Local Female Political Representation in Sub-Saharan Africa

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1. Introduction

Despite substantial improvements, inequality between men and women remains important in most spheres of life around the world and particularly in developing countries. Women still have unequal standing when we compare economic opportunities, access to education, inheritance rights, and rights over land. They continue to be dependent on men financially and have limited rights to operate a business or manage a property in many countries (Duflo 2012, World Bank 2011). Relative to these differences, the political participation of women is by far the slowest to improve.

Gender inequality and the lack of female representation in formal positions of power have raised serious concerns among policy makers regarding the relative position of women in societies. Moreover, research has demonstrated the wider impact of female political representation, in turn, for society. Female political representation has been shown to affect the types of public goods and expenditures, to improve the aspirations and accomplishments of women, and to improve female access to justice through the legal system (Beaman et al. 2009, Chattopadhyay and Duflo 2004, Iyer et al. 2012). Relatedly, there is significant evidence in developing countries, that the higher is women's relative bargaining power within the household the more likely is household income to be invested in children, and to be used equally for girls and boys. For this reason, the United Nations deemed gender equality a key element in achieving its Millennium Development Goals. International development agencies emphasize empowering women as not only right and fair, but also as economically sensible.

There is now a fair amount of consensus amongst economists that successful economic development depends on the development of the right political institutions (Acemoglu, Johnson, and Robinson 2001). This research suggests that when it comes to ensuring that the positive effects of economic growth in turn enhance female empowerment, a crucial ingredient is most likely the nature of these institutions and in particular the direct role women play in them. To date, there is relatively little research on the direct role women play in political institutions. Moreover, there are parts of the developing world, such as Africa, where research on these issues is particularly scant.

Historically, there is a large amount of variation across Africa along this dimension. In fact, African history is replete with well-known female monarchs, chiefs, and constitutional leaders. Their exploits are celebrated and constitute a preponderant feature of African historical traditions. Very early legends include female pharaohs, such as Cleopatra and Nefertiti who ruled ancient Egypt, and the Queen Candaces of Ethiopia in the second century. In the Niger and Chad and Hausa territory, women founded cities, led migrations, and conquered kingdoms. In West Africa, among the Ashanti and other Akan speaking tribes, Queen Mothers, had parallel leadership roles to men. They had their own royal courts, councils, and armies. Several female leaders are important signatores on treaties with the colonists (Lebeuf 1960, Steady 2011).

In contemporary times, women have served as president, vice president, or prime minister in: Liberia, Rwanda, Sao Tome and Principe, Lesotho, South Africa, Zimbabwe, the Gambia,

Central African Republic, Malawi, Burundi, Senegal, Mozambique, Gabon, Uganda, and Guinea Bissau. Rwanda leads the world with 64% of legislators in national parliament (the lower or single house) being women, followed by other African countries such as: Senegal (43%); South Africa (41%); Mozambique (39%); Angola (37%); Tanzania (36%); and Uganda (35%). This is in comparison to other developed countries with significantly lower female representation such as: France (26%); Australia (26%); Canada (25%); U.K. (22%); and the United States of America (18%).

Research on contemporary female political participation in administrative levels below national legislators is scant. In many parts of Africa, particularly in the rural areas, the traditional political structures govern alongside the more modern democratic institutions. Though research is extremely sparse, women often seem to have a prominent role in these chieftaincies. Well-known current examples of paramount chiefs include Madam Ella Koblo Gulama of Sierra Leone and Ellen Johnson Sirleaf of Liberia. Female chiefs are also known in Zimbabwe, Zambia, South Africa, Malawi, and the Democratic Republic of Congo. Female leadership is also still common in many parts of Ghana, where all the main chiefs have beside them a female ruler called a "queen mother". These female paramount chiefs were admitted to the National House of Chiefs in 2013.

As a first step in understanding the implications of variation in female political representation across Sub-Saharan Africa, we have collected data on female representation in formal political institutions at the local level. In the next section, we describe this data.

2. Data Collection

This database is the first of its kind to provide comprehensive and disaggregated information on female political participation at the local government level for sub-Saharan Africa. The database includes election data that has yet to be released in the public domain. The first iteration of the dataset covers local election results for 21 sub-Saharan African countries. The database aims to become the primary, centralized resource for local election data for sub-Saharan, African countries. The variables included in the dataset provide information about the following:

- The existence of legislated quotas for women
- The type of election system used
- The names and gender of winning candidates
- The total number of seats per administrative division
- The number of seats won by females in each administrative division.

The overarching aim of the data collection process was to collate data on female political representation at the local government level. The data contains detailed information about winning candidates at various local administrative levels.

A primary investigator and lead research assistant (1 female, 1 male) oversaw the initial composition of the dataset and identified the necessary variables to be included. Teams consisting of two post-graduate economics students from Stellenbosch University in South Africa (1 male, 1 female) were tasked with sourcing local election data for all Sub-Saharan

African countries that hold sub-national elections. Data was primarily sourced from the respective countries' electoral commissions. Other sources for obtaining election data included, *inter alia*; election reports by NGO's, researchers at other academic institutions, embassies and numerous local government organizations. Where required, the collected data was verified by a secondary source. All data entries were monitored and verified by the lead research assistant in order to minimize the probability of transcription errors.

If the researchers were certain that gender-identifying data could not be obtained, a two-fold methodology to determine the gender of winning candidates was adopted. Firstly, researchers worked in their teams to find gender identifying information for each individual winning candidate. This was achieved by finding gender specific pronouns in relevant news articles, reports and government statements that mentioned the winning candidate. If gender specific pronouns could not be sourced then researchers identified the winning candidates on a variety of social networks in order to identify the gender.

The second approach to determining the gender of winning candidates was by making use of a gender specific, names database.[1] Gender API (2017) provides a comprehensive, country specific, names database which was used to query the gender of an individual using their first name as an identifier.[2]

The scope of the study covers Sub-Saharan Africa. There is some missing information. First, not all countries in Africa have elections at the local level.[3] In addition to this, there are countries which have local elections, but the information is not available. There are substantial barriers to collecting the data. The majority of electoral commission (IEC) websites are either poorly designed or non-existent or hacked. Our repeated requests for help and/or access to information was met with apathy by many IEC officials. Poor record keeping and political instability further hindered the data collection process.[4] To obtain the data, we had to work through NGOs, Universities, local/national government departments and leverage our networks to obtain election data for these countries. The dearth of accessible information regarding local election results emphasises the need for projects such as ours. As we can now provide unbiased and accurate local election results which were previously unavailable to the wider public.

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[1] The following countries required the use of the Gender API (2017) in order to determine the gender of winning candidates: Benin, Republic of the Congo, and Zambia. Each individual name query returned the gender associated with the first name followed by an indication of the number of samples and a percentage specifying the accuracy of the result. Queries were localised by country to enhance the accuracy of results and a minimum accuracy percentage of 90% was selected in order to ensure the validity of the data.

[2] For more information on Gender API please see https://www.gender-api.com/.
[3] Countries which have yet to have local elections as of 1 Jan 2017 are Democratic Republic of the Congo, Equatorial Guinea, the Seychelles, Guinea-Bissau, Liberia, South Sudan, and Togo.

[4] The countries that hold up to date records and exhibit transparency regarding election information are: Kenya, Malawi, Mauritius, Namibia, South Africa, Swaziland, Uganda, and Lesotho.

3. Female Political Representation

Quotas to promote women's representation in the world's legislatures have spread to more than one hundred countries. Within Africa, at least 33 countries have adopted some form of quota. Across sub-Saharan Africa the use of electoral gender quotas has dramatically transformed national legislatures in the past two decades. Since 2003, Rwanda has led the world in women' representation in parliament, another dozen sub-Saharan African countries top the world list. The first sub-Saharan African countries to adopt a form of electoral gender quotas in 1990s and early 2000s were more likely to be post-conflict countries in East and Southern Africa. Often a political transition which entailed the adoption of new constitutions and electoral laws and mobilized national women' movements accompanied the adoption of the quotas (Bauer and Britton 2006).

Gender quotas come three forms at the national level. Reserved seats set aside for women in parliaments. Legislative quotas that require a certain percentage of political parties' nominees to be women. Voluntary party quotas involve individual parties promising to nominate a certain percentage of women. Further to this, some countries have gender quotas at the sub-national level.

Table 1 below lists the preponderance of political gender quotas across countries in Sub-Saharan Africa.

Table 1 – Gender Quotas in Political Institutions across Sub-Saharan Africa

Country	National Quotas	Sub-national Quotas	Party Quotas
Angola	✓	✗	✗
Benin	✗	✗	✗
Botswana	✗	✗	✓
Burkina Faso	✓	✓	✗
Burundi	✓	✗	✗
Cameroon	✗	✗	✓
Cape Verde	✓	✓	✗
Comoros	✗	✗	✗
Congo, The Republic of the	✓	✓	✗
Cote d'Ivoire	✗	✗	✓
Dijbouti	✓	✗	✗
Equatorial Guinea	✗	✗	✓
Eritrea	✓	✗	✗
Ethiopia	✗	✗	✓
Ghana	✗	✗	✗
Guinea	✓	✓	✗
Kenya	✓	✓	✓
Lesotho	✓	✓	✓
Liberia	✗	✗	✗
Malawi	✗	✗	✓
Mali	✗	✗	✓
Mauritius	✗	✓	✗
Mozambique	✗	✗	✓
Namibia	✗	✓	✓
Nigeria	✗	✗	✗
Rwanda	✓	✓	✗
Senegal	✓	✓	✗
Sierra Leone	✗	✓	✗
South Africa	✗	✓	✓
Sudan	✓	✗	✗
Swaziland	✓	✗	✗
Tanzania	✓	✓	✓
Uganda	✓	✓	✗
Zambia	✗	✗	✗
Zimbabwe	✓	✓	✓

Data Sources: Refer to: http://cournot.sun.ac.za/fppssa/political_metafiles.html.
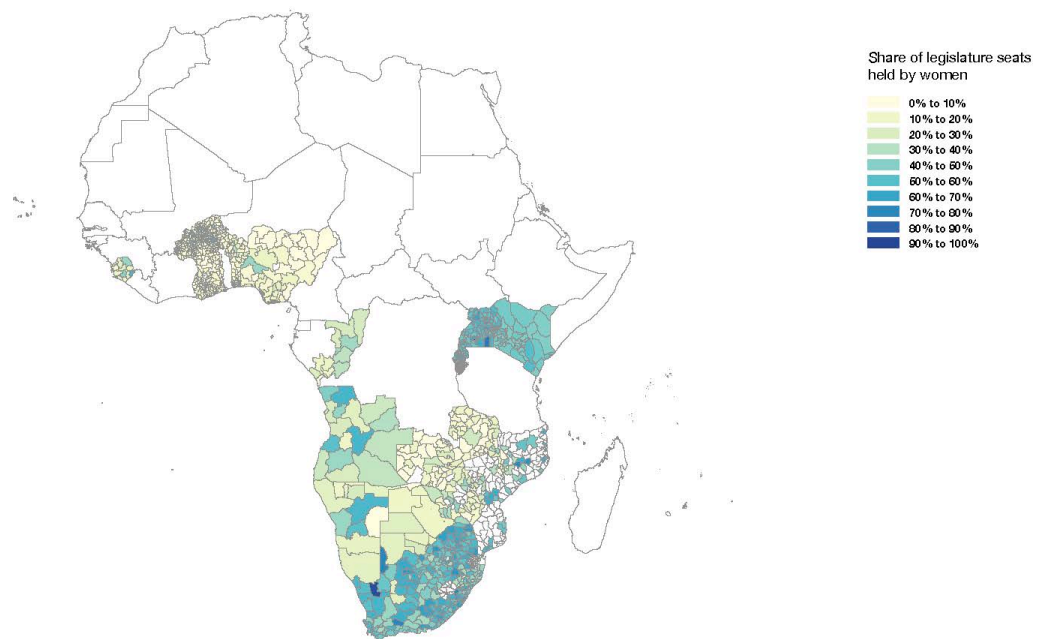
4. Data Summary

Table 2 above lists the countries in our sample, the election year, the administrative unit, and the average local female political representation.

Table 2 – Female Political Representation at the Sub-National Level

| Country	Election Year	Administrative Unit	Female Representation
Angola	2012	Municipal	24.69%
Benin	2015	Commune	7.98%
Botswana	2014	Local Council	15.71%
Burkina Faso	2016	Commune	13.09%
Burundi	2010	Town Council	34.02%
Cape Verde	2012	Municipal	22.81%
Cape Verde	2016	Municipal	25.62%
Comoros	2015	Municipal	27.72%
Congo, The Republic of the	2014	Department	15.72%
Ghana	2010	District	6.82%
Ghana	2015	District	4.66%
Kenya	2013	County Assembly	34.90%
Lesotho	2005	Community Council	55.70%
Lesotho	2011	Community Council	31.98%
Malawi	2014	District Council	11.69%
Mauritius	2012	Village Council	26.35%
Mauritius	2012	Municipal Council	35.00%
Mozambique	2013	Municipal Assembly	39.80%
Namibia	2010	Regional Council	12.87%
Namibia	2015	Municipal Council	40.33%
Nigeria	2011	State Assembly	5.17%
Rwanda	2016	District Council	43.55%
Sierra Leone	2012	District	17.56%
South Africa	2011	Local Municipality	38.45%
South Africa	2014	Province	40.47%
South Africa	2016	Local Municipality	41.23%
Swaziland	2012	Village	20.48%
Swaziland	2013	Town	15.25%
The Gambia	2013	Local Council	9.91%
Uganda	2011	District	41.27%
Zambia	2011	Local Council	6.04%
Zimbabwe	2008	Municipal	18.36%
Zimbabwe	2013	Municipal	16.31%

The map in Figure 1 below illustrates the geographic distribution of local female political representation for the most recent election.

Figure 1 - Local Female Representation

Share of legislature seats
held by women

- 0% to 10%
- 10% to 20%
- 20% to 30%
- 30% to 40%
- 40% to 50%
- 50% to 60%
- 60% to 70%
- 70% to 80%
- 80% to 90%
- 90% to 100%

As is clear from Figure 1, there is significant variation within a given country in terms of local female representation. The below figures depict this variation for Benin and South Africa.

Figure 2 – Local Female Representation by Country

Benin   **South Africa**
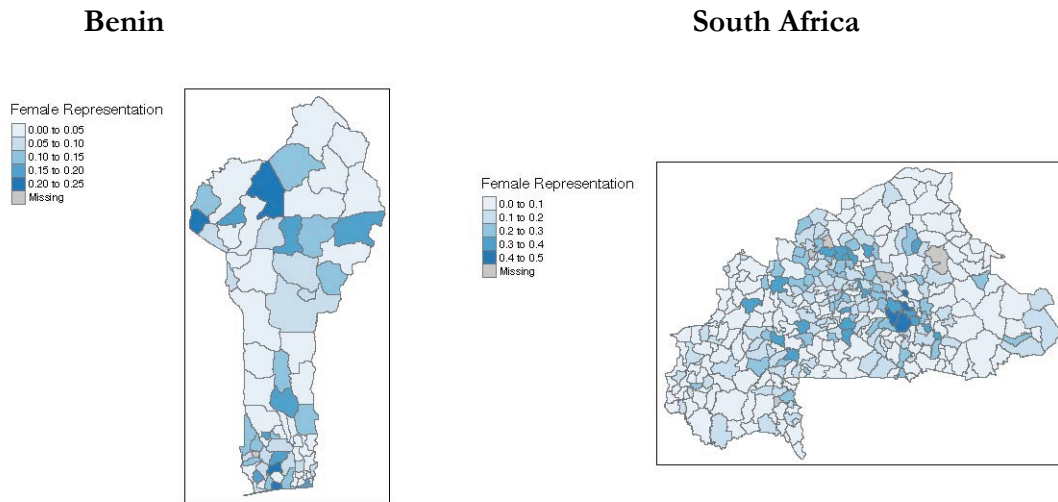
As seen from Table 2, it is not always the case that if a country imposes gender quotas at the national level, they necessarily do so also at the sub-national level as well. Likewise, they can impose quotas at the party or sub-national level and not at the national level. Despite these patterns, we see from Table 3 below that any type of quota increases female representation in local government to approximately 25%. This representation is slightly below the proportion of 30% which is the typical target mandated by the quotas. It is interesting to note, however, that for the sample of countries without any gender quotas, there is still some female political representation, equal to roughly 14%.

Table 3 – Female Political Representation at the Sub-National Level and Gender Quotas

	Female Representation in Local Government
Whole Sample	0.20 (0.15)
National Female Quotas	0.26 (0.11)
Sub-National Female Quotas	0.27 (0.13)
Political Party Quotas	0.26 (0.14)
National /Sub-National Quotas	0.25 (0.11)
National/Sub-National/Party Quotas	0.25 (0.11)
No Quotas	0.14 (0.15)

Table Notes: Standard deviations are in parentheses. Data Source:
http://cournot.sun.ac.za/fppssa/political_metafiles.html.

5. Individual-Level Correlations

We now turn to individual-level data to determine whether female political representation significantly determines outcomes for women. For the individual-level data, we rely on the Demographic Health Surveys (DHS). These are surveys which have been conducted in 45 countries in Africa since the 1990s. These surveys interview a nationally representative sample of between 10,000 and 20,000 women (aged 15-49) in each country.

In the tables below we estimate our individual-level variables of interest (from the DHS surveys) as a function of our key variable of interest, the proportion of female representatives at the local level of government. We include country fixed effects into our estimations. This implies that we are essentially comparing the effect of local level female political representation on individual level outcomes within a country. In other words, the estimated effect controls for any systematic differences across countries such as GDP, national governance structures, and quota systems.

We begin with indicators of economic well-being for women.

Table 4 – Female Well-being Indicators (Country Fixed Effects Estimation)

Variable	Coefficient on Female Representation
Illiterate	-0.27 (0.13)**
More than Primary	0.32 (0.12)***
Education Level	0.75 (0.27)***
Work	0.16 (0.06)***
Wealth Index	1.52 (0.61)***
Piped Water	0.18 (0.08)**
Flush Toilet	0.29 (0.11)***
Electricity	0.40 (0.16)***
BMI	230.0 (76.0)***
Rohrer	119.8 (43.7)***
Observations	568608

Table Notes: Clustered (at the local administrative level) standard errors are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Source: Demographic Health Surveys.

We see from Table 4 that all indicators of female well-being are positively related to the proportion of female representatives in the local government. That is, women are significantly less likely to be illiterate and more likely to have higher educational outcomes with more female political representation. Likewise, they are significantly more likely to work. Correspondingly they reside in households with a higher wealth index and have better access to public amenities. These include piped water, a flush toilet, and electricity. Women in areas with better female political representation also have significantly better health outcomes as reflected in two measures, the BMI and Rohrer Indicies.[5]

We next turn to variables representing outcomes in marriage for women.

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[5] The BMI and Rohrer indicies both aim to capture measure of weight to height. Low values refer to weight deficiencies.

Table 5 – Female Marital Outcomes (Country Fixed Effects Estimation)

Variable	Coefficient on Female Representation
Polygynous	-0.15 (0.06)**
Age at marriage	3.20 (0.92)***
Age at first sex	1.09 (0.51)**
Age at first birth	2.00 (0.57)***
Fertility	-1.12 (0.37)***
Modern Method	0.15 (0.06)**
Observations	568608

Table Notes: Clustered (at the local administrative level) standard errors are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Source: Demographic Health Surveys.

We see from Table 5 that women are significantly less likely to be in a polygynous marriage in areas with greater female political representation. They are also significantly more likely to marry at a later age, have their first sexual encounter when older, and in turn give birth to their first child at later ages. Correspondingly overall fertility for women is also significantly lower in areas with greater female political representation. Women are also significantly more likely to be informed about modern contraception methods.[6]

We now turn to measures of female autonomy in the household. The DHS surveys have a module focused on capturing relative decision-making power within the household. They ask women: "Who usually decides about X ?", where the possible responses are: "respondent"; "husband"; or "respondent and husband jointly"; and X refers to "major household purchases", "health care for the wife", "daily purchases", and "visits to the wife's family and relatives". We create a variable which is equal to one if the respondent has any decision-making power within the household (i.e., alone or with her husband) and equal to zero if instead only her husband decides with regards to the different household decisions. The DHS surveys also include a measure of the acceptability of domestic violence. Women are asked whether they think it is justified for their husband to beat them in different contexts: if she goes out without telling him, neglects the children, argues with her husband, refuses sex with him, or burns the food.

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[6] This is compared to no knowledge of contraception methods or aware only of traditional or folkloric methods.

Table 6 – Female Autonomy Indicators (Country Fixed Effects Estimation)

Variable	Coefficient on Female Representation
HH Decision Power:	
Own Health	0.17 (0.10)*
Large Purchases	0.22 (0.10)**
Daily Needs	0.19 (0.11)*
Visits to Family	0.15 (0.09)*
Violence not Justified	
Goes Out	0.24 (0.08)***
Neglects Children	0.19 (0.08)***
Argues	0.17 (0.07)**
Refuses Sex	0.25 (0.08)***
Burns Food	0.16 (0.06)***
Observations	568608

Table Notes: Clustered (at the local administrative level) standard errors are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Source: Demographic Health Surveys

From Table 6, we see that women have significantly greater autonomy in areas with higher female political representation. Measures of their relatively bargaining power are significantly higher and also these women are significantly less likely to consider domestic violence as a justifiable act.

6. Discussion and Conclusion

We have put together the first comprehensive data set on local female political representation in Sub-Saharan Africa.

The effect of female representation in national legislatures in Sub-Saharan Africa is well studied. Generally, it is found that there has correspondingly been an increased parliamentary presence of women (Yoon 2004, Tripp et. al. 2006). By contrast, there has been no work on local level female representation in Sub-Saharan Africa. From our data, it appears that mandated gender quotas have also increased female representation at the local level.

Qualitative studies identify some impacts of the increased parliamentary presence of women, like new laws regarding gender-based violence, family law and land rights (Powley and Pearson 2007). Other studies point to a decrease in the political engagement gender gap (Barnes and Burchard 2012).

It is not possible to map individual-level data to parliamentary female representation to quantitatively estimate the direct impacts on the well-being of women. For this purpose, we need to instead rely on data on local level female representation as we have collected.

We have shown that this local level female representation is significantly correlated with better outcomes for women on several dimensions. Women are better educated, more likely to be working, healthier, and improved marital outcomes. Moreover, accordingly their autonomy within the household is significantly higher. They have greater levels of relative bargaining power and are significantly less likely to tolerate violent behavior from their husbands. These findings are in accord with descriptive studies which discuss how women's increased presence in parliament in turn increases the respect that women receive from family and community members (Burnet 2011). It is also in accord with research from India which found that female leadership at the local level raised aspirations and educational attainment of girls (Beaman et. al. 2012).

These findings support introduction political gender quotas at the local levels of governance in Sub-Saharan Africa. In rural Africa, where most people live, the reach of the state at the national level can be weak and ineffective at governing in rural areas. In this sense, female representation at the local level of governance can be more significant in determining the well-being of women.

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