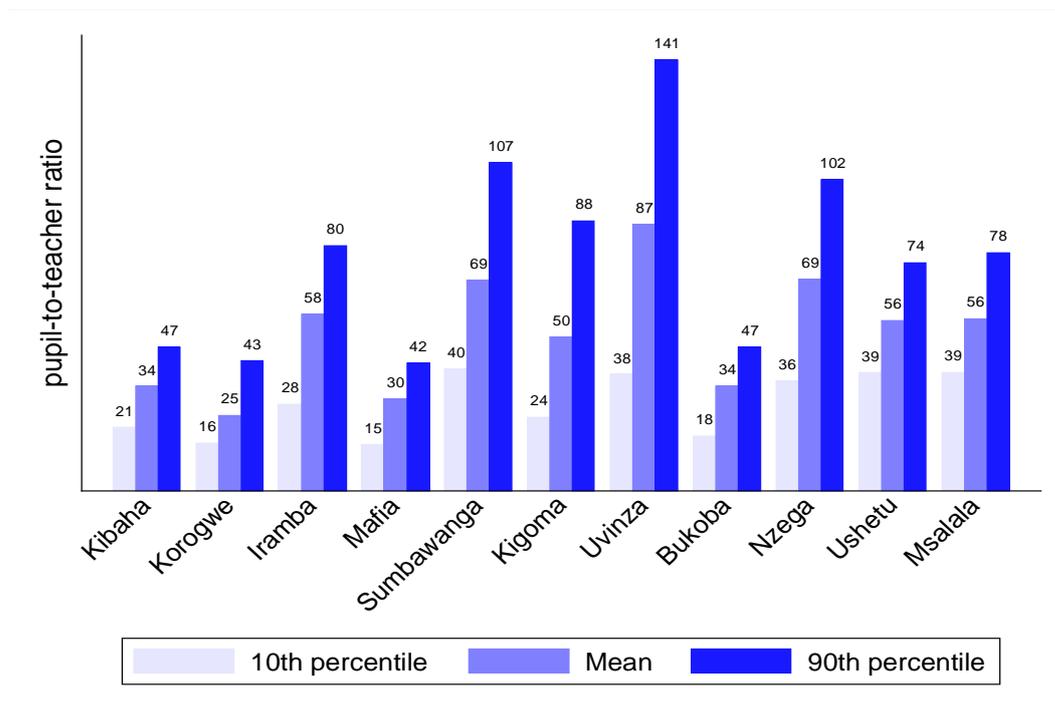
**Figure 33: Minimum, mean and maximum pupil teacher ratios by district**



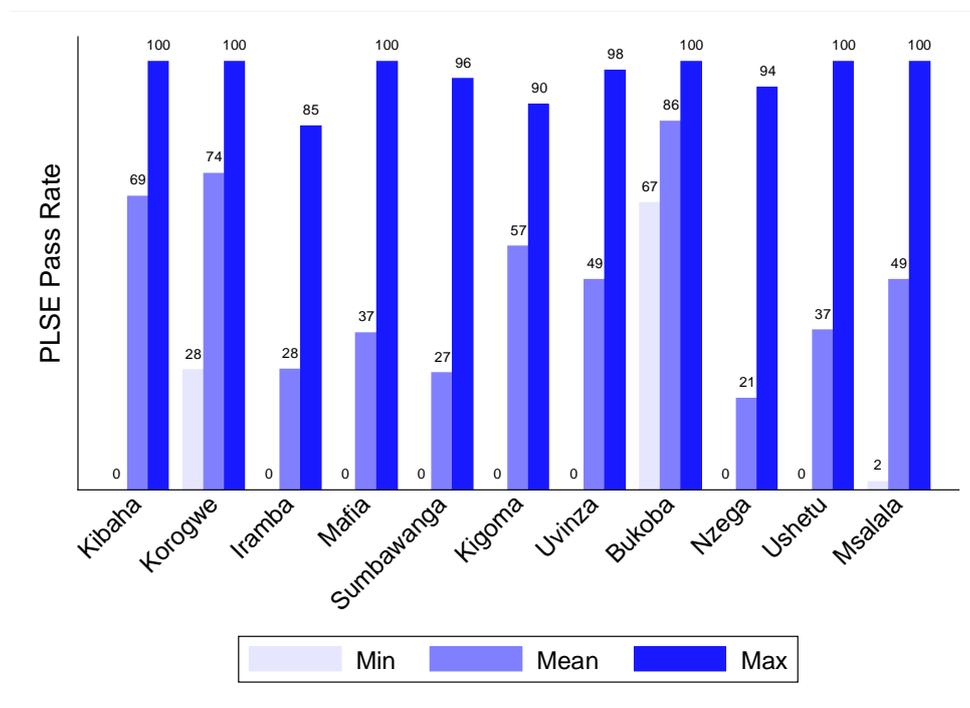
**Figure 34: 20<sup>th</sup> percentile, mean and 80<sup>th</sup> percentile PTRs by district**



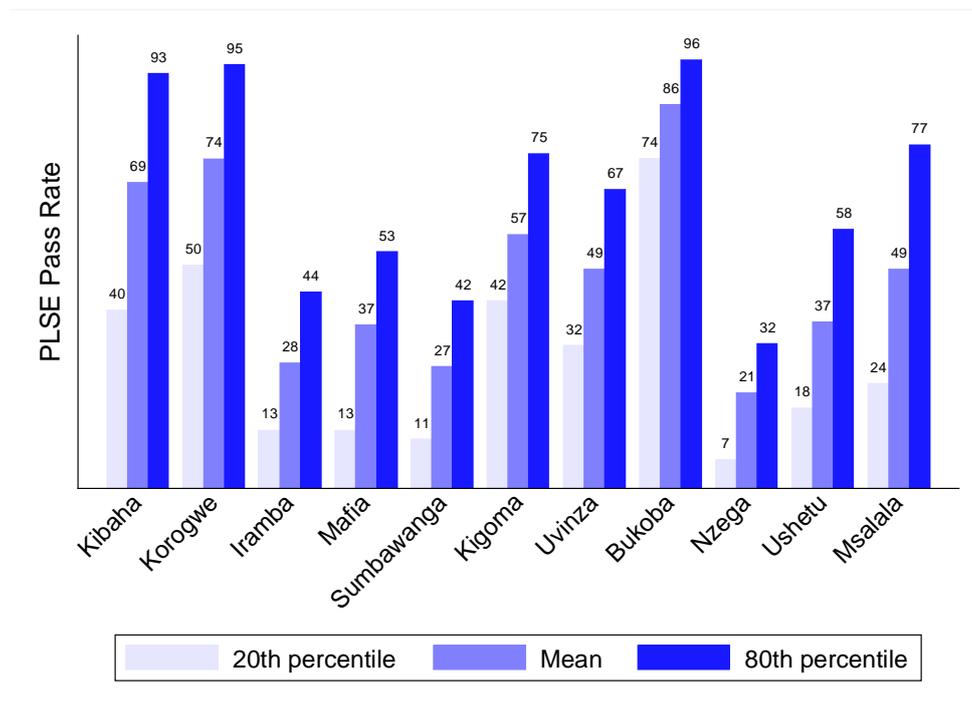
**Figure 35: 10<sup>th</sup> percentile, mean and 90<sup>th</sup> percentile PTRs by district**



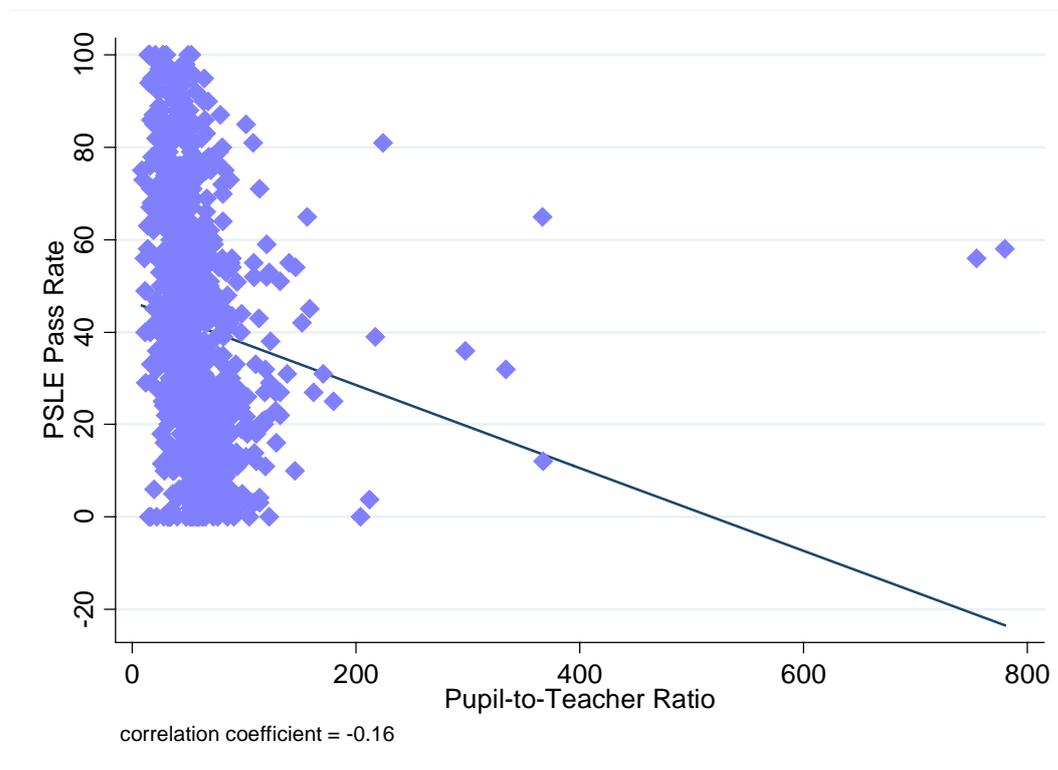
**Figure 36: Minimum, mean and maximum PSLE pass rates by district**



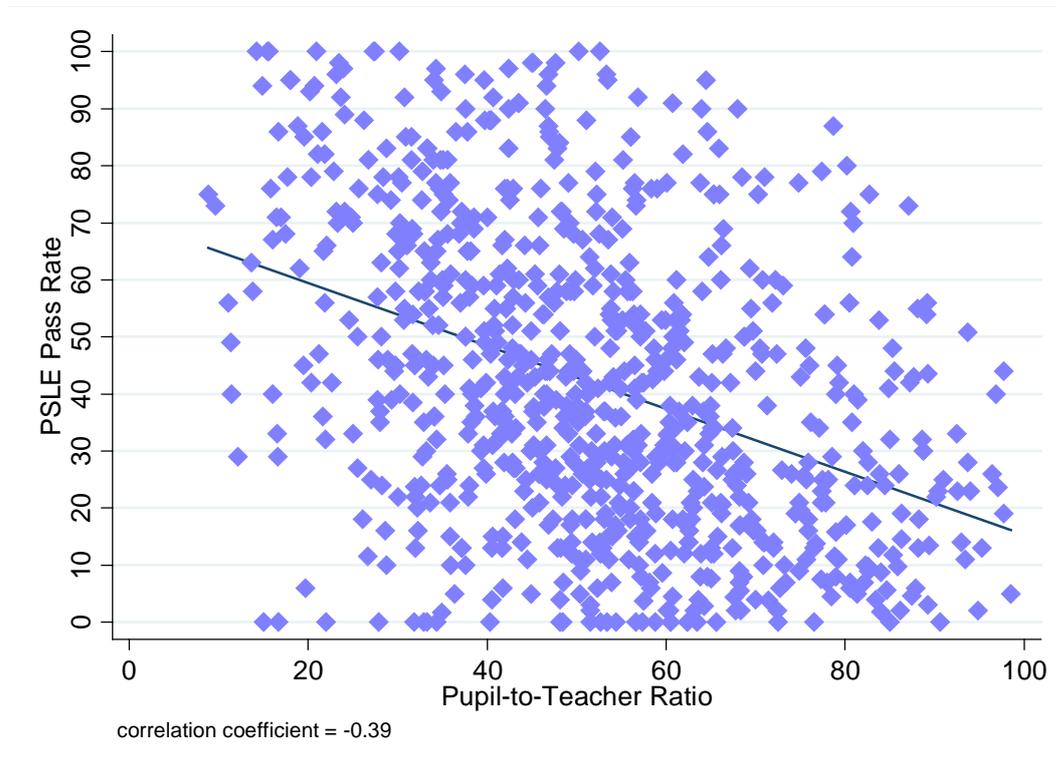
**Figure 37: 20<sup>th</sup> percentile, mean and 80<sup>th</sup> percentile PSLE pass rates by district**



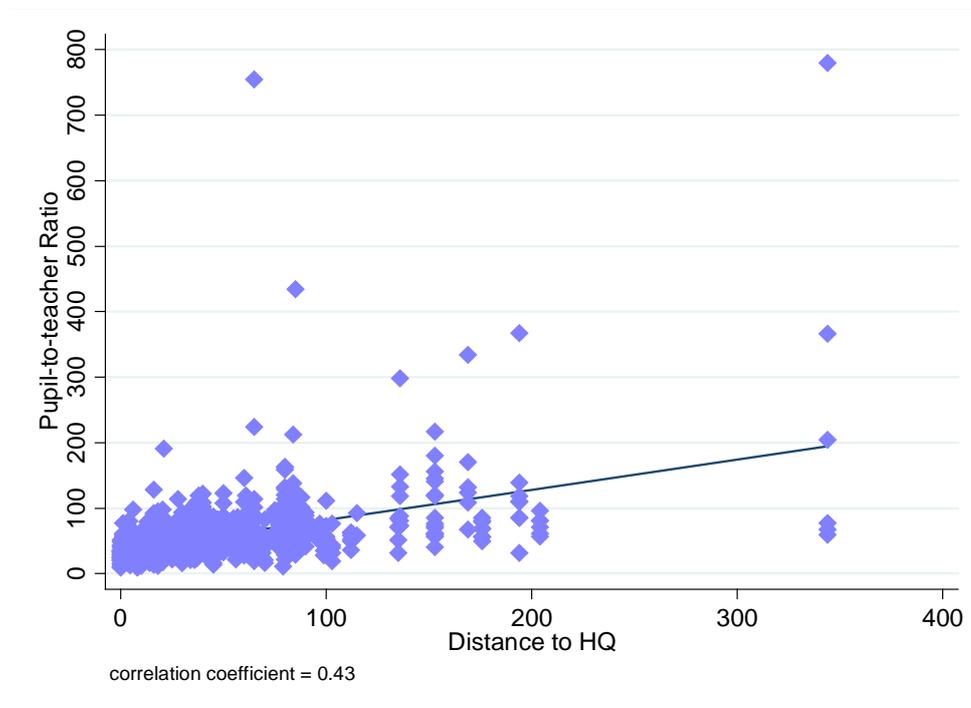
**Figure 38: Relationship between primary school pass rate and PTR across surveyed districts**



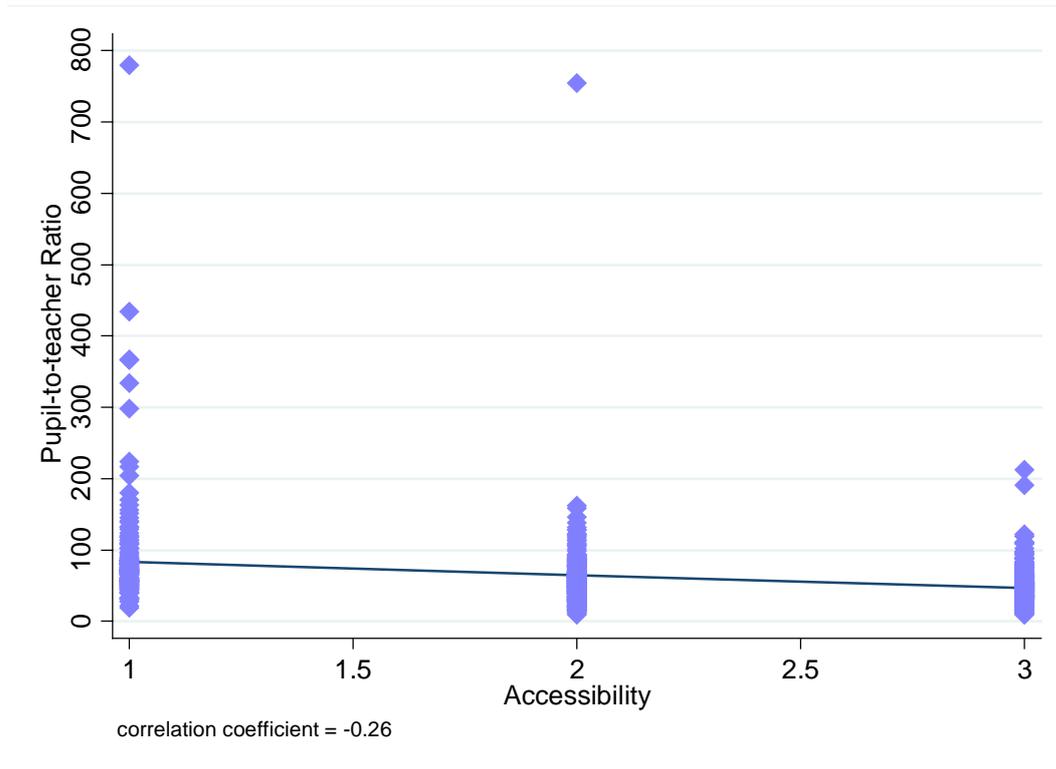
**Figure 39: Relationship between primary school pass rate and PTR (<100) across surveyed districts**



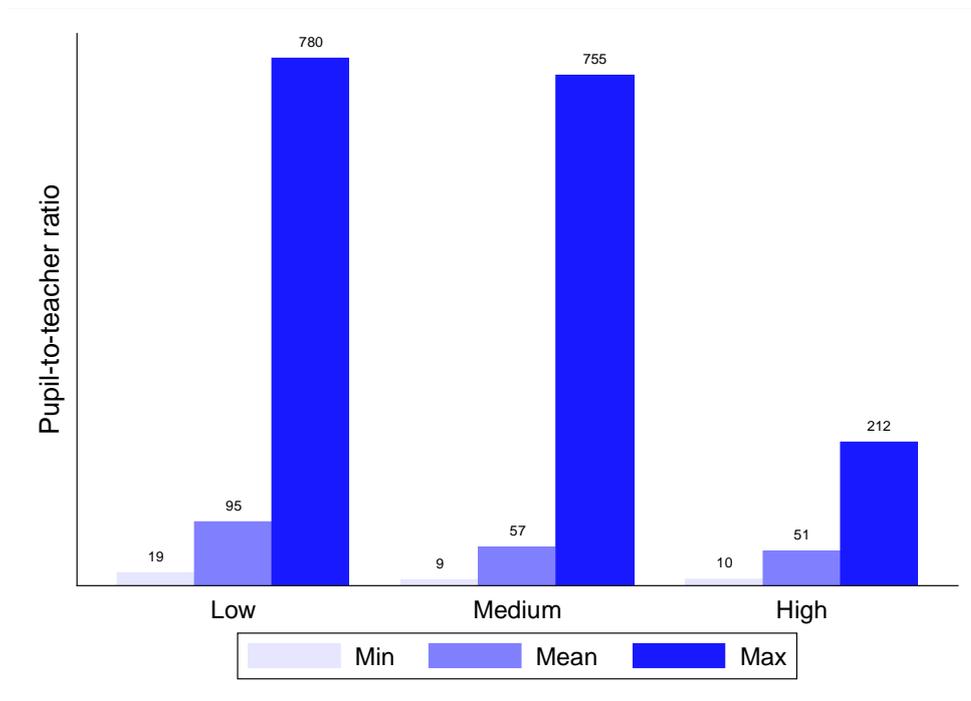
**Figure 40: Relationship between distance and PTR for surveyed districts**



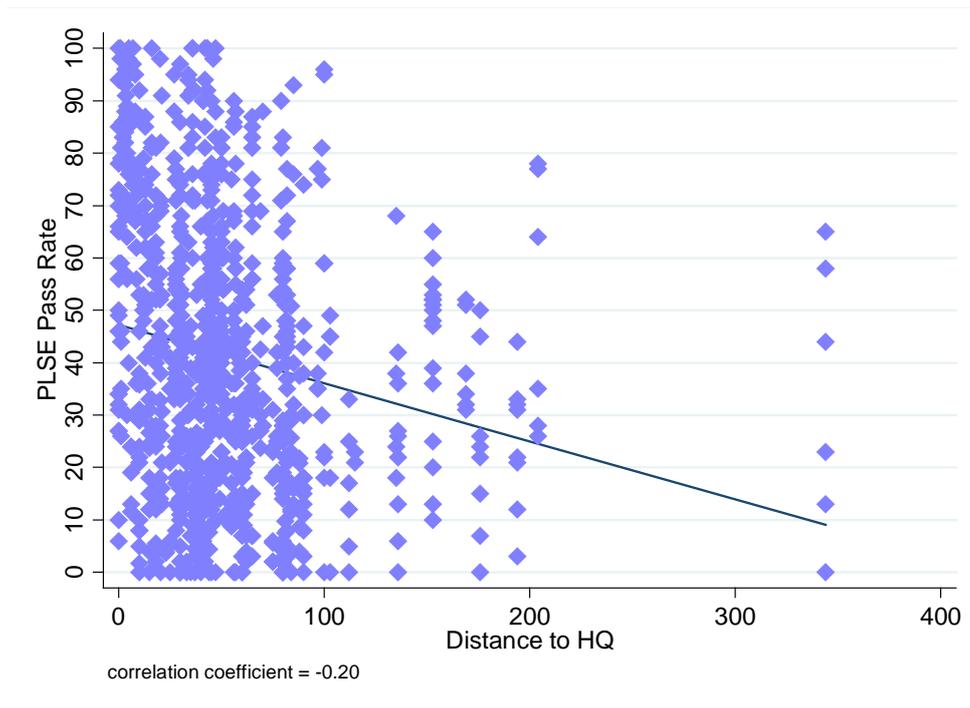
**Figure 41: Relationship between accessibility and PTR for surveyed districts**



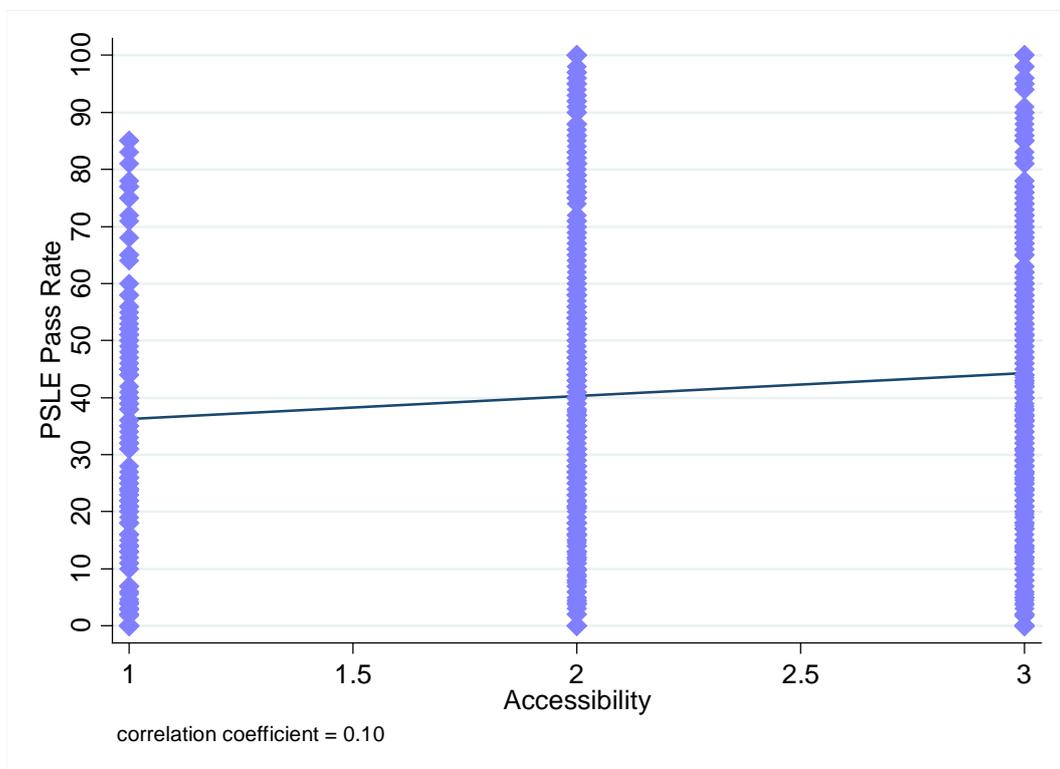
**Figure 42: Minimum, mean and maximum PTR by accessibility for surveyed districts**



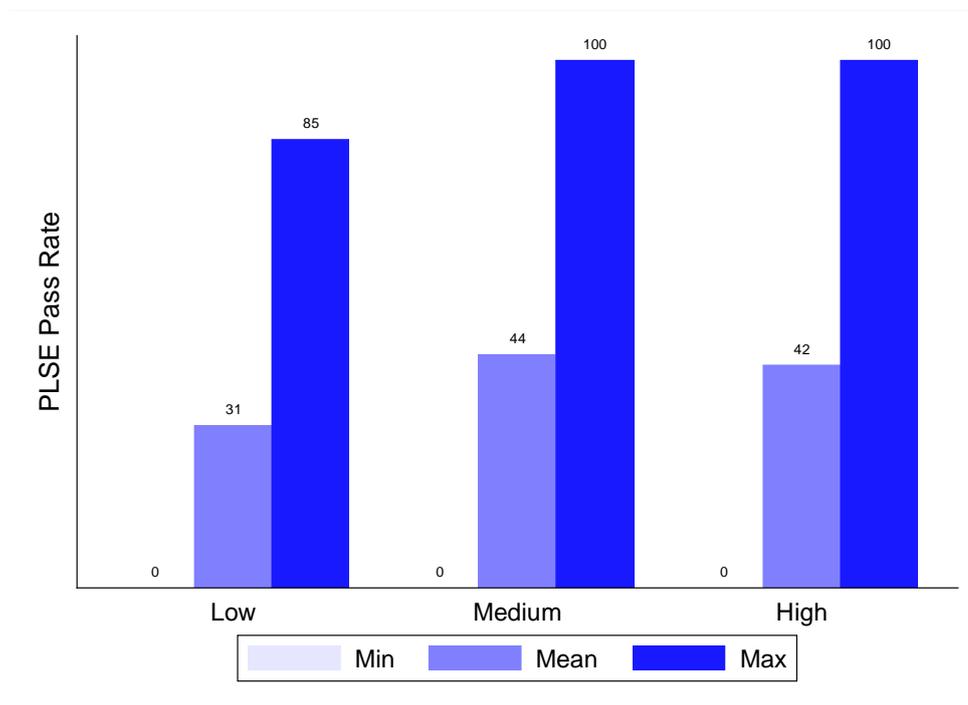
**Figure 43: Relationship between distance and pass rates for surveyed districts**



**Figure 44: Relationship between accessibility and pass rates for surveyed districts**



**Figure 45: Minimum, mean and maximum pass rates by low, medium and high accessibility districts**



### 3.2 Secondary education

- Disadvantaged LGAs have on average higher PTRs than non-disadvantaged LGAs. However, the disparities between the two groups are not as pronounced as for the primary school PTRs.
- While there are disparities across districts in terms of outcomes, the disparities do not follow a pattern similar to that of primary school outcomes. Some non-disadvantaged LGAs are performing poorly, while some disadvantaged LGAs are performing well.
- Within districts, more remote schools have on average higher PTRs and lower pass rates compared with more accessible schools. However, the disparities are again not as pronounced as was the case for primary education.

#### Staffing levels

- Analysis of the PTR shows some inequity across LGAs visited by the team, but more so within LGAs – particularly compared to primary school teacher PTRs.
- The 4 non-disadvantaged LGAs have average PTRs ranging from 16 (Korogwe DC) to 33 (Mafia DC). The disadvantaged LGAs have average PTRs ranging from 25 (Nzega DC and Sumbawanga DC) to 80 (Uvinza DC) (Figure 46). However, in the case of secondary school PTRs, Uvinza is far more of an outlier than was the case for primary school PTRs.
- Both disadvantaged and non-disadvantaged LGAs show high disparities in PTR levels within their districts. In Bukoba, the non-disadvantaged LGA with the widest disparities<sup>9</sup>, the secondary school with the highest PTR has 1 teacher for every 34 students, while the secondary school with the lowest PTR has 1 teacher for every 7 students (Figure 46).
- However, these disparities are significantly wider in the disadvantaged LGAs. In Uvinza DC – the disadvantaged LGA with the widest disparities – the secondary school with the highest PTR

<sup>9</sup> Aside from Mafia DC, which appears much more like an disadvantaged LGA when it comes to its allocation of secondary school teachers.

---

has 1 teacher for every 149 students, while the secondary school with the lowest PTR has 1 teacher for every 42 students (Figure 46).

- Using percentile analysis in Figure 47, there are some notable differences in staffing patterns across districts. While Sumbawanga DC and Nzega DC have the same average PTR of 25, Sumbawanga DC's distribution of its secondary school teacher allocation is more equitable than that of Nzega DC. Similarly, Korogwe DC's within-district allocation is more equitable than that of either Bukoba MC or Kibaha DC, despite the latter having a similar average PTR.

### **Pass rates**

- Analysis of pass rates also shows wide disparities in primary education outcomes, both within and across districts (Figure 48).
- However, unlike in the case of primary education, outcomes do not appear to be correlated with disadvantaged LGA status. Although Uvinza is one of the worst performers, Msalala DC and Ushetu DC are the strongest, while Kibaha is the worst performer (Figure 48).

### **Staffing and pass rates**

- The correlation between the secondary school pass rate and the PTR is negative (i.e. the higher the PTR the worse the pass rate), but only weakly, with a correlation coefficient of -0.17 (Figure 49).

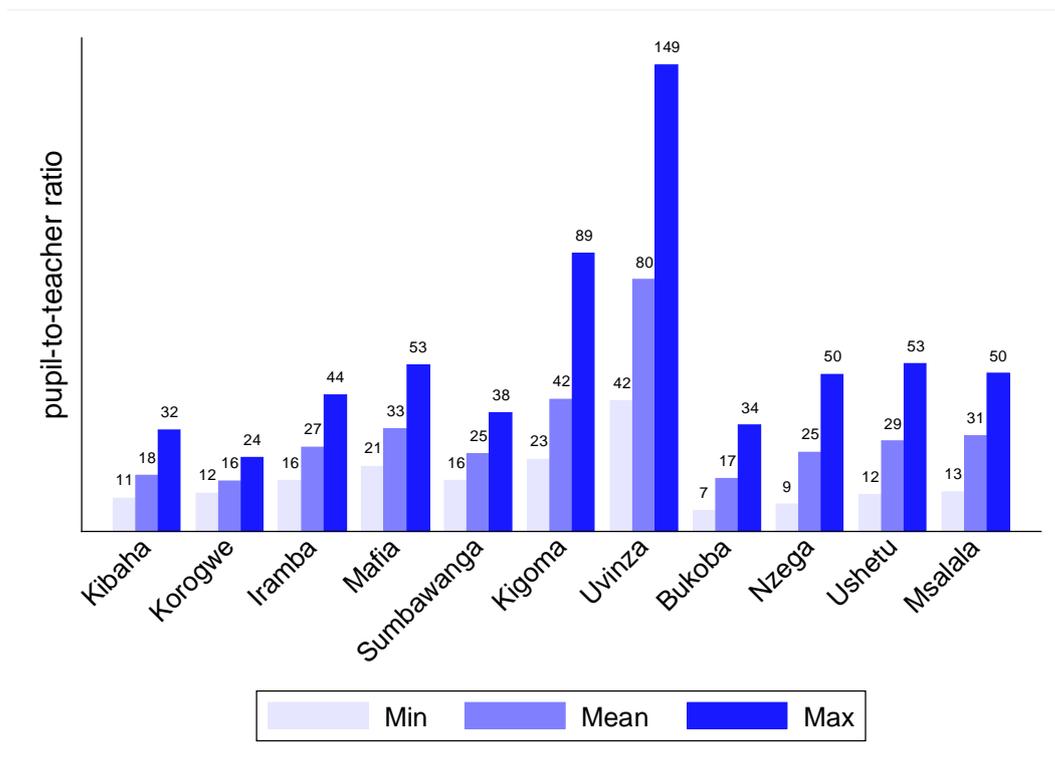
### **Distance and accessibility**

- Within districts, some schools are located in wards that are less accessible to others. District council staff provided data on the distance from HQ to wards as well as on their accessibility. Low accessibility wards were scored 1, medium accessibility wards were scored 2 and easily or highly accessible wards were scored 3<sup>10</sup>.
- Distance from HQ was found to be positively correlated with a higher PTR, with a correlation coefficient of 0.3 (Figure 50). Similarly, accessibility was found to be negatively correlated with a higher PTR, implying that the PTR is higher at more inaccessible schools (Figure 51). Figure 52 shows that the average PTR is significantly higher in hard-to-reach areas.
- Perhaps as a result, schools that are more remote and / or inaccessible perform less well than their counterparts in less remote and / or more accessible areas.
- There is a negative relationship between distance to HQ and primary school pass rates (Figure 53), while there is a positive relationship between accessibility and pass rates (Figure 54).
- Figure 55 highlights the lower levels of outcomes in terms of pass rates for the more inaccessible schools – where the average pass rate is just 33% – compared to 38% and 41% in medium and highly accessible areas respectively.

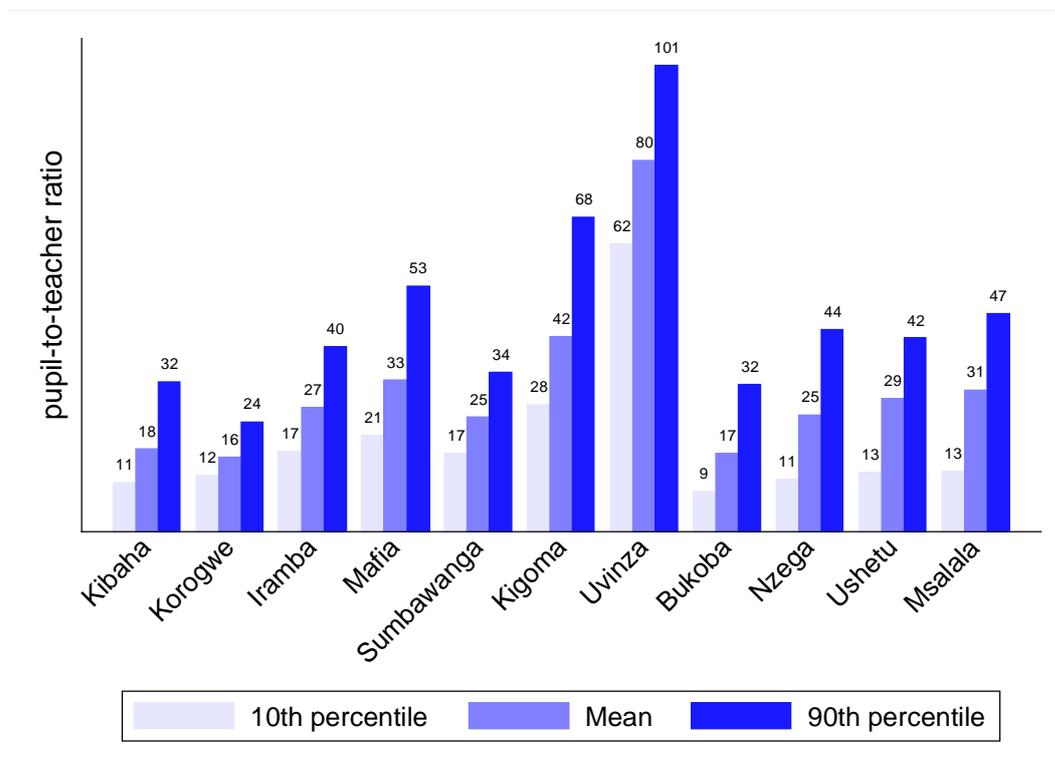
---

<sup>10</sup> Note that we did not receive data from Nzega DC for this analysis.

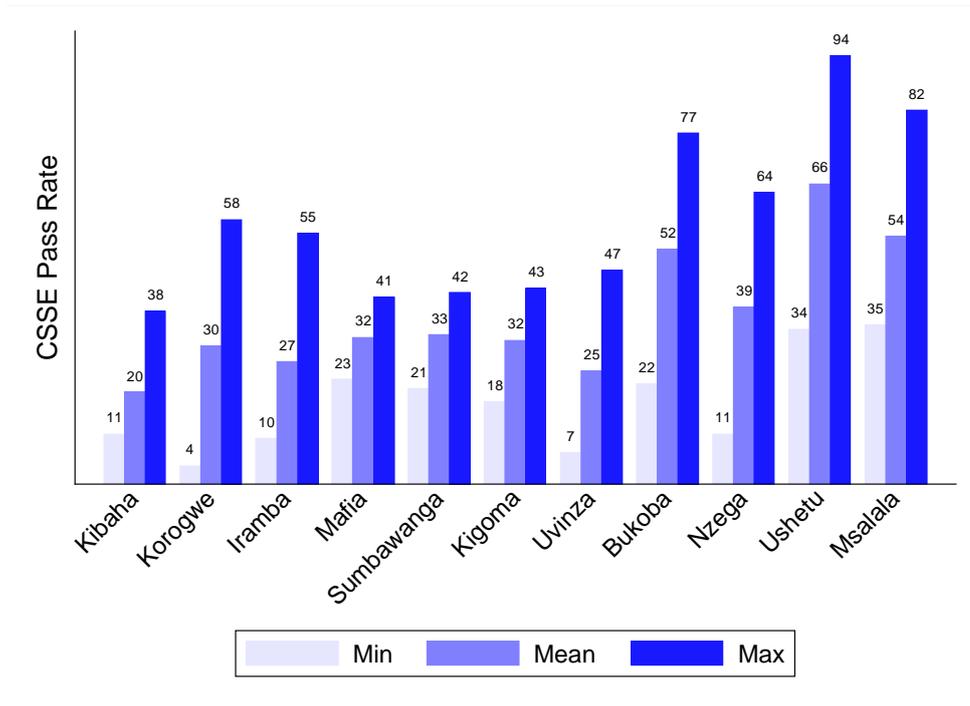
**Figure 46: Minimum, mean and maximum PTR by district**



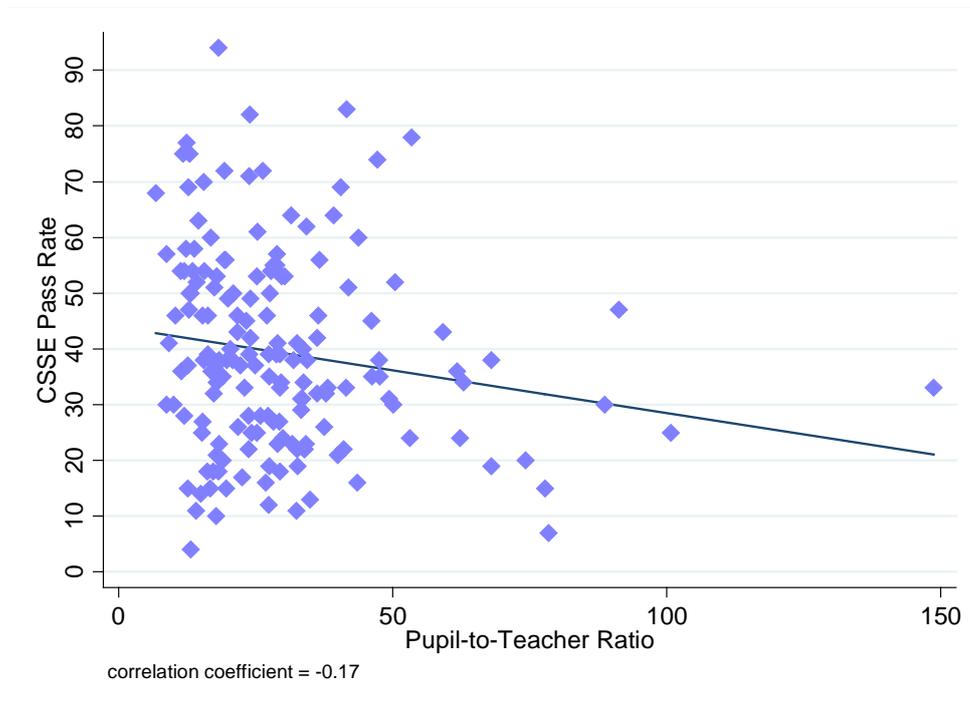
**Figure 47: 10<sup>th</sup> percentile, mean and 90<sup>th</sup> percentile PTR by district**



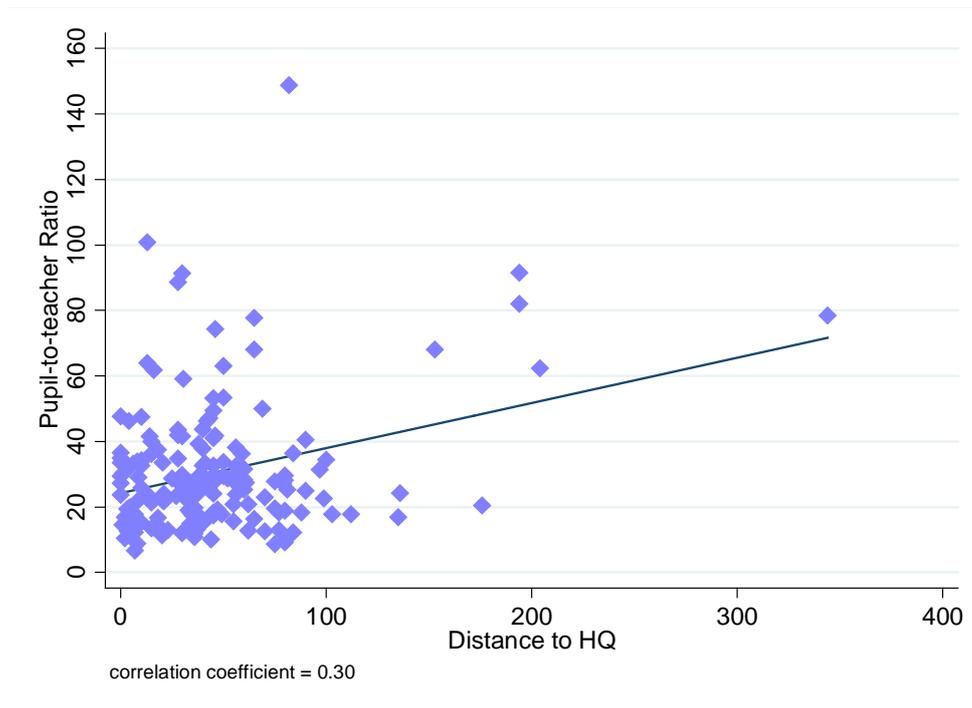
**Figure 48: Minimum, mean and maximum CSSE pass rates by district**



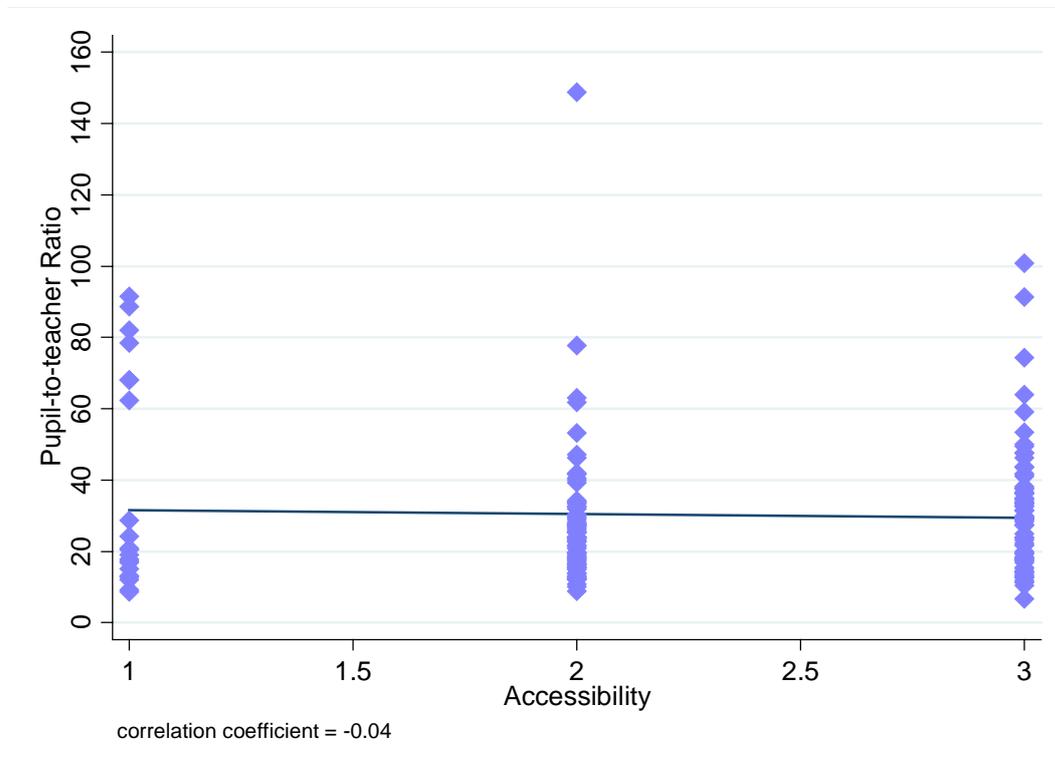
**Figure 49: Relationship between CSSE pass rate and PTR across surveyed districts**



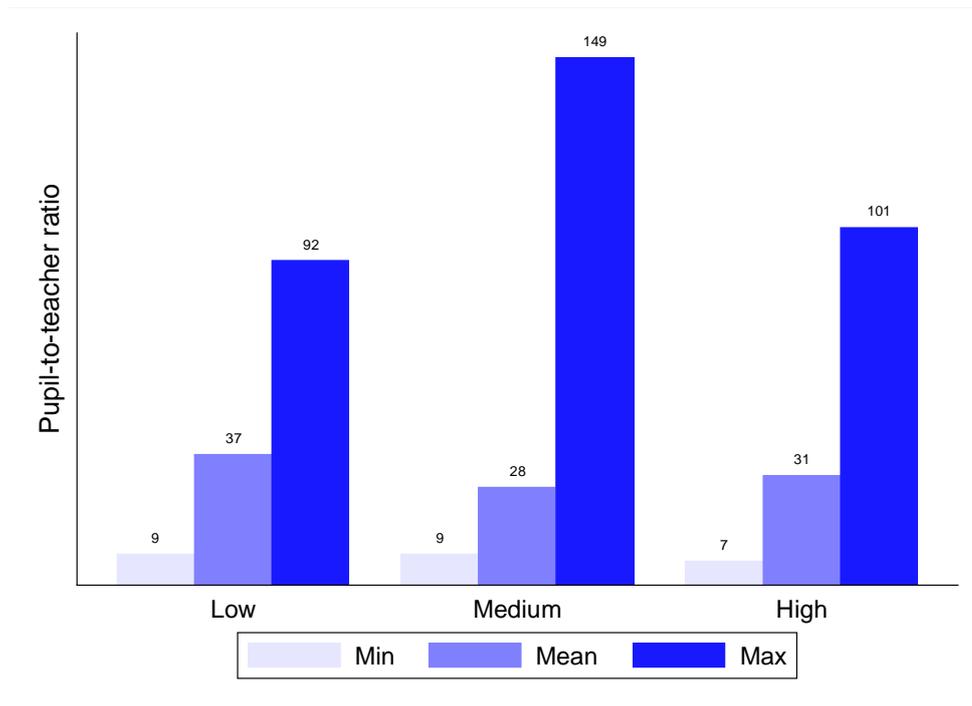
**Figure 50: Relationship between distance and PTR for surveyed districts**



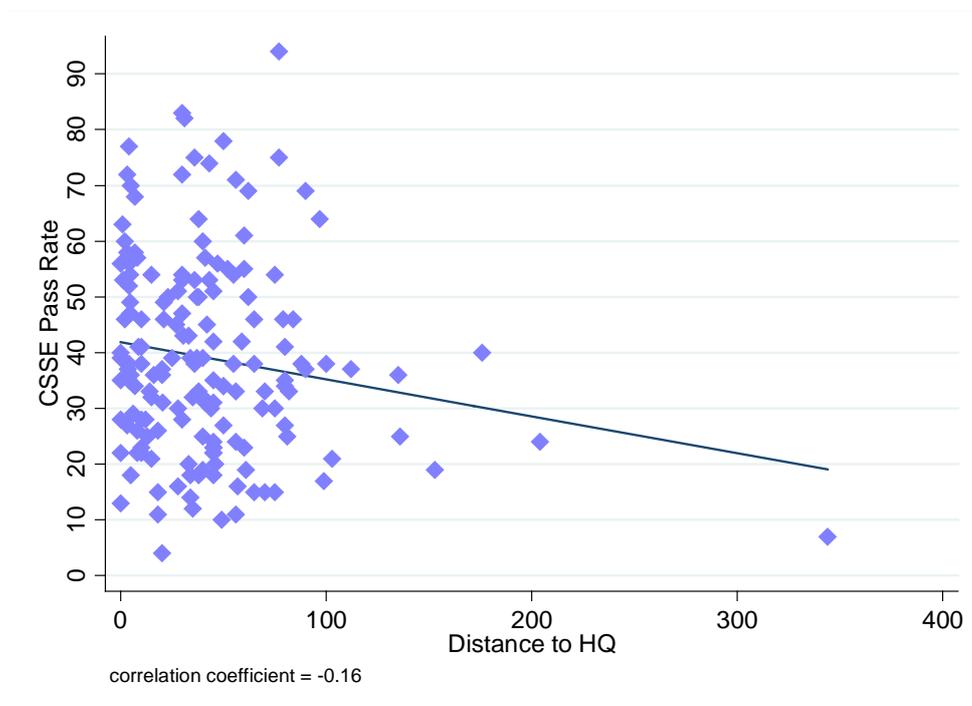
**Figure 51: Relationship between accessibility and PTR for surveyed districts**



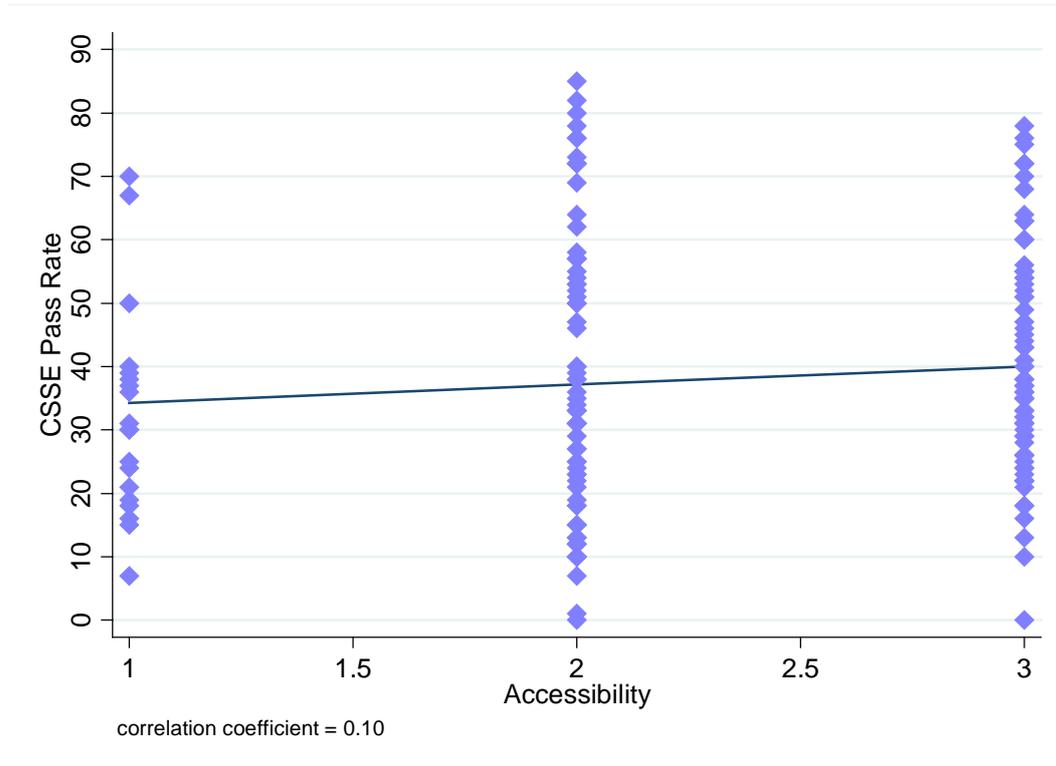
**Figure 51: Minimum, mean and maximum PTR by accessibility for surveyed districts**



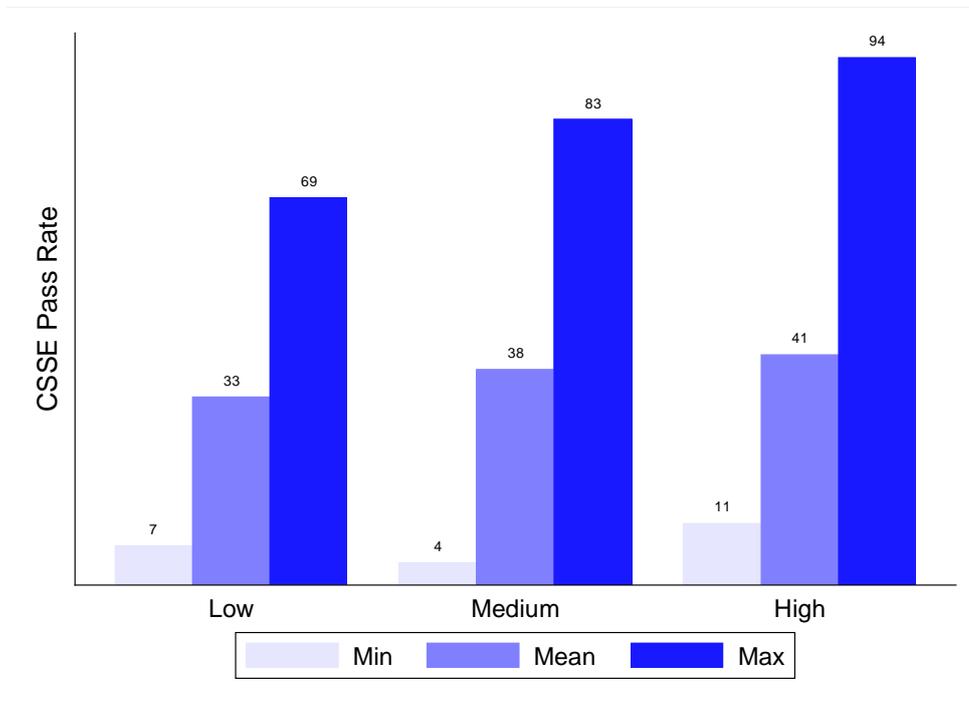
**Figure 53: Relationship between distance and CSSE pass rates for surveyed districts**



**Figure 54: Relationship between accessibility and CSSE pass rates for surveyed districts**



**Figure 55: Minimum, mean and maximum CSSE pass rates by accessibility for surveyed districts**



---

## 3.3 Health

### Summary

- Although there are exceptions on both sides, disadvantaged LGAs have on average higher staffing levels per outpatient than non-disadvantaged LGAs.
- Within districts, more remote facilities have on average lower levels of staffing per outpatient than more accessible facilities, but again, with some exceptions.

### Staffing levels

- Analysis of the annual outpatient-to-staff-ratio (OSR) shows deep inequities both across and within LGAs visited by the team.
- The 4 non-disadvantaged LGAs have average OSRs ranging from 611 (Korogwe DC) to 1,166 (Mafia DC). The disadvantaged LGAs have average OSRs ranging from 441 (Msalala DC) to 7,147 (Uvinza DC) (Figure 56).
- Both disadvantaged and non-disadvantaged LGAs show high disparities in OSR levels within their districts. In Kibaha DC, the non-disadvantaged LGA with the widest disparities, each staff member at the health facility with the highest OSR sees on average 4,141 outpatients per annum while each staff member at the health facility with the lowest OSR see just 5 outpatients per annum (Figure 56).
- However, these disparities are significantly wider in the disadvantaged LGAs. In Uvinza DC, the disadvantaged LGA with the widest disparities, each staff member at the health facility with the highest OSR sees on average 21,900 outpatients per annum, while each staff member at the health facility with the lowest OSR sees just 717 outpatients per annum (Figure 56). Using this maximum-minimum analysis, we can also see from Figure 56 wide disparities in the OSR in Iramba DC and Nzega DC.
- Using percentile analysis in Figure 57, similar patterns of inequities in staffing levels emerge across districts. This is particularly in relation to Iramba DC and Uvinza DC, but it also shows that the most understaffed facility in Nzega DC is an outlier for that district.

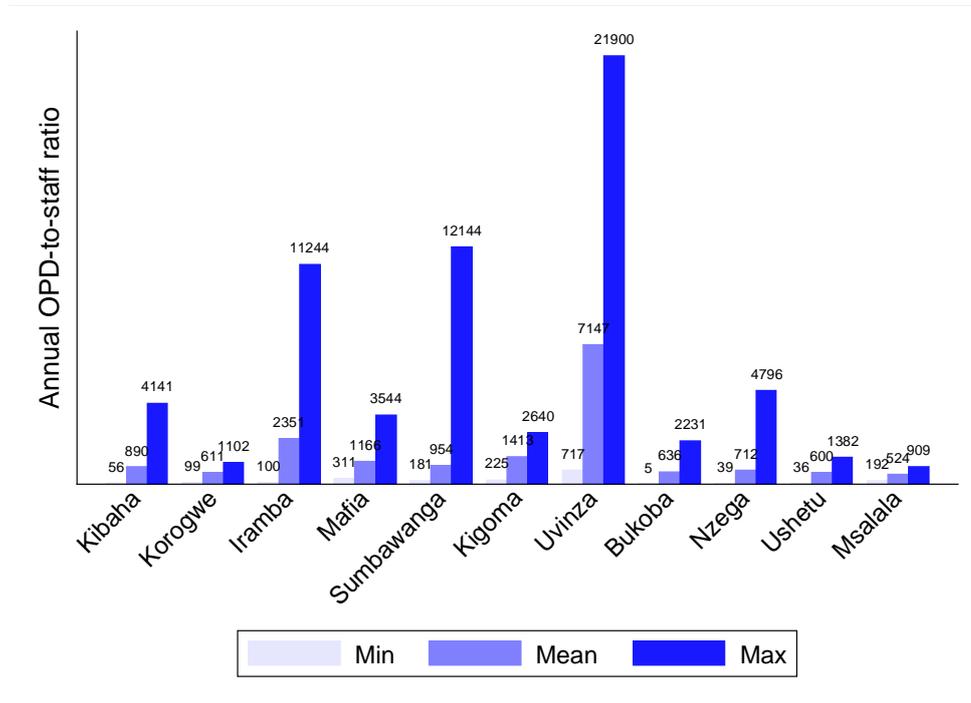
### Distance and accessibility

- Within districts, some health facilities are located in wards that are less accessible to others. District council staff provided data on the distance from HQ to wards as well as on their accessibility. Low accessibility wards were scored 1, medium accessibility wards were scored 2 and easily or highly accessible wards were scored 3<sup>11</sup>. It should be noted that some LGAs also reported on other factors that influence the extent to which a particular posting is attractive: this included the availability of various services, and electricity and water, as well as factors that are harder to measure, such as the extent to which the communities are supportive of the schools and health facilities, etc. In some areas the relationship between teachers and communities is so poor that witchcraft is used as an explanation for why teachers do not want to work in the particular areas. Accessibility is thus only a crude measurement of the extent to which the posting is relatively attractive.
- Distance from HQ was found to be positively correlated with a higher OSR, with a correlation coefficient of 0.26 (Figure 58). Accessibility was found to be only very weakly negatively correlated with a higher OSR (Figure 59). Figure 60 shows that the average OSR is higher in hard-to-reach areas than in areas of medium accessibility.

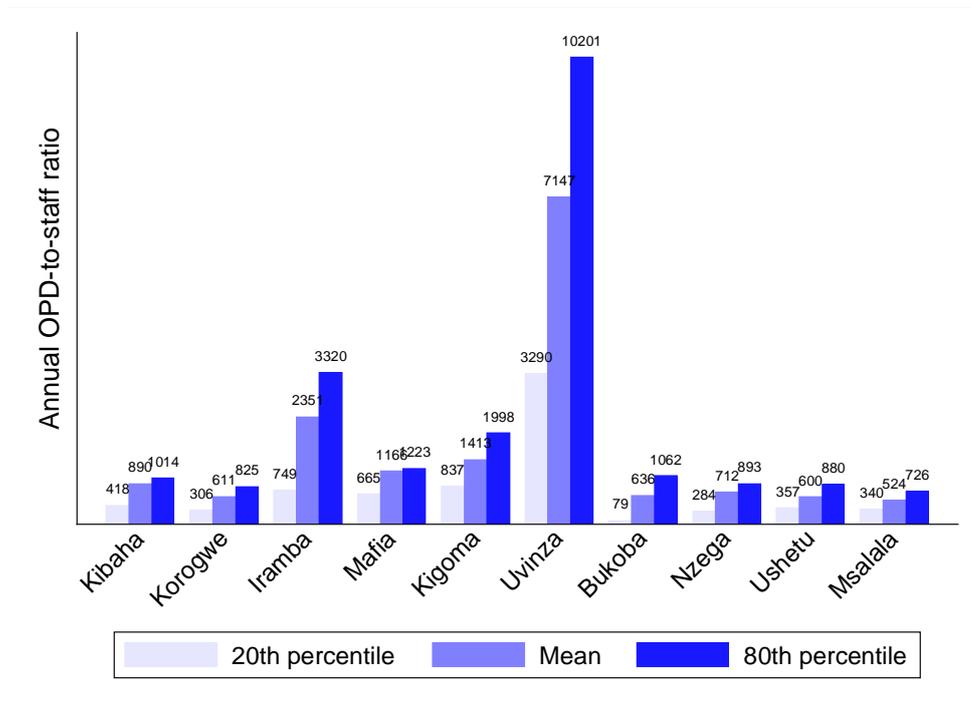
---

<sup>11</sup> Note that we did not receive data from Nzega DC for this analysis.

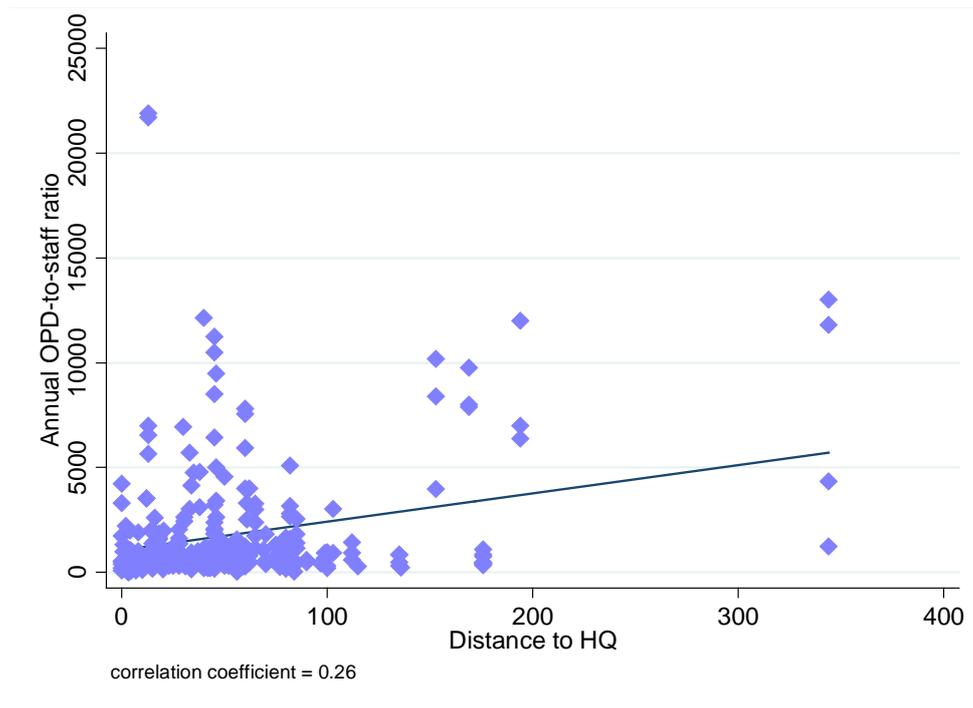
**Figure 56: Minimum, mean and maximum OSR by district**



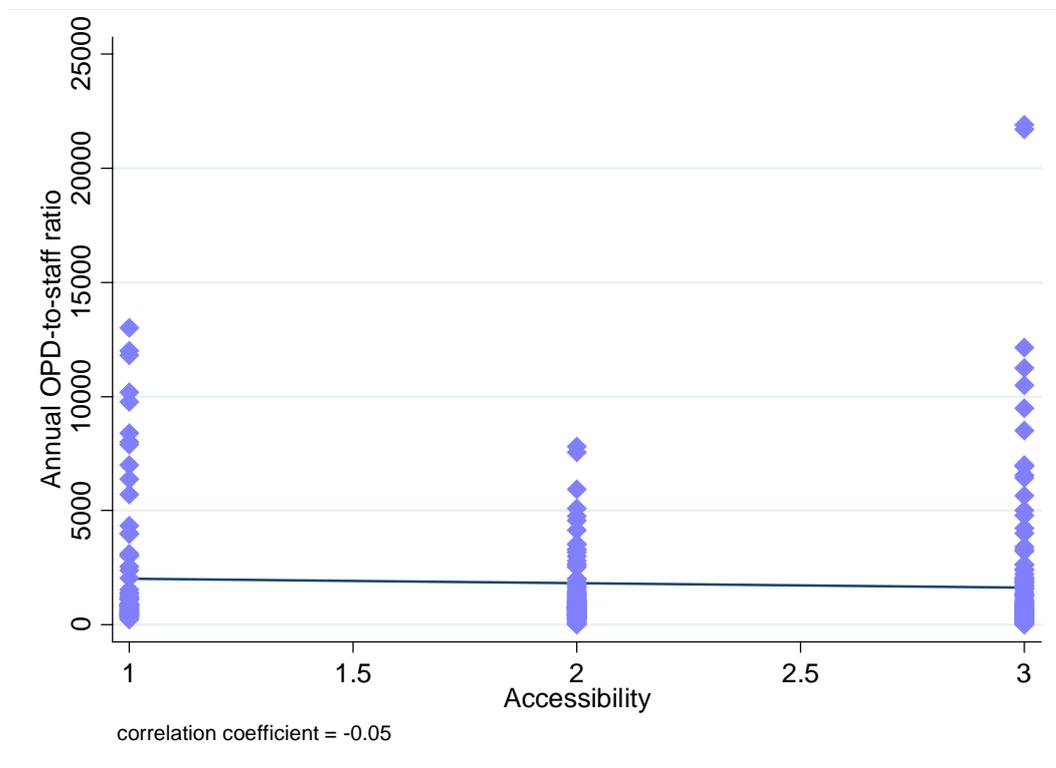
**Figure 57: 20<sup>th</sup> percentile, mean and 80<sup>th</sup> percentile OSR by district**



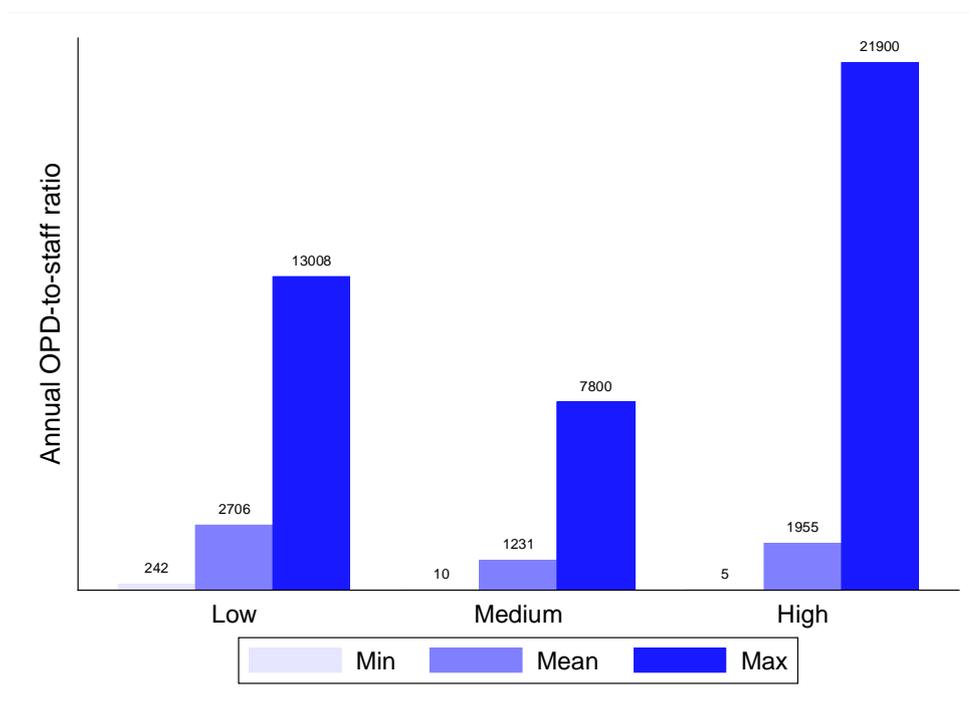
**Figure 58: Relationship between distance and OSR for surveyed districts**



**Figure 59: Relationship between accessibility and OSR for selected districts**



**Figure 60: Minimum, mean and maximum OSR by low, medium and high accessibility districts**



### 3.4 Agriculture

There was quite a wide level of variation observed in agriculture staffing levels across the 11 districts surveyed, particularly in relation to the number of staff per ward (although the number of staff per village is more uniform) and the ratio of motorbikes to agriculture staff. Within districts, there were some notable differences in staffing levels per village, particularly in the case of Uvinza DC and Korogwe DC, where the allocation of staff appears to be less than efficient.

**Table 14: Agriculture statistics**

	Bukoba	Kibaha	Korogwe	Mafia	Iramba	Kigoma	Msalala	Nzega	Sumbawanga	Ushetu	Uvinza
Total extension staff:	15	38	19	13	36	23	29	57	36	25	21
of which at head quarter											
staff per ward	1.1	3.5	2.4	1.6	3.0	2.1	1.8	1.5	2.4	1.3	1.5
staff by village	0.3	0.8	0.8	0.6	0.6	0.7	0.4	0.4	0.4	0.3	0.5
staff per total motor bike	0.0	7.6	3.2	0.0	3.3	5.8	2.2	11.4	2.4	1.4	3.0
Highest number of staff per village in any ward	0.7	1.3	1.3	1.0	1.0	1.0	1.0	1.0	0.7	0.7	1.3
Lowest number of staff per village in any ward	0.0	0.1	0.3	0.3	0.3	0.3	0.1	0.0	0.1	0.1	0.0

### 3.5 Individual profiles of the 11 fieldwork LGAs

**Table 15: Individual profiles of the 11 fieldwork LGAs**

LGA: **Bukoba MC** Region: **Kagera**

Population:	128796
Wards	14
Villages	0
Mtaa	66

Average PTR Primary education	34.19803
Lowest PTR Primary education	8.857142
Highest PTR Primary education	51.25
Overall Pass rate	86.04348
Highest pass rate	100
Lowest pass rate	67

Average PTR Secondary education	16.95019
Lowest PTR Secondary education	6.75
Highest PTR Secondary education	33.90476
Average Number of students to science teachers	86.45561
Lowest Number of students to science teachers	27
Highest Number of students to science teachers	239.25
Overall Pass rate	49.63158
Highest pass rate	72
Lowest pass rate	18

#### Health data

Number of dispensaries	18	HCs:	5	Hospital:	1
Highest number of staff per dispensary:	13				
Lowest number of staff per dispensary:	1				
Highest OPD per dispensary	24539				
Highest OPD per staff	2230.818				
Lowest OPD per dispensary	41				
Lowest OPD per staff	5.125				

#### Agriculture

Total extension staff:	#REF!
staff per ward	1.071429
staff by village	0.2668651
staff per total motor bike	0
Highest number of staff per village in any ward	0.6666667
Lowest number of staff per village in any ward	0

LGA		Bukoba MC	
Status		Old established LGA	
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Bilele	Zam Zam HC		
Buhembe	Buhembe WO		
	Buhembe Dispensary		
	Kashenge PS		
	Buhembe SS		
Ijuganyondo	Ijuganyondo Dispensary		
Kahororo	Kahororo WO		
	Kahororo Dispensary		
	Mugeza(m) PS		
	Rutungu PS		
Kazhai	Kazhai SS		
	Kazhai Dispensary		
	Kazhai PS		
Kibeta	Ward Office		
	Kibeta SS		
	Kibeta PS		
Staffing levels			
Overall assessment of staffing levels		Very good	
Key vacancies		Medical officers	
		Assistant medical officers	
		Registered nurses	
		Qualified medical staff	
		Science teachers	
		Qualified agriculture officers	
Overall primary PTR		1:35	
Overall secondary PTR		1:17	

Overall health staff to population	1:317
Overall agriculture staff to village	1:4
<b>Attraction and retention strategies</b>	
The district does not have any documented attraction and retention strategies.	
<b>Other attraction and retention related issues</b>	
Factors affecting attraction and retention include:	
<ul style="list-style-type: none"> <li>• secondary school teachers seeking transfers to other districts</li> <li>• an increasing cost of living as a result of the sudden increase of higher learning institutions within the municipality and the resulting increase in the number of students seeking private accommodation, resulting in a shortage of rental houses and rising prices</li> <li>• limited community support in terms of contributions due to existence of private service providers used by more affluent community residents.</li> </ul>	
<b>General patterns of inequity within the LGA</b>	
Due to its small size, service facilities and staff are relatively equally distributed across wards, although small disparities exist. Most areas are easy to reach and well served.	
<b>Specific patterns of inequity</b>	
Some wards, such as Hamugembe, have particularly high PTRs.	
<p>Some service facilities are relatively old and the existing infrastructure has deteriorated to the extent that some have been condemned. For example at Kibeta Primary School (established in 1960) only 1 of the existing 3 staff houses is in good condition. The pupils' latrines collapsed in 2012 and since then only 2 pit latrines are in use (one for 359 boys and the other one for 337 girls). Following the collapse of the existing structures the community has been saving for the construction of latrines at an estimated cost of TZS 14 million. At the time of the fieldwork TZS 1.8 million of the TZS 2.6 million required (before the council will commit to top up development funds) had been saved.</p> <p>Secondary school teachers benefit more from available staff housing than their counterparts in primary education and other sectors.</p>	

LGA: **Kibaha DC** Region: **Coast**

Population:	70209
Wards	11
Villages	57
Mtaa	0

Average PTR Primary education	34.2089
Lowest PTR Primary education	16
Highest PTR Primary education	64.625
Overall Pass rate	68.56757
Highest pass rate	100
Lowest pass rate	0

Average PTR Secondary education	17.9022
Lowest PTR Secondary education	10.7
Highest PTR Secondary education	32.47619
Average Number of students to science teachers	70.22698
Lowest Number of students to science teachers	36.44444
Highest Number of students to science teachers	136.4
Overall Pass rate	14.57143
Highest pass rate	29
Lowest pass rate	7

### Health data

Number of dispensaries	23	HCs:	1	Hospital:	0
Highest number of staff per dispensary:	9				
Lowest number of staff per dispensary:	1				
Highest OPD per dispensary	8281				
Highest OPD per staff	4140.5				
Lowest OPD per dispensary	112				
Lowest OPD per staff	56				

### Agriculture

Total extension staff:	#REF!
staff per ward	3.454545
staff by village	0.7944805
staff per total motor bike	7.6
Highest number of staff per village in any ward	1.333333
Lowest number of staff per village in any ward	0.125

LGA		Kibaha DC	
Status		Old established LGA	
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Kilangalanga	Kilangalanga PS	Dutumi	Dutumi PS
	Kilangalanga SS		Dutumi Dispensary
Mlandizi	Mlandizi PS	Mangindu	Dutumi WO
	Mihande SS		Mangindu PS
	Mlandizi HC		Mangindu Dispensary
			Mangindu WO
Staffing levels			
Overall assessment of staffing levels		Very good	
Key vacancies		Science teachers	
Overall Primary PTR		1:35	
Overall Secondary PTR		1:17	
Overall health staff to population		1:296	
Overall agriculture staff to village		1:1.5	
Attraction and retention strategies			
There are no documented attraction and retention strategies currently in place. However, the council has committed some of its own revenue resources to the construction of staff housing and the installation of solar panels.			
Other attraction and retention related issues			
Factors affecting the equitable distribution of staff include:			
<ul style="list-style-type: none"> <li>• lack of staff houses and available rentals in HTRS areas, which hampers efforts to post or relocate staff to those areas</li> <li>• requests for recruitment permits to POPSM are not honoured according to LGA needs or preferences (e.g. more arts teachers are posted instead of the requested science teachers)</li> <li>• limited community support in relation to the construction of staff housing</li> <li>• inadequate transport at head office and particularly at ward level for supervision, coordination and backstopping</li> <li>• old and poorly maintained facilities and staff housing.</li> </ul>			
General patterns of inequity within the LGA			
There are inequities in the distribution of staff, particularly in HTRS areas.			

---

### Specific patterns of inequity

In the Dutumi Ward, the 2 available staff houses are shared by 7 teachers and the medical attendant is residing in one of the dispensary's treatment rooms. The head teacher of Dutumi Primary School vacated his house for the school's female teachers and built a grass-thatched hut close to the ward office. Two days before the fieldwork the hut caught fire and was burnt, along with all of his belongings.

LGA: **Korogwe DC** Region: **Tanga**

Population:	68308
Wards	8
Villages	24
Mtaa	0

Average PTR Primary education	24.71705
Lowest PTR Primary education	13.78947
Highest PTR Primary education	42.81818
Overall Pass rate	73.85185
Highest pass rate	100
Lowest pass rate	28

Average PTR Secondary education	16.1046
Lowest PTR Secondary education	12.23077
Highest PTR Secondary education	23.73077
Average Number of students to science teachers	138.3821
Lowest Number of students to science teachers	44.16667
Highest Number of students to science teachers	617
Overall Pass rate	21.11111
Highest pass rate	53
Lowest pass rate	0

#### Health data

Number of dispensaries	11	HCs:	1	Hospital:	1
Highest number of staff per dispensary:	21				
Lowest number of staff per dispensary:	3				
Highest OPD per dispensary	19842				
Highest OPD per staff	1102.333				
Lowest OPD per dispensary	1720				
Lowest OPD per staff	98.57971				

#### Agriculture

Total extension staff:	#REF!
staff per ward	2.375
staff by village	0.8333333
staff per total motor bike	3.166667
Highest number of staff per village in any ward	1.333333
Lowest number of staff per village in any ward	0.25

LGA		Korogwe TC	
Status		Established as a TC in 2006	
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Manundu	Nyerere Memorial SS	Kwamndolwa	Kwamndolwa PS
	Majengo Dispensary		Kwamndolwa SS
			Kwamndolwa Dispensary
Mtonga	Mtonga SS	Kwamsisi	Kwamsisi PS
	Mtonga HC		Kwamsisi Dispensary
Staffing levels			
Overall assessment of staffing levels		Overstaffed / Well served	
Key vacancies		Clinical officers	
		Agricultural extension officers	
Overall primary PTR		24	
Overall secondary PTR		16	
Overall health staff to population		407	
Over agriculture staff to village		0.25	
Attraction and retention strategies			
There is no documented scheme with regards to attracting and retaining staff in the LGA.			
Other attraction and retention related issues			
Due to its geographical location (along a main road) and its status as a growing town, the LGA has not had issues attracting staff and the turnover ratio is generally very low.			
Efforts are also made at the council level to retain staff, including:			
<ul style="list-style-type: none"> <li>ensuring a good working environment by rehabilitating teacher housing and classrooms</li> <li>a culture of customer care where the district takes a short amount of time to address staff issues (e.g. staff with medical problems are sent to the hospital for treatment)</li> <li>rewards for the best-performing schools</li> <li>a culture of transparency, including transparent distribution of OC in the budget to different departments and the posting of advertisements for positions on the office notice board</li> <li>incentive schemes for staff, including priority access to purchasing land plots at discounted costs, as well as short and long courses.</li> </ul>			

## General patterns of inequity within the LGA

Patterns of inequity are moderate, although some facilities in more remote areas are less well staffed. Efforts to address these inequities through reallocations are frustrated by:

- out-of-line allocations from the responsible ministry (e.g. posting more arts subject teachers even though the required levels of establishments have been reached)
- limited number of experts in some disciplines at the national level (e.g. water engineers and agricultural officers)
- challenges related to the management of science teachers especially when posted to remote areas. At the moment they consider themselves as rare. (For example between 2010/11 and 2012/13, 7 teachers absconded after payment of their subsistence allowance to join other private or NGO schools.)
- limited OC and/or own LGA funds, which prevents transfers of staff from one ward to another. (A staff transfer costs approximately TZS 2 million. In 2012/13 the LGA spent TZS 173 million on staff transfers.)
- limited development funds (both at national and council level) to support the implementation of various development projects, including the construction of staff houses and facilities such as classrooms and dispensaries (In 2012/13 the LGA spent TZS 21.9 million on staff housing.)
- lack of staff houses, including the availability of alternative rental houses, as well as other basic social services like electricity and water in the remote areas
- inadequate community support in relation to contributions, construction of houses/facilities and generally providing a conducive environment for staff within their areas
- transfer requests due to family and health reasons that are granted by the responsible ministry
- a feeling among staff that posting to remote areas (e.g. Kwamndolwa, Kwamsisi and Mgombezi wards) amounts to punishment, due to: the distance from town where there are opportunities for other income generating activities; a lack of houses and other basic social services; and challenges with the surrounding community due to cultural beliefs (including witchcraft).

## Specific patterns of inequity

### Primary schools

Significant cases of inequity were found in 2 schools (Mgombezi and Kwamsisi primary schools) where the PTR is 1:43 while the lowest PTR (1:14) was also observed in another school in Kwamsisi Ward. Schools in accessible wards generally had PTRs ranging between 1:14 and 1:33.

### Secondary schools

Secondary schools in the district were generally found to be well staffed or even overstaffed, with a relatively fair distribution of staff. A notable exception is Korogwe Girls Secondary School (Old Korogwe Ward), which had a total of 65 teachers (47 arts and 18 science teachers) and a PTR of 1:12, while Mgombezi Secondary School has just 1 science teacher.

### Health facilities

Majengo Dispensary (Manundu Ward) has 18 staff as it is being converted into a health centre, while Kwamsisi dispensary had just 4 staff with just 1 considered qualified. All other remaining dispensaries had staff ranging from 5 to 7.

### Agriculture

2 remote wards had no agricultural extension officers at village level, while 1 easy-to-reach ward had no agricultural extension officers at either ward or village level. The 3 remaining wards had 2 agricultural extension officers at village level and 1 at ward level. The overall ratio of staff per village is 1:4.

LGA: Mafia DC Region: Coast

Population:	46438
Wards	8
Villages	23
Mtaa	0

Average PTR Primary education	29.98549
Lowest PTR Primary education	9.6
Highest PTR Primary education	56.5
Overall Pass rate	36.67742
Highest pass rate	100
Lowest pass rate	0

Average PTR Secondary education	32.79717
Lowest PTR Secondary education	20.8
Highest PTR Secondary education	53.18182
Average Number of students to science teachers	101.9014
Lowest Number of students to science teachers	68.125
Highest Number of students to science teachers	146.25
Overall Pass rate	33.83333
Highest pass rate	55
Lowest pass rate	23

### Health data

Number of dispensaries	16	HCs:	0	Hospital:	0
Highest number of staff per dispensary:	6				
Lowest number of staff per dispensary:	2				
Highest OPD per dispensary	10631				
Highest OPD per staff	3543.667				
Lowest OPD per dispensary	934				
Lowest OPD per staff	311.3333				

### Agriculture

Total extension staff:	#REF!
staff per ward	1.625
staff by village	0.6145833
staff per total motor bike	0
Highest number of staff per village in any ward	1
Lowest number of staff per village in any ward	0.25

LGA		Mafia DC	
Status		Old established LGA	
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Kilindoni	Kilindoni PS	Kirongwe	Kirongwe PS
	Kilindoni SS		Kirongwe SS
		Jibondo	Kirongwe Dispensary
			Jibondo PS
		Jibondo Dispensary	
Staffing levels			
Overall assessment of staffing levels		Average	
Key vacancies		Clinical officers	
		Agricultural extension officers	
		Water staff	
		Science teachers	
Overall primary PTR		31	
Overall secondary PTR		32	
Overall health staff to population		860	
Over agriculture staff to village		0.33	
Attraction and retention strategies			
No documented scheme with regards to attracting and retaining staff in the LGA.			
Other attraction and retention related issues			
<ul style="list-style-type: none"> <li>Geographical location (as an island) is a significant challenge. The turnover ratio has been high, although the situation has started to improve. For 2012/13 over 90% of staff posted to the LGA reported and remain in post. Motivational strategies being pursued by the LGA include: <ul style="list-style-type: none"> <li>abolishment of house rent for all staff working in the rural/‘remote’ wards</li> <li>ongoing rehabilitation of the existing staff houses to enable as many staff as possible to be accommodated in the same</li> <li>prioritisation of medical doctors</li> <li>ensuring timely payments, particularly for the medical treatment.</li> </ul> </li> </ul>			
General patterns of inequity within the LGA			
Higher patterns of inequity in the LGA were observed in 4 wards as a result of staff attraction and retention issues, due to geographical and cultural reasons. Factors affecting efforts to			

reallocate staff to address these inequities include:

- out-of-line allocations of teachers by the responsible ministry particularly in relation to the posting of arts subject teachers
- limited number of experts in some disciplines at the national level (e.g. water engineers and agricultural officers)
- limited OC and/or own LGA funds to cater for staffing issues such as internal transfers, leave allowances, and the general maintenance of facilities within the district
- limited development funds to support the implementation of various development projects including the construction of staff houses, classrooms, and dispensaries (A flat rate of TZS13 million is given to all LGAs for constructing staff houses / classrooms.)
- lack of staff houses including the availability of alternative rental houses, as well as other basic social services, such as electricity and water in 'remote' areas
- inadequate community support in terms of contributions, construction of houses/facilities and generally providing a conducive working environment for staff within their areas
- transport – with the exception of the Kilindoni and Ndagoni wards (The other 6 wards are considered remote due to the fact that they are islands within an island. The only reliable means of transport is by air, which is costly and unaffordable for the majority of staff. Some staff have not used their annual leave for almost four years as a return air fare costs TZS 240,000, which is approximately one month's salary for some staff. Other means of transport include use of canoe/dhow and boats. Sometimes these are not reliable.)
- traditional and/or cultural beliefs (including witchcraft).

In spite of these factors, it was reported that the situation is now improving. In 2012/13, 104 teachers were allocated to the LGA out of whom 97 reported, and of which 100% remain in post.

### Specific patterns of inequity

#### Primary schools

Significant cases of inequity were observed at Jibondo Primary School with a PTR of 1:57, and Bweni Primary School, which has a PTR 1:48. Both are located in hard-to-reach wards. The overall PTR for other remote schools ranged from 1:12 to 1:41, whereas PTR for schools in easy to reach wards ranged from 1:10 to 1:39. The overall PTR for the LGA was 1:31.

#### Secondary schools

With the exception of 1 significant case in Baleni Secondary School – which had the highest PTR in the LGA at 1:53 – the other 5 schools had PTRs ranging from 1:21 to 1:34. The overall PTR for science teachers in the LGA is 1:97, ranging from a PTR of 1:146 at Baleni Secondary School to 1:68 at Kilindoni Secondary School.

#### Health facilities

A case of exceptional inequity was observed at the Jibondo Dispensary, which has no qualified staff. The other 15 facilities had a relatively fair distribution of qualified staff, ranging from 1 to 2 per dispensary.

#### Agriculture

2 remote wards have no agricultural extension officers at ward level, while another 2 remote

wards have no agricultural extension officers at the village level. The overall ratio of staff per village is 1 to 3. The LGA does not have any motorcycles.

LGA: **Iramba MC** Region: **Singida**

Population:	236282
Wards	17
Villages	76
Mtaa	0

Average PTR Primary education	57.737
Lowest PTR Primary education	11.31818
Highest PTR Primary education	434
Overall Pass rate	28.18391
Highest pass rate	85
Lowest pass rate	0

Average PTR Secondary education	26.89323
Lowest PTR Secondary education	16.25
Highest PTR Secondary education	43.57143
Average Number of students to science teachers	119.432
Lowest Number of students to science teachers	26
Highest Number of students to science teachers	329
Overall Pass rate	26.7
Highest pass rate	55
Lowest pass rate	10

#### Health data

Number of dispensaries	35	HCs:	3	Hospital:	1
Highest number of staff per dispensary:	13				
Lowest number of staff per dispensary:	1				
Highest OPD per dispensary	9516				
Highest OPD per staff	11244				
Lowest OPD per dispensary	816				
Lowest OPD per staff	99.69334				

#### Agriculture

Total extension staff:	#REF!
staff per ward	3
staff by village	0.6284722
staff per total motor bike	3.272727
Highest number of staff per village in any ward	1
Lowest number of staff per village in any ward	0.3333333

LGA		Iramba DC	
Status		Old established LGA	
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Kiomboi	New Kiomboi SS	Ulemo	Nkingi PS
	Bomani Dispensary		Mikulu SS
			Ulemo Dispensary
Mgongo	Mgongo SS	Kidaru	Kidaru PS
	Mgongo HC		Kidaru SS
			Kidarui Dispensary
Staffing levels			
Overall assessment of staffing levels		Average	
Key vacancies		Health staff – vacancy rate of 51%	
		Severe shortage of clinical officers	
		Science teachers	
		Agriculture – vacancy rate of 54%	
		Water engineers and technicians	
Overall primary PTR		48	
Overall secondary PTR		27	
Overall health staff to population		885	
Over agriculture staff to village		0.333	
Attraction and retention strategies			
Documented scheme for attracting and retaining health staff (though not provided) on the basis of allowances for:			
<ul style="list-style-type: none"> <li>• extra duty – TZS 30,000 per month</li> <li>• preparation and submission of monthly reports – TZS 30,000 per month</li> <li>• outreach – TZS 6,000 per day</li> <li>• mobile clinics – TZS 10,000 per day.</li> </ul>			
Other attraction and retention related issues			
The LGA experiences some relatively high patterns of inequity as a result of its remote wards, particularly those situated in the Rift Valley, including the Kidaru, Ulemo, Kyengege, Ndulungu, Tulya and Mtoa wards. However, it was noted that after being posted to a remote area staff tend to become motivated over time due to positive factors, which			

include:

- opportunities for other income, including farming and poultry-keeping businesses
- community awareness and contributions in relation to providing good working environments (e.g. at Nkingi Primary School in Ulemo, a remote ward, a teacher stays in a house which was offered by the Kitongoji Chairperson at a fairly reasonable rental charge of TZS 5,000 per month. In some villages, village governments pay rental charges for staff)
- commitment of the LGA (using funding both from OC and own source) to constructing staff houses, supplying solar energy particularly for dispensaries and health centres, conducting regular meetings with staff, and timely payment of allowances.

#### General patterns of inequity within the LGA

Factors affecting an equitable distribution of staff within the district include:

- out-of-line allocations of teachers by the responsible ministry (e.g. the posting of arts subject teachers even though the required level of the establishment has been reached)
- limited number of experts in some disciplines at the national level (e.g. water engineers and agricultural officers)
- lack of science subject teachers in some secondary schools particularly in the remote wards (e.g. Kidaru Ward)
- limited OC and/or own LGA funds for reallocation transfer costs
- limited development funds to support the implementation of various development projects, including the construction of staff houses and facilities like classrooms and dispensaries
- lack of staff houses, including the availability of alternative rental houses, as well as other basic social services such as electricity and water.

#### Specific patterns of inequity

##### Primary schools

Walla and Kingulusungi primary schools in Ntwike and Mtekente Wards have PTRs of 1:119 and 1:113 respectively, while the lowest PTR of 1:26 was observed at the Kizega Primary School in Kiomboi Ward.

##### Secondary schools

Both the highest PTR of 1:44 at the Kizega Secondary School and the lowest PTR of 1:16 at Mtekente Secondary School were observed in easy-to-reach wards. Lulumba Secondary School has 14 science teachers, while 3 other schools in the district have just 1 science teacher.

##### Health facilities

Luono Dispensary in the Kidaru Ward has just 1 member of staff, compared to 2 to 6 in the other district dispensaries.

##### Agriculture

5 wards have no agricultural extension officers at village level and a further 2 of the 5 have no agricultural extension officers at ward level. The overall ratio of staff per village is 1:3.

LGA: **Kigoma DC** Region: **Kigoma**

Population:	211566
Wards	11
Villages	33
Mtaa	0

Average PTR Primary education	50.22856
Lowest PTR Primary education	11.06897
Highest PTR Primary education	224
Overall Pass rate	56.86813
Highest pass rate	90
Lowest pass rate	0

Average PTR Secondary education	42.2062
Lowest PTR Secondary education	23.05882
Highest PTR Secondary education	88.66666
Average Number of students to science teachers	225.1667
Lowest Number of students to science teachers	119.75
Highest Number of students to science teachers	476
Overall Pass rate	32.14286
Highest pass rate	43
Lowest pass rate	18

### Health data

Number of dispensaries	31	HCs:	3	Hospital:	0
Highest number of staff per dispensary:	7				
Lowest number of staff per dispensary:	1				
Highest OPD per dispensary	4881				
Highest OPD per staff	2640				
Lowest OPD per dispensary	1674				
Lowest OPD per staff	225.2				

### Agriculture

Total extension staff:	#REF!
staff per ward	2.090909
staff by village	0.7257576
staff per total motor bike	5.75
Highest number of staff per village in any ward	1
Lowest number of staff per village in any ward	0.3333333

LGA		Kigoma DC	
Status		Recently split into Kigoma DC and Uvinza DC	
Kigoma was until recently among the largest districts, administratively divided into 25 wards and 78 villages. After being split into two, Kigoma DC retained 11 wards and 33 villages.			
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Kalinzi	Kalinzi PS		
	Kalinzi SS		
	Kalinzi Dispensary		
Matendo	Mkuti SS		
	Pamila SS		
	Pamila Dispensary		
Staffing levels			
Overall assessment of staffing levels		Average	
Key vacancies		Across all sectors	
Overall primary PTR		1:41	
Overall secondary PTR		1:21	
Overall health staff to population		1:1429	
Over agriculture staff to village		1:1.4	
Attraction and retention strategies			
The district has implemented a staff attraction and retention strategy, which has had some initial success.			
Other attraction and retention related issues			
The main issues that the district faces in relation to attraction and retention are:			
<ul style="list-style-type: none"> <li>publicising the improved working environment in order to attract more staff</li> <li>sustaining the ongoing efforts by the LGA in relation to attracting and retaining staff</li> <li>sensitising communities in relation to their traditional beliefs and practices which frighten some staff</li> <li>improving the overall infrastructure, including the rural road network, staff housing and facilities</li> <li>maintenance of existing infrastructure</li> <li>training and skills improvement particularly for health staff.</li> <li>convincing POPSM to fill the recruitment gap (e.g. for the past 5 years the</li> </ul>			

---

council has not received assistant medical officers, despite several requests and a shortage of over 50% of requirement)

- requests for recruitment permits to POPSM not honoured according to LGA needs or preferences (e.g. arts teachers often posted instead of requested science teachers)
- limited community support (e.g. willingness to participate in constructing staff houses and classrooms)
- lack of and/or inadequate transport facilities at head office and particularly ward level for supervision, coordination and backstopping
- old infrastructure (e.g. classrooms and staff houses mainly in old schools that require major rehabilitation (e.g. Mlandizi Primary School).

#### General patterns of inequity within the LGA

Service facilities, specifically for health and secondary education, are unequally distributed among the administrative units. Some wards are without secondary schools, while some villages are without dispensaries. Furthermore, there is unequal distribution of staff across service facilities and administrative units.

#### Specific patterns of inequity

Staffing inequities within the LGA are pronounced in some wards, including the Mwamgongo, Kagunga and Kagongo wards. In these wards primary schools have on average fewer than 10 teachers per school and at most 1 staff member per dispensary. All are HTRS wards located along the lakeshore of Lake Tanganyika. There are also some easy-to-reach wards such as Mkongoro, which exhibit significant inequalities within the service facilities in the ward. Furthermore in some wards, including Matendo and Pamila, traditional beliefs (including witchcraft) discourage the attraction and retention of staff.

LGA:

Msalala DC

Region:

Shinyanga

Population:	286248
Wards	29
Villages	82
Mtaa	0

Average PTR	Primary education	56.109
Lowest PTR	Primary education	11.25
Highest PTR	Primary education	107.4444
Overall Pass rate		49.17647
Highest pass rate		100
Lowest pass rate		2

Average PTR	Secondary education	30.64394
Lowest PTR	Secondary education	12.75
Highest PTR	Secondary education	50.44444
Average Number of students to science teachers		207.3155
Lowest Number of students to science teachers		93.66666
Highest Number of students to science teachers		601
Overall Pass rate		75.85714
Highest pass rate		86
Lowest pass rate		67

### Health data

Number of dispensaries	18	HCs:	2	Hospital:	0
Highest number of staff per dispensary:					15
Lowest number of staff per dispensary:					4
Highest OPD per dispensary					5112
Highest OPD per staff					908.75
Lowest OPD per dispensary					2497
Lowest OPD per staff					191.6

### Agriculture

Total extension staff:	#REF!
staff per ward	1.8125
staff by village	0.3869792
staff per total motor bike	2.230769
Highest number of staff per village in any ward	1
Lowest number of staff per village in any ward	0.125

LGA		Msalala DC	
Status		Newly created LGA*	
Formerly part of Kahama DC, which has now been subdivided into Msalala DC and Ushetu DC (see below). Msalala DC became operational effective on 1 July 2013.			
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Ntobo	Ntobo WO	Chela	Chela WO
	Ntobo SS		Baloha SS
	Wichamike PS		Mwanuiaguli PS
	Ntobo Dispensary		Chela HC
Staffing levels			
Overall assessment of staffing levels		Poor	
Key vacancies		<p>At management level due to staff requesting transfers to the newly created districts. Shortage of 6 education officers at council level.</p> <p>Staffing shortage of 600, predominantly across education and health sectors, with the primary education staffing shortage being particularly acute.</p> <p>Shortage of 5 technicians within the works department.</p> <p>Science teachers (particularly when those assigned are on study leave).</p>	
Overall primary PTR		1:56	
Overall secondary PTR		1:32	
Overall health staff to population		1:1449	
Over agriculture staff to village		1:3	
Attraction and retention strategies			
For primary education there are documented strategies (not provided) in relation to:			
<ul style="list-style-type: none"> <li>• sensitising councillors</li> <li>• community support for staff housing</li> <li>• budgeting for the completion of staff housing and classrooms started by communities.</li> </ul>			
Other attraction and retention related issues			

---

Factors affecting the equitable distribution of staff include:

- lack of services in remote areas makes it difficult to place staff there ('Even if you force post them they will request a transfer within 2 years'. Remoteness is the main factor affecting the equitable distribution of teachers.)
- lack of staff housing
- lack of transport for staff, particularly extension officers
- lack of support from parents, particularly in relation to timely payment of contributions and in terms of encouraging children to attend school (particularly in agri-based communities)
- lack of staff housing
- maintenance of solar powered electricity
- availability of drugs at dispensaries
- accessibility of education facilities in terms of attendance and access to social services, particularly water
- attitude of the community to education in some wards and villages.

The DC has been making requests to the Employment Secretariat to address some of these issues.

#### General patterns of inequity within the LGA

General patterns of inequity are similar to those of Ushetu DC.

#### Specific patterns of inequity

The infrastructure at Mwanuiaguli Primary School in the Chela Ward is particularly poor. The school and staff housing has been poorly constructed and maintained. The school is located approximately 2 kilometres from the village, but access to the school from the main road is by dirt track and becomes particularly inaccessible during the rainy season. All the teachers at the school are male. The last female teacher who worked at the school died in labour because it took 3 hours to arrive at the health centre during the rainy season.

LGA: **Nzega DC** Region: **Tabora**

Population:	502252
Wards	37
Villages	163
Mtaa	0

Average PTR Primary education	68.9927
Lowest PTR Primary education	14.875
Highest PTR Primary education	212
Overall Pass rate	21.40267
Highest pass rate	94
Lowest pass rate	0

Average PTR Secondary education	25.28861
Lowest PTR Secondary education	8.714286
Highest PTR Secondary education	50.07692
Average Number of students to science teachers	138.3773
Lowest Number of students to science teachers	24.33333
Highest Number of students to science teachers	306
Overall Pass rate	35.5
Highest pass rate	60
Lowest pass rate	10

#### Health data

Number of dispensaries	46	HCs:	6	Hospital:	2
Highest number of staff per dispensary:	13				
Lowest number of staff per dispensary:	1				
Highest OPD per dispensary	9592				
Highest OPD per staff	4796				
Lowest OPD per dispensary	212				
Lowest OPD per staff	38.61538				

#### Agriculture

Total extension staff:	#REF!
staff per ward	1.540541
staff by village	0.4237774
staff per total motor bike	11.4
Highest number of staff per village in any ward	1
Lowest number of staff per village in any ward	0

LGA		Nzega DC	
Status		Old established LGA	
Nzega DC in the Tabora region is among the oldest LGAs in Tanzania. It is subdivided into 37 wards and 167 villages, with a total population of 502,252 concentrated in the urban trading areas.			
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Nata	Nata PS	Budushi	Budushi PS
	Nata SS		Budushi SS
	Nata Dispensary		Budushi Dispensary
	Nata WO		Budushi WO
Nzega Ndogo	Nzega Ndogo PS	Kahama	Mabonde SS
	Undomo SS		Kahama PS
	Zogolo HC		Kahama Dispensary
	Nzega Ndogo WO		Kahama WO
Overall assessment of staffing levels		Poor	
Key vacancies		Primary education (shortage of 200) Secondary education* (shortage of 170) Health** (shortage of 159) Agriculture (shortage of 122) *particularly science teachers. **particularly clinicians and nurses.	
Overall primary PTR		1:60	
Overall secondary PTR		1:26	
Overall health staff to population		1:2616	
Over agriculture staff to village		1:3	
Attraction and retention strategies			
A pay-for-performance scheme is practised in the district secondary schools where teachers whose students pass the subjects they teach are paid TZS 30,000 for each student with A grades, TZS 20,000 for B grades, and TZS10,000 for C grades. However, most schools do not have the funding to implement the scheme.			

---

## Other attraction and retention related issues

Factors affecting the equitable distribution of staff include:

- The district has trouble posting staff to remote areas, with district management claiming there is ‘no type’ of person willing to take up a position in the remote areas and citing instances of fake marriages to avoid taking up posts. Remarks from those posted to these areas included, *Nafanya kazi hapa kwa kuwa sina namna* (‘I am working in this area because I have no alternative’) and, *Kama ningeambiwa nihame leo sitadai hata senti moja* (‘If I were to be transferred I will never ask for a single cent of the transfer or disturbance allowance’).
- Funding for transfer allowances. Approximately TZS 56 million was received last year for transferring staff but most of it is spent on relocating retirees.
- School boards and school committees are institutionally weak, due to the lack of training and orientation in relation to their roles and responsibilities, while attendance at meetings is also reported to be poor.
- Limited community participation in meetings and making contributions.

## General patterns of inequity within the LGA

Serious inequities are notable in the more remote wards, particularly those with poor roads. Some of these wards become inaccessible during the rainy season (e.g. Semembela, Mambali and Budushi).

Communications are also an issue, due to the lack of network coverage (e.g. Semembela).

In the urban/trading centres there is overstaffing (e.g. Nzega Mjini), where schools have PTRs above the national average.

There are a number of health facilities with fewer than 2 members of staff. There are just 23 village agricultural extension officers and 8 motorcycles for the 167 villages in the district.

## Specific patterns of inequity

The distance<sup>12</sup> some students must travel to school is a significant impediment and secondary education is facing difficulties with a high dropout rate, late reporting, students seeking transfers to other schools, and pregnancies. For example, at Budushi Secondary School the dropout rate is high and many students have sought transfers, leaving the school with just 44 students. Despite the long distances students must travel, it is proving difficult to sustain the provision of meals at schools.

Severe shortages of staff housing. At one school visited 3 teachers were being accommodated in a kitchen.

Serious shortages of science laboratories (buildings and laboratory equipment), dormitories and latrines.

A significant number of students enrolled in Form I this year have not reported (e.g. at Undomo Secondary School in Nzega Ndogo out of the expected 61 Form I students, only 35 had reported).

In the Budushi Ward there are no staff houses or rentals, resulting in a daily commute of

---

<sup>12</sup> In Nzega Ndogo some students cover 5 to 8 km to school each day

---

26 kilometres from Ndala for the staff of the ward. During the dry season, the commute can be done by bicycle. However, during the rainy season motorbikes must be hired at a cost of TZS 10,000 per day.

LGA: **Sumbawanga DC** Region: **Rukwa**

Population:	305841
Wards	15
Villages	101
Mtaa	0

Average PTR Primary education	68.62343
Lowest PTR Primary education	19.47368
Highest PTR Primary education	298
Overall Pass rate	27.31068
Highest pass rate	96
Lowest pass rate	0

Average PTR Secondary education	24.82538
Lowest PTR Secondary education	16.23077
Highest PTR Secondary education	37.78571
Average Number of students to science teachers	228.3125
Lowest Number of students to science teachers	75.5
Highest Number of students to science teachers	529
Overall Pass rate	32.66667
Highest pass rate	40
Lowest pass rate	21

### Health data

Number of dispensaries	56	HCs:	7	Hospital:	0
Highest number of staff per dispensary:	8				
Lowest number of staff per dispensary:	0				
Highest OPD per dispensary					
Highest OPD per staff					
Lowest OPD per dispensary					
Lowest OPD per staff					

### Agriculture

Total extension staff:	#REF!
staff per ward	2.4
staff by village	0.362963
staff per total motor bike	2.4
Highest number of staff per village in any ward	0.666667
Lowest number of staff per village in any ward	0.111111

LGA		Sumbawanga DC	
Status		Old established LGA	
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Mpui	Mpui PS	Kipeta	Kipeta PS
	Mpui SS		Kipeta SS
	Mpui Dispensary		Kipeta Dispensary
Kaengesa	Kaengesa PS	Mfinga	Mfinga PS
	Mzindakaya SS		Mfinga SS
			Mfinga Dispensary
Staffing levels			
Overall assessment of staffing levels		Average	
Key vacancies		Primary school teachers	
		Science teachers	
		Clinical officers	
		Water engineers / technicians	
		Agricultural staff	
Overall primary PTR		61	
Overall secondary PTR		25	
Overall health staff to population		1124	
Over agriculture staff to village		0.20	
Attraction and retention strategies			
There is no official documented scheme with regards to attracting and retaining staff in the LGA. However, at the time of the fieldwork it was observed that the LGA has started preparing for this but it had only been discussed at the CMT level.			
Other attraction and retention related issues			
In the last 5 years, staff turnover has improved compared to 5 to 10 years ago. Factors contributing to the turnaround include:			
<ul style="list-style-type: none"> <li>a regional initiative, which led to the establishment of the Rukwa Mwl. Nyerere Civil Servants Facilitation Fund (RCSFF) in 2005, applying to all districts in the region (The scheme aimed to top up some allowances, and provide furniture and loans, and was mainly focused on attracting and retaining secondary school teachers. The scheme is not functioning well currently, due to lack of funds and insufficient political will.)</li> </ul>			

- other opportunities for other income including farming and cattle keeping businesses
- other LGA efforts, including commitment to good governance, own fund contributions to staff houses and facilities, and monetary incentives for the best performing teachers and schools.

#### General patterns of inequity within the LGA

The LGA displays relatively high patterns of inequity, particularly across its remote wards. These include remote wards such as Kipeta, Kaoze, Milepo and Ilemba and others, such as Mfinga, Sandalule and Mtowisa. However, the situation is improving due to the existence of opportunities for other income in the LGA like farming and cattle-keeping businesses. Factors impeding the equitable distribution of staff within the district include:

- out-of-line teacher allocations from the responsible ministry (e.g. over posting of arts teachers)
- limited number of experts in some disciplines at the national level (e.g. water engineers, agricultural officers)
- the management of science teachers posted to remote areas who consider themselves as rare
- limited OC and/or own LGA funds to cater for staffing issues, such as internal transfers, leave allowances and general maintenance of facilities
- delays in the receipt of OC (e.g. at the time of the fieldwork the LGA had received a total of just TZS 26 million as OC for the first 8 months of the fiscal year)
- limited development funds to support the implementation of various development projects, including the construction of staff houses, classrooms, and dispensaries (e.g. TZS 89 million was allocated as development funds in respect of education for 2012/13, while the actual funds received were just TZS 2 million.)
- inadequate community support in terms of contributions, the construction of staff houses and facilities, and generally providing a conducive environment for staff within their areas, particularly in the more remote wards
- lack of staff houses, including the availability of alternative rental houses as well as basic social services like electricity and water in 'remote' areas
- the very high cost of transport for wards situated in the lowland, particularly during the rainy season when roads are not passable, which can see prices rise to TZS 40,000 to reach Sumbawanga Town
- lack of staff houses and basic social services, including electricity and water
- lack of community awareness of the importance of education and the requirement of children to assist in farming, leading to truancy
- cultural beliefs, including rumours of witchcraft.

#### Specific patterns of inequity

##### Primary schools

Some significant cases of inequity were noted in the remote wards. The highest PTR (1:298) was found in Kapenta Primary School in Kaoze Ward, where the school had just 2 teachers. PTRs of 1:159, 1:132, 1:123 were also noted in other remote wards.

##### Secondary schools

Overall, the distribution of secondary teachers is relatively equitable. There are some exceptions, particularly in relation to science teachers. Both Mpui and Miangalua

---

secondary schools have 4 science teachers, while Kikwale, Unyika and Kipeta have no science teachers. The overall PTR is 1:25, with the lowest being 1:16 (Unyiha) and highest being 1:38 (Mzindakaya).

#### Health facilities

Ilemba Dispensary in the HTRS Ilembela Ward has a total of 6 qualified staff seeing 24,179 outpatients per annum, while Chitete Dispensary, in the Kaengesa Ward has just 1 qualified member of staff seeing 36,432 outpatients per annum. Overall, 8 dispensaries (27%) had no qualified staff. All other remaining dispensaries had qualified staff, ranging from 1 to 3.

#### Agriculture

3 wards (including Mtowisa, which has 9 villages) have no agricultural officers. Kaengesa and Ilemba had 4 and 3 extension officers respectively. The overall ratio of staff per village in the LGA is 1:5.

LGA: **Ushetu DC** Region: **Shinyanga**

Population:	273303
Wards	19
Villages	105
Mtaa	0

Average PTR Primary education	55.6102
Lowest PTR Primary education	31.71428
Highest PTR Primary education	92.5625
Overall Pass rate	37.29592
Highest pass rate	100
Lowest pass rate	0

Average PTR Secondary education	28.85058
Lowest PTR Secondary education	11.77778
Highest PTR Secondary education	53.44444
Average Number of students to science teachers	199.25
Lowest Number of students to science teachers	77.5
Highest Number of students to science teachers	503
Overall Pass rate	60.26667
Highest pass rate	76
Lowest pass rate	33

### Health data

Number of dispensaries	19	HCs:	3	Hospital:	0
Highest number of staff per dispensary:	8				
Lowest number of staff per dispensary:	3				
Highest OPD per dispensary	5098				
Highest OPD per staff	1381.667				
Lowest OPD per dispensary	145				
Lowest OPD per staff	36.25				

### Agriculture

Total extension staff:	#REF!
staff per ward	1.315789
staff by village	0.2598371
staff per total motor bike	1.388889
Highest number of staff per village in any ward	0.6666667
Lowest number of staff per village in any ward	0.125

LGA		Ushetu DC	
Stat		Newly established LGA*	
*Ushetu and Msalala DCs were formed following the split of the former Kahama DC in the Shinyanga region, with Ushetu DC retaining the district HQ and the majority of the management of the former Kahama DC.			
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
Ukune	Iboja PS	Idahina	Idahina PS
	Dakama SS		Idahina SS
	Ukune HC		Idahina Dispensary
	Ukune WO		
Staffing levels			
Overall assessment of staffing levels		Poor	
Key vacancies		Qualified health staff	
		Agricultural extension officers	
		Science teachers	
Overall primary PTR		1:56	
Overall secondary PTR		1:28	
Overall health staff to population		1:1859	
Over agriculture staff to village		1:18	
Attraction and retention strategies			
There are no documented strategies, but management noted that remote areas are prioritised in relation to:			
<ul style="list-style-type: none"> <li>• working with the community to ensure staff are initially well received</li> <li>• encouraging the construction of staff housing</li> <li>• providing transport for staff arriving for the first time.</li> </ul>			
The council management also pointed out that they do not have the funding for attraction and retention incentive schemes.			
However, the fieldwork uncovered examples of facility level incentive schemes at some secondary schools, where teachers were paid bonuses of TZS 1,000 and TZS 500 per student achieving A and B grades respectively in national examinations. Also, teachers' first year of rent was paid by the school in order to help them settle in initially, while plots of land for farming were also provided.			
Other attraction and retention related issues			

---

Lack of social services and staff housing affect efforts to distribute staff equitably.

#### General patterns of inequity within the LGA

The distribution of staff within the service facilities is relatively unequal, with instances of serious understaffing in the more remote wards, particularly those with poor roads. Schools located near trading centres tend to have relatively lower PTRs. A number of primary schools in the remote areas have PTRs in excess of 75.

Staff housing tends to be more readily available for the health sector compared to the education sector and particularly the agriculture sector, which has no staff housing. The policy of the LGA is for the community to initiate the construction of staff houses with the council subsequently providing technical support and specialised construction materials (e.g. roofing materials). In some communities such initiative was lacking.

#### Specific patterns of inequity

The Idahina Ward constructed a staff house in 2004, but to date no support has been received from the council and the unfinished house has started to fall apart. Community members are frustrated and have not been willing to participate in or contribute to any similar initiatives since then. Out of desperation, the head teacher of the primary school mobilised fellow teachers and pupils and started the construction of 4 single-bedroom houses. The houses require finishing but neither the community nor the council has shown interest in supporting the initiative. The MP for the constituency has failed to deliver on a promise made the previous year to secure roofing material.

LGA: **Uvinza DC** Region: **Kigoma**

Population:	383640
Wards	14
Villages	45
Mtaa	0

Average PTR Primary education	86.95436
Lowest PTR Primary education	18.8
Highest PTR Primary education	780
Overall pass rate	49.15625
Highest pass rate	98
Lowest pass rate	0

Average PTR Secondary education	80.31429
Lowest PTR Secondary education	41.83333
Highest PTR Secondary education	148.75
Average Number of students to science teachers	324.0556
Lowest Number of students to science teachers	157
Highest Number of students to science teachers	548
Overall pass rate	20.33333
Highest pass rate	34
Lowest pass rate	0

### Health data

Number of dispensaries	41	HCs:	4	Hospital:	0
Highest number of staff per dispensary:	6				
Lowest number of staff per dispensary:	1				
Highest OPD per dispensary	43800				
Highest OPD per staff	21900				
Lowest OPD per dispensary	1250				
Lowest OPD per staff	716.6667				

### Agriculture

Total extension staff:	#REF!
staff per ward	1.5
staff by village	0.4845238
staff per total motor bike	3
Highest number of staff per village in any ward	1.333333
Lowest number of staff per village in any ward	0

LGA		Uvinza DC	
Status		Newly established LGA*	
*Uvinza DC is a newly established council following the split of Kigoma DC. The council started operating effective July 1 <sup>st</sup> 2013. Administratively the council is divided into 14 wards and 45 villages.			
Fieldwork			
Easy to reach		Hard to reach	
Ward	Facility	Ward	Facility
		Buhingu	Buhinga PS Buhinga SS Buhingu HC
Staffing levels			
Overall assessment of staffing levels		Poor	
Key vacancies		Science teachers	
Overall primary PTR		1:63	
Overall secondary PTR		1:56	
Overall health staff to population		1:2780	
Over agriculture staff to village		1:3	
Attraction and retention strategies			
As a newly created LGA, Uvinza DC has yet to develop its own attraction and retention strategies, but is likely to lean heavily on those devised by Kigoma DC before the district split.			
Other attraction and retention related issues			
Attraction and retention issues are similar to those observed for Kigoma DC.			
General patterns of inequity within the LGA			
Patterns of inequity are similar to those in Kigoma DC, from which Uvinza split. There are significant inequities, particularly in relation to the district's remote areas along the lake shore. Lack of community support remains a significant obstacle to progress in the education sector.			
Specific patterns of inequity			
Wards located along the lake shore of Lake Tanganyika, including Buhingu, Kalya, Igalula and Sigunga are significantly understaffed. Transport is the main issue affecting attraction and retention to these areas. Travel is primarily via boat across the lake and a return journey can take up to 2 days. Accessibility by motorbike is limited to the dry season.			
These HTRS areas are also characterised by a lack of reliable communication networks and other basic amenities, including staff housing and electricity. Dispensaries in Igalula, Sigunga, and Kalya have just 1 member of staff.			
The poor staffing situation has affected service delivery in wards such as Buhingu, where			

---

attendance and dropout rates are high.

## Appendix 4 : Relationship between LGA fiscal allocations and service delivery

This appendix presents a preliminary analysis of the relationship between fiscal transfers to LGAs and their impact on service delivery. The analysis focuses on three sectors discussed in the three sub-appendices below: (A) primary education, (B) secondary education and (C) health.

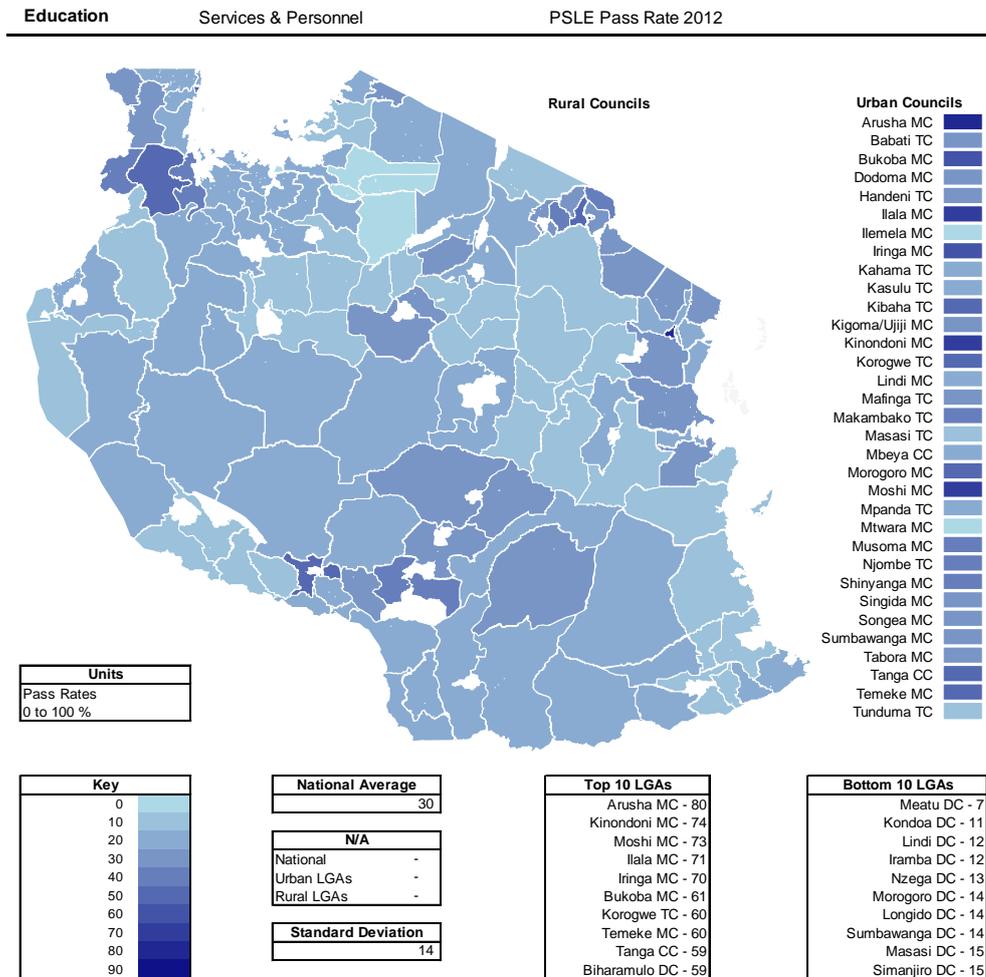
The overall conclusion from the preliminary analysis is that the link between resources allocated for services in the form of PE and other transfers and actual service delivery outcomes is extremely weak. The overall conclusions from the analysis are in support of the major conclusions from previous years' public expenditure studies as discussed in Section 3.6 of the main report.

### 4.1 Relationship between primary education spending and service delivery

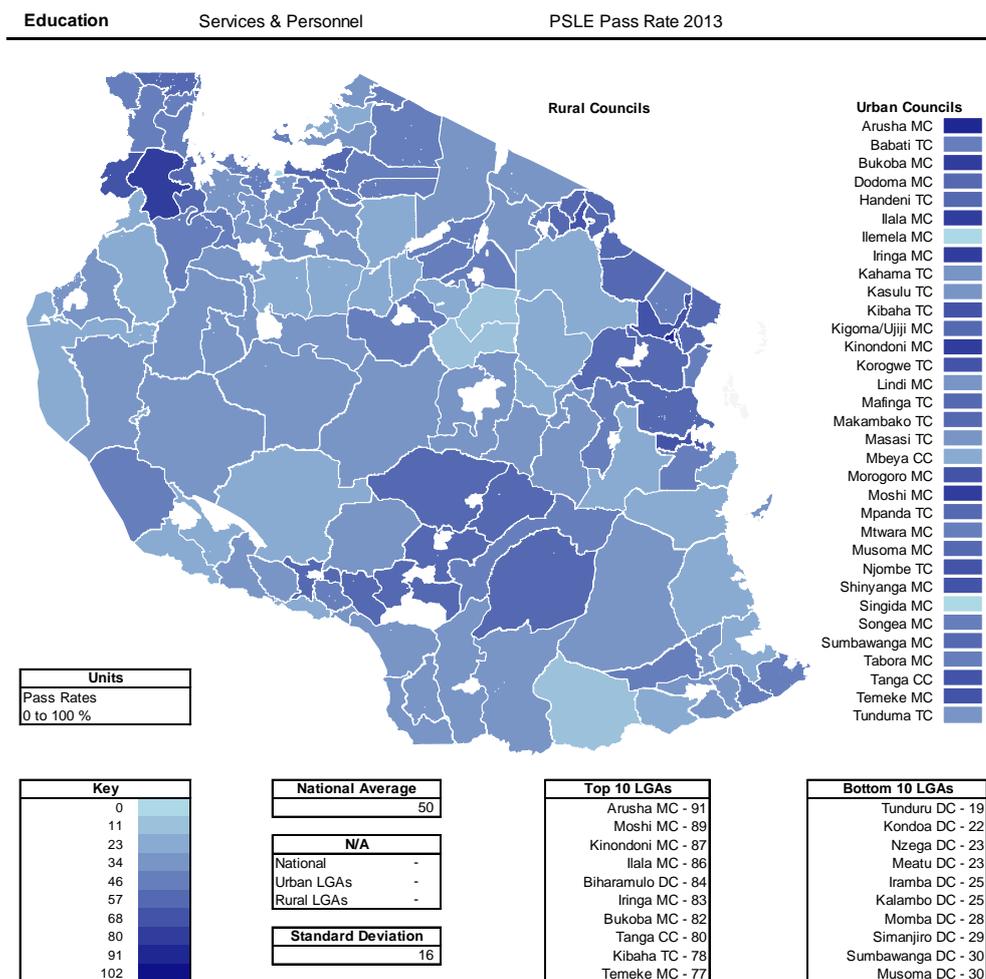
- There is a wide variation in primary education outcomes across districts. Figure 61 maps average pass rates for districts on the Primary School Leaving Exam (PSLE) for 2012 and Figure 62 does the same for 2013.
- The wide disparity is notable in the large deviations from the mean pass rate in both years. In 2012 the average pass rate was 30%, with a standard deviation of 14. The highest performing district (Arusha MC) had an average pass rate of 80% compared to just 7% in the lowest performing district (Meatu DC).
- In 2013 the average pass rate improved significantly to 50%, while the standard deviation also increased to 16. The highest performing district (again Arusha MC) had a pass rate of 91% compared to just 19% for the lowest performing district (Tunduru DC).
- In 2012 Arusha MC received TZS 56,080 per capita in primary PE funding compared to TZS 32,035 for Meatu DC. While this disparity in the pattern of funding matches the pattern of disparity between outcomes, it should be noted that Arusha MC, although better funded than the national average, was far from being the best funded district, and Meatu DC, although less well funded than the national average, was far from being the least funded district (see Figure 1 in Appendix 2). This suggests that funding is a driver of outcomes but that the relationship may not be that strong.
- In fact, we find that the overall correlation is weakly positive between 2012 PSLE district average pass rates and 2012/13 recurrent spending per capita (Figure 63).
- The overall correlation between pass rates and recurrent spending is 0.19 (Figure 63), with the correlation for PE spending being slightly stronger at 0.21 (Figure 64), while, surprisingly, the correlation with OC is weakly negative at -0.05 (Figure 65).

- The correlation is stronger at 0.33 if urban districts (Municipal Councils, Town Councils and City Councils) are excluded from the sample (Figure 66). It is also notable that with the exception of Biharamulo DC in 2013, the top 10 performers are all urban districts in 2012 and 2013, while the bottom 10 performers are all rural council districts (see Figure 61 and Figure 62). **This suggests potential gains from reallocating resources from urban to rural settings.**

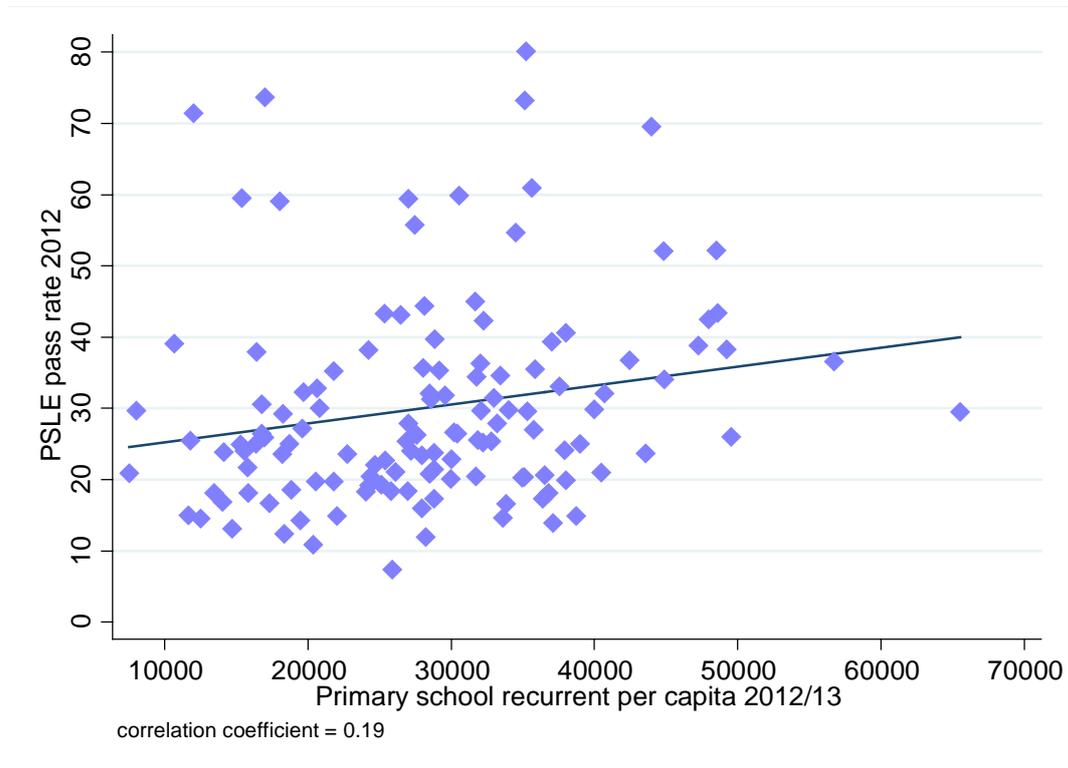
**Figure 61: Primary education outcomes by district, 2012**



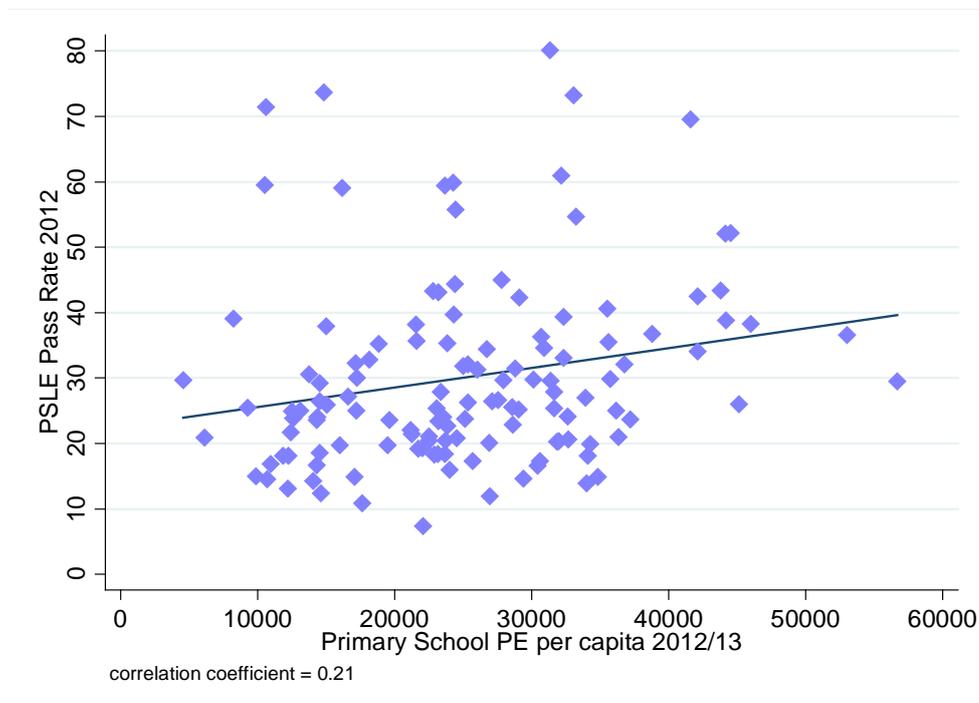
**Figure 62: Primary education outcomes by district, 2013**



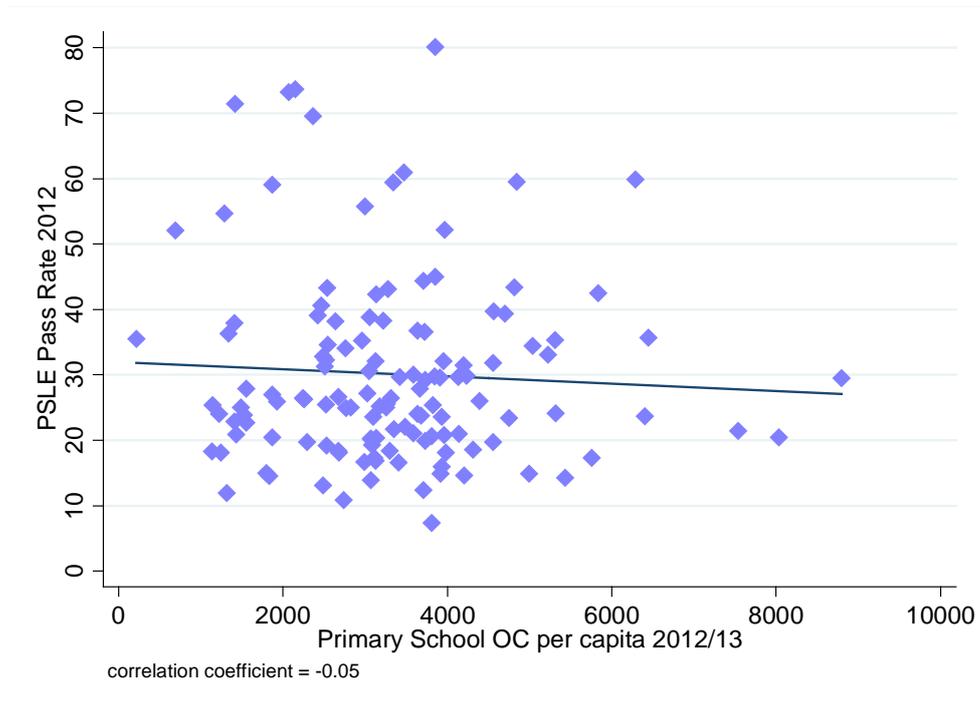
**Figure 63: Relationship between primary education recurrent spending and pass rates at district level**



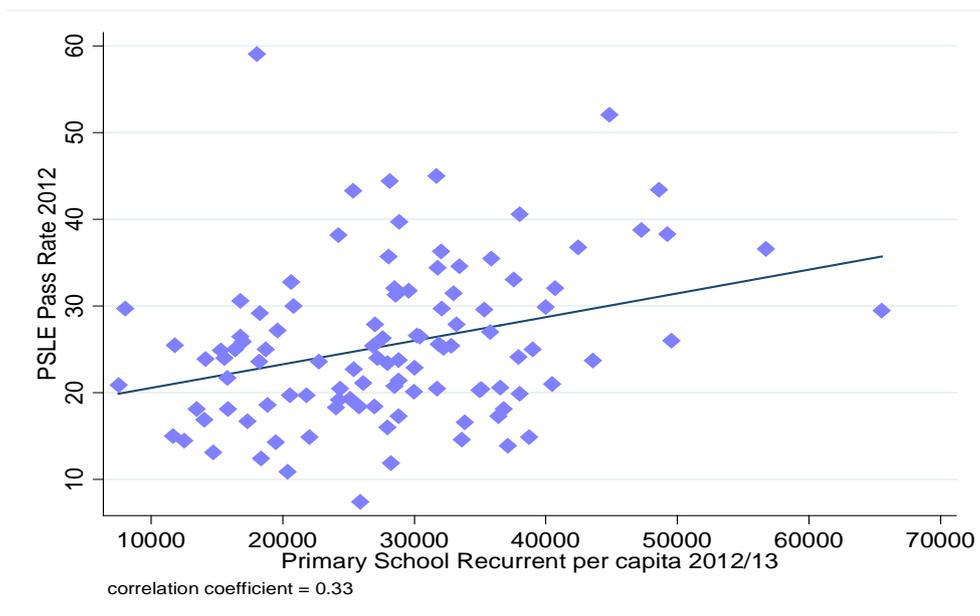
**Figure 64: Relationship between primary education PE spending and pass rates at district level**



**Figure 65: Relationship between primary education OC spending and pass rates at district level**



**Figure 66: Relationship between rural primary education recurrent spending and pass rates at district level**

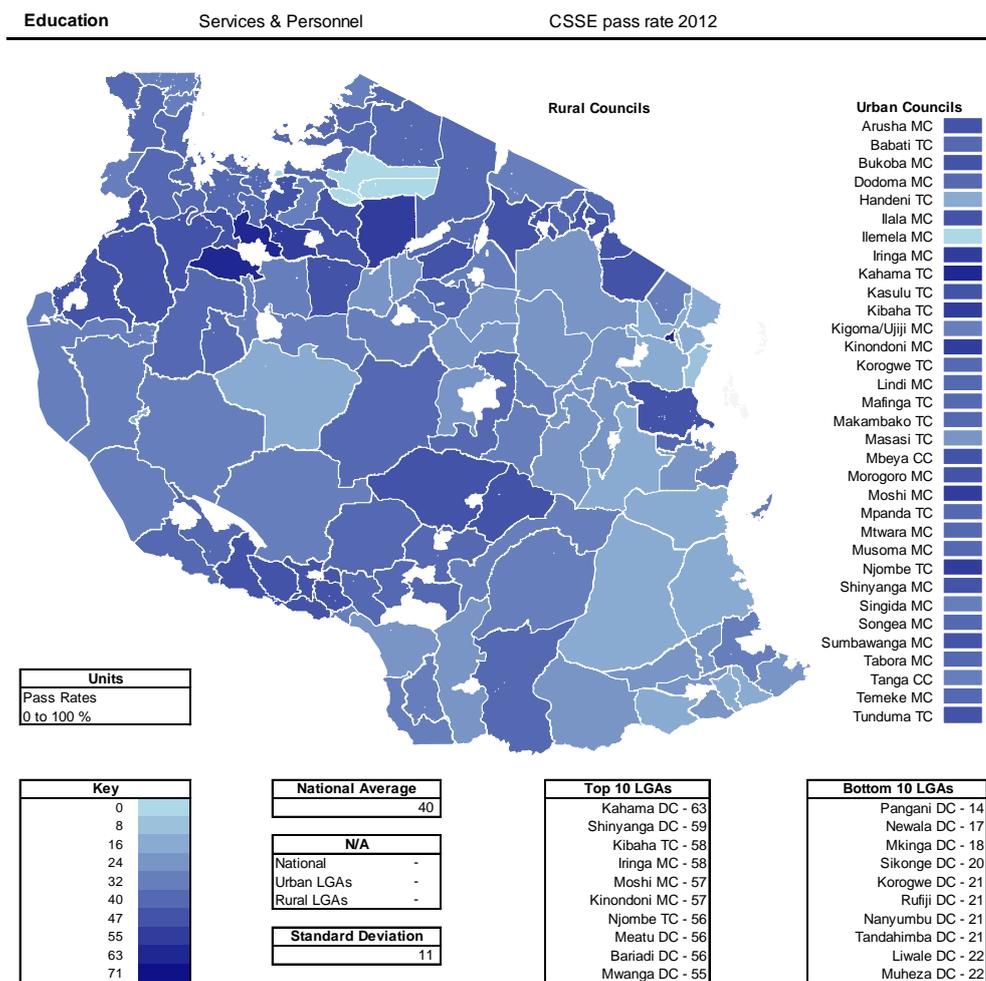


---

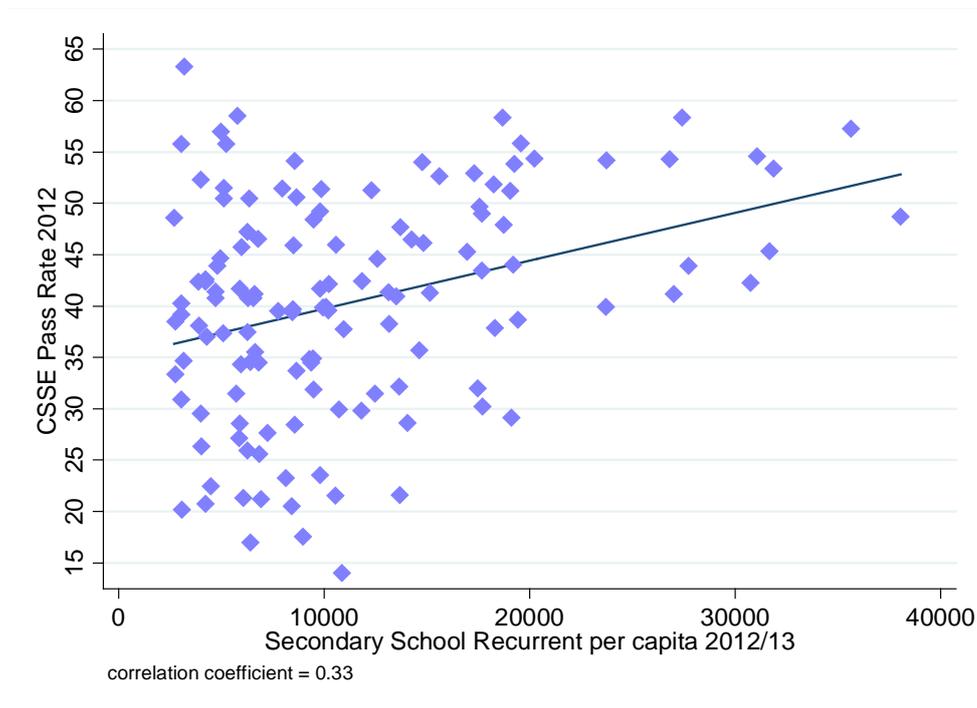
## 4.2 Relationship between secondary education spending and service delivery

- Although there is wide variation in secondary education outcomes across districts, it is not as pronounced as in the case of primary education outcomes. Figure 67 maps average pass rates for districts on the Certificate in Secondary School Exam (CSSE) for 2012.
- The disparity, as measured by the standard deviation from the mean of 11, is considerably less than was observed for primary education outcomes. The highest performing district (Kahama DC) had an average pass rate of 63% compared to 14% in the lowest performing district (Pangani DC).
- In 2012 Kahama received just TZS 2,356 per capita in secondary PE funding compared to TZS 9,263 for Pangani DC. This might suggest that funding is not a driver of outcomes of secondary education outcomes.
- However, we find that the overall correlation is more positive between 2012 secondary outcomes and funding (Figure 68 below) than was the case for primary education funding and outcomes. In other words Kahama DC appears to be a particular outlier.
- The overall correlation between pass rates and recurrent spending is 0.33 (Figure 68) with the correlation for PE spending being slightly stronger at 0.34 (Figure 69) while the correlation with OC is weaker at 0.2 (Figure 70).
- Although there are a number of urban districts in the top 10 performing LGAs while the bottom 10 districts are all rural LGAs the correlation is significantly weaker at 0.22 if urban districts (Municipal Councils, Town Councils and City Councils) are excluded from the sample (Figure 71).
- Overall, the analysis suggests that increased funding of underfunded LGAs would support better secondary education outcomes.

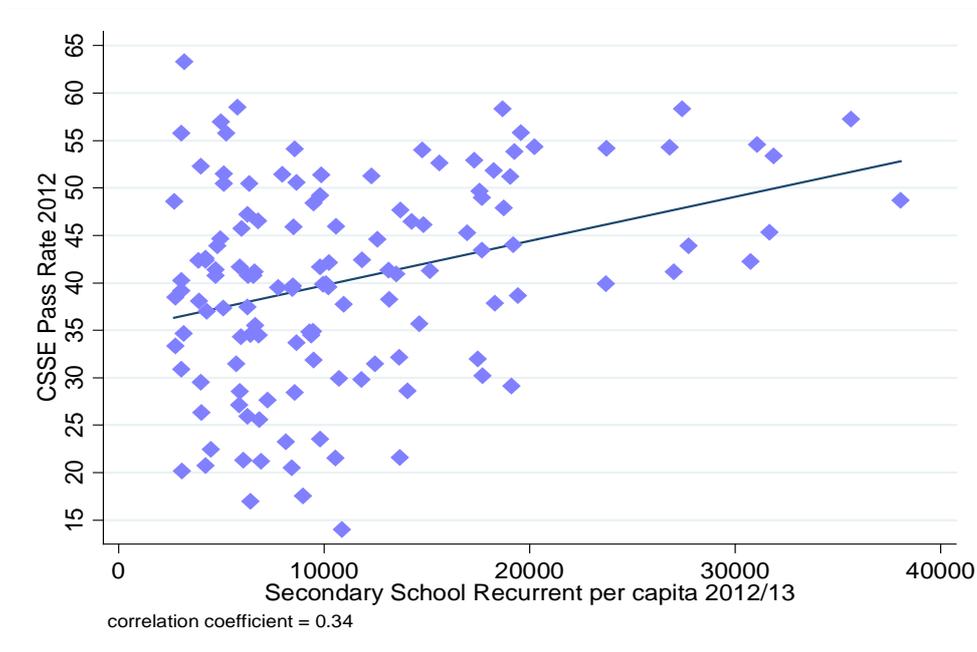
**Figure 67: Secondary education outcomes by district, 2012**



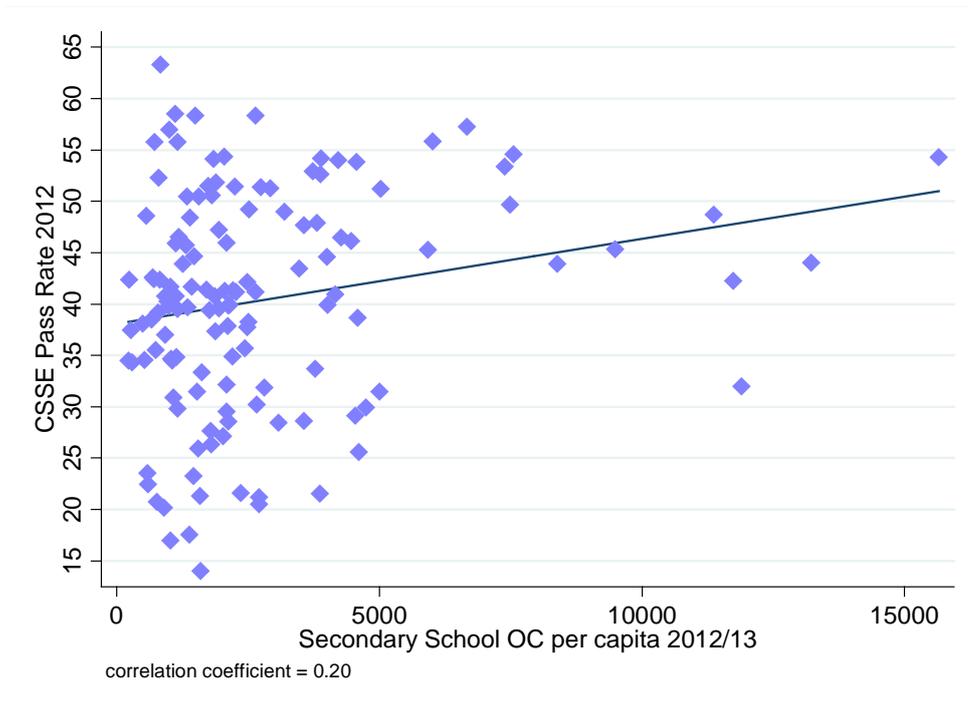
**Figure 68: Relationship between secondary education recurrent spending and pass rates at district level**



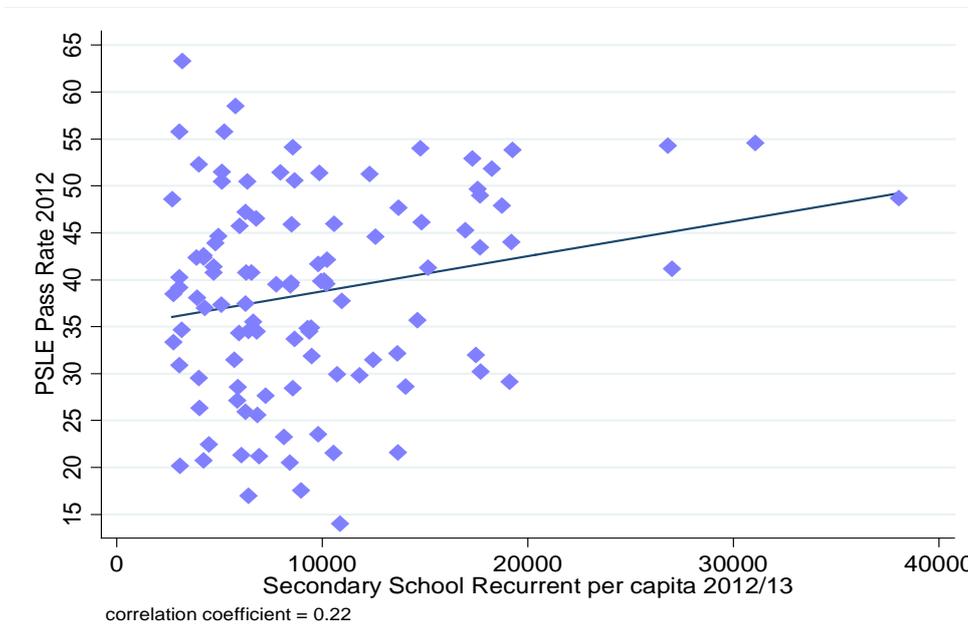
**Figure 69: Relationship between secondary education PE spending and pass rates at district level**



**Figure 70: Relationship between secondary education OC spending and pass rates at district level**



**Figure 71: Relationship between rural secondary education recurrent spending and pass rates at district level**



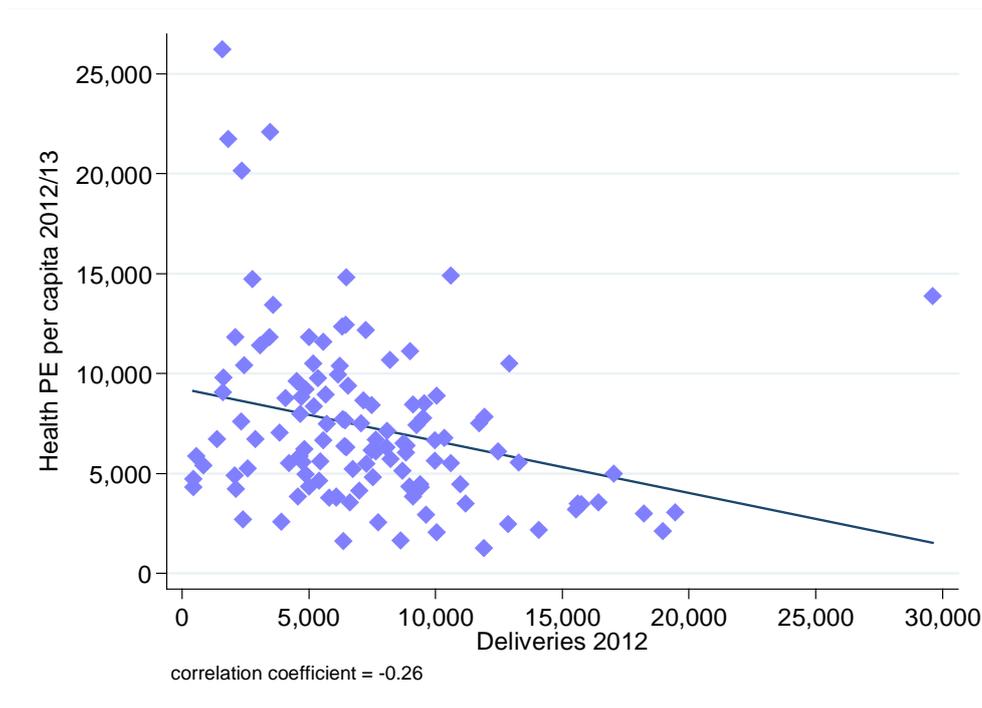
### 4.3 Relationship between health spending and service delivery

There is a very limited range of data sets for service delivery at LGA level in the health sector, as most is disaggregated at regional level. However, the team received a data set on deliveries at facility level that is used for the analysis here. This analysis concludes that there is a negative but weak relationship between spending and health service delivery (as measured by number of deliveries).

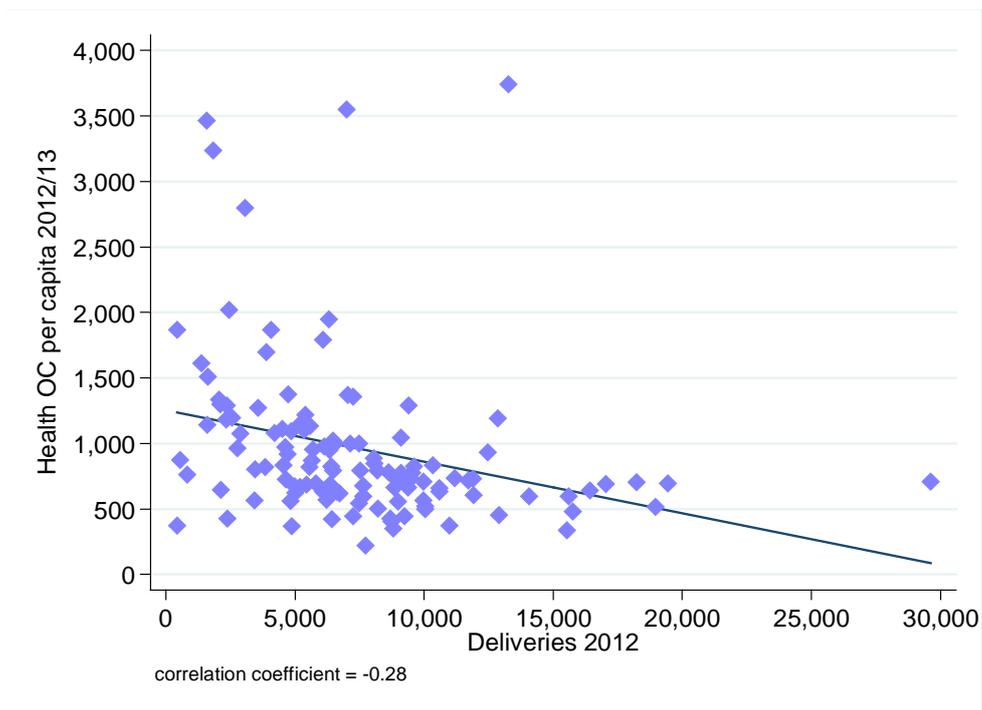
**Table 16: Correlation coefficients of spending and service delivery**

Spending 2012/13	Deliveries
PE	-0.26
OC	-0.28
Subventions and Basket	-0.19

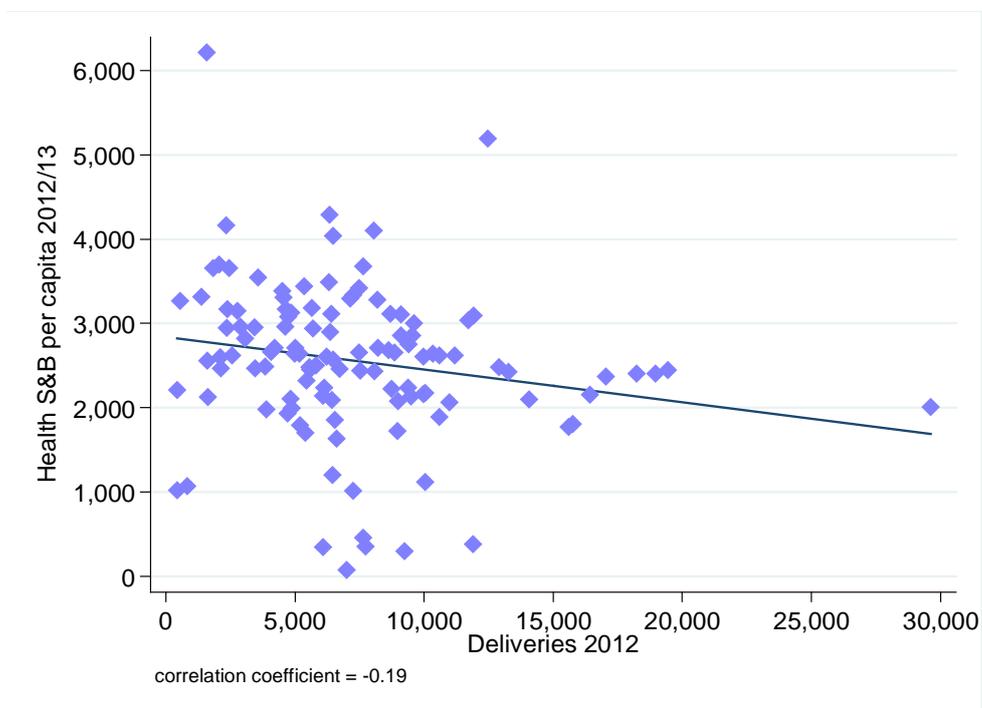
**Figure 72: Relationship between health PE spending and deliveries at district level**



**Figure 73: Relationship between health OC spending and deliveries at district level**



**Figure 74: Relationship between health subvention and basket spending, and deliveries at district level**



---

# Appendix 5 : Selected data on staff allocations to LGAs

This appendix presents selected data on staff allocations across LGAs. The data have been obtained from the various responsible sector ministries. There are significant differences across sectors relating to how data on staff allocations are organised, analysed and shared. In general it can be concluded that transparency on human resource data (staff allocation to LGAs, etc.) is very limited compared to transparency on similar data on fiscal resources.

The Ministry of Education is the most transparent. Through its website it allows online access to data from the BEST national publication (Basic Education Statistics Tanzania) (<http://educationstatistics.moe.go.tz/moe/>), where data on enrolment and PTR ratios across the country are included.

Other ministries do not have similar open access data on staff allocations and during the study it was difficult to extract information on staffing in useful formats from the sectors. The sectors keep various forms of records for staff allocations, but all in different formats and occasionally records are only traceable as hard copies. While data from the education sector are the most easy to assess, all sectors were working in a collaborative manner with the team to generate useful statistics on staff allocation patterns.

Three important data sets are included below:

- Primary education: data on teachers and pupil enrolments across LGAs in 2013, with an analysis of respective levels of under or overstaffing per LGA. Related data for previous years enable the team to analyse trends of the degree of inequity, for example, over time. (These are also discussed in the main report.)
- Agriculture sector staff allocations: the most recent record of staff allocations (agriculture and livestock officers) across LGAs, compiled by MAFS in March 2014.
- Health sector data on new allocations to LGAs: analysed in comparison with relative needs (measured as deviation from formula-based allocations).

**Table 17: Relative level of over/understaffing of primary schools by LGA, 2013<sup>13</sup>**

Region	District	PTR 2013	Enrolment	Teachers	Teachers above/less than PTR 40
			Total 2013	Total 2013	
Arusha	Arusha Rural	36	65391	1841	206
Arusha	Arusha Urban	30	73692	2486	644
Arusha	Karatu	35	41892	1191	144
Arusha	Longido	47	19951	428	-71
Arusha	Meru	39	64013	1647	47
Arusha	Monduli	39	25811	663	18
Arusha	Ngorongoro	30	28237	940	234
Dar es Salaam	Ilala	34	159930	4722	724
Dar es Salaam	Kinondoni	25	152917	6146	2,323
Dar es Salaam	Temeke	37	164195	4437	332
Dodoma	Bahi	45	32941	731	-93
Dodoma	Chamwino	52	57710	1107	-336
Dodoma	Chemba	48	46864	981	-191
Dodoma	Dodoma urban	38	74531	1979	116
Dodoma	Kondoa	49	56987	1170	-255
Dodoma	Kongwa	47	57526	1233	-205
Dodoma	Mpwapwa	50	62933	1258	-315
Geita	Bukombe	46	83022	1808	-268
Geita	Chato	55	80946	1462	-562
Geita	Geita	67	189189	2820	-1,910
Geita	Geita Urban	37	44970	1201	77
Geita	Mbogwe	48	39385	825	-160
Geita	Nyang'hwale	68	39861	586	-411

<sup>13</sup> Ministry of Education BEST data.

Iringa	Iringa Rural	44	60274	1356	-151
Iringa	Iringa Urban	32	28887	894	172
Iringa	Kilolo	47	59541	1269	-220
Iringa	Mufindi	39	71008	1804	29
Kagera	Biharamulo	50	43876	870	-227
Kagera	Bukoba Rural	42	64628	1540	-76
Kagera	Bukoba Urban	32	21440	668	132
Kagera	Karagwe	42	57527	1369	-69
Kagera	Kyerwa	67	61257	909	-622
Kagera	Missenyi	41	35871	866	-31
Kagera	Muleba	51	104330	2034	-574
Kagera	Ngara	48	76125	1579	-324
Katavi	Mlele	38	19698	523	31
Katavi	Mpanda Rural	25	27353	1106	422
Katavi	Mpanda Urban	49	19652	404	-87
Katavi	Nsimbo	42	25705	608	-35
Kigoma	Buhigwe	54	40486	752	-260
Kigoma	Kakonko	52	27763	532	-162
Kigoma	Kasulu	43	76953	1770	-154
Kigoma	Kibondo	45	42980	946	-129
Kigoma	Kigoma Rural	41	41953	1020	-29
Kigoma	Kigoma Urban	42	39349	948	-36
Kigoma	Uvinza	61	68637	1128	-588
Kilimanjaro	Hai	27	34544	1277	413
Kilimanjaro	Moshi Rural	27	73872	2745	898
Kilimanjaro	Moshi Urban	30	27212	896	216
Kilimanjaro	Mwanga	41	30835	755	-16

Kilimanjaro	Rombo	33	50553	1541	277
Kilimanjaro	Same	40	56635	1412	-4
Kilimanjaro	Siha	40	18390	465	5
Lindi	Kilwa	47	37070	791	-136
Lindi	Lindi Rural	50	35705	709	-184
Lindi	Lindi Urban	40	12690	314	-3
Lindi	Liwale	54	21066	392	-135
Lindi	Nachingwea	41	30946	751	-23
Lindi	Ruangwa	45	23284	512	-70
Manyara	Babati Rural	43	58856	1365	-106
Manyara	Babati Urban	30	15763	528	134
Manyara	Hanang	44	51510	1178	-110
Manyara	Kiteto	44	34202	770	-85
Manyara	Mbulu	41	55827	1360	-36
Manyara	Simanjiro	45	30239	670	-86
Mara	Bunda	52	86746	1681	-488
Mara	Butiama	51	49733	984	-259
Mara	Musoma Rural	52	100193	1939	-566
Mara	Musoma Urban	47	34492	730	-132
Mara	Rorya	52	67177	1295	-384
Mara	Serengeti	52	57235	1106	-325
Mara	Tarime	44	86189	1980	-175
Mbeya	Busokelo	54	23007	429	-146
Mbeya	Chunya	45	45789	1007	-138
Mbeya	Ileje	40	26573	664	0
Mbeya	Kyela	46	52082	1140	-162
Mbeya	Mbarali	43	53799	1251	-94

Mbeya	Mbeya Rural	40	64024	1606	5
Mbeya	Mbeya Urban	41	66020	1622	-29
Mbeya	Mbozi	41	91339	2230	-53
Mbeya	Momba	49	51269	1055	-227
Mbeya	Rungwe	36	54606	1528	163
Morogoro	Gairo	59	28902	492	-231
Morogoro	Kilombero	45	76707	1692	-226
Morogoro	Kilosa	42	72528	1740	-73
Morogoro	Morogoro Rural	42	54673	1297	-70
Morogoro	Morogoro Urban	26	50972	1929	655
Morogoro	Mvomero	42	58848	1394	-77
Morogoro	Ulanga	42	45339	1076	-57
Mtwara	Masasi	43	44871	1032	-90
Mtwara	Masasi Urban	36	16861	462	40
Mtwara	Mtwara Rural	48	46174	953	-201
Mtwara	Mtwara Urban	35	17412	501	66
Mtwara	Nanyumbu	46	29547	640	-99
Mtwara	Newala	45	36343	814	-95
Mtwara	Tandahimba	49	44927	911	-212
Mwanza	Ilemela	41	72488	1757	-55
Mwanza	Kwimba	50	83770	1664	-430
Mwanza	Magu	42	66425	1568	-93
Mwanza	Misungwi	45	67600	1503	-187
Mwanza	Nyamagana	41	78831	1912	-59
Mwanza	Sengerema	50	152324	3046	-762
Njombe	Ludewa	41	33130	804	-24
Njombe	Makambako TC	39	21105	539	11

Njombe	Makete	29	19891	675	178
Njombe	Njombe Rural	42	18753	447	-22
Njombe	Njombe Urban	39	28245	719	13
Njombe	Wanging'ombe	45	35637	789	-102
Pwani	Bagamoyo	40	55571	1399	10
Pwani	Kibaha Rural	31	12990	413	88
Pwani	Kibaha Urban	30	22488	739	177
Pwani	Kisarawe	33	22585	694	129
Pwani	Mafia	29	8831	302	81
Pwani	Mkuranga	42	50020	1205	-46
Pwani	Rufiji	47	48973	1039	-185
Rukwa	Nkasi	51	52237	1016	-290
Rukwa	Sumbawanga Rural	50	57547	1142	-297
Rukwa	Sumbawanga Urban	45	45979	1017	-132
Rukwa	Kalambo	49	46709	955	-213
Ruvuma	Namtumbo	42	41055	967	-59
Ruvuma	Nyasa	53	30913	584	-189
Ruvuma	Songea Rural	47	33149	709	-120
Ruvuma	Songea Urban	36	39967	1118	119
Ruvuma	Tunduru	47	58350	1234	-225
Shinyanga	Kahama Urban	38	49777	1305	61
Shinyanga	Kishapu	43	49525	1150	-88
Shinyanga	Msalala	51	51574	1012	-277
Shinyanga	Shinyanga Rural	43	63366	1469	-115
Shinyanga	Shinyanga Urban	39	29814	756	11
Shinyanga	Ushetu	56	50861	912	-360
Simiyu	Bariadi Rural	58	116771	2005	-914

Simiyu	Bariadi Urban	36	33856	952	106
Simiyu	Busega	51	51613	1011	-279
Simiyu	Itilima	60	62238	1042	-514
Simiyu	Maswa	50	65950	1322	-327
Simiyu	Meatu	45	56904	1258	-165
Singida	Ikungi	47	48430	1032	-179
Singida	Iramba	48	44320	927	-181
Singida	Manyoni	44	51273	1171	-111
Singida	Mkalama	56	37303	665	-268
Singida	Singida Rural	51	45369	891	-243
Singida	Singida Urban	35	28388	809	99
Tabora	Igunga	49	69736	1414	-329
Tabora	Kaliua	76	58389	768	-692
Tabora	Nzega	52	96529	1843	-570
Tabora	Sikonge	54	32874	614	-208
Tabora	Tabora Urban	42	46405	1118	-42
Tabora	Urambo	45	37390	834	-101
Tabora	Uyui	55	72864	1313	-509
Tanga	Bubmuli	50	45268	910	-222
Tanga	Handeni	45	71389	1591	-194
Tanga	Kilindi	41	38734	948	-20
Tanga	Korogwe Rural	42	49882	1179	-68
Tanga	Korogwe Urban	27	12407	459	149
Tanga	Lushoto	55	136491	2484	-928
Tanga	Mkinga	44	27204	612	-68
Tanga	Muheza	38	38815	1034	64
Tanga	Pangani	41	10387	253	-7

---

Tanga	Tanga Urban	37	53658	1461	120
Grand total / average PTR		43	8,253,080	190,648	-15,679

---

**Table 18: Agriculture sector staff posted to LGAs <sup>14</sup>**

	Regions	Districts	Status	Number of staff		
				Crops	Livestock	Total
1	Arusha		Region			
		1 Arusha	District	77	86	163
		2 Arusha	City	15	39	54
		3 Karatu	District	35	44	79
		4 Longido	District	24	13	37
		5 Meru	District	42	57	99
		6 Monduli	District	37	30	67
		7 Ngorogoro	District			0
		Total		230	269	499
2	Dar es Salaam		Region			0
		1 Ilala	Municipality	34	47	81
		2 Kinondoni	Municipality	30	29	59
		3 Temeke	Municipality	42	37	79
		Total		106	113	219
3	Dodoma		Region			0
		1 Bahi	District	28	42	70
		2 Chamwino	District	58	47	105
		3 Chemba	District			0
		4 Dodoma	Municipality	30	53	83
		5 Kondoa	District	50	64	114
		6 Kongwa	District	56	29	85
		7 Mpwapwa	District	39	46	85

<sup>14</sup> Compiled in March 2014 by Ministry of Agriculture, Food Security and Cooperatives as input to this study.

		Total		261	281	542
4	Geita		Region			0
	1	Bukombe	District	58	25	83
	2	Chato	District	65	20	85
	3	Geita	District	41	32	73
	4	Mbogwe	District			0
	5	Nyang'wale	District			0
		Total		164	77	241
5	Iringa		Region			0
	1	Iringa	District	97	44	141
	2	Iringa	Municipality	22	13	35
	3	Kilolo	District	88	30	118
	5	Mufindi	District	68	33	101
		Total		275	120	395
6	Kagera		Region			0
	1	Biharamulo	District	60	14	74
	2	Bukoba (Rural)	District	39	26	65
	3	Bukoba	Municipality	13	6	19
	4	Karagwe	District	79	35	114
	5	Kyerwa	District			0
	6	Missenyi	District	48	25	73
	7	Muleba	District	72	28	100
	8	Ngara	District	40	18	58
		Total		351	152	503
7	Katavi		Region			0
	1	Mlele	District			0

	2	Mpanda	District	59	19	78
	3	Mpanda	Town	5	4	9
				64	23	87
8	Kigoma		Region			0
	1	Buligwe	District			0
	2	Kakonko	District			0
	3	Kasulu	District	65	20	85
	4	Kasulu	Town			0
	5	Kibondo	District	73	32	105
	6	Kigoma	District	47	27	74
	7	Kigoma Ujiji	Municipality	20	11	31
	8	Uvinza	District			0
		Total		205	90	295
9	Kilimanjaro		Region			0
	1	Hai	District	47	30	77
	2	Moshi	District	162	82	244
	3	Moshi	Municipality	11	20	31
	4	Mwanga	District	45	24	69
	5	Rombo	District	46	23	69
	6	Same	District	82	53	135
	7	Siha	District	22	29	51
		Total		415	261	676
10	Lindi		Region			0
	1	Kilwa	District	57	13	70
	2	Lindi	District	69	25	94
	3	Lindi	Municipality	9	9	18

	4	Liwale	District	48	7	55
	5	Nachingwea	District	54	15	69
	6	Ruangwa	District	50	15	65
		Total		287	84	371
11		Manyara	Region			0
	1	Babati	District	53	28	81
	2	Babati	Town	15	17	32
	3	Hanang	District	38	26	64
	4	Kiteto	District	35	33	68
	5	Mbulu	District	29	30	59
	6	Simanjiro	District	25	30	55
		Total		195	164	359
12		Mara	Region			0
		Bunda	District	92	26	118
		Butiama	District			0
		Musoma	District	79	28	107
		Musoma	Municipality	5	5	10
		Rorya	District	60	22	82
		Serengeti	District	66	32	98
		Tarime	District	56	29	85
		Total		358	142	500
13		Mbeya	Region			0
	1	Chunya	District	58	34	92
	2	Ileje	District	46	11	57
	3	Kyela	District	48	31	79
	4	Mbarali	District	66	45	111

	5	Mbeya	District	107	45	152
	6	Mbeya	City	16	23	39
	7	Mbozi	District	163	43	206
	8	Momba	District			0
	9	Rungwe	District	136	31	167
	10	Tunduma	Town			0
		Total		640	263	903
14		Morogoro	Region			0
	1	Gairo	District			0
	2	Kilombero	District	71	31	102
	3	Kilosa	District	130	66	196
	4	Morogoro	District	86	45	131
	5	Morogoro	Municipality	33	29	62
	6	Mvomero	District	97	63	160
	7	Ulanga	District	49	33	82
		Total		466	267	733
15		Mtwara	Region			0
	1	Masasi	District	43	20	63
	2	Masasi	Town			0
	3	Mtwara	District	19	16	35
	4	Mtwara	Municipality	9	7	16
	5	Nanyumbu	District	22	6	28
	6	Newala	District	59	14	73
	7	Tandahimba	District	54	15	69
		Total		206	78	284

16	Mwanza		Region			
		1	Ilemela	Municipality		
		2	Kwimba	District	42	32
		3	Magu	District	64	67
		4	Misungwi	District	51	37
		5	Mwanza	City	30	21
		6	Sengerema	District	40	32
		7	Ukerewe	District	29	14
			Total		256	203
						459
17	Njombe		Region			0
		1	Ludewa	District	57	22
		2	Makambako	Town		
		3	Makete	District	63	14
		4	Njombe	District	78	47
		5	Njombe	Town	20	25
		6	Wangingombe	District		
			Total		218	108
						326
18	Pwani		Region			0
		1	Bagamoyo	District	96	40
		2	Kibaha	District	28	28
		3	Kibaha	Town	27	24
		4	Kisarawe	District	66	26
		5	Mafia	District	25	7
		6	Mkuranga	District	42	51
		7	Rufiji	District	40	29
			Total		324	205
						529

19	Rukwa		Region			
	1	Kalambo	District			
	2	Nkasi	District	62	17	79
	3	Sumbawanga	District	106	32	138
	4	Sumbawanga	Municipality	26	18	44
		Total		194	67	261
20	Ruvuma		Region			
	1	Mbinga	District	110	31	141
	2	Namtumbo	District	52	19	71
	3	Nyasa	District			0
	4	Songea	District	63	27	90
	5	Songea	Municipality	18	18	36
	6	Tunduru	District	67	17	84
		Total		310	112	422
21	Shinyanga		Region			0
	1	Kahama	District	108	46	154
	2	Kahama	Town			0
	3	Kishapu	District	50	46	96
	4	Shinyanga	District	75	37	112
	5	Shinyanga	Municipality	33	26	59
		Total		266	155	421
22	Simiyu		Region			0
	1	Bariadi	District	65	36	101
	2	Busega	District			0

	3	Itilima	District			0
	4	Maswa	District	75	28	103
	5	Meattu	District	62	35	97
		Total		202	99	301
23		Singida	Region			0
	1	Ikungi	District			0
	2	Iramba	District	35	36	71
	3	Manyoni	District	44	16	60
	4	Mkalama	District			0
	5	Singida	District	63	39	102
	6	Singida	Municipality	20	17	37
		Total		162	108	270
24		Tabora	Region			0
	1	Igunga	District	25	36	61
	2	Kaliua	District			0
	3	Nzega	District	81	35	116
	4	Sikonge	District	42	11	53
	5	Tabora	Municipality	21	21	42
	6	Urambo	District	34	18	52
	7	Uyui	District	34	18	52
		Total		237	139	376
25		Tanga	Region			0
	1	Handeni	District	51	60	111
	2	Kilindi	District	37	43	80
	3	Korogwe	District	50	61	111
	4	Korogwe	Town	61	31	92

5	Lushoto	District	98	40	138
6	Mkinga	District	79	32	111
7	Muheza	District	84	50	134
8	Pangani	District	19	11	30
9	Tanga	City	29	22	51
	Total		508	350	858
<b>Grand Total</b>			<b>6,900</b>	<b>3,930</b>	<b>10,830</b>

**Table 19: Data on health sector staff allocations to LGAs, 2011/12**

Region	Vote Code	LGA Name	SP. Services & Personnel	E2. Recurrent PE Expenditure TZS
			Vacancies filled 2011/12	Variation from formula-based allocations 2010/11 (outcome)
Arusha	703099	Arusha DC	30	-692
Arusha	702001	Arusha MC	21	3,263
Manyara	953002	Babati DC	25	-2,137
Manyara	952024	Babati TC	34	7,243
Coast	713008	Bagamoyo DC	89	1,002
Dodoma	723101	Bahi DC	15	-2,970
Simiyu	472036	Bariadi TC	0	
Simiyu	473060	Bariadi DC	44	2,211
Kagera	873075	Biharamulo DC	62	-1,470
Kagera	873077	Bukoba DC	55	-225
Kagera	872002	Bukoba MC	8	3,931
Geita	633090	Bukombe DC	38	-964
Tanga	863141	Bumbuli DC	0	
Mara	773033	Bunda DC	70	1,792
Mbeya	783140	Busokelo DC	0	
Mara	773113	Butiama DC	0	
Dodoma	723102	Chamwino DC	44	-974
Geita	633107	Chato DC	50	-1,379
Mbeya	783037	Chunya DC	19	-2,576
Dar es Salaam	882022	Dar es Salaam CC	0	
Dodoma	722003	Dodoma MC	10	827
Geita	633052	Geita DC	52	-2,802
Geita	632035	Geita TC	0	
Kilimanjaro	753024	Hai DC	33	2,674

Manyara	953003	Hanang DC	18	-703
Tanga	863072	Handeni DC	42	-370
Tanga	862035	Handeni TC	1	
Tabora	853065	Igunga DC	13	-1,077
Dar es Salaam	882019	Ilala MC	123	1,513
Mbeya	783038	Ileje DC	36	1,856
Mwanza	812032	Ilemela MC	33	0
Singida	843063	Iramba DC	60	-1,965
Iringa	733016	Iringa DC	74	27
Iringa	732004	Iringa MC	85	3,745
Shinyanga	833061	Kahama DC	0	-2,128
Shinyanga	832033	Kahama TC	17	
Rukwa	893136	Kalambo DC	44	
Kagera	873074	Karagwe DC	63	-2,267
Arusha	703084	Karatu DC	88	3,296
Kigoma	743022	Kasulu DC	0	-2,509
Kigoma	742029	Kasulu TC	0	
Coast	713011	Kibaha DC	70	11,923
Coast	712023	Kibaha TC	5	3,051
Kigoma	743023	Kibondo DC	49	-1,573
Kigoma	743021	Kigoma DC	40	-3,579
Kigoma	742005	Kigoma/Ujiji MC	3	1,479
Tanga	863093	Kilindi DC	32	-4,085
Iringa	733094	Kilolo DC	41	-1,750
Morogoro	793045	Kilombero DC	60	-1,647
Morogoro	793044	Kilosa DC	73	-656
Lindi	763030	Kilwa DC	54	2,313
Dar es Salaam	882020	Kinondoni MC	194	1,707
Coast	713010	Kisarawe DC	57	9,349

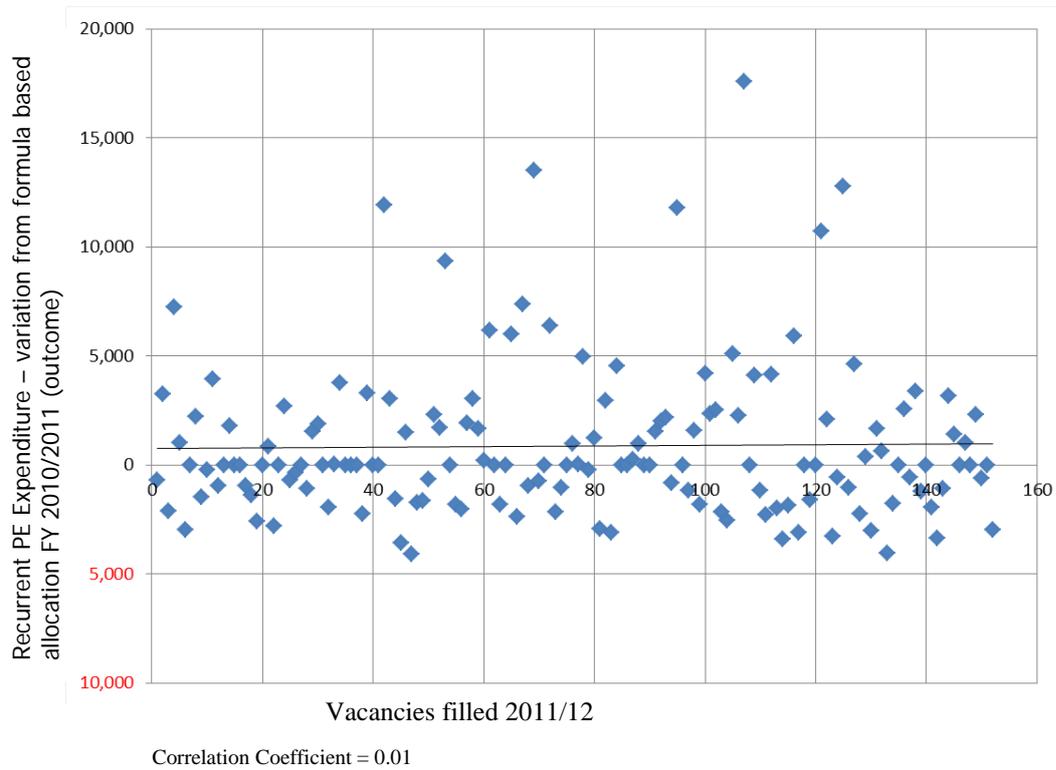
Shinyanga	833095	Kishapu DC	0	-2,157
Manyara	953004	Kiteto DC	38	-1,822
Dodoma	723014	Kondoa DC	26	-2,020
Dodoma	723086	Kongwa DC	74	1,938
Tanga	863071	Korogwe DC	38	3,025
Tanga	862025	Korogwe TC	14	1,644
Mwanza	813053	Kwimba DC	55	215
Mbeya	783039	Kyela DC	70	6,148
Kagera	873125	Kyerwa DC	0	
Lindi	763032	Lindi DC	53	-1,810
Lindi	762006	Lindi MC	0	-1,807
Lindi	763031	Liwale DC	15	5,998
Arusha	703100	Longido DC	66	-2,381
Njombe	733019	Ludewa DC	34	7,356
Tanga	863073	Lushoto DC	44	-968
Coast	713009	Mafia DC	19	13,491
Mwanza	813054	Magu DC	31	-764
Njombe	542028	Makambako TC	22	
Njombe	733020	Makete DC	64	6,395
Singida	843064	Manyoni DC	13	-2,152
Mtwara	803049	Masasi DC	37	-1,063
Mtwara	802031	Masasi TC	13	
Simiyu	473059	Maswa DC	43	957
Mbeya	783087	Mbarali DC	25	18
Mbeya	783040	Mbeya CC	7	4,983
Mbeya	782007	Mbeya DC	40	-250
Ruvuma	823057	Mbinga DC	58	1,237
Mbeya	783041	Mbozi DC	50	-2,922
Manyara	953005	Mbulu DC	32	2,939

Simiyu	473082	Meatu DC	59	-3,122
Arusha	703098	Meru DC	61	4,522
Kagera	873108	Misenyi DC	0	-1,324
Mwanza	813089	Misungwi DC	0	-219
Tanga	863106	Mkinga DC	9	230
Coast	713085	Mkuranga DC	24	986
Katavi	363140	Mlele DC	20	
Mbeya	783114	Momba DC	72	
Arusha	703006	Monduli DC	41	1,525
Morogoro	793043	Morogoro DC	28	2,008
Morogoro	792008	Morogoro MC	45	2,180
Kilimanjaro	753025	Moshi DC	12	-819
Kilimanjaro	752009	Moshi MC	32	11,795
Katavi	363079	Mpanda DC	0	-2,112
Katavi	362027	Mpanda TC	22	-1,160
Dodoma	723015	Mpwapwa DC	37	1,578
Mtwara	803047	Mtwara DC	41	-1,821
Mtwara	802010	Mtwara MC	12	4,179
Iringa	733017	Mufindi DC	58	2,352
Tanga	863069	Muheza DC	60	2,537
Kagera	873076	Muleba DC	15	-2,143
Mara	773034	Musoma DC	87	-2,534
Mara	772011	Musoma MC	8	5,087
Morogoro	793096	Mvomero DC	112	2,263
Kilimanjaro	753028	Mwanga DC	7	17,560
Mwanza	812012	Mwanza CC	24	
Lindi	763029	Nachingwea DC	9	4,094
Ruvuma	823097	Namtumbo DC	33	-1,182
Mtwara	803105	Nanyumbu DC	37	-2,269

Mtwara	803048	Newala DC	22	4,167
Kagera	873078	Ngara DC	109	-1,992
Arusha	703007	Ngorongoro DC	60	-3,407
Njombe	733018	Njombe DC	52	-1,849
Njombe	732026	Njombe TC	30	5,898
Rukwa	893081	Nkasi DC	25	-3,089
Katavi	363142	Nsimbo DC	0	
Tabora	853066	Nzega DC	16	-1,617
Tabora	852034	Nzega TC	0	
Tanga	863070	Pangani DC	29	10,704
Kilimanjaro	753026	Rombo DC	24	2,099
Mara	773104	Rorya DC	48	-3,272
Coast	713012	Rufiji DC	72	-553
Mbeya	783042	Rungwe DC	43	12,774
Lindi	763092	Rwangwa DC	45	-1,029
Kilimanjaro	753027	Same DC	14	4,639
Mwanza	813051	Sengerema DC	58	-2,242
Mara	773035	Serengeti DC	43	354
Shinyanga	833058	Shinyanga DC	33	-3,027
Shinyanga	832013	Shinyanga MC	3	1,678
Kilimanjaro	753103	Siha DC	28	634
Tabora	853091	Sikonge DC	21	-4,044
Manyara	953083	Simanjiro DC	20	-1,769
Singida	843062	Singida DC	0	-1,792
Singida	842014	Singida MC	10	2,548
Ruvuma	823055	Songea DC	36	-577
Ruvuma	822015	Songea MC	4	3,356
Rukwa	893080	Sumbawanga DC	25	-1,235
Rukwa	892016	Sumbawanga MC	0	-2,056

Tabora	852017	Tabora MC	29	-1,958
Tabora	853067	Tabora/Uyui DC	14	-3,365
Mtwara	803088	Tandahimba DC	30	-1,083
Tanga	862018	Tanga CC	59	3,163
Mara	773036	Tarime DC	48	1,416
Mara	772037	Tarime TC	0	
Dar es Salaam	882021	Temeke MC	184	1,020
Mbeya	782030	Tunduma TC	45	
Ruvuma	823056	Tunduru DC	31	2,288
Mwanza	813050	Ukerewe DC	34	-612
Morogoro	793046	Ulanga DC	0	1,599
Tabora	853068	Urambo DC	46	-2,970
	Total		5410	

**Figure 75: Number of health staff positions allocated in 2011/12 relative past over/under funding of the LGAs in 2010/11\***



**Table 20: Summary of approved PE – annual estimates 2012/13 establishment strength for period ending 30<sup>th</sup> June 2013**

S/NO.	VOTE	VOTE DESCRIPTION	Establishment Strength 2012/13			Total projected establishment 2012/13
			actual	permits	new posts	
1	7003	Arusha MC	3,295	137	171	3,603
2	70A1	Meru DC	2,604	232	237	3,073
3	70A2	Monduli DC	1,324	135	79	1,538
4	70A3	Mbulu DC	2,418	338	273	3,029
5	70A4	Babati DC	2,143	0	192	2,335
6	70A5	Kiteto DC	1,346	158	145	1,649
7	70A6	Ngorongoro DC	1,147	176	177	1,500
8	70A7	Hanang' DC	1,929	94	180	2,203
9	70A8	Simanjiro DC	1,208	119	154	1,481
10	70A9	Karatu DC	1,792	229	257	2,278
11	70Q1	Arusha DC	2,434	227	241	2,902
12	70Q2	Longido DC	731	162	77	970
13	95A0	Babati TC	976	51	91	1,118
14	71B1	Bagamoyo DC	2,750	329	161	3,240
15	71B2	Kisarawe DC	1,398	112	122	1,632
16	71B	Rufiji DC	1,869	212	332	2,413
17	71B	Kibaha DC	1,109	0	22	1,131
18	71B	Mafia DC	598	18	107	723
19	71B	Mkuranga DC	2,074	68	175	2,317
20	71B	Kibaha TC	1,221	94	32	1,347
21	7205	Dodoma MC	3,190	114	120	3,424
22	72C2	Mpwapwa DC	2,093	102	297	2,492
23	72C3	Kondoa DC	2,218	165	48	2,431
24	72C4	Kongwa DC	1,859	38	219	2,116
25	72C5	Bahi DC	1,310	116	187	1,613
26	72C6	Chamwino DC	1,881	124	185	2,190

27	72C	Chemba DC	1,231	124	62	1,417
28	7309	Iringa MC	1,715	158	118	1,991
29	73D1	Iringa dc	2,525	320	329	3,174
30	73D2	Mufindi DC	3,100	252	400	3,752
31	73D6	Kilolo Dc	1,843	223	250	2,316
32	73D3	Njombe DC	1,001	112	178	1,291
33	73D7	Njombe TC	1,380	102	91	1,573
34	73D	Makambako TC	792	11	148	951
35	73D5	Ludewa DC	1,601	168	224	1,993
36	73D4	Makete DC	1,180	414	160	1,754
37	73D	Wanging'ombe DC	1,289	0	201	1,490
38	7410	Kigoma MC	1,625	193	233	2,051
39	74E1	Kigoma DC	1,450	264	230	1,944
40	74E2	Kasulu DC	1,701	283	287	2,271
41	74E3	Kibondo DC	1,623	76	111	1,810
42	74E	Kasulu TC	672	104	82	858
43	74E	Kakonko DC	600	179	168	947
44	74E	Buhingwe DC	1,062	159	238	1,459
45	74E	Uvinza DC	1,553	370	331	2,254
46	7512	Moshi MC	2,110	125	57	2,292
47	75F1	Moshi DC	4,650	157	191	4,998
48	75F2	Same DC	2,675	129	232	3,036
49	75F3	Rombo DC	2,966	101	216	3,283
50	75F4	Hai DC	2,256	87	114	2,457
51	75F5	Mwanga DC	1,920	134	166	2,220
52	75F6	Siha DC	959	164	100	1,223
53	7613	Lindi MC	535	77	54	666
54	76G1	Lindi DC	1,594	220	120	1,934
55	76G2	Nachingwea DC	1,354	202	80	1,636
56	76G3	Uwale DC	870	106	155	1,131

57	76G4	Kilwa DC	1,575	194	149	1,918
58	76G5	Ruangwa DC	1,126	63	106	1,295
59	7714	Musoma DC	1,433	85	207	1,725
60	77H1	Musoma DC/Butima	2,701	241	503	3,445
61	77H2	Tarime DC	2,690	238	390	3,318
62	77H3	Bunda DC	2,512	410	451	3,373
63	77H4	Serengeti DC	1,699	230	296	2,225
64	77H	Rorya DC	1,928	164	400	2,492
65	7815	Mbeya CC	3,149	254	189	3,592
66	78J1	Mbeya DC	2,996	185	299	3,480
67	78J2	Rungwe DC	3,237	447	386	4,070
68	78J3	Mbozi DC	3,389	288	265	3,942
69	78J4	Chunya DC	1,701	187	245	2,133
70	78J5	Kyela DC	1,713	110	370	2,93
71	78J6	Ileje DC	1,332	49	79	1,460
72	78J7	Mbarali DC	1,846	237	175	2,258
73	78J	Momba DC	945	179	134	1,258
74	78J	Tunduma TC	411	157	120	688
75	7916	Morogoro MC	3,246	152	103	3,501
76	79K1	Morogoro DC	2,344	60	105	2,509
77	79K	Kilosa DC	2,660	302	272	3,234
78	79K	Ulanga DC	2,140	0	197	2,337
79	79K	Kilombero DC	3,136	293	357	3,786
80	79K	Mvomero DC	2,497	127	256	2,880
81	79K	Gairo DC	1,157	88	218	1,463
82	8017	Mtwara MC	1,106	69	57	1,232
83	80L1	Mtwara DC	1,867	0	194	2,061
84	80L	Masasi TC	462	0	112	574
85	80L2	Masasi DC	2,435	27	216	2,678
86	80L3	Newala DC	1,589	211	179	1,979

87	80L4	Tandahimba DC	1,594	216	273	2,083
88	80L5	Nanyumbu DC	910	146	205	1,261
89	8118	Mwanza CC	3,258	118	588	3,964
90	81M1	Magu DC	2,425	165	349	2,939
91	81M2	Kwimba DC	2,823	158	384	3,376
92	81M3	Geita DC	4,568	601	717	5,886
93	81M4	Sengerema DC	4,045	617	925	5,587
94	81M5	Ukerewe DC	2,081	185	574	2,840
95	81M6	Missungwi DC	2,330	159	446	2,935
96	81M	Ilemela MC	2,012	54	253	2,319
97	81M	Mbongwe DC	1,178	229	179	1,586
98	81M	Nyang'hwile DC	778	285	327	1,390
99	8219	Songea MC	1,934	91	83	2,108
100	82N1	Songea DC	1,465	135	105	1,705
101	82N2	Tunduru DC	2,113	373	296	2,782
102	82N3	Mbinga DC	2,905	176	127	3,208
103	82N4	Namtumbo DC	1,724	142	179	2,045
104	82N	Nyasa DC	888	158	193	1,239
105	8321	Shinyanga M.C	1,339	54	158	1,551
106	83P1	Bariadi D.C	2,486	179	392	3,057
107	83P2	Kahama TC	939	72	88	1,099
108	83P3	Maswa DC	2,271	120	244	2,635
109	83P4	Shinyanga DC	1,811	78	263	2,152
110	83P5	Meatu DC	1,772	108	311	2,191
111	83P6	Bukombe DC	1,442	237	186	1,865
112	83P7	Kishapu DC	1,784	236	366	2,386
113	83P	Msalala DC	2,111	186	337	2,634
114	83P	Ushetu DC	1,154	201	394	1,749
115	83P	Busega DC	1,250	167	296	1,713
116	83P	Itilima DC	1,126	170	421	1,717

117	8423	Singida MC	1,432	110	35	1,577
118	84R1	Singida DC	1,372	178	349	1,899
119	84R2	Manyoni DC	1,687	195	200	2,082
120	84R3	Iramba DC	1,548	286	250	2,084
121	84R	Mkalama DC	578	320	296	1,194
122	84R	Ikungi DC	1,323	155	341	1,819
123	8524	Tabora MC	1,973	122	178	2,273
124	85T1	Igunga DC	2,184	56	316	2,556
125	85T	Nzega DC	0	0	92	92
126	85T2	Mzega TC	2,520	135	142	2,797
127	85T3	Tabora/Uyui DC	1,664	174	487	2,325
128	85T4	Urambo DC	1,328	265	200	1,793
129	85T5	Sikonge DC	972	247	169	1,388
130	85T	Ulyankulu DC	382	0	240	622
131	85T	Kaliua DC	834	161	158	1,153
132	8626	Tanga CC	2,649	66	288	3,003
133	86U1	Muheza DC	2,057	83	152	2,292
134	86U2	Korogwe DC	2,458	75	174	2,707
135	86U3	Lushoto DC	4,323	361	115	4,799
136	86U4	Handeni DC	1,880	219	328	2,427
137	86U5	Pangani DC	729	166	84	979
138	86U6	Korogwe TC	875	148	145	1,168
139	86U7	Kilindi DC	1,299	88	232	1,619
140	86U8	Mkinga DC	1,179	107	154	1,440
141	86U	Handeni TC	582	1	184	767
142	8727	Bukoba MC	1,124	25	14	1,163
143	87V1	Biharamulo DC	1,303	238	168	1,709
144	87V2	Bukoba DC	2,045	112	169	2,326
145	87V3	Karagwe DC	1,911	251	294	2,456
146	87V4	Muleba DC	2,761	155	348	3,264

147	87V5	Ngara DC	1,780	116	200	2,105
148	87V6	Misseny DC	1,449	104	182	1,735
149	87V7	Chato DC	1,932	410	417	2,759
150	87V	Kyerwa DC	1,176	0	697	1,873
151	8811	DSM CC	365	26	5	397
152	88Z1	Ilala MC	7,540	0	255	7,795
153	88Z2	Temeke MC	5,914	633	414	6,961
154	88Z3	Kindondoni MC	8,068	207	148	8,423
155	8906	S'wanga MC	1,682	55	223	1,960
156	89W1	S'wanga DC	1,890	47	132	2,069
157	89W2	Mpanda DC	1,031	81	175	1,287
158	89W3	Nkasi DC	1,575	97	219	1,891
159	89W4	Mpanda TC	733	0	135	868
160	89W	Kalambo DC	1,355	53	395	1,803
161	89W	Mlele DC	1,109	130	192	1,431
GRAND TOTAL			300,858	25,885	38,348	363,149

Data received from PO-PSM March 2014.

# Appendix 6 : Staff questionnaire

## 6.1 Method

Two teams of consultants and representatives from various ministries visited 117 facilities across 11 districts and 36 wards, administering questionnaires in primary and secondary schools, health centres and dispensaries, and in ward offices.<sup>15</sup> The questionnaire is attached at the end of this appendix.

## 6.2 Findings

### Characteristics of respondents

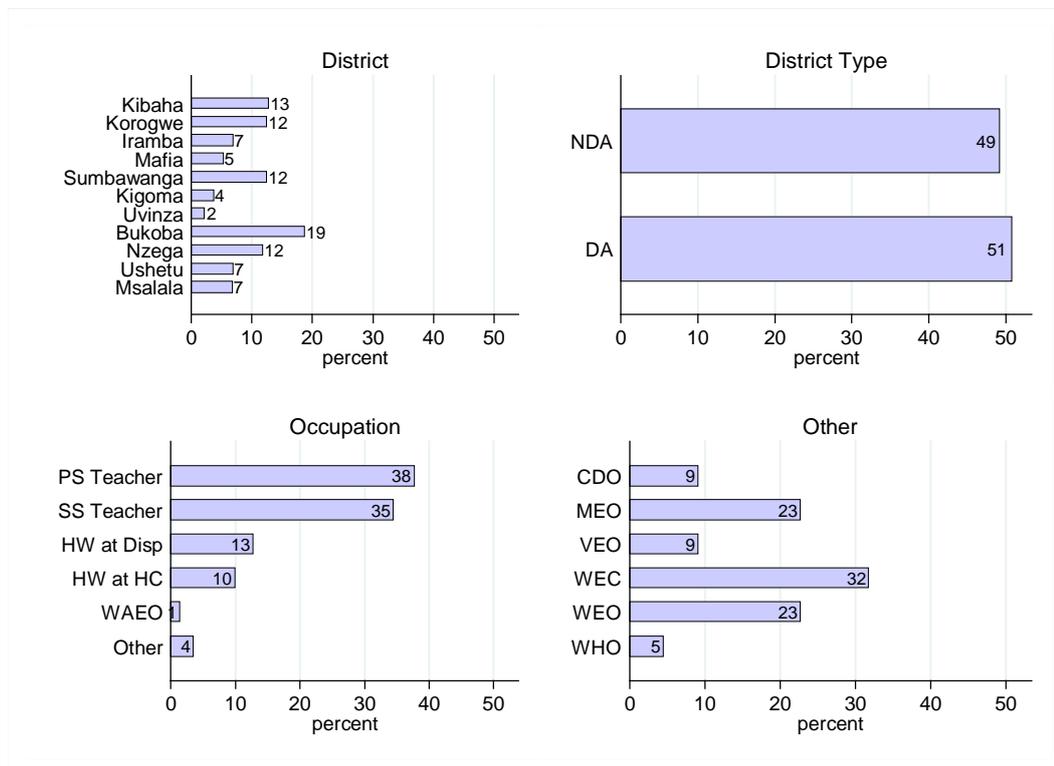
**Table 21: Number of respondents by district and facility type**

		DY	HC	PS	SS	WD	Total
Team 1	Kibaha DC	9	14	28	26	3	80
	Korogwe TC	17	0	28	33	0	78
	Iramba DC	10	5	8	20	0	43
	Mafia DC	3	1	20	9	0	33
	Sumbawanga DC	5	5	36	31	1	78
Team 2	Kigoma DC	5	0	9	9	0	23
	Uvinza DC	0	6	4	3	1	14
	Bukoba MC	21	9	41	38	8	117
	Nzega DC	5	5	33	20	11	74
	Ushetu DC	3	10	15	14	1	43
	Msalala DC	2	7	14	13	6	42
Total		80	62	236	216	31	625

DY = dispensary; HC = health centre; PS = primary school; SS = secondary school; WD=ward office

<sup>15</sup> 10 LGAs were initially selected. However, it was noted in the field that the Kahama DC had recently been subdivided into Kahama TC, Ushetu DC and Msalala DC. The decision was therefore taken to visit 2 wards in both Ushetu and Msalala.

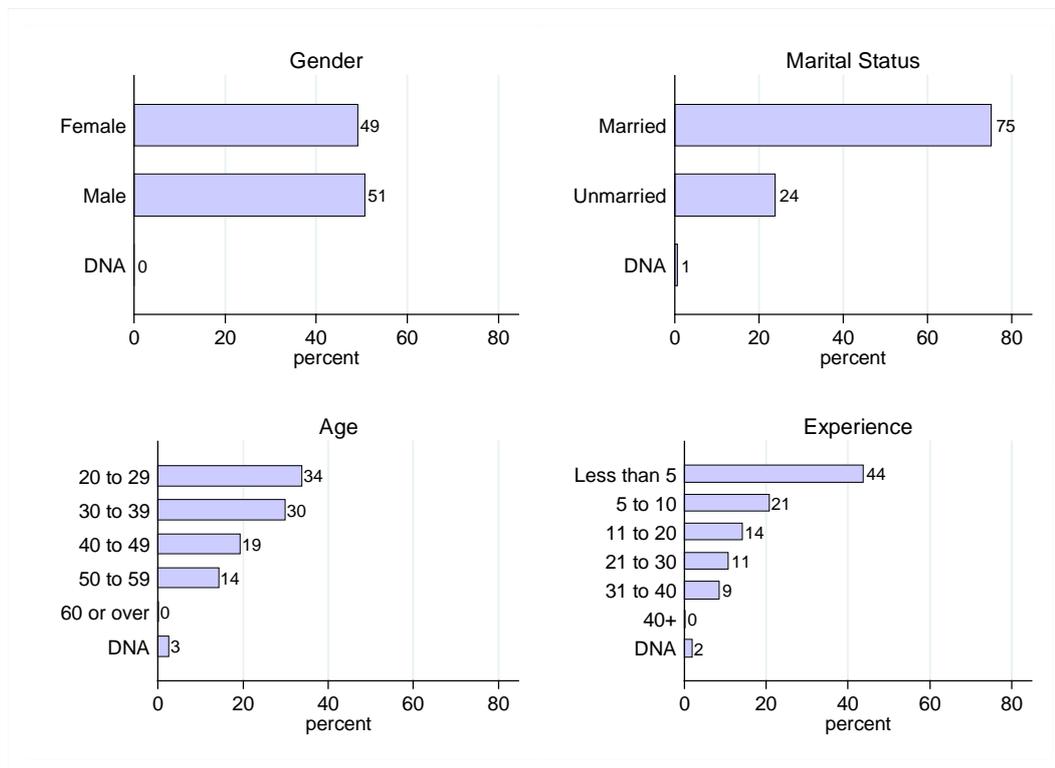
**Figure 76: Respondents by district, district type and occupation (% of total respondents)**



- The total number of respondents was 625, with 51% of the respondents (317) located in disadvantaged LGAs (disadvantaged) and 49% of respondents (308) located in non-disadvantaged LGAs (non-disadvantaged)<sup>16</sup>. (Figure 76).
- The largest categories of respondents were primary school teachers (236) and secondary school teachers (216); followed by health workers at dispensaries (80) and health centres (62) (Figure 76).
- 9 agricultural extension officers were surveyed as well as 22 other respondents at the ward office level, including ward executive officers (5), ward education coordinators (7), community development officers (2), village executive officers (2), *mitaa* executive officers (5), and ward health officers (1) (Figure 76).

<sup>16</sup> Iramba DC, Sumbawanga DC, Kigoma DC, Uvinza DC, Nzega DC, Msalala DC and Ushetu DC have been classified as disadvantaged LGAs based on the level of fiscal transfers they receive per capita.

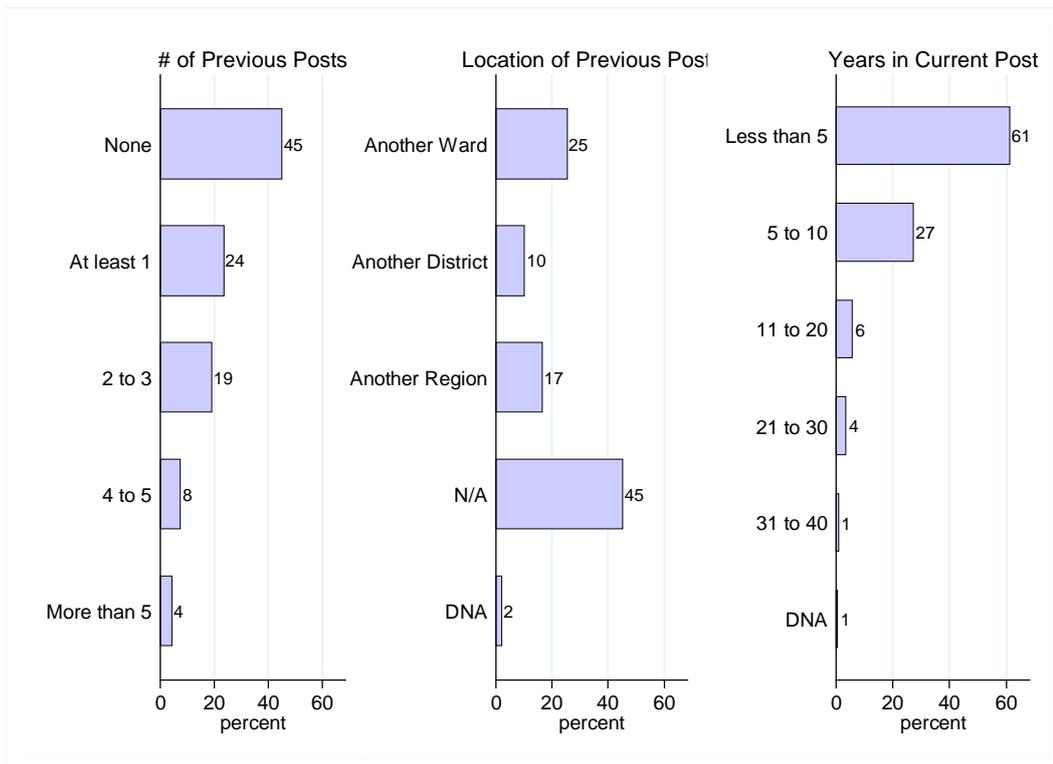
**Figure 77: Respondents by gender, marital status, age and experience (% of total respondents)**



- Slightly more males (317) were surveyed than females (307), while 1 respondent did not answer (DNA) the relevant question (Figure 77).
- Married respondents (471) vastly outnumbered unmarried respondents (150) while 4 respondents did not answer the relevant question (Figure 77).
- Respondents varied in age but most were found to be in the '20 to 29 category' (211) and the '30 to 39 category' (187) compared to the '40 to 49 category' (121) and the '50 to 59 category' (89), while in the '60 or over' category there was just 1 respondent. 16 respondents did not answer the relevant question (Figure 77).
- Similarly, there was a greater concentration of less experienced respondents<sup>17</sup>, with those having experience of less than 5 years (274), 5 to 10 years (129), 11 to 20 years (88), 21 to 30 years (68), 31 to 40 years (54), and over 40 years (1), constituting 44, 21, 14, 11, 9 and 0% of all respondents respectively. 11 respondents did not answer the relevant question (Figure 77).

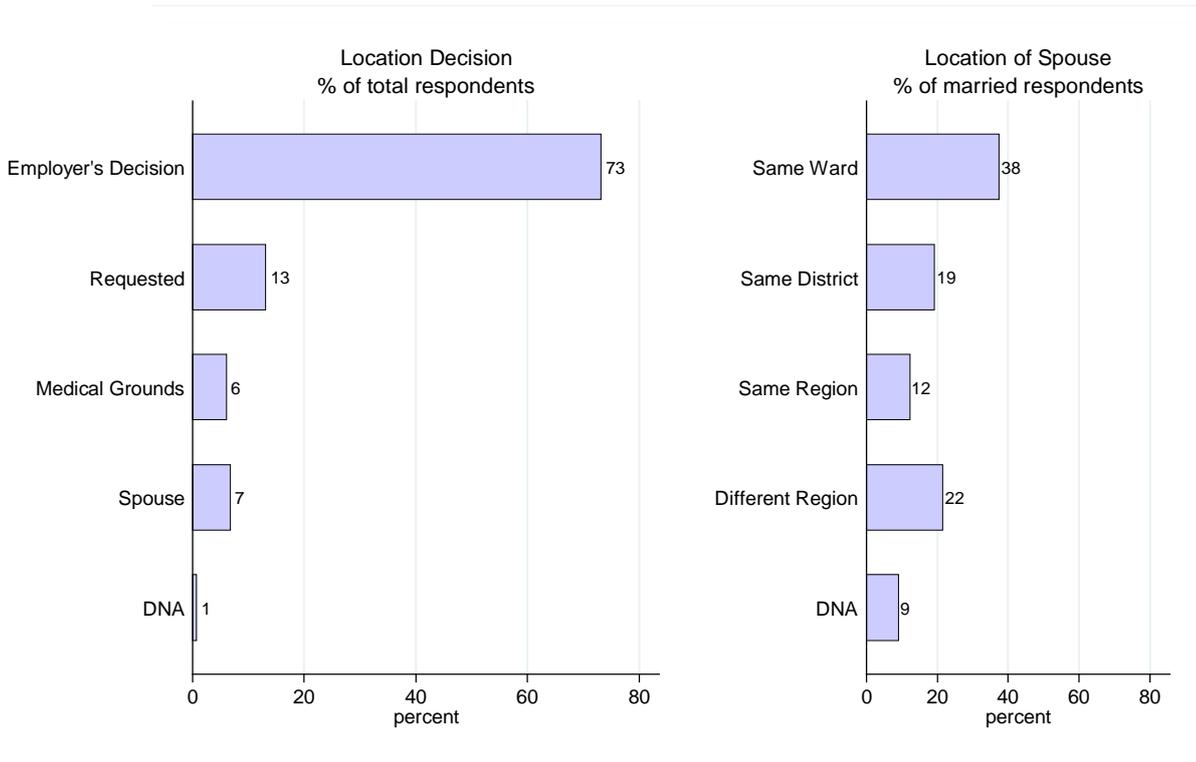
<sup>17</sup> Experience is calculated from the date that the respondents indicated that they completed their education and may therefore understate experience in the case of respondents who undertook further education after working for some time.

**Figure 78: Respondents by previous and current postings (% of total respondents)**



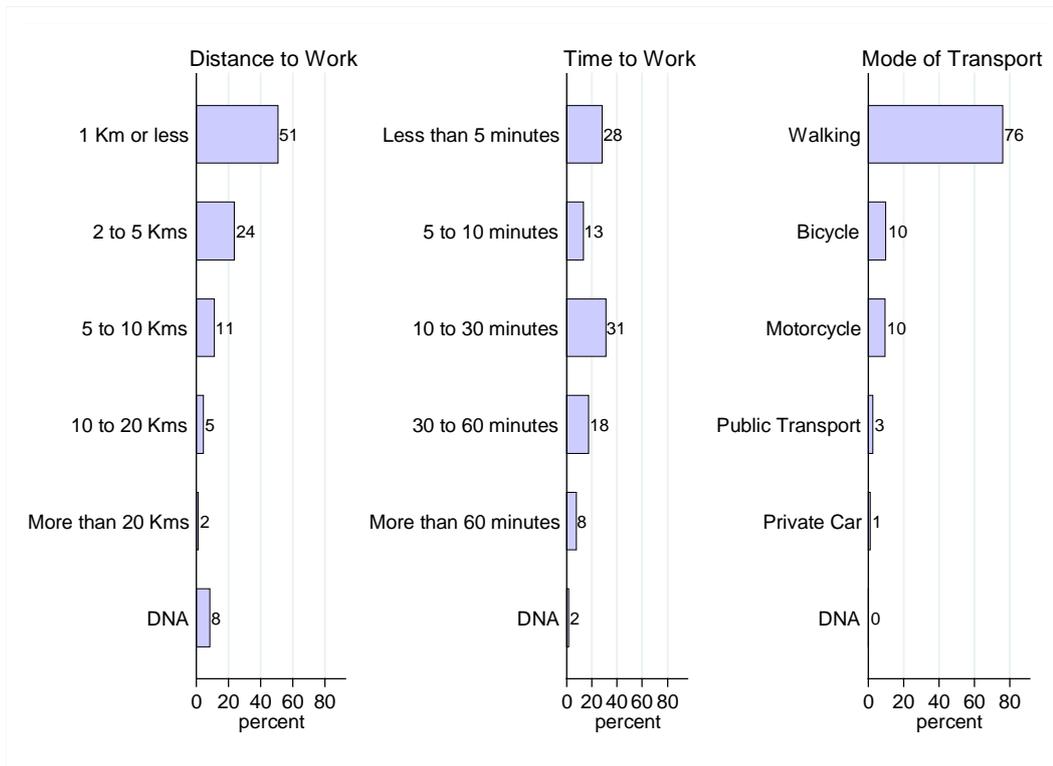
- In line with the low level of experience, for 45% of respondents (282) their current posting was their first and only posting (Figure 78).
- 24% of respondents (147) had at least 1 previous posting, 19% of respondents (120) had 2 to 3 previous postings, 8% of respondents (48) had 4 to 5 previous postings, and 4% (28) had more than 5 previous postings (Figure 78).
- 25% of respondents (159) had previously been posted in another ward in the same district, 10% (65) had previously been posted in another district, and 17% (104) had been posted in another region (Figure 78).
- The relevant question was not applicable (N/A) to the 45% of respondents with no previous postings and 14 respondents did not answer (DNA) the relevant question (Figure 78).
- 61% of respondents (382) have been in their current post less than 5 years, 27% (171) for 5 to 10 years, 6% (37) for 11 to 20 years, 4% (23) for 21 to 30 years and just 1% (7) for more than 30 years. 5 respondents did not answer the relevant question (Figure 78).

**Figure 79: Respondents by reason for posting and location of spouse**



- There was little variation in the reason cited by respondents as ‘the reason for their present posting’, with 73% (458) indicating that it was their employer’s decision. 13% of respondents (82) had requested a transfer to their current location, 6% of respondents (38) are at their current location on medical grounds, and 7% of respondents (42) are at their current location because their spouse is located there. 5 respondents did not answer the relevant question (Figure 79).
- For 76% of married respondents (329) their spouse is located in the same ward (179), district (92) or region (58). However for 16% of married respondents (103) their spouse is located in another region. 7% of married respondents (43) chose not to answer this question (Figure 79).

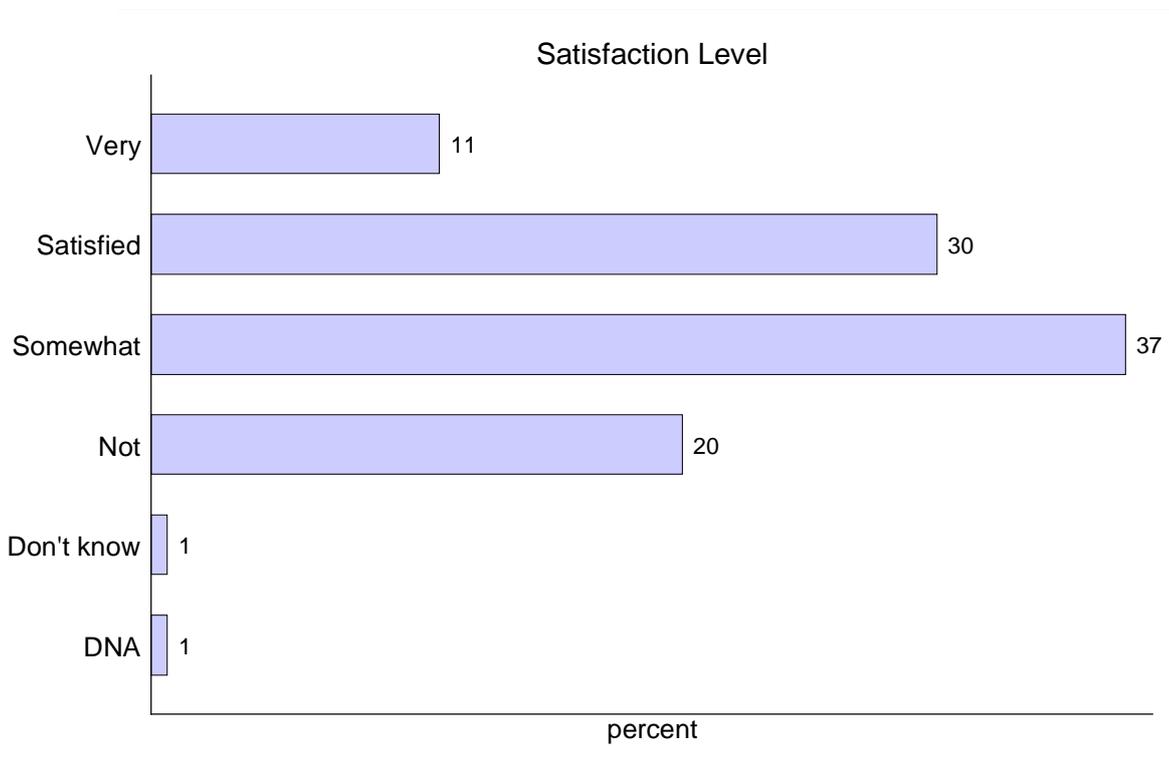
**Figure 80: Respondents by mode, time and distance of commute (% of total respondents)**



- 51% of respondents (317) travel less than 1 kilometre to get to work, while 24% (148), 11% (69) and 5% (30) of respondents travel between 2 to 5 kilometres, 6 to 10 kilometres, and 10 and 20 kilometres respectively to get to work (Figure 80).
- 2% of respondents (10) travel over 20 kilometres to get to work. 8% of respondents (51) did not answer the relevant question (Figure 80).
- 73% of respondents take less than 30 minutes to get to work, while 90% of respondents take less than 1 hour to get to work. 2% of respondents (12) did not answer the relevant question (Figure 80).
- The most common mode of transport is walking, with 76% of respondents (476) stating that this was their most regular mode of transport for travelling to work. Bicycle was the next most common mode of transport (64) followed by motorbike (60). Just 1% of respondents (7) travel to work by private car. 2 respondents did not answer the relevant question (Figure 80).

## Satisfaction levels

**Figure 81: Satisfaction with present deployment / location**



When asked about their satisfaction level with their current location / deployment 20% of respondents (127) stated that they were 'not satisfied'. 37% (233) stated that they were 'somewhat satisfied'. 30% (188) stated that they were 'satisfied', while 11% (69) stated that they were 'very satisfied'. 4 respondents stated that they 'don't know' while a further 4 did not answer the question (Figure 81).

**Table 22: Satisfaction levels by district type**

	Observations		%		Cumulative %	
	NDA	DA	NDA	DA	NDA	DA
Very Satisfied	37	32	12%	10%	12%	10%
Satisfied	101	87	33%	27%	45%	38%
Somewhat Satisfied	111	122	36%	38%	81%	76%
Not Satisfied	54	73	18%	23%	98%	99%
Don't Know	2	2	1%	1%	99%	100%
Did not Answer	3	1	1%	0%	100%	100%

NDA=non-disadvantaged; DA=Disadvantaged

- Satisfaction levels were found to be higher among respondents in non-disadvantaged LGAs compared to disadvantaged LGAs. 45% of respondents in non-disadvantaged LGAs described themselves as satisfied or very satisfied, compared to 38% in disadvantaged LGAs (Table 22).

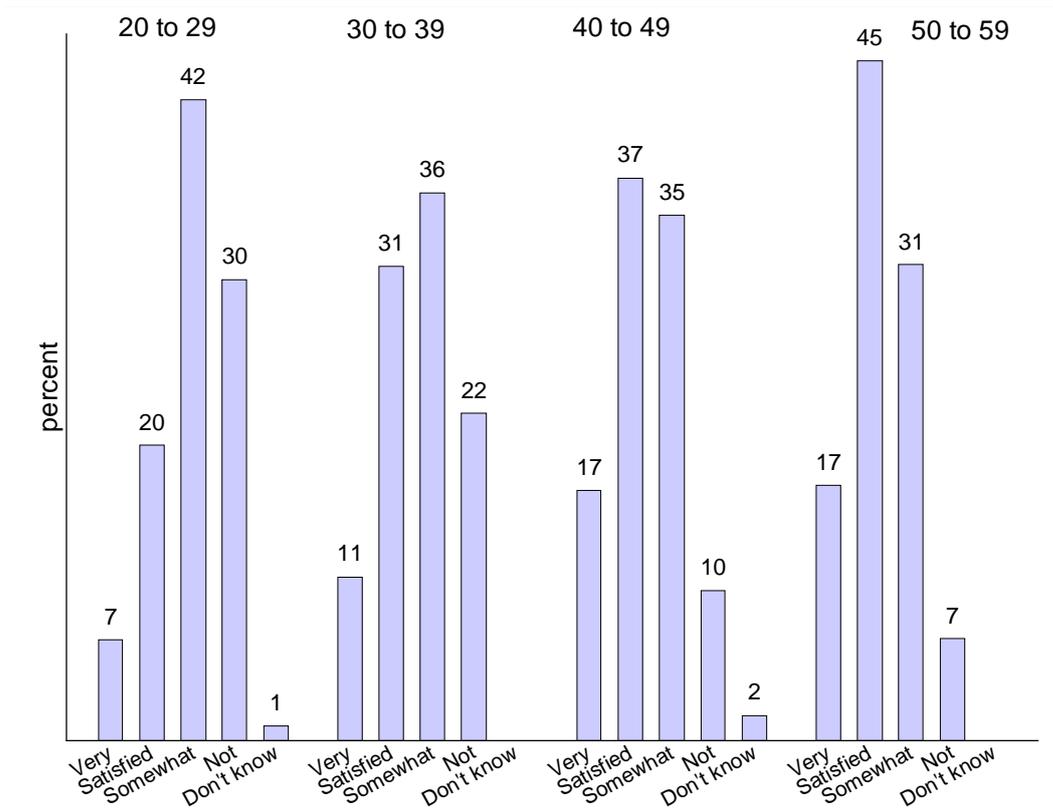
- Dissatisfaction levels were found to be higher in disadvantaged LGAs compared to non-disadvantaged LGAs. 23% of respondents in disadvantaged LGAs stated that they were not satisfied with their current location / deployment compared to 18% in non-disadvantaged LGAs (Table 22).

**Table 23: Satisfaction level by occupation**

	Percentage				Cumulative Percentage			
	Teachers		Health Workers		Teachers		Health Workers	
	Primary	Secondary	Dispensary	HC	Primary	Secondary	Dispensary	Centre
Very Satisfied	11%	10%	14%	16%	11%	10%	14%	16%
Satisfied	31%	21%	34%	39%	42%	31%	48%	55%
Somewhat Satisfied	35%	41%	38%	35%	77%	72%	85%	90%
Not Satisfied	22%	26%	13%	10%	99%	98%	98%	100%
Don't Know	0%	1%	1%	0%	100%	99%	99%	0%
Did not Answer	0%	1%	1%	0%	100%	100%	100%	0%

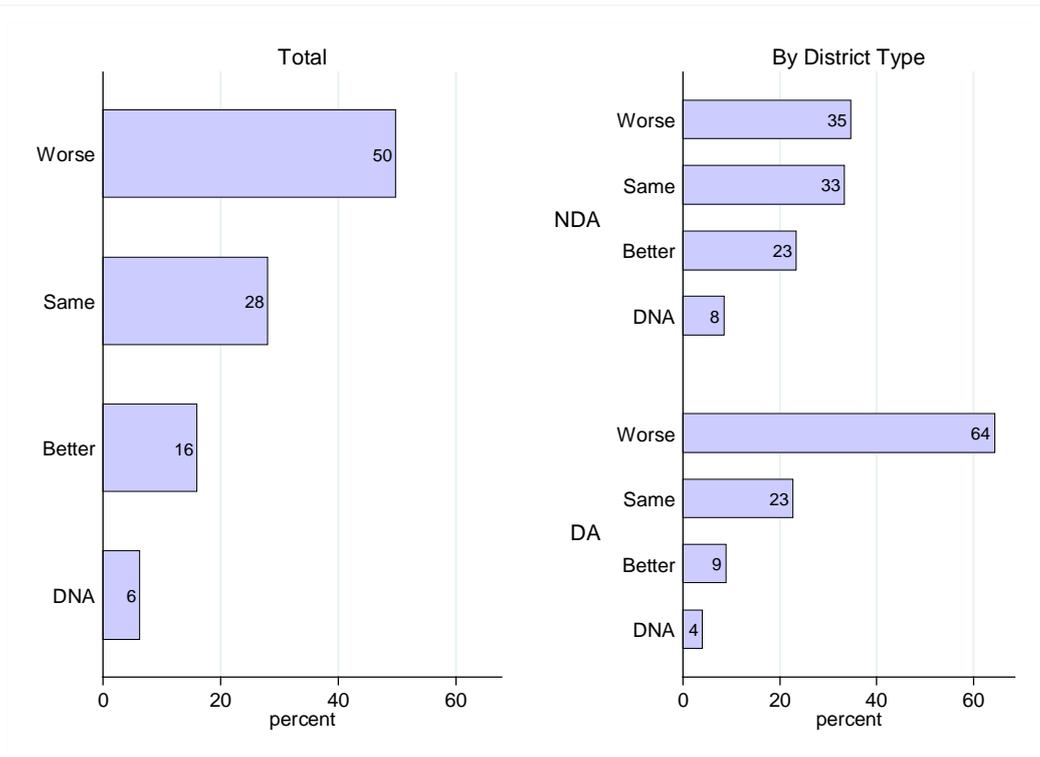
- Satisfaction levels are higher among health workers. 48% of dispensary health workers and 55% of health workers described themselves as being satisfied or very satisfied with their current deployment / location compared to 42% and 31% for primary school teachers and secondary school teachers respectively (Table 23).
- Secondary school teachers are the least satisfied category of workers, with 26% describing themselves as not satisfied compared to 26% for primary school teachers, 13% for dispensary health workers and 10% for health centre workers (Table 23).

**Figure 82: Satisfaction by age**



**Perceptions of staffing levels**

**Figure 83: Perception of staffing levels in the district compared to other districts:**



- 50% of respondents (311) perceive the staffing level in their district to be worse compared to other districts in the country. Unsurprisingly this finding is more pronounced in disadvantaged LGAs, where 64% of respondents believe that the staffing level in their district is worse compared to other districts in the country. (Figure 83)
- 35% of respondents in non-disadvantaged LGAs believe that staffing levels in their districts are worse compared to other districts in the country (Figure 83).
- Just 9% of respondents in disadvantaged LGAs believe staffing levels in their district are better than other districts in the country compared to 23% for respondents in non-disadvantaged LGAs (Figure 83)

## Future plans

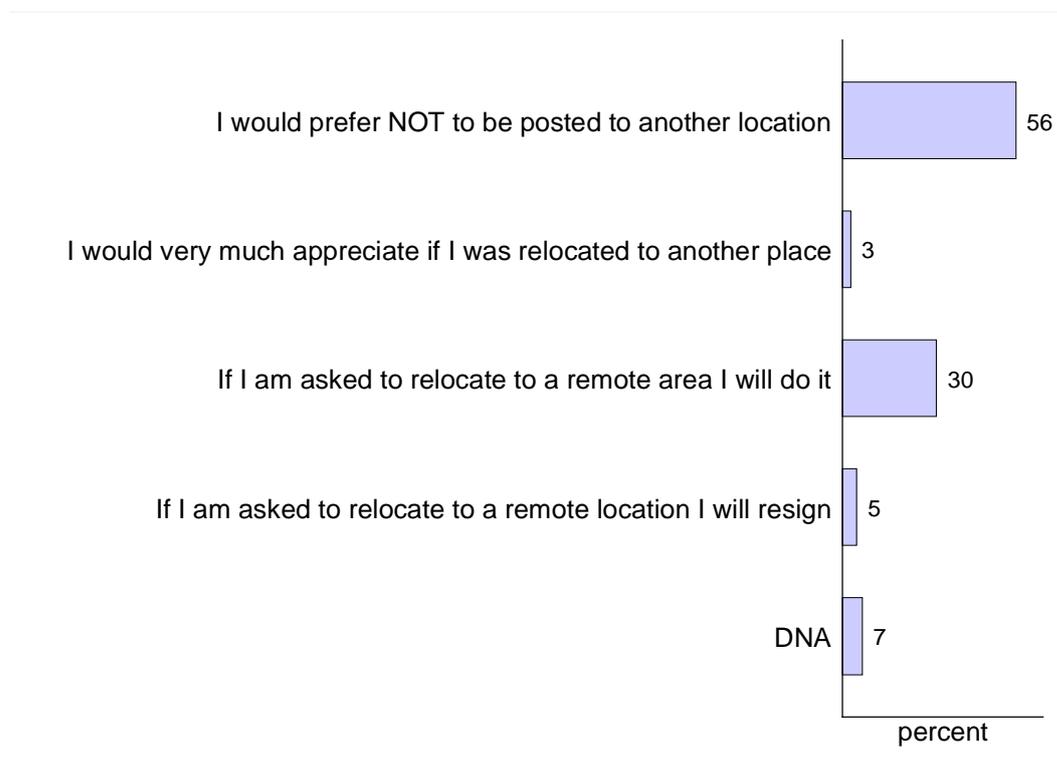
### Figure 84: Future plans

When asked about their future plans:

- 18% of respondents (110) stated that they wished to ‘stay and continue’ and this was the same across both non-disadvantaged and disadvantaged LGAs (Figure 86)
- 56% of respondents hope to go on further training, 59% in non-disadvantaged LGAs and 54% in disadvantaged LGAs (Figure 86)
- respondents planning to request a transfer were 20% overall, 14% in non-disadvantaged LGAs and 25% in disadvantaged LGAs (Figure 86)

## Willingness to relocate

### Figure 85: Willingness to relocate to a more remote location



When asked about their willingness to relocate to a more remote location:

- 56% of respondents (347) stated that they ‘would prefer NOT to be posted to another location’, while 5% (30) stated they would resign if asked to relocate to another region, implying that 61% of respondents (377) would not be willing to relocate (Figure 87).
- 30% of respondents (189) stated that they would relocated to a more remote region if they were asked to do it, while just 3% (18) stated that they ‘would very much appreciate it if they were relocated to another place’, suggesting that 33% of respondents would be willing to relocate. 7% of respondents (41) did not answer the relevant question (Figure 87).

In addition, the research showed that:

- Females are slightly more open to relocating than males.
- 59% of females in the sample are unwilling to relocate versus 34% who are willing to relocate, while 62% of males in the sample are unwilling to relocate against 32% who are willing to relocate, suggesting that females are slightly more open to relocating than males.
- Unmarried respondents are more open to the idea of relocating to a more remote location than married respondents.
- 58% of married respondents in the sample are unwilling to relocate versus 35% who are willing to relocate, while 67% of unmarried respondents in the sample are unwilling to relocate against 28% who are willing to relocate.
- Health workers are more open to the idea of relocating to a more remote location than teachers.
- 62% of primary school teachers in the sample are unwilling to relocate versus 32% who are willing to relocate, while 69% of secondary school teachers in the sample are unwilling to relocate against 32% who are willing to relocate.
- 48% of health workers at dispensaries in the sample are unwilling to relocate versus 49% who are willing to relocate, while 50% of secondary school teachers in the sample are unwilling to relocate against 40% who are willing to relocate.

**Table 24: Willingness to relocate by age**

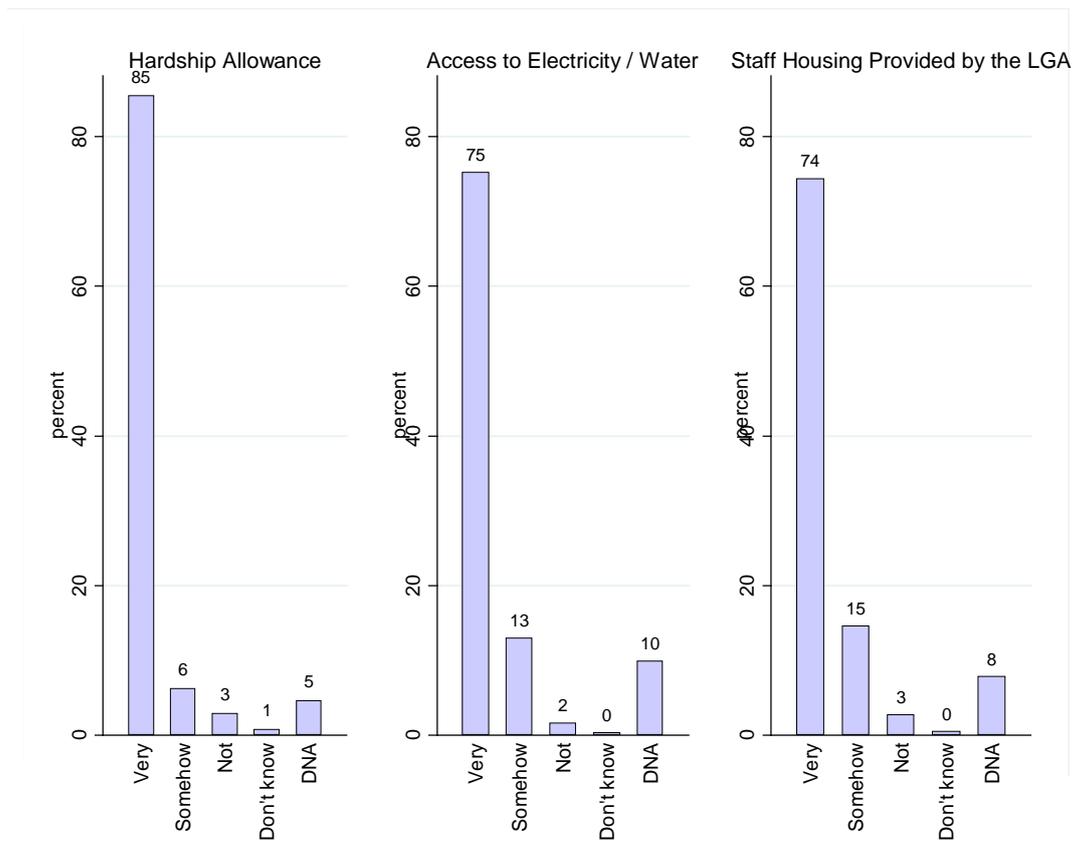
Age	Unwilling	Willing	DNA
20 to 29	67%	28%	5%
30 to 39	59%	35%	6%
40 to 49	53%	40%	7%
50 to 59	56%	36%	8%

Willingness to relocate is increasing in age and unwillingness to relocate is decreasing in age (Table 24):

- 67% of respondents in their 20s were unwilling to relocate to a more remote location while just 28% of respondents in their 20s were willing to relocate to a more remote location.
- Contrastingly, 53% of respondents in their 40s were unwilling to relocate to a more remote location while 40% of respondents in their 40s were willing to relocate to a more remote locat

## Factors affecting satisfaction

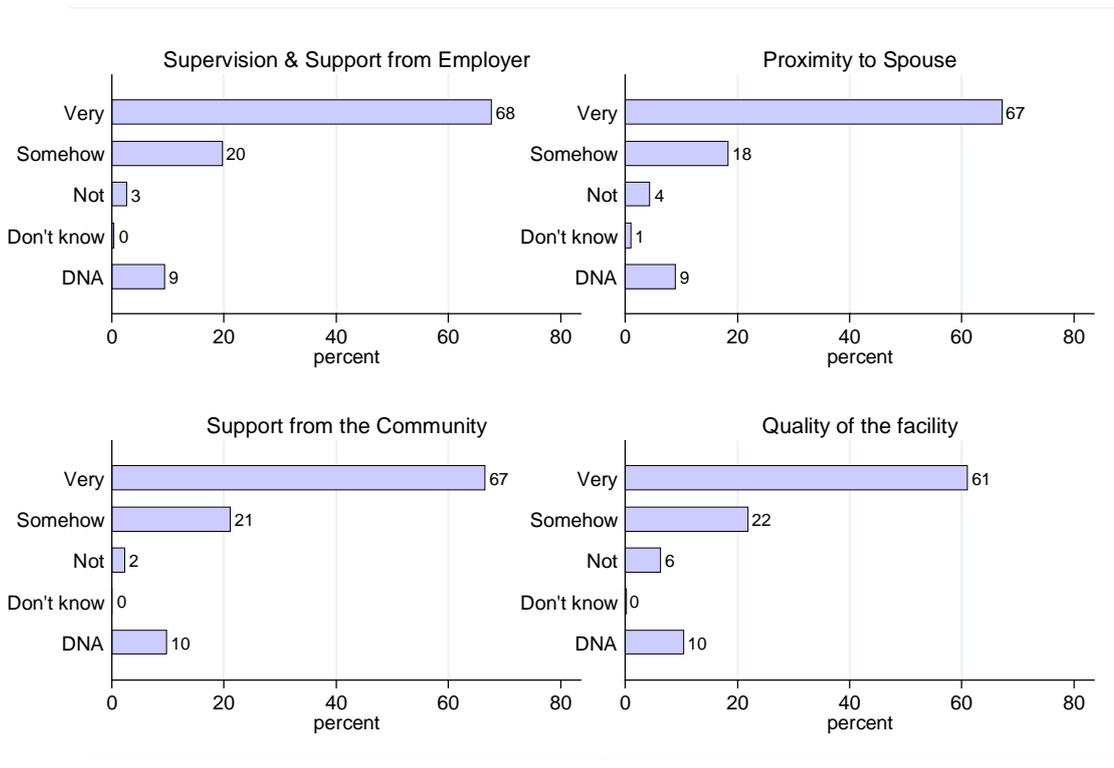
**Figure 86: Factors affecting satisfaction with location / deployment**



When asked about factors that would positively influence their satisfaction with their deployment / location, according to a scale of importance:

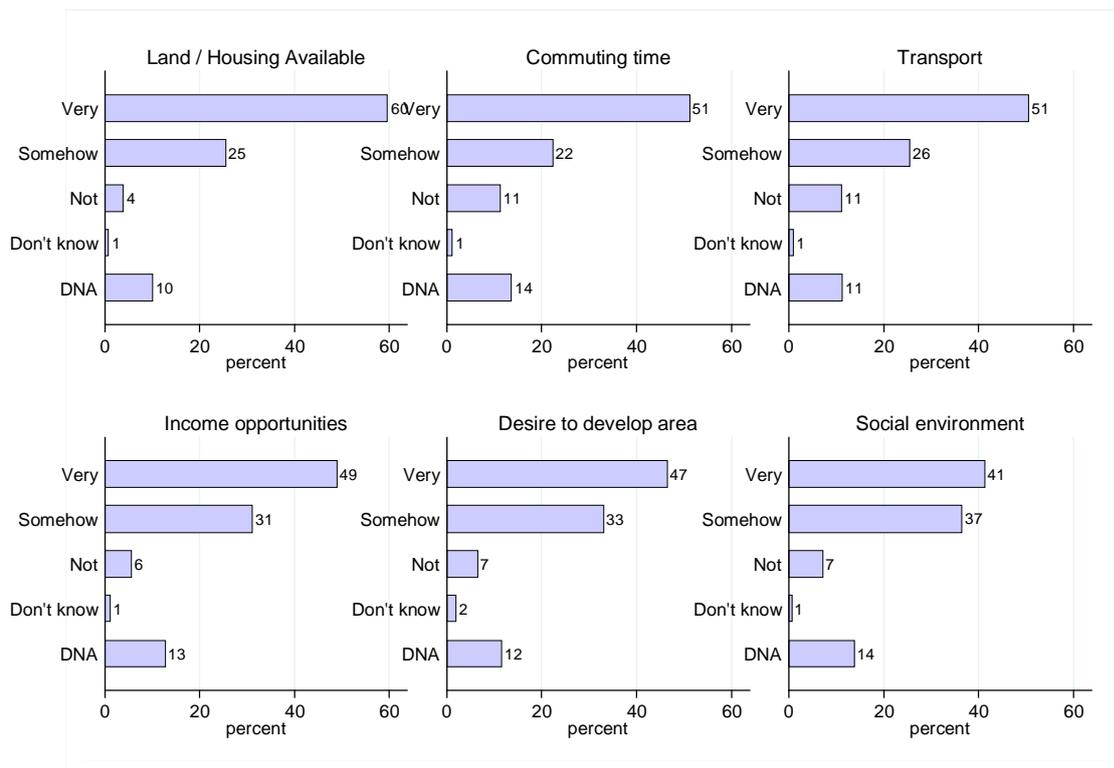
- The three highest rated factors were hardship allowances, access to electricity and water, and staff housing. (Figure 88)
- 85% of respondents stated that a hardship allowance would be a very important influence on their job satisfaction with a further 6% stating it would be somehow important. (Figure 88)
- 75% of respondents stated that access to electricity and water would be a very important influence on their job satisfaction with a further 13% stating it would be somehow important (Figure 88).
- 74% of respondents stated that access to staff housing provided by the LGA would be a very important influence on their job satisfaction with a further 15% stating it would be somehow important (Figure 88).

**Figure 87: Factors affecting satisfaction with location / deployment**



- Supervision and support from the employer, proximity to spouse, support from the community, and the quality of the facility were all deemed very important influences on job satisfaction by over 60% of respondents. (Figure 89)
- 68% of respondents thought that supervision and support from the employer was very important with a further 20% believing it was somehow important. (Figure 89)
- 67% of respondents thought that proximity to one’s spouse was very important with a further 18% believing it was somehow important. (Figure 89)
- 67% of respondents thought that support from the community was very important with a further 21% believing it was somehow important. (Figure 89)
- 61% of respondents thought that the quality of the facility was very important with a further 22% believing it was somehow important. (Figure 89)

**Figure 88: Factors affecting satisfaction with location / deployment**



- Factors rated as very important by less than 60% of respondents were availability of land and housing (60%), the commuting distance to work (51%), transport provided by the LGA (51%), other income opportunities (49%), a desire to develop the area (47%) and the social environment (41%) (Figure 90).

**Figure 89: Questionnaire**

Dodoso kwa Watumishi wa H/W: Maswali yanayohusu Ajira na Mazingira ya Kazi.

Jina la Halmashauri: \_\_\_\_\_

Dodoso Na \_\_\_\_\_ Mahali: \_\_\_\_\_ (Ijazwe na consultant)

Aina ya Ajira

- Mwalimu wa shule ya msingi
- Mwalimu wa sekondari
- Mtumishi wa afya ngazi ya Zahanati (dispensary)
- Mtumishi wa afya ngazi ya Kituo cha Afya (Health Centre)
- Afisa ugani (extension worker)

---

Nyingine, *fafanua* \_\_\_\_\_

Mwaka wa kuzaliwa: \_\_\_\_\_

Jinsia: KE  ME

Umeoa/Umeolewa : Ndio  Hapana

Kama uko kwenye ndoa – mwenzi wako anafanyia kazi wapi? (*Weka alama ya √*)

Tuko wote kata moja

Tuko wote wilaya moja

Tuko wote mkoa moja

Tuko mikoa tofauti

Ni lini ulihitimu masomo mafunzo yako (mwaka)? \_\_\_\_\_

Ni lini ulipangwa katika kituo hiki cha kazi ? (mwaka) \_\_\_\_\_

Je, umewahi kufanya kazi katika vituo vingine? Ndiyo/Hapana: Kama ndiyo vingapi? \_\_\_\_\_

Je, ulishawahi kufanya kazi katika (*Weka alama ya √ panapostahili*)

Kata nyingine ?

Wilaya nyingine?

Mkoa mwingine?

Sababu za kupangwa katika kituo hiki (*Weka alama ya √ panapostahili*)

Mwajiri aliamua

Niliomba kupangwa /kuhamishiwa hapa

- 
- Sababu za kiafya (kuwa karibu na huduma ya afya)
- Sababu mwenzi wangu anafanya kazi maeneo haya

Kwa sasa unaishi umbali gani na kituo chako cha kazi (*kwa kilometa*)? \_\_\_\_\_

Unatumia muda gani toka unapoishi hadi kazini kwako (*kwa dakika*)? \_\_\_\_\_

Unategemea usafiri gani wa uhakika kuja/kwenda kazini ? *Weka alama ya ✓ kwenye kisanduku kimoja tu).*

- Natembea
- Baiskeli
- Pikipiki/Bajaji
- Usafiri wa umma (e.g. basi/daladala)
- Gari binafsi
- Nyingine, *Fafanua* \_\_\_\_\_

Je, kwa kiasi gani unaridhika na kituo chako cha sasa cha kazi? (*Weka alama ya ✓*)

Naridhika sana	Naridhika	Naridhika kiasi	Siridhiki	Sijui
<input type="checkbox"/>				

Nini mtizamo wako kuhusu idadi ya watumishi katika wilaya hii ukilinganisha na wilaya nyingine ?

- Mbaya
- Hakuna tofauti
- Ni nzuri

Kuridhika kwako na kituo chako cha sasa cha kazi kumechangiwa na: *Weka alama ya ✓ panapostahili*

	Imechangia sana	Imechangia kwa kiasi Fulani	Hakuchangia	Si muhimu
Posho maalum tunayopewa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kupewa nyumba ya H/W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upatikanaji wa nyumba/ardhi kwa ujumla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kuwa karibu na mume/mke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ubora wa kituo cha kazi ( <i>majengo n.k.</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usimamizi na msaada toka kwa mwajiri	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Muda ninaotumia kuja kazini	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Msaada na ushirikiano toka kwa jamii	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fursa nyingine za kujipatia kipato cha ziada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mazingira ya kijamii (mf. marafiki/shughuli za kijamii)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upatikanaji huduma muhimu (mf. umeme/maji/afya)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nia yangu ya kuendeleza eneo hili	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nyingine (taja):				

1. Mipango ya baadae kuhusiana na ajira yangu (*miaka 3 ijayo*):

Kuendelea kufanya kazi katika kituo hiki.

- Kuomba uhamisho kwenda kituo kingine
- Nina mpango wa kujiendeleza kielimu nje ya kituo hiki
- Sijui

Utayari wa kuhamishiwa kituo kilichopo katika mazingira magumu (zaidi)

- Nisingependa kuhamishiwa kituo chenye mazingira magumu
- Ningefurahi sana kuhamishiwa kituo chenye mazingira magumu
- Kama nikihamishiwa kituo chenye mazingira magumu itabidi niende
- Kama nikihamishwa najiuzulu (nitaacha kazi)

Ni nini kinaweza kuwafanya watumishi wafanye kazi popote bila kupendelea baadhi ya maeneo?

	Muhimu sana	Muhimu	Si Muhimu	Sijui
Malipo ya posho ya mazingira magumu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kupatiwa nyumba na mwajiri (H/W)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upatikanaji wa nyumba/ardhi kwa ujumla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kuwa karibu na mume/mke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ubora wa ofisi na majengo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usimamizi na msaada toka kwa mwajiri	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Umbali wa kusafiri kuelekea kazini	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ushirikiano na msaada toka kwa jamii	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kupatiwa usafiri na mwajiri (H/W)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fursa nyingine za kujipatia kipato cha ziada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mazingira ya kijamii (mf. Marafiki /shughuli za kijamii)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

Upatikanaji wa huduma muhimu (mf.      
umeme/maji)

Nia ya kuliendeleza eneo husika

Je una maoni mengine?

Asante sana kwa kujibu maswali haya. Tunakushukuru sana kwa ushirikiano wako atika zoezi hili.

# Appendix 7 : Selection of most needy LGAs for priority support

Different approaches can be used for the selection of the relative most needy LGAs. The simplest approach would be to target those LGAs that have received significantly below average PE/capita allocations – this serves as a simple measurement of relative levels of understaffing.

The list below is based on analysis of the 2013/14 budget and analysis of the LGA PE allocations. Each LGA is ranked according to how underfunded it is compared to the average level of allocation for all LGAs. Some special cases have been omitted from the list: the three municipalities in Dar es Salaam<sup>18</sup> and some recently created town councils and Ilemela MC that yet are to be fully reflected in the budgets.

The first list of LGAs is ordered according to their relative levels of underfunding comparing total PE allocations for LGAs. The next three columns indicate how the LGAs are ranked in terms of relative underfunding for each of the main sectors.

Rank	Total – PE	Education PE	Health PE	Agriculture PE
1	Momba DC	Momba DC	Ukerewe DC	Masasi DC
2	Biharamulo DC	Biharamulo DC	Kigoma DC	Tabora/Uyui DC
3	Urambo DC	Ukerewe DC	Urambo DC	Nzega DC
4	Kigoma DC	Nanyumbu DC	Masasi DC	Tabora MC
5	Muleba DC	Urambo DC	Muleba DC	Meatu DC
6	Ukerewe DC	Rwangwa DC	Tabora/Uyui DC	Singida DC
7	Rwangwa DC	Mtwara DC	Kilindi DC	Igunga DC
8	Nzega DC	Kiteto DC	Nzega DC	Bukoba DC
9	Chato DC	Muleba DC	Sikonge DC	Ileje DC
10	Igunga DC	Nkasi DC	Mpanda TC	Morogoro DC
11	Kiteto DC	Chato DC	Kasulu DC	Musoma MC
12	Kilindi DC	Kigoma DC	Kishapu DC	Tunduru DC

<sup>18</sup> They actually receive below average level of funding – but can hardly be termed "understaffed" LGAs as government schools have a relatively low PTR because many citizens in Dar es Salaam use private schools.

13	Meatu DC	Igunga DC	Tabora MC	Mvomero DC
14	Nkasi DC	Kilindi DC	Kondoa DC	Babati DC
15	Sikonge DC	Manyoni DC	Rorya DC	Musoma DC
16	Mtwara DC	Nzega DC	Biharamulo DC	Lindi MC
17	Tabora MC	Ngara DC	Shinyanga DC	Bukoba MC
18	Geita DC	Meatu DC	Chato DC	Nanyumbu DC
19	Kasulu DC	Ngorongoro DC	Meatu DC	Masasi TC
20	Bukombe DC	Bukombe DC	Nkasi DC	Bariadi TC
21	Ngorongoro DC	Rufiji DC	Bahi DC	Handeni TC
22	Singida DC	Geita DC	Geita DC	Kahama TC
23	Rufiji DC	Simanjiro DC	Sengerema DC	Kalambo DC
24	Chunya DC	Nachingwea DC	Moshi DC	Kasulu TC
25	Shinyanga DC	Chamwino DC	Lushoto DC	Kyerwa DC
26	Bahi DC	Chunya DC	Ngorongoro DC	Mlele DC
27	Manyoni DC	Iramba DC	Manyoni DC	Kigoma DC
28	Ngara DC	Sikonge DC	Longido DC	Rombo DC
29	Chamwino DC	Tandahimba DC	Chunya DC	Kasulu DC
30	Sengerema DC	Bahi DC	Sumbawanga MC	Sikonge DC
31	Kishapu DC	Tabora MC	Singida DC	Bagamoyo DC
32	Kibondo DC	Shinyanga DC	Kilolo DC	Kilosa DC
33	Masasi DC	Kibondo DC	Igunga DC	Kilwa DC
34	Simanjiro DC	Kasulu DC	Arusha DC	Urambo DC
35	Tabora/Uyui DC	Sengerema DC	Iramba DC	Geita DC
36	Nanyumbu DC	Lindi DC	Kilombero DC	Makambako TC
37	Longido DC	Mbarali DC	Rwangwa DC	Korogwe DC
38	Kwimba DC	Kishapu DC	Mbeya DC	

---

# **Appendix 8 : Attracting, retaining and improving the productivity of human resources in Kigoma DC**

**Workshop - LGA fiscal inequities and hard to reach areas (26 March, 2014)**

**Presentation by Dr. Kilimba E. (DMO) for DED, Kigoma Distirict Council**



# **Attracting, Retaining and Improving Productivity for Human Resource in Kigoma DC**

**Workshop - LGA fiscal inequities and  
hard to reach areas (26 March , 2014)**

*Presentation by Dr. Kilimba E. (DMO)  
(For DED -Kigoma District Council)*

# Contents

- **Introduction**
- **HR (health and education)**
- **Service indicators**
- **Retention and motivation plans**
- **Achievements**
- **Challenges**
- **Way forward**

# Introduction



- Kigoma DC area covers-19,574 sq kms (8,029 water bodies)
- North-South border shared by DR-Congo and Burundi through Lake Tanganyika
- District Pop; 595,206 (2012 census)
- Divided to yield Uvinza DC in Sept 2013

# Introduction

- KDC is among the 4 Councils of Kigoma Region (Now 7)
- 78 Villages, 6 Division and 25 Wards
- Major geographical difficulties in accessibility
- Average distance btn villages = 8Km; HC = 65 Km the furthest facility from regional hosp = 258 Km along the lake shore
- 27 villages along the Lake Tanganyika shore
- 5 reachable villages but with socio-traditional challenges

# RAMANI YA WILAYA YA KIGOMA INAYOONYESHA VIJJI NA UMBALI TOKA MAKAO MAKUU



Illustrator: Prag + Gisbert C. Mbonyeo KDC

## HRH status (2012/13)

- No hospital, 78 health facilities
- District staff requirements (all cadres) = 559
- Current staff available = 252
- HRH shortage to date = 307 (55%)
- Major shortage of C/O (112) and nurses (113)
- 14 health facilities with only one staff member (10 along lake shores)

## HRH requests and allocation trend

YEAR	LGA REQUEST	PERMITS	ALLOCATION	REPORTED	REMAINED AFTER 1 YR
2010/11	76	36	25	13	12
2011/12	78	50	32	22	19
2012/13	102	25	35	16	16
2013/14	110	80	---	---	---

- Retention of 86.4% to 100% for the past 3 years
- Request – permit difference (25% to 73%)

## HR requests and allocation trend

YEAR	LGA REQUEST	PERMITS	ALLOCATION	REPORTED	REMAINED AFTER 1 YR
2010/11	150	0	0	0	0
2011/12	350	262	216	216	216
2012/13	300	275	275	249	249
2013/14	300	300	-	-	-

- Retention 100% for the past 3 years

# Health service indicators

- Maternal mortality rate reduced from 92/100,000 to 36/100,000 in past 3 yrs (national MMR = 454/100,000)
- Episodes of cholera reduced from 13 (2011) to zero (2013)
- Vaccination coverage raised from 89% to 93% in past 2 yrs
- Retention of staff – 1 yr after arrival (86% to 100% in the past 3 yrs)

# Service indicators (Education)

- Teacher–pupil ratio improved to 1:48 (2013) from 1:60 (2011)
- Pass rate increased from 18% in 2012 to 35% in 2013.
- Retention of teachers–1 yr after arrival (to 100% for the past 3 yrs)
- Turnover of teachers reduced to about 99.2% in the past 3 years

# Retention Plans

- Reducing allocation bias within the Council
- Allocating new staffs to accessible facilities - transfer the experienced staff to the challenging locations
- **(Health sector)**; Provide bed and mattress (200,000/=) to each newly employed staff
  - Provide house to each new staff or 1 yr housing allowance (Tsh.240,000/=)
  - Incentive package of cash (Tsh.400,000)- top up allowance to the Govt deployment rights
  - New employee accepting direct deployment to challenging area (Tsh.400,000/= allowance)

# Retention Plans

- Monthly airtime of 10,000/ to H/facility in charge
- Secondary school fees for 2 children of staffs stationed along the lake zone
- **(Education)**: provide 1 mattress and 1 solar powered light to each newly employed teachers allocated along lake shore, 1 solar light to others. (CRDB, Exim, NMB, NBC, Postal Bank.....)
- Housing priority to schools along the lake zone.
- Support meal allowance of 20,000/= for 3 days at arrival
- Opportunity for upgrading and further studies

# Motivation plans

- **Before arrival of the staff to Kigoma DC HQ:**
  - Proper clarification of Kigoma DC through media (location, transport to Kigoma.....)
  - Organized reception of new employees in collaboration with all respective sectors
    - Reception from the bus stand and railway station to Kigoma DC HQ
    - Accommodation arrangement before reporting to the working station (booking of clean safe and cheap guest houses)

# Coordinated induction

Cert verification, filling in forms, medical examination, allowances and transport arrangement



# Motivation plans

## ➤ At work station:

- Local community committee ( VEO, 2 Religious leaders, 2 parents and the service in charge (responsible for safety, food, accommodation and mentoring)
- Direct access of the new employees to the DE/Director
- DED/HoD escort to facilities (influencing the positive attitude about the challenging stations)
- Provision of free transport each other month to the lake zone staff, 3 days permit for salaries and family needs-Staff exchange to facilities

# Staff houses...



# Achievements

- Approval of the motivation plan/packages by the Councils General meeting
- Incorporation of motivation plans into the Council budgets (HBF and OC - 35 Mil in 2012/13 and 41 Mil in 2013/14)
- Political/leadership will and participation
- Community participation, formulation of social clubs (Inauguration of 32 clubs by the Hon. Minister for IYSC on 14 April)
- Partners participation (Pathfinder, Engender, BMAF, WLF, CRDB, NMB, EXIM, NBC.....)

# Achievements...

- Panelist at International Conference of HRH in Recife-Brazil (Nov 2013) - linking human resource satisfaction to service output , Kigoma DC as “difficult context”



# Challenges

- Shortage of staff in all sectors while employment permits given far short of the requirements
- Inadequate resources for motivation
- Lack of human resource development institutes in Kigoma
- Unfriendly communities (traditional believes and witchcraft) and limited accessibility to some areas
- Poor working environment; shortage of houses, working equipment
- Aging pyramid of the available human resource
- Unqualified staff for further studies

# Transport difficulties and the costs...



# Way forward

- Supporting natives/others on health cadres training under contract then work for KDC (4 student 2013/14)
- Construction of staff houses and facilities (5- 2013/14 and 10 from Benjamin Mkapa foundation) 5 in 2014/5
- Construction of teachers houses and facilities (13 houses FY 2013/14 and 10 houses FY 2014/2015)
- In-service training to ensure staff development
- Encourage and improve local community awareness on staff care and services
- Realistic request of new staff according to establishment
- Mobilizing new staff/temporally from training institutions

## Leadership and commitment;

*The DED escorting new staff to lake zone facilities, sensitizing positive attitudes to communities and club formulation.....*



*Video clips.....*



---

ODI is the UK's leading independent think tank on international development and humanitarian issues.

Our mission is to inspire and inform policy and practice which lead to the reduction of poverty, the alleviation of suffering and the achievement of sustainable livelihoods.

We do this by locking together high-quality applied research, practical policy advice and policy-focused dissemination and debate.

We work with partners in the public and private sectors, in both developing and developed countries.

Readers are encouraged to reproduce material from ODI Reports for their own publications, as long as they are not being sold commercially. As copyright holder, ODI requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the ODI website. The views presented in this paper are those of the author(s) and do not necessarily represent the views of ODI.

© Overseas Development Institute 2014. This work is licensed under a Creative Commons Attribution-NonCommercial Licence (CC BY-NC 3.0).

ISSN: 2052-7209

**Overseas Development Institute**  
**203 Blackfriars Road**  
**London SE1 8NJ**  
**Tel +44 (0)20 7922 0300**  
**Fax +44 (0)20 7922 0399**