

Kenya: How Equitable Was the Distribution of National Roads and Water Projects in 2016/17?

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Dissatisfaction with the way in which resources have been shared in Kenya has colored the country's post-independence history and has been a key driver of legal and fiscal reform. Prior to 2010, the introduction of decentralization and the Constituency Development Fund were intended to address this dissatisfaction. With the new constitution, Kenya created a new revenue allocation formula for counties and an Equalization Fund to address continuing tensions over resource sharing.

However, while principles of equity have clearly informed these reforms, there remains little discussion of equity in regard to the massive funds that remain with the national government. The national government still spends the largest share of revenue through its Ministries, Departments and Agencies (MDAs). In 2017/18 the development budget at the national level, of Ksh. 642 billion, is more than double the total equitable share to all 47 counties in Kenya (Ksh. 302 billion).

One factor that has hampered discussions of equity in national government spending is the lack of disaggregated information about spending, especially regarding capital expenditure. However, in 2016/17, the national government began to provide additional information in its line-item budget. For the first time, MDA development budgets were broken down to the individual project level, showing the distribution of development projects across the country in all the ministries, departments, and agencies.

This budget brief looks at the geographical distribution of capital projects in the State Department for Infrastructure and State Department for Water Services in the 2016/17 budget. The Department for Infrastructure was selected because it is one of the biggest spenders of capital funds, second only to the State Department for Transport, whose budget was mainly allocated to the Standard Gauge Railway in 2016/17. In the case of the State Department for Water Services, while water and sanitation functions are devolved, a large portion of what is spent on water in the country is still spent by state corporations at the national level.

These two MDAs are allocated Ksh. 187 billion for development, which is 23 percent of the total development budget in 2016/17. The State Department for Infrastructure has the largest share of the two MDAs at 18 percent of the total MDAs development budget, while Water Services accounts for 5 percent of the budget. An analysis of the

two MDAs therefore covers about one quarter of spending in capital projects by the national government for that year. Though we hope this breakdown will also be presented for the 2017/18 budget year, the line-item budget for 2017/18 is not yet publicly available as of the time of writing.

WHAT WE DID

The first step in this analysis was to link all projects to counties and regions because there are some projects that cover broader geographical regions beyond individual counties. The line-item budget estimates in 2016/17 provide data of individual projects with their allocations for the budget year, and projections for 2017/18 and 2018/19. However, the data does not indicate the specific locations of each project. Therefore, we assigned all projects to counties based on their names where possible. Names were found through internet search, websites of state corporations involved with construction of roads, and water service boards for water projects. We coded all of the projects in the budget except for a single project that we could not identify.¹

Some projects in the budget covered a geographical area that is larger than one county, so we assigned them to regions comprising several counties. Budgetary allocations at county and regional levels were then analyzed against roads and water access data to establish the level of need for both types of investment at county and regional levels. Data on the kilometers (KMs) of paved and unpaved roads per county was obtained from the World Bank and Commission on Revenue Allocation's recommendation for the second-generation formula.² Water access data was obtained from, "Exploring Kenya's Inequality" a report by Kenya National Bureau of Statistics and Society for International Development.³

Our analysis covers only one year of spending, 2016/17, which is the only year in which data showing individual capital projects has been included in the budget estimates. No data is available from previous years, so it is difficult to know whether the projects in 2016/17 are new or ongoing projects (and no clarification of this is offered in the 2016/17 budget itself). It is therefore impossible to know how the distribution of capital investments is changing at the current time.

The costs of infrastructure projects can also be affected by aspects like the land terrain or population density in the areas where they are located. However, the variations in costs caused by such factors is not given in any public document. Sector reports, which inform government planning over the medium term, lack data explaining the criteria for distributing projects or costs. There is no publicly available information on how the government takes

¹ The only project we could not identify was "Ruwaciondo Dam."

² <http://www.crakenya.org/wp-content/uploads/2013/10/CRA-RECOMMENDATION-ON-EQUITABLE-REVENUE-SHARING-November-2014.pdf>

³ <http://inequalities.sidint.net/kenya/national/water-sources/>

unique needs into account when allocating the capital budget. Therefore, while the presentation of the 2016/17 development budget is better than in previous years, it is still challenging to interpret the data in a meaningful way. These gaps also hinder the National Assembly from playing its role in approving and monitoring the budget.

BOX 1. DATA USED IN THE ANALYSIS

In April 2016, the Transition Authority released data on all roads in the country as part of unbundling of functions in the sector. However, the data has two main weaknesses. First the data does not show how roads under the national government are spread across the country either by counties or by broader regions. Secondly, the data seems to show the total distance of all roads and does not separate paved roads and unpaved roads. Therefore, that data would not be useful in this analysis. As a result, the county data used in this analysis are indicative of the status of roads (and therefore the need for investments in roads) around the country, but we lack data on the exact distribution of national roads.

ROADS INFRASTRUCTURE

The table below shows the country's overall expenditure on roads in the last two years (2015/16 and 2016/17). Construction of roads is a function that is now shared among the two levels of government. Based on the spending on these functions in the two years, a large part of what was spent was at the national government level.

TABLE 1. EXPENDITURE ON ROADS IN 2015/16 AND 2016/17

| Infrastructure/Roads and Transport | 2015/16 (Ksh. billions) | 2016/17 (Ksh. billions) | Share of Total Sector Spending (2015/16) | Share of Total Sector Spending (2016/17) |
|------------------------------------|--------------------------|-------------------------|--|--|
| National | 63.00 | 176.75 | 62% | 80% |
| County | 39.34 | 44.26 | 38% | 20% |
| Total | 102.34 | 221.01 | 100% | 100% |

Source: Estimates of Development Expenditure 2016/17, National Treasury and Vertical Recommendations for 2016/17 and 2017/18, CRA

DISTRIBUTION OF ROADS PROJECT

The State Department for Infrastructure had a total development budget of Ksh. 147.4 billion in 2016/17, which was 9 percent of the total department budget and 18 percent of the development budget. We analyzed the projects under the department and classified them in three broad categories:

1. National projects: These are large infrastructure programs that are not broken down by region or county, or are spread across more than a single region.
2. Regional Projects: These are projects that cover two or more counties which are grouped into regions.
3. County projects: These are projects that are implemented within the borders of one county.

National projects took up more than half (56 percent) of the total development budget for the department. Cross-county projects that were to be implemented in two or more counties took up 8 percent of the budget. Projects that could be tagged to individual counties received 36 percent of the budget. Taken together then, only 44 percent of total national road funding could be assigned to counties or regions.

TABLE 2. SHARE OF THE TOTAL MDA DEVELOPMENT BUDGET

| Project Categories | Gross Expenditure (Ksh. Billions) | Share of the Total Budget |
|--------------------|-----------------------------------|---------------------------|
| National Projects | 82.40 | 56% |
| County Projects | 53.43 | 36% |
| Regional Projects | 11.89 | 8% |
| Total | 148 | 100% |

NATIONAL PROJECTS

This category covers large infrastructure projects such as the Lamu Port Southern Sudan-Ethiopia Transport (LAPSSET) that cuts through multiple regions: several counties in northern Kenya and the coastal region. In such cases, it is possible to list the counties where the project will be implemented but not the amount of money that will be spent on the project in each of them. This category also contains large national projects with no details on the location of individual investments, such as the Low Volume Seal Roads, which take up 21 percent of the department’s capital budget (see Table 3). None of the projects listed in Table 3 are presented in a way that the geographical distribution of spending can be established. While the distribution of roads such as those under the Low Volume Seal program does have equity implications, we have no way to assess this.

The national projects category also includes allocations for the Kenya Highways Building Institute (KHBI). This is a tertiary institution that serves students from across the county. While the institution and its satellite schools are located in particular areas, we cannot say that these local offices are for the benefit of the host county or any specific region.

As shown in Table 2, the national projects take up more than half the capital budget for 2016/17, but there is little information on what projects they are and where they are to be implemented. This lack of transparency makes it difficult to monitor implementation or discuss the way that these funds are distributed.

TABLE 3. TOP TEN NATIONAL PROJECTS

| Project | Gross capital Expenditure (Ksh. Billions)(?) |
|--|---|
| Kenya Transport Sector Support Programme | 14.50 |
| Low Volume Seal Roads Batch 1 | 12.37 |
| Low Volume Seals Phase 1 Batch 2 | 9.80 |
| Annuity Low Volume Seal Roads | 9.49 |
| South Sudan Eastern Africa Transport, Trade & Development Facilitation | 8.20 |
| National Urban Transport Improvement Project (NUTRIP) | 8.04 |
| Low Volume Sealed Roads (Lvsr); Phase 1 - Batch 1A | 5.23 |
| Northern Corridor Transport Improvement Project | 4.53 |
| Eu Missing Links (Eu Funded 67% & 33% GOK) | 1.70 |
| Low Volume Seals Phase 1 Batch 2 | 1.62 |
| <i>Subtotal for top 10 projects</i> | <i>75.47</i> |
| <i>Total for National projects</i> | <i>82.40</i> |
| <i>Top 10 projects as a share of all national projects</i> | <i>92%</i> |

COUNTY PROJECTS

The second category of projects are those which remain within the boundaries of one county. This does not include any roads funded and constructed by county governments. Spending by national government was spread across all but eight of the 47 counties. For counties with no funding, it is possible that some of the expenditure in the national category is for projects in these counties.

In the 2016/17 development budget, Nairobi and Mombasa had the largest share of the national budget at 23 and 16 percent respectively, taking up more than one-third of funding in projects under this category. While the distribution of funding appears to be dispersed across many of the 47 counties, 75 percent of these road funds were allocated to the top 10 counties in terms of allocations.

There are challenges in finding good and accurate data that provide information on access to roads at county level access across the country. The best indicator we have found is the number of paved and unpaved kilometers of roads in 2013 from the World Bank. This data contains classes of roads that were expected to be under the county governments at that time. Some of these roads were later moved to the national level by the Transition Authority, so the data is imperfect: it contains county and some national roads, but not all national roads.

We assessed budget allocations for roads against three measures of need. First, we looked at need based on the share of unpaved roads in a county; unpaved roads should ideally be paved and the larger the network of unpaved roads, the greater the need for investment in paving. However, this does not address other types of need, such as the need for roads relative to the land area of a county. We therefore also consider paved roads relative to each county's land area, assuming that those counties with fewer paved roads per square kilometer have greater need. Finally, because land area does not tell us about population needs, we also look at population per kilometer of paved road as a measure of need. These are complementary approaches, since roads are needed both to connect distant areas, and to serve populations.

The 10 counties with the highest shares of unpaved roads contain 40 percent of all unpaved roads in the country. However, these counties were only allocated 12 percent of the capital budget in the infrastructure department. On the other hand, the ten counties with the smallest share of unpaved roads took up 43 percent of the capital budget. So, from the perspective of financing the paving of unpaved roads, this distribution appears inequitable.

TABLE 4. FIRST MEASURE OF NEED: SHARE OF UNPAVED ROADS PER COUNTY

| County | Unpaved (KMs) | County Share of Unpaved Roads | County share of Gross Capital Expenditure |
|-------------------------|---------------|-------------------------------|---|
| Top Ten Counties | | | |
| Nakuru | 8,718 | 6% | 1% |
| Kitui | 7,992 | 6% | 1% |
| Makueni | 7,254 | 5% | 0% |
| Machakos | 5,426 | 4% | 2% |
| Kajiado | 5,175 | 4% | 0% |
| Kiambu | 4,419 | 3% | 2% |

| | | | |
|----------------------------|----------------|-------------|-------------|
| Meru | 4,260 | 3% | 6% |
| Wajir | 4,195 | 3% | 0% |
| Turkana | 4,132 | 3% | 0% |
| Narok | 3,996 | 3% | 0% |
| <i>Subtotal</i> | <i>55,566</i> | <i>40%</i> | <i>12%</i> |
| Bottom Ten Counties | | | |
| Tharaka Nithi | 1,687 | 1% | 0% |
| Nairobi | 1,624 | 1% | 23% |
| Trans Nzoia | 1,556 | 1% | 1% |
| Elgeyo Marakwet | 1,511 | 1% | 2% |
| Busia | 1,384 | 1% | 1% |
| Bomet | 1,279 | 1% | 0% |
| Nyamira | 959 | 1% | 0% |
| Lamu | 697 | 0% | 0% |
| Mombasa | 689 | 0% | 16% |
| Vihiga | 607 | 0% | 0% |
| <i>Subtotal</i> | <i>11,993</i> | <i>9%</i> | <i>43%</i> |
| Total | 140,315 | 100% | 100% |

When we look at the access to paved roads per square kilometer of land area, Nairobi has the highest share with a kilometer of paved road for every 0.5km². The top 10 counties have a kilometer of paved roads for every 8 km² of land. This set of counties is allocated 55 percent of the capital budget. The bottom ten counties have a kilometer of paved road for every 6,814 km² against a national average of 146 km². Despite the lower access to paved roads, these counties were allocated only 10 percent of the capital budget. Based on this measure, counties with good road access still receive a higher budgetary allocation compared to those with poor access, which does not appear equitable.

TABLE 5. SECOND MEASURE OF NEED: KILOMETERS OF PAVED ROAD PER KM² OF LAND AREA

| County | Paved Roads (KMs) | Area in Square Km. | Land Area (km2) per Km of Paved Road | County share of Gross Capital expenditure |
|-------------------------|-------------------|--------------------|--------------------------------------|---|
| Top Ten Counties | | | | |
| Nairobi | 1,279 | 695 | 1 | 23% |
| Mombasa | 226 | 219 | 1 | 16% |
| Kiambu | 333 | 2,543 | 8 | 2% |

| | | | | |
|----------------------------|--------------|----------------|--------------|-------------|
| Vihiga | 41 | 531 | 13 | 0% |
| Murang'a | 172 | 2,559 | 15 | 5% |
| Kisumu | 120 | 2,086 | 17 | 2% |
| Nyeri | 169 | 3,337 | 20 | 5% |
| Nyamira | 45 | 899 | 20 | 0% |
| Kericho | 99 | 2,479 | 25 | 1% |
| Nakuru | 276 | 7,495 | 27 | 1% |
| <i>Subtotal</i> | <i>2,760</i> | <i>22,844</i> | <i>8</i> | <i>55%</i> |
| Bottom Ten Counties | | | | |
| Kitui | 23 | 30,497 | 1,331 | 1% |
| Narok | 8 | 17,933 | 2,288 | 0% |
| Wajir | 8 | 56,686 | 6,903 | 0% |
| Samburu | 3 | 21,022 | 8,201 | 2% |
| Tana river | 3 | 38,437 | 11,220 | 0% |
| Garissa | 3 | 44,175 | 15,096 | 5% |
| Isiolo | 2 | 25,336 | 15,562 | 0% |
| Lamu | - | 6,273 | N/A | 0% |
| Mandera | - | 25,992 | N/A | 1% |
| Marsabit | - | 70,961 | N/A | 0% |
| <i>Subtotal</i> | <i>50</i> | <i>337,311</i> | <i>6,814</i> | <i>10%</i> |
| Total | 3,969 | 581,313 | 146 | 100% |

Turning to our third measures of need, the fewer the people using each kilometer of road, the better the access. Based on this measure, Nairobi has better access to paved roads with 3,309 people per kilometer of paved road while the bottom 10 counties have an average of 164,862 people per kilometer of paved road. The top 10 counties which have an average of 4,632 people per km of paved roads were allocated 60 percent of the budget while the 10 counties whose population has the lowest access were allocated 13 percent of the budget.

TABLE 6. THIRD MEASURE OF NEED: KILOMETERS OF PAVED ROAD BY POPULATION

| County | Population (2015) | Paved Roads (KMs) | Population per KM of Paved Roads | County share of Gross Capital Expenditure |
|----------------------------|-------------------|-------------------|----------------------------------|---|
| Top Ten Counties | | | | |
| Nairobi | 4,232,087 | 1,279 | 3,309 | 23% |
| Baringo | 679,256 | 180 | 3,782 | 0% |
| Nyeri | 782,864 | 169 | 4,636 | 5% |
| Mombasa | 1,145,259 | 226 | 5,068 | 16% |
| Kiambu | 1,831,800 | 333 | 5,501 | 2% |
| Murang'a | 1,063,721 | 172 | 6,178 | 5% |
| Laikipia | 487,934 | 74 | 6,564 | 0% |
| Taita Taveta | 347,195 | 52 | 6,710 | 7% |
| Nakuru | 1,959,880 | 276 | 7,091 | 1% |
| Embu | 554,079 | 64 | 8,667 | 1% |
| <i>Subtotal</i> | <i>13,084,075</i> | <i>2,825</i> | <i>4,632</i> | <i>60%</i> |
| Bottom Ten Counties | | | | |
| Migori | 1,048,602 | 9 | 119,422 | 2% |
| Kakamega | 1,843,320 | 15 | 122,698 | 1% |
| Busia | 825,836 | 7 | 124,446 | 1% |
| Narok | 1,039,837 | 8 | 132,695 | 0% |
| Garissa | 423,931 | 3 | 144,875 | 5% |
| Bomet | 892,429 | 4 | 210,598 | 0% |
| Homa Bay | 1,101,901 | 5 | 221,820 | 2% |
| Lamu | 123,842 | - | N/A | 0% |
| Mandera | 697,922 | - | N/A | 1% |
| Marsabit | 312,698 | - | N/A | 0% |
| <i>Subtotal</i> | <i>8,310,318</i> | <i>50</i> | <i>164,862</i> | <i>13%</i> |
| Total | 44,156,578 | 3,969 | 11,124 | 100% |

The three measures described here indicate that a sizeable proportion of the investments in roads is happening in areas that already have good access. While no government document gives a direct indication of the criteria

applied when formulating the budget, better data and information in the budget would help clarify the reasons for these distributional choices, such as whether they relate to economic objectives beyond distributional fairness.

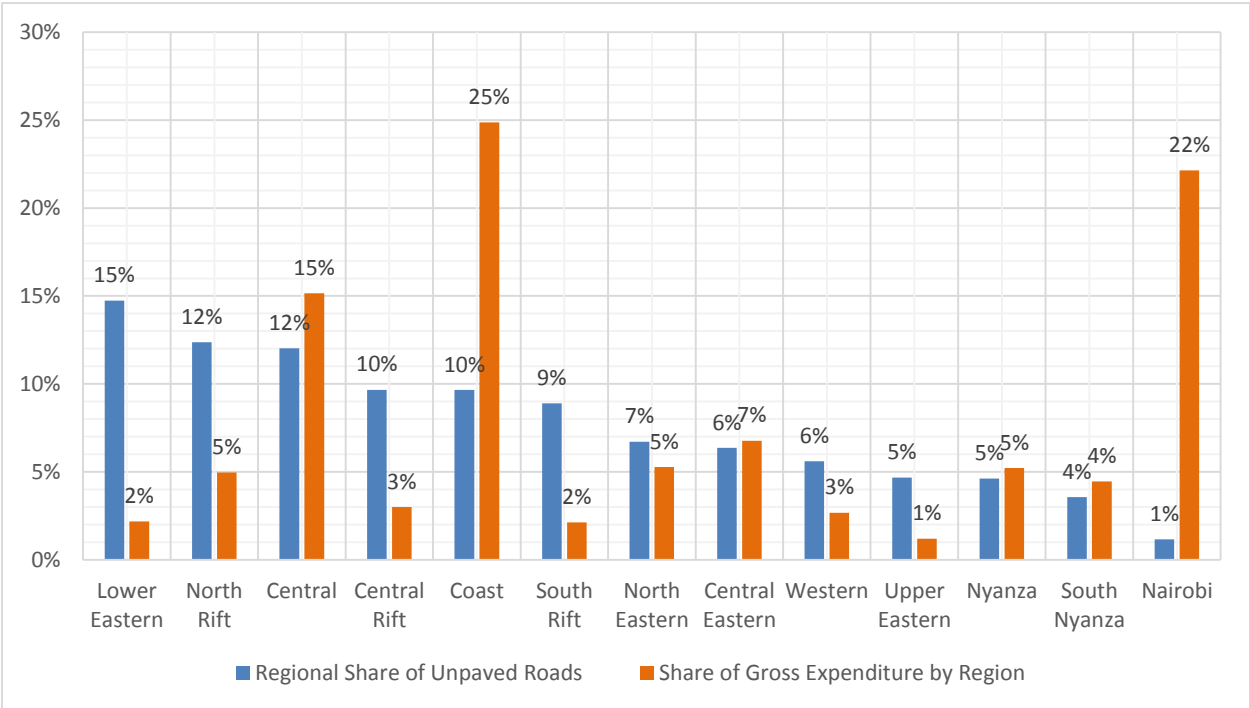
REGIONAL CLASSIFICATION OF PROJECTS

We also look at the regional distribution of road projects, by grouping together all the county projects and the broader regional projects into 14 regions (see Annex 1). Coast and Nairobi regions have the highest share of the total allocations at 25 and 22 percent respectively. Central region is third.

We analyze access and allocation to roads based on the three measures used for county specific roads. As shown in Figure 1, the Coast region had the highest allocation taking 25 percent of the total regional allocations. Nairobi follows closely with 22 percent and Central region is third with 15 percent. Regions with the lowest allocations are Upper Eastern (Isiolo and Marsabit), Lower Eastern (Machakos, Kitui and Makueni) and South Rift (Narok, Kajiado, Kericho and Bomet).

Lower Eastern accounts for the largest share of unpaved roads at 15 percent, but the region was allocated only two percent of the total capital budget under this category. On the other hand, Nairobi region had the second highest allocation at 22 percent but has the lowest share of unpaved roads among the 14 regions. However, there are seven cases where the shares are close for example, Central region, which has the third highest share of unpaved roads (12 percent), also had the third highest allocation at 15 percent. This scenario, where the share of unpaved roads relates closely to the share of allocations, is also seen in South Nyanza, Nyanza and Central Eastern.

FIGURE 1. FIRST MEASURES OF NEED: SHARE OF UNPAVED ROADS PER REGION



On average, as we saw above, the country has a kilometer of paved for every 146km². Nairobi has the best road access with a kilometer for 0.5km² of its land area. The Nairobi region has the best access to paved roads, yet it was one of the top recipients in the budget, receiving 22 percent of the development budget under this category. The Upper Eastern region, which is made up of Marsabit and Isiolo, has the lowest access of a kilometer of paved road for an area of over 59,000km² but was allocated just one percent of the total budget. The top three allocations are to Coast, Nairobi, and Central regions whose average access is a kilometer of paved road for every 41km² of land, far better than the national average; they received 62 percent of the budget. This does not seem equitable.

TABLE 7. SECOND MEASURE OF NEED: KILOMETERS OF PAVED ROAD PER KM² OF LAND AREA

| Region | Paved Roads (KMs) | Area in Square KM. | Share of Gross Expenditure by Region | Land per KM of Paved Roads |
|-----------------|-------------------|--------------------|--------------------------------------|----------------------------|
| Nairobi | 1,279 | 695 | 22% | 1 |
| Central | 720 | 13,164 | 15% | 18 |
| Nyanza | 138 | 7,800 | 5% | 57 |
| South Nyanza | 68 | 4,813 | 4% | 71 |
| Central Eastern | 159 | 12,393 | 7% | 78 |
| Western | 80 | 8,309 | 3% | 104 |
| Central Rift | 353 | 37,979 | 3% | 107 |
| North Rift | 483 | 100,620 | 5% | 208 |
| Coast | 357 | 82,893 | 25% | 232 |
| Lower Eastern | 185 | 44,714 | 2% | 242 |
| South Rift | 135 | 44,784 | 2% | 332 |
| North Eastern | 11 | 126,852 | 5% | 11,389 |
| Upper Eastern | 2 | 96,297 | 1% | 59,146 |
| Total | 3,969 | 581,313 | 100% | 146 |

TABLE 8. MEASURE OF NEED: KILOMETERS OF PAVED ROAD BY POPULATION

| Region | Paved Roads (KMs) | Population (2015) | Population per KM of Road | Share of Gross Expenditure by Region |
|--------------|-------------------|-------------------|---------------------------|--------------------------------------|
| Nairobi | 1,279 | 4,232,087 | 3,309 | 22% |
| Central | 720 | 4,947,415 | 6,867 | 15% |
| Central Rift | 353 | 2,721,618 | 7,703 | 3% |
| Coast | 357 | 4,054,921 | 11,369 | 25% |
| North Rift | 483 | 5,818,280 | 12,048 | 5% |

| | | | | |
|-----------------|--------------|-------------------|------------|-------------|
| Central Eastern | 159 | 2,402,023 | 15,131 | 7% |
| Lower Eastern | 185 | 3,215,112 | 17,398 | 2% |
| Nyanza | 138 | 3,172,663 | 23,032 | 5% |
| South Rift | 135 | 3,692,030 | 27,375 | 2% |
| South Nyanza | 68 | 3,049,988 | 44,771 | 4% |
| Western | 80 | 4,811,630 | 60,149 | 3% |
| North Eastern | 11 | 1,572,238 | 141,164 | 5% |
| Upper Eastern | 2 | 466,573 | 286,572 | 1% |
| Total | 3,969 | 44,156,578 | 315 | 100% |

WATER INFRASTRUCTURE

The water sector is also managed by both levels of government. Nevertheless, a significant part of the sector's expenditure remains at the national level. Data from the Commission on Revenue Allocation shows that in 2015/16 and 2016/17, an average of 91 percent of the money spent in the environmental protection, water and natural resources sector was spent by the national government

TABLE 9. EXPENDITURE IN WATER SERVICES IN 2015/16 AND 2016/17

| Environmental Protection, Water and Natural Resources | 2015/16 (Ksh. Billions) | 2016/17 (Ksh. Billions) | Share of Total Sector Spending (2015/16) | Share of Total Sector Spending (2016/17) |
|---|-------------------------|-------------------------|--|--|
| National | 134 | 89.00 | 95% | 92% |
| County | 6.73 | 7.94 | 5% | 8% |
| Total | 140.70 | 96.94 | 100% | 100% |

Understanding the distribution of national resources in this sector is a good indicator of equity. Kenya has eight water catchment areas and water investments in the sector at the national level are organized around these areas. The sector working group report for 2017/18 has a section on the priorities to be funded in that period.⁴ However, the section has no details on why certain programs and projects are selected for funding and others are not. We can only guess what criteria the State Department for Water Services uses to determine where to invest in water. In this analysis, the focus is on the distribution of capital projects in the development budget for the year 2016/17.

⁴ <http://www.treasury.go.ke/sector-reports-2018/send/127-2017/235-environmental-protection-water-and-natural-resources.html>

WHAT INFORMATION WAS AVAILABLE?

The budget has details of all the individual development projects and some were broken down by name. Other projects are placed under broad budget lines with no information on specific investments or locations. These non-specific projects take up 32 percent of the total development allocation in 2016/17. The figure below shows an example where Ksh. 189.6 million is allocated for water supply and sanitation for the urban poor. However, there is no way to identify the urban areas that will benefit and there are no details as to how many projects will be implemented with the allocated amount.

In order to compare water investments to water need, we collected water access data from the reports produced by the Kenya National Bureau of Statistics on inequalities in Kenya at national and county levels. *Exploring Inequalities* captures data mainly collected from the 2009 census.⁵ The data was then aggregated by combining data from the county level into the regions covered by each water service board to give the regional access rates.

FIGURE 2. VOTE D1103 STATE DEPARTMENT FOR WATER SERVICES

| VOTE D1103 State Department for Water Services | | | | | |
|---|---------------------|-----------------------|-----------------|---------------------|---------------------|
| I. DEVELOPMENT EXPENDITURE SUMMARY 2016/2017 AND PROJECTED EXPENDITURE ESTIMATES FOR 2017/2018 - 2018/2019 | | | | | |
| I. ESTIMATE of the amount required in the year ending 30th June, 2017 for the State Department of Water Services, for capital expenditure | | | | | |
| (KShs 11,139,000,000) | | | | | |
| SUMMARY | | | | | |
| HEAD/ PROJECT | Estimates 2016/2017 | | | Projected Estimates | |
| | Gross Expenditure | Appropriations in Aid | Net Expenditure | Estimates 2017/2018 | Estimates 2018/2019 |
| | Kshs. | Kshs. | Kshs. | Kshs. | Kshs. |
| 1103105000 Water Supply and Sanitation for the Urban Poor | 189,652,000 | 37,652,000 | 152,000,000 | 85,652,000 | 37,652,000 |
| 1103105100 Support to Equitable Access to quality water | 220,000,000 | - | 220,000,000 | 204,000,000 | - |
| 1103105200 Green Growth and Employment Creation- Access to and Management of the | - | - | - | 200,000,000 | 205,000,000 |
| 1103105300 Vihiga Cluster Project-Belgium funding | 25,000,000 | - | 25,000,000 | 100,000,000 | 174,000,000 |
| 1103105400 Sirisia-Chwele (Koica) | 221,000,000 | 100,000,000 | 121,000,000 | 109,000,000 | - |

water projects implemented in one county are meant to provide water to other counties. For example, the North Collector tunnel in Muranga County is a source of water for Nairobi County. There are many cases where water projects in one county have beneficiaries beyond that county. Water projects such as Chemasusu dam are meant to improve water access in Baringo and Nakuru County. Therefore, our analysis of the distribution of water

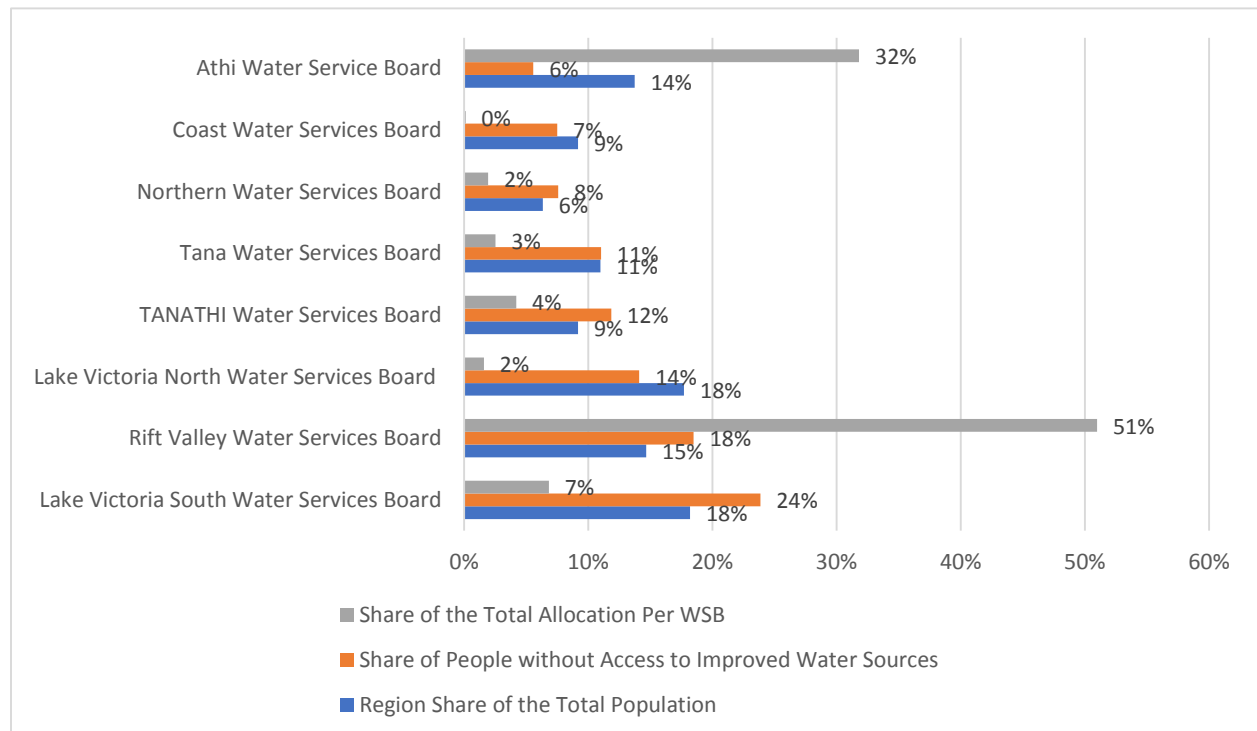
⁵ <http://inequalities.sidint.net/kenya/county/>

projects focuses on the investments made by the national government at the water service board level rather than those made at the county level.

A sizeable portion of the budget under the State Department of Water is spent through the Water Service Boards (WSB). The boards are responsible for implementation of water infrastructure between the water source and the distributors (water companies). Therefore, at the department level, the revenue allocation is to the eight water boards. The question then becomes: does the distribution of resources in the sector consider the access levels in the areas under each board? Is it equitable? Because the funds are directly transferred from the department to the boards, the discussion of equity must focus on the spending of each WSB in the counties they cover.

About 47 percent of Kenyans do not have access to improved sources of water (22.6 million people as of 2015). The largest share, 24 percent, of those without access are in the eight counties under the Lake Victoria South Water Service Board region.⁶ The Rift Valley Water Service Board region follows with 18 percent. Both regions have smaller proportions of the country’s population at 18 and 15 percent respectively. Athi Water Service Board, which serves Nairobi and Kiambu counties, has the smallest share of the country’s population without access to good water at six percent. The region’s share of the country’s population is much higher at 14 percent. The access level in Athi Water Service Board is three times better than in Lake Victoria South Water Service Board.

FIGURE 3. WATER ACCESS AND REVENUE DISTRIBUTION PER WATER SERVICE BOARD



Based on the allocations in the 2016/17 development budget where the projects can be geo-located, 83 percent of the budget was allocated to two regions: Rift Valley Water Service Board and Athi Water Service Board. Lake Victoria South has the highest proportion of people without good access to water (24 percent of the population), but has only seven percent of the allocation. Itare Dam in Nakuru accounts for 81 percent of the budget allocated to the Rift Valley Water Service Board.

When the need for water is compared to the share of the investment in infrastructure under the water ministry, the area with the best access to water, Athi River region, is still getting the second highest allocation. This raises the question on whether the distribution of funds considers access gaps that already exist among the regions. Though the high allocation to the Rift Valley board may be equitable, it does not seem fair to allocate 51 percent of the budget to it while other regions with low access have below 5 percent of the share. This analysis does not include allocations that were not made to specific geographical areas and thus it is possible that additional information on these distributions could change the picture illustrated by Table 7.

CONCLUSION

The National Treasury’s presentation of the development budget in 2016/17 is a positive step toward greater budget transparency. It eases the ability of the public to see how government investment is distributed around the country and to question that distribution. This opens a new front in discussing equity in the national budget beyond funds such as the County Development Fund (CDF). Still, there is a need for more information to better help the public understand the basis for distributions, and to what extent equity has been considered. This information is also critical for Members of both houses of Parliament who play a role in overseeing allocations and monitoring implementation. There is insufficient data in the budget for MPs or citizens interested in monitoring projects to do so. There is no information on the distribution of many projects, nor do we have information on which projects are ongoing and what the multi-year investment plan for these projects entails. In addition, the data available on access to water and roads is either outdated (water data is from 2009) or not disaggregated (roads) and making it more challenging to evaluate whether government spending is equitable.

ANNEX 1. REGIONAL DIVISIONS: ROADS

| | |
|--------------|---------------------|
| Coast | Central Rift |
| Mombasa | Samburu |
| Kwale | Laikipia |
| Kilifi | Nakuru |
| Tana River | South Rift |

| | |
|------------------------|---------------------|
| Lamu | Narok |
| Taita/Taveta | Kajiado |
| North Eastern | Kericho |
| Garissa | Bomet |
| Wajir | Western |
| Mandera | Kakamega |
| Upper Eastern | Vihiga |
| Marsabit | Bungoma |
| Isiolo | Busia |
| Central Eastern | Nyanza |
| Meru | Siaya |
| Tharaka - Nithi | Kisumu |
| Embu | Homa Bay |
| Lower Eastern | South Nyanza |
| Kitui | Migori |
| Makueni | Kisii |
| Machakos | Nyamira |
| Central | Nairobi |
| Nyandarua | Nairobi City |
| Nyeri | |
| Kirinyaga | |
| Murang'a | |
| Kiambu | |
| North Rift | |
| Turkana | |
| West Pokot | |
| Trans Nzoia | |
| Uasin Gishu | |
| Elgeyo/Marakwet | |
| Nandi | |
| Baringo | |

ANNEX 2. REGIONAL DIVISIONS: WATER

| | |
|---|---|
| Athi Water Service Board | Northern Water Services Board |
| Nairobi | Samburu |
| Kiambu | Laikipia |
| Coast Water Services Board | Marsabit |
| Mombasa | Isiolo |
| Kwale | Garissa |
| Kilifi | Wajir |
| Tana River | Mandera |
| Lamu | Lake Victoria South Water Services Board |
| Taita-Taveta | Kericho |
| Tana Water Services Board | Bomet |
| Nyeri | Siaya |
| Kirinyaga | Kisumu |
| Muranga | Homa Bay |
| Tharaka Nithi | Nyamira |
| Embu | Kisii |
| Meru | Migori |
| Lake Victoria North Water Services Board | Rift Valley Water Services Board |
| Kakamega | Narok |
| Vihiga | Elgeyo-Marakwet |
| Bungoma | Baringo |
| Busia | Nakuru |
| Trans-Nzoia | Turkana |
| Uasin-Gishu | West Pokot |
| Nandi | Nyandarua |
| TANATHI Water Services Board | |
| Kitui | |
| Makueni | |
| Machakos | |
| Kajiado | |