The Toka-Leya of Zambia

Southern Province Livingstone, Kazungula, Zimba and Kalomo Districts

Linguistic Survey Report

With recommendations for Bible translation strategy



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Summary

The language group investigated in this survey is the Toka-Leya of Zambia's Southern Province which is located in Livingstone and Kazungula Districts as well as parts of Zimba and Kalomo Districts. Recent surveys listed over 55,000 speakers of Toka-Leya.

The purposes of the research included exploring the relationships between the Toka-Leya language and related languages such as Tonga, Ila, Lozi, Nkoya, Lenje, Kunda, Nsenga and Soli. Another purpose was to obtain information on the language in order to assess the need for a language development project. Some anthropological and historical data which was collected is also included.

The Toka-Leya language is often described a dialect of Tonga that includes many Lozi words. Our analysis shows that Toka-Leya is a distinct language on its own. It shares only 62% lexical similarity with Tonga and 17% lexical similarity with Lozi.

A lexical and phonostatistical comparison was also done between three variations or dialects of Toka-Leya. The Mukuni and Sekute variants have an equally high percentage of lexical similarity with each other as well as with the Musukotwani variant. But because the Mukuni dialect is already viewed as the purest form of the language by most speakers it is likely the best form of the language to use in regards to language development. The phonostatistical analysis showed that all of the three variant forms shared a high percentage of similarity, 97.3%.

Toka-Leya was found to be a viable language with a higher level of vitality than other minority languages in Zambia which we have studied. However it does show signs of language loss from the ever increasing influence of surrounding languages such as Chewa and English. There are no published materials in the language and other languages like Tonga which do have published materials are also occupying some domains.

1. INTRODUCTION AND BACKGROUND

1.1. Introduction

This survey was conducted as part of a larger research project begun in 2012 to study the remaining translation needs of Zambia. This particular survey was conducted to collect information concerning the language of the Toka-Leya people of Zambia's Southern Province. Dialectical issues, comparisons of the language to related neighboring languages, and questions of language endangerment were the main focus of the research. Also included in these goals was an examination of the need for vernacular language development and the anticipated church and community response to a language development project.¹

Data for the survey was collected through questionnaires, word lists, interviews and a dialect mapping exercise. Four researchers (Christopher Mbewe, Rev. Daka Josephat, Jacob Schwertfeger, and Kenneth S. Sawka) collected the majority of the information over seven days between March 28th and November 13th 2013. Additional information on the people and their language was also obtained on other occasions as well.

This draft report is dependent upon the input of the Toka-Leya people to refine and correct whatever may be incorrect. The Toka-Leya people themselves are the experts in the knowledge of their language and culture. Therefore we encourage them to share from their wealth of knowledge to improve the accuracy of the report.

We would like to extend our appreciation to Chief Mukuni, Chief Sekute, and Chief Musukotwani for receiving the survey team, blessing the exercise and allowing the team to collect data from their chiefdoms. Others who assisted and helped in the planning of this survey are Pastor Dragon Zondani, Pastor Enoch Sikabowa, Fredrick Malmabo, as well as many other Toka-Leya. Lastly we would also like to thank the people of Overland Mission for their input and practical assistance.

1.2. Terminology

Toka-Leya is the common term used by westerners to refer to both the people group as well as to the language. However the Bantu method is to use the prefixes ba- to distinguish the people group and chi- to indicate the language. For example, the Tonga people would use the word batonga to refer to the people and use the word chitonga to refer to the language. However with Toka-Leya the situation is more complex because of the two terms joined with a hyphen.

Inhabitants of Mukuni Chiefdom prefer to designate themselves as "The Leya People". Thus in this chiefdom it is proper say *Baleya* for the people and *Chileya* for the language and not include the term *toka*.

In Sekute and Musukotwani chiefdoms it is proper to refer to the people as either *Batoka* or *Batoka-Leya* and use the terms *Chitoka-Leya* or simply *Chitoka* for the language. In other words, the people of Mukuni feel that they are simply the Leya people while the other chiefdoms embrace the two terms joined together as Toka-Leya.

The main purpose of the survey was measuring the vitality of the Toka-Leya or Leya language. It was not the purpose of this report to research whether one spoke Chileya as opposed to Chitoka-Leya or even Chitoka. So if the question was posed "What language do you speak to your children at home?" some respondents simply said *Chileya* while the majority said *Chitoka-Leya*. The questionnaires and the

computerized data listed each exact response as it was given. However to simplify matters the final analysis counted responses of *Chileya* and *Chitoka-Leya* identically. For the purposes of this study we will most often refer to the language as *Toka-Leya*.

In conclusion, it should be noted that the division of people groups into language groups rarely has clear-cut demarcations. Language use by a community is constantly shifting as smaller language groups are being absorbed by larger ones or larger groups are splintering and separating into smaller subdivisions. "Language group" divisions like the political boundaries that have been placed upon ethnic groups within Africa, can be considered somewhat artificial and not a primary way of identification in the minds of all indigenous peoples. It is not necessarily an "African perspective" to think of people groups divided according to what language is spoken. Instead what may be more significant is identification with a tribal kingdom and all the connected alliances that kingdom may have. With this in mind we speak of all the language groups in Zambia including the "Toka-Leya language group" knowing that these are not entirely natural subsets but are somewhat manufactured groupings.

1.3. Historical Background

Most Bantu language groups of Zambia are assumed to be a part of the early Bantu migrations thought to have occurred from 500 to 1000 AD. These migrations originated out of western central Africa approximately in what is now the area of Cameroon. Later migrations into Zambia probably came out of the Lunda and Luba Kingdoms of Mwatayamvu in the Congo. Other Bantu groups in Zambia also identify their origins from what is today the Democratic Republic of the Congo or other neighboring countries. For example, the Lozi language group explain that they originated from what is today Angola, Bemba speakers trace their origins back to the DR Congo, and the Chewa speakers tell how their people originated from the DR Congo and migrated through Malawi for example. The Ngoni trace their entrance into Zambia from the Zulu Kingdom south of Zambia as late as the early 1800s.

The following map from Langworthy (1972) shows some of these migrations including those of the Leya people.²

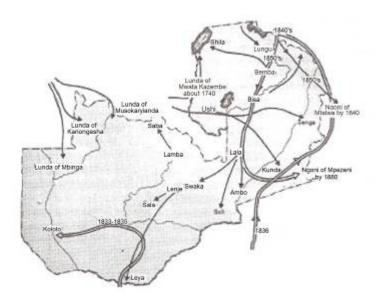


Figure 1: Later migrations of chiefs into Zambia and migrations within Zambia.

The Toka-Leya includes the Batoka people who live on the areas north of the Zambezi River to the west of Victoria Falls and the Baleya people which are more towards the eastern side of the falls but also north of the Zambezi River.

Vogel (1975) says that the present day area where the Toka-Leya people now reside had human habitation as far back as the 13th century and the Chireya Dynasty.³ However this does not mean that the first inhabitants of the area were necessarily today's inhabitants. The Mukuni Royal Dynasty which currently presides over the Toka-Leya people trace their presence in the area back to somewhere probably in the mid 1700's⁴ when Chief Sichichele Mukuni led off a number of his followers and separated from King Mulopwe of the Bayeke Empire in present day DR Congo.⁵ They have a succession of 19 chiefdoms dating back to this time.

According to Brelsford (1965) and Gray (1961) the people of Mukuni are an offshoot of the Bene-Mulopwe which originated from Mulopwe in what is today the D.R. Congo. During the 18th century two sons of Chief Mulopwe, Mukuni and Mwanza migrated southward to the Lukanga Swamps in an area west of the present day town of Kabwe in central Zambia. This is where the Lenje language group is centered today. Mukuni continued southward and eventually settled near the world's largest waterfalls, Mosi-o-Tunya, "The Smoke That Thunders", commonly called Victoria Falls, in present day Livingstone Zambia.

Although the area was likely inhabited earlier, the modern chiefdom was planted sometime probably early in the 1800s. It is claimed that the chiefdom was founded as the geographical capital of what was called Chundu, a collection of today's Lenje, Soli, Tonga, Ila and Leya peoples in Zambia's Southern Province. Siloka and Mukuni's published history of the Leya people reports that politically they are part of a Bene Mukuni nation which encompasses nine language groups. These include the Leya, Lenje, Sala, Soli/Kaka/Goba, Tonga, Lala, Nsenga, and Kunda all of which are in Zambia, and also the Nambia/Nanzwa/Leya from the Hwange District of Zimbabwe. It is unclear what the historical relationship between Toka-Leya and Tonga are except that both may have a common root from Lenje.

John Desmond Clark (1916-2002) was a British archaeologist who worked extensively in Africa as well as other parts of the world. He collected a story of the first Mukuni's death (1952):

The story told of Sichichele Mukuni's death... is that one of his slaves having died; Sichichele was bidden to attend the funeral by his brother, Sinyemba. Sichichele was by then a very old man, being nearly blind and able to walk only with the aid of a stick. As he stood near the edge of the grave, feeling its depth with his stick, he was pushed in and buried alive by his brother who then assumed the chieftainship.

During the chieftainship of Mukuni Mupotla, two groups of Subiya from the Linyanti Swamp area migrated eastward down the river and looked to settle in the area above the Victoria Falls. These Subiya were noted as being skilled fishermen. Mukuni initially refused them permission to settle on the mainland, and conflict broke out. One of their leaders, Sekute, after being captured in battle and losing all his royal drums (powerful symbols of the chieftainship), accepted an offer of peace with the Leya, marrying one of Mukuni's sisters and being allowed to settle. The Subiya of Sekute, the adopted hereditary title, soon incorporated Leya cultural elements and became identified as the Sekute Leya.

It is said that Mujimaizi Mukuni was born from this marriage. Mujimaizi was to distinguish himself in battle against the Lozi at a place near Ngwezi known as Musamumuyumu (the dry tree) before the coming of the Kololo.

Clark (1952) continues:

Another of the Mukuni's, at the time when the Leya were being raided by the Lozi, before the coming of the Makololo, was Mujimaizi, and it is said of him that forming an alliance with the Toka, he fought so bravely and killed so many Lozi with his battle-axe, and consequently to have been so exhausted, that he sat down at the foot of a tree and called to the Lozi to kill him – which of course they promptly did!

The Sekute Chief was feared for his magical powers - Livingstone reports that it was believed that the Chief held on Kalai Island a pot of "medicine" which, when opened, would release an epidemic in the land (Livingstone 1857). Mukuni also credited Sekute's mystical powers, in particular the royal drums, symbols of the chief's powers. One of these drums, the *makuwakuwa*, is believed to have performed miracles, and is said to have sailed ahead of Chief Sekute's fleet when he led his people along the Chobe and Zambezi to settle in the area, sounding loudly at the approach of danger. When Sekute was defeated by Mukuni, his people seized the royal drums, including the *makuwakuwa*, which is said to have escaped into the Zambezi, hiding at the bottom of the river where its sound was heard for many years afterwards.

Traditional Leya historians state that Sekute originally came to hunt hippopotami, a pursuit at which his people are said to have been particularly skilled.

Lozi oral sources indicate that when the Lozi Litunga (king) Ngombala invaded the Victoria Falls area, probably in the late seventeenth or early eighteenth century, he conquered the Leya under Sekute. In the 1830s the Sekute Leya were defeated and dispersed by the Kololo under Sebitwane, who invaded from the south, before the subsequent overthrowing of the Kololo and the return of Lozi dominion in the 1860s.

Mubitana (1990) tells,

When the Kololo Sebitwane invaded Kalai Island about 1836, Siansingu was the incumbent Sekute. Although many of his people were massacred during the raid, Siansingu and a few others escaped and sought refuge at Malindi and Mpandeni near Nyamandhlovu, under the overlordship of the Ndebele leader Mziliazi. Siansingu died of leprosy at Malindi, but some of his followers returned after the annihilation of the Kololo by the Lozi in 1864. Mungala, a nephew of Siansingu, had assumed the Sekuteship. He and his people first settled at Lwanja in Mashi, but later moved back to the Victoria Falls area, where they settled at the 'Old Drift'.

By 1853, the Leya were well established on the north side of the Zambezi River, as is shown by Livingstone's sketch map of the middle Zambezi which was made at that time (Smith and Dale, 1920). There can be little doubt that some Leya also lived on the south bank since Leya chiefs often transferred their capitals from one bank to another. Leya presence on both banks of the river up to the early 1930s is also confirmed by a report published by J Moffat Thomson, then Secretary of Native Affairs in Northern Rhodesia.

Livingstone reports having seen in 1855 the graves of Sekute Chiefs on Kalai Island, with 70 elephant tusks set in the earth around the graves.

Livingstone also records that three different locations at the Falls were used by the Sekute, Mukuni and other peoples as places of worship for their gods and ancestors. Coillard, writing some twenty years after Livingstone, records that the local inhabitants "believe it is haunted by a malevolent and cruel divinity, and they make offering to conciliate its favour, a bead necklace, a bracelet, or some other object, which they fling into the abyss, bursting into lugubrious incantations" (Coillard 1897).

While Sekute fled his islands and Mukuni went into humble submission, Musukotwani first resisted the invading Kololo and then, having been defeated, went on to serve them loyally. It was the Toka who led the Kololo up north to the Tonga and Ila territories; it was with the help of Toka auxiliaries that Sebitwane and, later, Sekeletu kept peace on the north bank of the Zambezi in the Victoria Falls region. The Toka, with the encouragement of the Kololo, also plundered the surrounding villages. As Musukotwani told Livingstone in 1860: 'The Makololo have given me a spear; why should I not use it?' He had personally killed his rival,

Chief Mukuni. According to the Livingstone, Musukotwani (Mushobotwane) was so well nourished that he was 'the stoutest man we have seen in Africa' (D and C Livingstone, 1865: 248).

The Toka also became the focus of Ndebele raids during the 1880s and 1890s. It was the Toka Chief Sekute who lived near the Old Drift when the first white settlers came to the area. One source said that the Toka people were a group of Tonga from the country to the south-east of Kalomo. This group first settled to the north, before the coming of the Subiya, but later moved to the Sinde River, some 9 miles above the Falls.⁸

The hereditary title of the Toka Chieftainship is Musukotwani. Mubitana (1990) tells that,

It is generally believed that this was a nickname given to the Toka leader by the Kololo when they first came to the Victoria Falls area between 1830 and 1836. The name is said to have originated from the Toka or Tonga word Kusitoka (to cross or jump). It is stated that, when Sebitwane asked the then Toka leader whence he and his people originally came, the latter replied *twakasotoka mwami*, i.e. 'we crossed over, chief' – referring to himself and his people having crossed the Kalomo river from Kabanga to settle in the Ngwezi, Senkobo and Sinde areas; whereupon the Kololo named him Musukotwani (probably meaning 'the jumper'). Musukotwani's people also claim that it was the Kololo who first called them Toka, which is really a corruption of the word 'Tonga'.

Another account says that the translation of the word *leya* is "to divert", "to separate" and "to keep out of troubles". Some have theorized that the combination "Toka-Leya" means "to separate from the Tonga". And lastly, the word *toka* is reported to have been an inaccuracy or variation by a colonial administrator or national worker for the word *tonga*. The administrator wrote "Toka-Leya" on a map to designate an area of a Tonga subgroup Leya. It was simply a misspelling that has remained to this day; it has only added to the false supposition that Toka-Leya is simply a dialect Tonga.

1.4. Geographical Location

The Toka-Leya people are located in Zambia's Southern Province in three administrative districts: Livingstone, Kazungula and parts of Zimba and Kalomo.



Figure 2: The red circle indicates region of the Toka-Leya studied in this survey.



Figure 3: Location of Zambia's Southern Province⁹

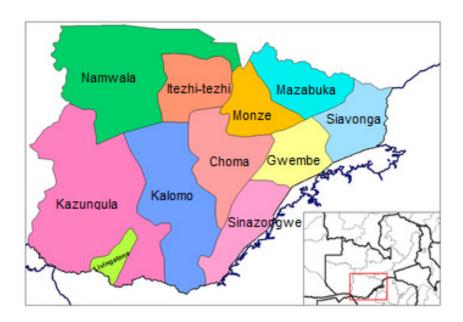


Figure 4: Districts within Zambia's Southern Province¹⁰

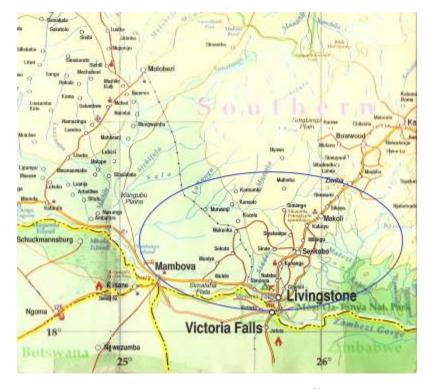


Figure 5: Road map showing portion of Zambia's Southern Province. ¹¹ The blue circle indicates the approximate area of the Toka-Leya people.



Figure 6: Google earth map showing approximate centers of Toka-Leya areas in black font with distances between in white fonts. Two Zambian cities are in blue font. Major roads T1 and M10 are also indicated.

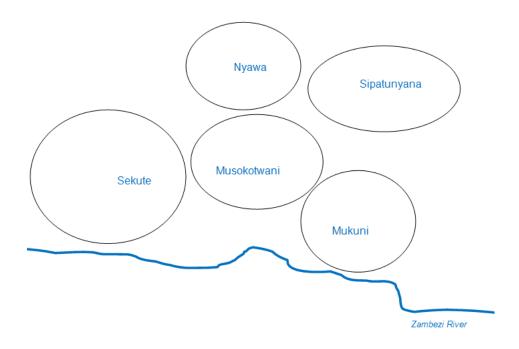


Figure 7: Representation of five Toka-Leya areas mentioned in this study.

There are three districts of Zambia's Southern Province where the Toka-Leya are primarily found. These are the Livingstone District, Kazungula District and Kalomo District. The following maps show each of these and their respective wards.



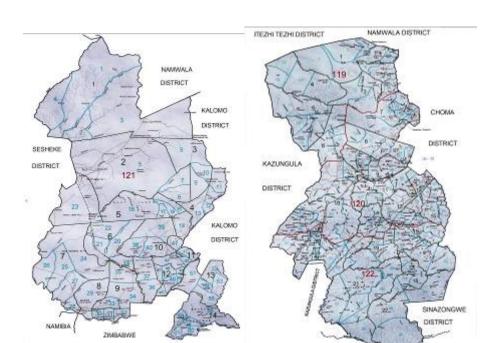


Figure 8: Livingstone District of Zambia's Southern Province.

Figure 9: Kazungula and Kolomo District of Zambia's Southern Province.



Figure 10: Sekute sector border



Figure 11: Road to Sekute outpost



Figure 12: Google Earth map showing the houses and plots of Sekute.

Some general information on Zambia's Southern Province is that it is...

...one of Zambia's ten provinces, and home to Zambia's premier tourist attraction, the Victoria Falls, also called Mosi-o-Tunya, which is shared with Zimbabwe. The center of the province, the Southern Plateau, has the largest area of commercial farmland of any Zambian province, and produces most of the maize crop for Zambia.

The Zambezi River is the province's southern border, and Lake Kariba, formed by the Kariba Dam, lies along the province's south-eastern edge. The eastern border is the Kariba Gorge and Zambezi, and the north-east border is the Kafue River and its gorge, dividing it from Lusaka Province. The Kafue Flats lie mostly within the province's northern border with Central Province. In the north west lies part of the famous Kafue National Park, the largest in Zambia, and the lake formed by the Itezhi-Tezhi Dam. The south-western border with Western Province runs through the teak forests around Mulobezi which once supported a commercial timber industry and for which the Mulobezi Railway was built.

The provincial capital is Choma. Until 2011 the provincial capital was Livingstone City. The Batonga are the largest ethnic group in the Province. A rail line and the Lusaka-Livingstone road form the principal transport axis of the province, running through its center and its farming towns: Kalomo, Choma, Pemba, Monze, and Mazabuka. In addition to maize, other commercially important activities include sugar cane plantations at the edge of the Kafue Flats, and cattle ranching.

Southern Province has the only large source of fossil fuel in Zambia, the Maamba coal mine in the Zambezi Valley, is served by a branch line of the railway. ¹²

Metcalfe (2005) describes Zambia as,

Most of Zambia lies on high plateau 3,500-4,500 feet above sea level that is broken by the Zambezi River Valley and its Kafue and Luangwa River tributaries. The Zambezi Valley area ...has [some of] the harshest climatic conditions [in Zambia], [with] rainfall totaling less than 800mm. A short crop growing season of 80-120 days and carries a medium to high risk of drought. Four of the chiefdoms (Sekute, Mukuni, Musukotwani and Simwatachela) have an average population density of below 15 people km_2 . A massive 53% of all under five aged children are nutritionally stunted on an age, weight and height basis, 73% of the total population is considered poor and 56% extremely poor (ECZ 2001).

With a total population of 778,740 persons in Southern province under the age of 20 those orphaned of one parent because of HIV/AIDS amount to 9% (135,086). Some 42% of all households in Southern Province earn less than half a US dollar a day of which only 27% is derived by on-farm income, 25% by non-farming and 28% from wage labor. Households produce only 26% of food consumed and cope with shortages by reducing daily meals and other household items or substituting normal meals with natural fruits.

Community lands in Zambia are a key part of the Toka-Leya areas with good wildlife habitat and well endowed with natural resources but with low wildlife populations. In Zambia, traditional rulers are land authorities and [are the] "gateways" to investment.

Mukuni Village where the Senior Chief for the Toka-Leya, Chief Mukuni resides is seven kilometers from Victoria Falls. The population of this village is approximately 8,000. Because the surrounding area has relatively poor soil and is infertile many people have embraced tourism, including cultural tours of the village.¹³ The Leya people of Chief Sekute live to the west of Livingstone towards Kazungula.

1.5. Population

Zambia has recently taken a census of their population every ten years. The following table includes data from Zambia's 2010 census report. It summarizes the population figures for Toka-Leya and related languages, separating those who identify themselves as Chewa from Nyanja.

	Ethnic Origin	Language of Predominant Communication
Chewa	929,842	499, 671
lla	97,411	82,940

Kunda	83, 467	40, 029
Lenje	196, 892	128, 269
Lozi	717, 015	611, 920
Nkoya	60,937	34,994
Nsenga	660, 947	328, 793
Nyanja ¹⁴	50, 761	1, 643, 686
Toka-Leya	56, 357	55, 644
Tonga	197, 744	11, 016
Soli	87,778	34,075

 Table 1
 2010 Population by Ethnic Origin and Language of Predominant Communication.

The Toka-Leya population resides mostly in two administrative districts of Zambia's Southern Province: Kazungula District and Livingstone District. Toka-Leya villages are reported as well in Zimba and Kalomo Districts. In 1990 the population of the Kazungula and Livingstone districts was 123,937 inhabitants. In 2000 the population of these two districts was 171,553 and in 2010 it had more than doubled from the 1990 figure to 244,240 inhabitants. Much of that population growth would include those from other language groups from all over Zambia as well as expatriates who have moved to the developing tourist industry around Victoria Falls.

1990, 2000, 2010 Population of Kazungula and Livingstone Districts									
	1990 2000 2010								
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Kazungula	22,410	22,747	45,157	34,178	34,087	68,265	51,994	52,737	104,731
Livingstone	42,230	41,550	83,780	51,828	51,460	103,288	68,763	70,746	139,509
Total	64,640	64,297	128,937	86,006	85,547	171,553	120,757	123,483	244,240

 Table 2
 Population figures by gender for Kazungula and Livingstone Districts

The following table shows the average growth rate of the two districts. One report says that the Kazungula District has grown so much more rapidly in population compared to other areas due to the sale of lands which have occurred in that area.

1990 to 2000 and 2000 to 2010 Average Annual Growth Rate of Kazungula and Livingstone Districts					
	1990 to 2000 2000 to 2010				
Kazungula 4.20% 4.30%					
Livingstone 2.10% 3.10%					

 Table 3
 Average Annual Growth Rate of Kazungula and Livingstone Districts

Livingstone District has a single constituency, the Livingstone Constituency, which has 17 wards. The results for these 17 wards in the 2010 census are tabulated in the following table. Those wards in which questionnaires for this survey were gathered are highlighted in the following tables.

Number of Households and Population of Livingstone District by Ward				
Wards	Households	Total	Male	Female
Akapelwa	742	3,058	1,412	1,646
Dambwa Central	1,384	6,329	3,043	3,286
Dr. Mubitana	1,391	6,543	3,259	3,284
Freedom	2,360	11,974	5,901	6,073
Kariba	939	4,521	2,231	2,290
Kasiya	1,839	9,165	4,598	4,567
Libuyu	1,481	7,817	3,967	3,850
Lizuma	553	2,761	1,313	1,448
Maramba	1,797	9,590	4,553	5,037
Mulungushi	2,048	8,263	4,007	4,256
Mosi-o-Tunya	1,882	8,213	3,930	4,283
Mwalibonena	2,315	9,886	4,840	5,046
Namatama	2,717	11,606	5,875	5,731
Nansanzu	1,418	7,194	3,611	3,583
Shungu	800	3,565	1,838	1,727
Simonga	2,984	12,926	6,483	6,443
Zambezi	3,811	16,098	7,902	8,196
Total	30,461	139,509	68,763	70,746

Table 4 2010 population figures by ward for Livingstone District.

Kazungula District also has a single constituency, the Katombola Constituency, which has 14 wards. The results for these 14 wards in the 2010 census are tabulated in the following table. Those wards in which questionnaires for this survey were gathered are highlighted in the following tables.

Number of Households and Population of Kazungula District by Ward					
Wards	Households	Total	Male	Female	
Chooma	1,178	7,264	3,584	3,680	
Kanchele	2,154	10,860	5,319	5,541	

Katapazi	1,271	6,410	3,167	3,243
Kauwe	1,123	6,539	3,324	3,215
Mandia	2,074	9,246	4,558	4,688
Moomba	494	2,425	1,228	1,197
<mark>Mukuni</mark>	1,950	8,862	4,419	4,443
Musukotwan i	990	4,960	2,458	2,502
Nguba	1,800	11, 393	5,551	5,842
Ngwezi	1,975	10,182	5,133	5,049
Nyawa	1,962	11,075	5,407	5,668
<mark>Sekute</mark>	656	3,228	1,652	1,576
Sikaunzwe	1,536	7,542	3,817	3,725
Simango	861	4,745	2,377	2,368
Total	20,024	104,731	51,994	52,737

 Table 5
 2010 population figures by ward for Kazungula District.

Kalomo District has three constituencies, the Central, Dundumwezi and the Mapatizya Constituencies which contain a total of 22 wards. The results for these three constituencies in the 2010 census are tabulated in the following table. Those wards in which questionnaires for this survey were gathered are highlighted in the following tables.

Number of Households and Population of Kalomo by Ward					
Wards	Households	Total	Male	Female	
Central Constituency					
Chawila	1,391	8,063	3,916	4,147	
Choonga	4,229	21,559	10,454	11,105	
Kalonda	2,219	13,562	6,531	7,031	
Mayoba	2,059	11,337	5,626	5,711	
Nachikungu	1,457	8,399	4,033	4,366	
Namwianga	1,826	9,785	4,850	4,935	
Siachitema	4,451	26,725	13,033	13,692	
Simayakwe	824	5,034	2,454	2,580	
<u>Sipatunyana</u>	698	3,814	1,899	1,915	
Subtotal	19,154	108,278	52,796	55,482	
Dundumwezi Constituency					
Bbilili	1,614	9,990	4,911	5,079	
Chamuka	1,601	10,065	4,825	5,240	
Chikanta	3,337	20,836	10,201	10,635	

Kasukwe	2,336	15,141	7,333	7,808
Naluja	2,119	13,707	6,701	7,006
Omba	1,677	10,676	5,162	5,514
Subtotal	12,684	80,415	39,133	41,282
Mapatizya Constituency				
Chidi	1,897	10,347	4,915	5,432
Luyaba	2,677	15,165	7,356	7,809
Mbwiko	1,757	9,161	4,455	4,706
Mulamfu	1,227	6,549	3,113	3,436
Siamafumba	1,936	10,413	5,113	5,300
Simwatachela	930	5,057	2,486	2,571
Zimba	2,466	13,185	6,400	6,785
Subtotal	12,890	69,877	33,838	36,039
Total	32,044	178,155	86,634	91,521

 Table 6
 2010 population figures by ward for Kalomo District.

The following tables show the wards for each district sorted by population and show the percentage of population as well.

Livingstone District sorted by Population Size					
Wards	Households	Population	Percentage		
Zambezi	3,811	16,098	11.54%		
Simonga	2,984	12,926	9.27%		
Freedom	2,360	11,974	8.58%		
Namatama	2,717	11,606	8.32%		
Mwalibonena	2,315	9,886	7.09%		
Maramba	1,797	9,590	6.87%		
Kasiya	1,839	9,165	6.57%		
Mulungushi	2,048	8,263	5.92%		
Mosi-o-Tunya	1,882	8,213	5.89%		
Libuyu	1,481	7,817	5.60%		
Nansanzu	1,418	7,194	5.16%		
Dr. Mubitana	1,391	6,543	4.69%		
Dambwa Central	1,384	6,329	4.54%		
Kariba	939	4,521	3.24%		
Shungu	800	3,565	2.56%		
Akapelwa	742	3,058	2.19%		
Lizuma	553	2,761	1.98%		

Total 30,461 139,509

 Table 7
 Wards of Livingstone District 2010 by population sorted from largest to smallest.

Kazungula District sorted by Population Size				
Wards	Households	Total	Percentage	
Nguba	1,800	11,393	10.88%	
Nyawa	1,962	11,075	10.57%	
Kanchele	2,154	10,860	10.37%	
Ngwezi	1,975	10,182	9.72%	
Mandia	2,074	9,246	8.83%	
Mukuni	1,950	8,862	8.46%	
Sikaunzwe	1,536	7,542	7.20%	
Chooma	1,178	7,264	6.94%	
Kauwe	1,123	6,539	6.24%	
Katapazi	1,271	6,410	6.12%	
Musukotwani	990	4,960	4.74%	
Simango	861	4,745	4.53%	
Sekute	656	3,228	3.08%	
Moomba	494	2,425	2.32%	
Total	20,024	104,731		

Table 8 Wards of Kazungula District 2010 by population sorted from largest to smallest.

Kalomo District sorted by Population Size				
Wards	Households	Population	Percentage	
Central Constituency				
Siachitema	4,451	26,725	25%	
Choonga	4,229	21,559	20%	
Kalonda	2,219	13,562	13%	
Mayoba	2,059	11,337	10%	
Namwianga	1,826	9,785	9%	
Nachikungu	1,457	8,399	8%	
Chawila	1,391	8,063	7%	

Simayakwe	824	5,034	5%
Sipatunyana	698	3,814	4%
Subtotal	19,154	108,278	
Dundumwezi Constituency			
Chikanta	3,337	20,836	26%
Kasukwe	2,336	15,141	19%
Naluja	2,119	13,707	17%
Omba	1,677	10,676	13%
Chamuka	1,601	10,065	13%
Chikanta	1,614	9,990	12%
Subtotal	12,684	80,415	
Mapatizya Constituency	0.077	45 405	000/
Luyaba	2,677	15,165	22%
Zimba	2,466	13,185	19%
Siamafumba	1,936	10,413	15%
Chidi	1,897	10,347	15%
Mbwiko	1,757	9,161	13%
Mulamfu	1,227	6,549	9%
Simwatachela	930	5,057	7%
Subtotal	12,890	69,877	33,838
Total	32,044	178,155	86,634

Table 9 Wards of Kalomo District 2010 by population sorted from largest to smallest.

The 2013 Demographics Profile for Zambia says that on average 46.2% of the country's population is from zero to 14 years of age¹⁵. The 2010 census included the breakdown in age showing that 38% of the population of Livingstone District is 14 years of age or under:

Livingstone District Population by Age						
Wards	0-14	15-34	35 and above	Total		
Akapelwa	914	1,495	649	3,058		
Dambwa Central	2,133	2,903	1,293	6,329		
Dr. Mubitana	2,315	2,923	1,305	6,543		
Freedom	4,415	5,173	2,386	11,974		
Kariba	1,591	2,064	866	4,521		
Kasiya	3,919	3,514	1,732	9,165		
Libuyu	3,047	3,151	1,619	7,817		
Lizuma	901	1,287	573	2,761		
Maramba	3,541	4,309	1,740	9,590		

Mulungushi	3,169	4,347	1,636	8,263
Musi-oa-tunya	2,523	3,932	1,758	8,213
Mwalibonena	3,864	4,347	1,675	9,886
Namatama	4,615	4,849	2,142	11,606
Nansanzu	2,730	3,095	1,369	7,194
Shungu	1,447	1,367	751	3,565
Simonga	5,187	5,420	2,319	12,926
Zambezi	6,175	7,133	2,790	16,098
Total	52,486	61,309	26,603	139,509
Percent	38%	44%	19%	

Table 10 2010 Age Demographics for wards of Livingstone District

Kazungula District has a much higher percentage of the population, 49%, that is 14 years of age or under according to the 2010 census:

Kazungula District Population by Age					
Ward	0-14	15-34	35-above	Total	
Moomba	1,161	734	530	2,425	
Chooma	3,973	2,240	1,051	7,264	
Nguba	6,275	3,493	1,625	11,393	
Kauwe	3,425	2,020	1,094	6,539	
Nyawa	5,749	3,397	1,929	11,075	
Ngwezi	5,136	3,141	1,905	10,182	
Sikaunzwe	3,474	2,478	1,590	7,542	
Mandia	4,167	3,322	1,757	9,246	
Sekute	1,459	1,106	663	3,228	
Kanchele	5,442	3,253	2,165	10,860	
Simango	2,327	1,535	883	4,745	
Musukotwani	2,275	1,528	1,932	4,960	
Katapazi	3,203	2,089	1,118	6,410	
Mukuni	3,755	3,060	2,047	8,862	
Total	51,821	33,396	20,289	104,731	
Percent	49%	32%	19%		

 Table 11
 2010 Age Demographics for wards of Kazungula District

The 2010 census showed that Kalomo district has the highest percentage of population, 51% being 14 years of age or under:

Kalomo District Population by Age					
Ward	0-14	15-34	35- above	Total	
Central Constituency	l	l			
Chawila	4,142	2,522	1,399	8,063	
Choonga	9,076	8,976	3,507	21,559	
Kalonda	6,966	4,412	2,184	13,562	
Mayoba	5,630	3,720	1,987	11,337	
Nachikungu	4,232	2,765	1,402	8,399	
Namwianga	4,578	3,558	9,649	9,785	
Siachitema	14,049	8,438	4,238	26,725	
Simayakwe	2,647	1,589	798	5,034	
Sipatunyana	1,905	1,234	675	3,814	
Subtotal	53,225	37,214	25,839	108,278	
Percentage	49%	34%	24%		
Dundumwezi Constituency					
Bbilili	5,490	3,140	1,360	9,990	
Chamuka	5,383	3,207	1,475	10,065	
Chikanta	11,105	6,487	3,244	20,836	
Kasukwe	8,171	4,889	2,081	15,141	
Naluja	7,396	4,408	1,903	13,707	
Omba	6,014	3,287	1,375	10,676	
Subtotal	43,559	25,418	11,438	80,415	
Percent	54%	32%	14%		
Mapatizya Constituency			T		
Chidi	5,153	3,579	1,615	10,347	
Luyaba	7,759	4,995	2,411	15,165	
Mbwiko	4,655	3,044	1,462	9,161	
Mulamfu	3,458	2,038	1,053	6,549	
Siamafumba	5,323	3,447	1,643	10,413	
Simwatachela	2,476	1,754	827	5,057	
Zimba	6,192	4,522	2,471	13,185	
Subtotal	35,016	23,379	11,482	69,877	
Percent	50%	33%	16%		
Average Percent for the District	51%	33%	18%		

 Table 12
 2010 Age Demographics for wards of Kalomo District

Considering the factors related to language vitality and language shift the age demographics are very important. An average of only 18.7% of the population is 35 years or older. This older segment of the population is that which would speak a vernacular language best and have the responsibility of passing it on correctly to the younger generation.

An inventory of 125 villages listed according to their location within the chiefdoms is included in Appendix A. Appendix B contains a list of population data gathered from the village leader questionnaires. This information gives some indication of the composition of Toka-Leya villages. The sampling of villages and small towns had an average of 660 people. Twenty nine percent of the villages are purely composed of Toka-Leya speakers. The majority of "Toka-Leya villages" will have a majority of the population composed of Toka-Leya mother tongue speakers, on average 89% of the village is Toka-Leya speakers. Most villages will also have a small percentage of the population composed of people speakers from Lozi, Luvale, Tonga, Chewa, Bemba or other language groups. Those villages that border other neighboring language groups will have a higher percentage of residents who are not mother tongue Toka-Leya speakers.

1.6. Previous Research

Dr. David Livingstone (1857) mentioned chief Sekute in his account of exploring the Zambezi River and discovery of Victoria Falls entitled *Missionary Travels*. John Desmond Clark (1952) included mention of the Toka-Leya people in his book *The Native Tribes*, about the language groups in what was then Northern Rhodesia. The Mukuni, Chief (1957) wrote a Handbook of the Leya History that has been updated in 2013. However no publication that specifically addresses the linguistic situation of the Toka-Leya language could be found.

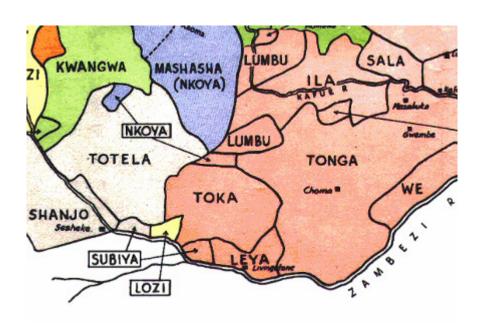


Figure 13: Portion of a map widely used in Zambia showing separate areas for Toka and Leya language groups.

1.7. Language borders and classification

The Tonga language forms the largest border around the Toka-Leya people. It forms the eastern and northern border of the Toka-Leya areas. Tonga is also the most influential language, second to Lozi. Some describe Toka-Leya as a combination of Tonga and Lozi. The word list analysis in section 3.4 will explore this.

The southern border of the Toka-Leya is often considered to be the Zambezi River; however, it is reported that there are Toka-Leya along the southern bank of the Zambezi in Zimbabwe and Botswana as well. The Zambezi River and its gorge below the falls (called the Batoka gorge) is a formidable barrier. There are no dugout canoes in the gorge; however, upstream from the falls travel by canoe is possible. Today there is one bridge across the Zambezi in the Toka-Leya area just south of Victoria Falls and a ferry crossing 84 kilometers north of the Falls in Kazungula District.

The following is a representation of the approximate geographic positions of the different languages in relation to Toka-Leya. Representing any language boundaries with a definite line are obviously imperfect representations but the diagram helps to show that the most influential language upon the Toka-Leya is Tonga since it forms the largest border.

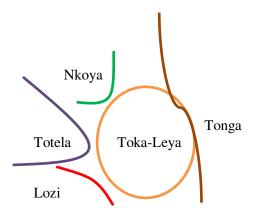


Figure 14: Depiction of approximate positions of bordering languages

One of the purposes of this study is to examine the linguistic similarities of Toka-Leya to other languages. The following is some information on each of the languages that closely affect Chitoka-Leya or the people. They are listed beginning with those that are most influential. Information on the lexical similarities is included in section 3.4. Much of this information is from the internationally recognized index of the world's languages, the Ethnologue.

Tonga

Tonga [toi] is spoken in Zambia's Southern and Western provinces. It is also spoken in Zimbabwe and has total population of over 1,127,000 speakers. A 2006 census reported that there were 990,000 in Zambia. In Zambia the number of Tonga speakers was 427,000. It is different from Tonga [tog] of Malawi, Tonga [toh] of Mozambique, or Tsonga (Tonga) [tso] of Mozambique. There are two major variations of Tonga well known in Zambia. These are what are called Plateau Tonga and Valley Tonga. Valley Tonga is what is spoken along the Zambezi river.

Tonga is an EGIDS¹⁶ Status 2 or Provincial language meaning that the language is so widespread and used that it has been adopted for local and regional mass media and governmental services. It is one of the seven official languages of Zambia that is taught in the school system. The others are Bemba, Nyanja, Lozi, Kaonde, Lunda, and Luvale.

Some alternate names that the Ethnologue lists with Tonga are Chitonga, Plateau Tonga, Zambezi Dialects: Chitonga, Leya, Mala, Shanjo (Sanjo), Toka (Southern Tonga), We (Valley Tonga).

Tonga is classified as a Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Central, M, Lenje-Tonga (M.64) language.

The Ethnologue (Lewis, 2013) includes both Toka and Leya as separate dialects of Tonga with 12,000 and 7,900 speakers respectively.

Lozi

The Lozi [loz] language is spoken mostly in Zambia's Western Province, as well as the Southern Province near Livingstone where it has exerted some influence upon Toka-Leya. Lozi is also found in Botswana, Namibia, and Zimbabwe. A 2006 census said that there were 610,000 speakers in Zambia with a population total in all countries of 722,600.

Lozi is an EGIDS Status 4 or Educational Language meaning that it is being transmitted and standardization promoted through a system of institutionally supported education.

Some alternate names are Kololo, Rotse, Rozi, Rutse, Silozi, and Tozvi. Lozi is classified as a Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Central, S, Sotho-Tswana (S.30) language.

Lenje

Lenje [leh] is included in this list because it is said historically that the Toka-Leya people separated off from the Lenje people. The language is spoken mostly in Zambia's Central Province including the Lukanga Swamp area. A 2006 census estimated that there were 156,000 speakers.

Lenje is an EGIDS Status 5 or Developing Language meaning that the language is used for face-to-face communication by all generations and has effective educational support in parts of the community. However Lenje it is not one of Zambia's official languages.

Some alternate names for Lenje are Chilenje, Chinamukuni, Ciina, Lengi, and Lenji. There is also what is called the Mukuni dialects of Lenje and Twa from the Lukanga Swamps. Lenje is classified as a Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Central, M, Lenje-Tonga (M.61) language.

Nkoya

The Nkoya [nka] language is included in this list as it is said to share a north western border with some Toka-Leya areas. It is spoken in Zambia's Western and Southern provinces in what is referred to as the Mankoya areas. A 2006 census estimated that there 146,000 speakers.

Like Lenje, Nkoya is an EGIDS status 5 or a Developing Language. One alternate name for Nkoya listed by the Ethnologue is Shinkoya. Six dialects that are listed are Lukolwe, Lushangi, Mashasha, Mbowela (Mbwela, Mbwera, Shimbwera), Nkoya, and Shasha. Nkoya is classified as a Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Central, L, Nkoya (L.601) language.

Chewa

Chewa [nya] is spoken in Zambia's Eastern and Central provinces and has become the lingua franca of the capital city, Lusaka, where it is often referred to as Nyanja¹⁷. A 2010 census reported that there are over two million Zambians that listed Chewa or Nyanja as their primary language of communication.¹⁸ Its use is growing and has become common in cities like Livingstone where the Toka-Leya people are, however Tonga would still be the most widely used language in Livingstone.

Dialects listed for Chewa in the Ethnologue include: Chingoni (Ngoni), Manganja (Waganga), Nyasa, and Peta (Chipeta, Cipeta, Malawi, Marave, Maravi). Chewa's classification is as a Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Central, N, Nyanja (N.31) language.

Soli [sby], Nsenga [nse], and Kunda are also compared with Toka-Leya in this report since Siloka and Mukuni's published history of the Leya people mentioned in section 1.3 claims historical ties with these people groups. Ila [ilb] is included as well because of its close relationship with Tonga. Bemba [bem] although not included in the linguistic comparisons is worth mentioning as it is popular across Zambia and has had a lot of influence on songs across Zambia. The Toka-Leya people would be familiar with some songs in Bemba.

The New Updated Guthrie List compiled by Maho (2009) includes Leya as part of the M64 group under the Lenje-Tonga/Bantu-Botatwe Group.

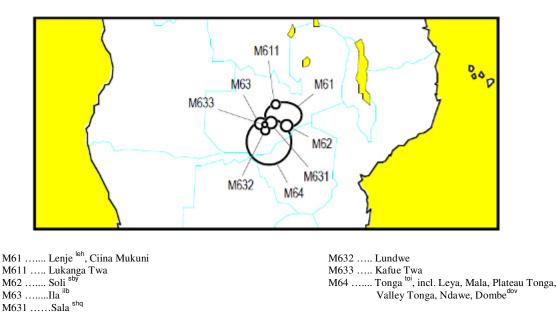


Figure 15: M60 : Lenje-Tonga Group / Bantu-Botatwe Group

Some information on the historical links of these languages is in section 1.3.

Having looked at other languages related to Toka-Leya we now want to examine Toka-Leya itself and explore whether it should be listed separately as a language on lists such as the Ethnologue. It is already recognized within Zambia as one of the country's 73 languages and is placed on a language map popularly published within the country. Toka-Leya is also listed separately in the 2012 Central Statistics Office reports for Zambia.

1.8. Religion

Before the advent of Christianity the Toka-Leya people practiced traditional animism including a belief in a supreme being, belief in spirits and other divinities and the role of dead ancestors played a key part. Many of these elements remain despite either a veneer or even substantial penetration of the Christian message within the society.

One source explains,

The Leya worship their dead ancestors, Chief Mukuni being their representative on earth. There are several ceremonies which are performed at the village at certain times of the year and in cases of disease or drought.

Chief Mukuni chooses one of his female relatives to be the Priestess of the tribe - usually a sister or aunt. The Chief, along with his counselors, arbitrates cases involving local politics and other problems. The Priestess, called *Bedyango*, is responsible for religious affairs, and receives reports of births and deaths.

It is said that the tribe brought with them a stone - Kechejo - from Kabwe. This stone was put at the site of the Mukuni village. The story of Kechejo is that it will disappear under the ground in times of severe drought; it will also raise itself higher out of the ground in times of good harvest.

The Victoria Falls region has been a place of worship to the Leya people for centuries. The Lwiindi Ceremony or Spray Ceremony is performed every year just before the rains. At the Lwiindi Ceremony, the chief leads his people down through the spray to the Victoria Falls gorge, where they offer sacrifices to their ancestors in thanks for the rain, accompanied by traditional dances and rituals.¹⁹

Munokalya and Mukuni (2013) describe the practice of many Leya traditional religious rituals that are still practiced. The traditional religions honored a supreme being called Leza but most often practices were more concerned with placating the spirits of ancestors that are believed to remain around the village or its environs. The brewing of beer is almost always a part of these animistic practices. Beer is poured out on the graves of ancestors but only water which comes from Leza, in the form of rain can be poured out in honor to Leza. On different occasions certain types of small temples are built in which libations may be poured out and prayers said. These temples must be built according to customary regulations, such as being built between sunrise and sunset on the same day, and it is only permitted that the chief or the chief priestess, *Be-Dyango*, enters within. Water is taken from "the belly of the Zambezi River" to bless such buildings.²⁰

Most Toka-Leya people would call themselves Christian. Some of the main church denominations in Toka-Leya areas include the following:

Assemblies of God Baptist Church of Christ Church of God New Apostolic Pentecostal Assemblies of God Pentecostal Holiness Pilgrim Roman Catholic Seventh Day Adventist The first Christian missionary to have visited the Toka-Leya was none other than Dr. David Livingstone. His book, Missionary Travels and Researches in Southern Africa, recounts his visit to the area in 1854:

...Having descended about ten miles, we came to the island of Nampene, at the beginning of the rapids, where we were obliged to leave the canoes and proceed along the banks on foot. The next evening we slept opposite the island of Chondo, and, then crossing the Lekone or Lekwine, early the following morning were at the island of Sekote, called Kalai. This Sekote was the last of the Batoka chiefs whom Sebituane rooted out. The island is surrounded by a rocky shore and deep channels, through which the river rushes with great force....

On the northern side I found the kotla of the elder Sekote, garnished with numbers of human skulls mounted on poles: a large heap of the crania of hippopotami, the tusks untouched except by time, stood on one side. At a short distance, under some trees, we saw the grave of Sekote, ornamented with seventy large elephants' tusks planted round it with the points turned inward, and there were thirty more placed over the resting-places of his relatives. These were all decaying from the effects of the sun and weather; but a few, which had enjoyed the shade, were in a pretty good condition.

....The Batoka believe that Sekote had a pot of medicine buried here, which, when opened, would cause an epidemic in the country.

It is believed that in late 1800 the Roman Catholic Mission were the first to establish churches and a mission school called Mukuni Primary Lower and Upper in Mukuni Chiefdom. They helped many to learn how to read and write in the Tonga language rather than in Toka-Leya. Much later the Seventh Day Adventist Missionaries came to open churches in the areas of Mukuni and Sekute. In early 1960s the Church of Christ missionaries came to establish a missionary base and organization in Musukotwani. In the early 1970's the Church of Christ became the first Christian mission to Chief Moomba's area. A Toka-Leya man named Mr. Jacob accompanied by a foreign missionary named Mr. Alan began the Church of Christ in Moomba, at that time they came from Chief Musukotwani in Makunka area. Soon afterwards, in 1972 the New Apostolic Church began work there as well and these two missions had a good relationship with each other as well as with the people and those in traditional leadership. Since then many other Christian organizations have come to the Toka-Leya areas. ²¹

In addition to the above more recognized mainline groups there are also the following groups among the Toka-Leya.

Apostolic Church of Pentecost Calvary Faith Apostle Future Hope House of Glory Stepping Stones Sword of the Spirit Zion

Jehovah's Witness Watchtower Society is also present in Toka-Leya areas.

1.9. Livelihood and Customs

Most Toka-Leya people are farmers growing maize, millet, sorghum, groundnuts, cow peas and some vegetables. Cotton is also grown as a cash crop. Others are involved in the tourist industry which includes carving curios. Keeping some livestock such as cattle or goats, or doing some fishing along the Zambezi

River or its tributaries contributes to the survival of others. A small amount of money can be earned through cutting timber, making brooms or making charcoal.

The Toka-Leya people are organized along a patriarchal system, that is, descendants trace their ancestry through the clan of their father's side. Prospective husbands must pay a dowry to the family of his wife and will also pay as well in the future for each of the children as they are born. Children are then reckoned as 'belonging to the father' or 'the father is the owner of the children.' If the payment to wife's family has not been made earlier the amount can be paid at a later date, even if the husband had died. Payment made after the death of the man is called *balunga chumbwe* meaning 'paying the remaining marital balance.' Under this system the father's children can then inherit the father's possessions or his position in society. For example if the father was a 'headman' in the village, meaning that he was in a position of authority over a village or part of it that status can also be passed onto his children.

Under a patriarchal system however the wife or wives receive nothing upon the death of her spouse. The entirety of the father's wealth would go to his children. More recently the widow has been permitted to stay in her late husband's home until she also passes on or she may leave if she marries someone else. In 1996 the Succession Law in Zambia was enacted which stated that the inheritance of the father would go to his spouse(s) as well as to the surviving children. Although enacted twenty years ago very few of the ethnic groups in Zambia are following this law.

Traditionally the Toka-Leya could not marry a member of the same clan. However inter-clanal marriage is common today. Dowry used to be paid in animals but today a common dowry price would be around 6000 Kwacha (\$1000 USD).

If a Toka-Leya husband or wife dies the spouse most observe a period of cleansing lasting from one to two years. Like the biblical story of Ruth, traditional Toka-Leya custom is for the brother of the deceased husband to inherit the widow. At the end of cleansing period the brother of the deceased would also have to pay a dowry price, nonetheless to the widow's family. With the advent of the HIV epidemic in Zambia this custom is not observed as much. More often today the widow is asked to pay something to the family of her deceased husband so that she can be free to begin a new life and marry someone of her choice.

During the traditional cleansing period the widow must not marry or have sex with anyone. The widow is not allowed to walk around in the village or stand with any man. She is also not allowed to change clothes and the dress she wears must be worn inside out to demonstrate that she is mourning the loss of her husband. If the man has lost his wife, the widower is also not permitted to have sexual contact with any one and he must wear a black ribbon around the arm during the entire cleansing period.

Near the end of the cleansing period the relatives of the deceased and the widow's family members meet with the widow to choose who will inherit her. If she has children, the children themselves will choose which of them will take the name of their father. The widow is given the option of accepting the brother of her late husband. If she agrees to enter into this new marriage with her husband's brother she then becomes his second wife and the children of the deceased spouse become a part of that new family. However the widow may choose not to marry her husband's brother. In which case she is free to go to another place be married to someone else. However in this case the children that she had by her deceased spouse remain with their father's brother.

The families will then set a date to complete the cleansing period. This final event begins with the brewing of beer. The relatives and other people will join to spend a night outside the widow's house. Besides drinking the beer, two things are done during this night. The mourning for the deceased continues until those gathered are able to "catch" the one who will inherit the widow. That person must then enter

the widow's room to consummate this new marriage. If during this process no one is chosen to marry the widow then another day will have to be set and the mourning period will continue. If the process has been successful then the mourning for the deceased is officially over and those gathered outside will now begin to sing in celebration until morning.

In the morning the new couple is made to sit on a mat in front of the house to receive a blessing for their new marriage. The people that have gathered will sprinkle corn flour on the couple's head and tell them to love each other and take good care of children of both families. The man is told to take care of his late brother's children as his own children. The family of the deceased gives a chicken to the widow to inform her that she has now been given back as a widow into the family. She is admonished to love the sisters of that family and they in turn will help her in any possible way to take care for the children. The entire process includes an important release of any accusation against the widow for the death of her husband.

Today the traditional rites have been diluted to allow the sister of the deceased to cleanse the widow, or the brother of the deceased to cleanse the widower, and no marriage consummation including sexual acts are involved. When a relative is chosen in this manner they take on a supporting role for the material and financial needs of the children of the deceased.

The Toka-Leya family is also strengthened by the existence of clans. There are many different clans and they take the names of domestic or wild animals, or the names of birds and other things such as rain or food. A few examples of Toka-Leya clan names are as follows. *Bene* here means 'belonging to'.

Bene Muambai – monkey clan Bene Nzovu – elephant clan Bene Ng'ombe – cattle clan Bene Munkombwe – bee clan

Within a period of six months of the death of a Toka-Leya chief a new chief is chosen by election. Names of candidates are put forward and discussions begin. Only certain clans can provide candidates for chiefs. For example, the successors of chief Mukuni are chosen from only the Ng'ombe Clan.

Witchcraft is a powerful influence and a most destructive practice among the Toka-Leya. It is believed that many people are using magic to kill other people in large numbers in Toka-Leya Chiefdoms. A witch is referred to as *mulozi* in Toka-Leya. A witch can use his or her powers to terrorize someone who is walking at night. A commonly feared creature resembles a man in a jacket, who is very tall but has no legs or any part touching the ground.

A witch can send a bird to call *ti* - *ye* meaning 'let's go.' If the bird persists in calling at someone's home, then one person from that home will follow the bird out to meet their death. Such magic powers are called *chilozyo* and are inherited or can be purchased from the elders in the village. The elders can secretly ask young men in the village if they want such powers to become stronger. Those who are interested can use the *chilozyo* to send sickness to an enemy, to bite people in an invisible state, and steal from people. The *chilozyo* charm can be composed of animal horns, a bundle of human hair wrapped in a cloth, roots, skins of animals and even parts of human body. The act of placing the charm is called *kuzyana* and means 'to dance in magic in order to kill' or 'spread magic powers.'

Those practicing *chilozyo* can be caught and destroyed by a witch finder called a *mung'anga*. The process used to demolish a charm used in witchcraft known as *kuchapa*.

The Toka-Leya people hold and celebrate many annual ceremonies. Some are held at the beginning of the year, middle of the year and others are at the end of November. A few examples are the Basilombelombe Ceremony held in January to commemorate the Spray of Victoria Falls and to intercede for good rain, a good harvest and for good grass for their livestock. The Bwande Ceremonies are held from March to June and involve a temporary transfer of power from chief Mukuni to the priestess Be-Dyango as the chief goes out to visit his kingdom. The Bene Mukuni Ceremony in July that commemorates the historic travels from the Congo to the present location of the Leya people. The Chandaule ceremony is held in August and marks the end of harvest time. The Toka Leya come to give thanks to the gods and ancestors for the good harvest and fat animals. They bring food staffs from their homes to the chief. Food and beer are prepared as part of the celebration The elders pour beer in the shrine to do an act of worship and thank the spirits but the rest of the food is eaten by the people who come to the ceremony.

2. SURVEY PURPOSE AND APPROACH

2.1. Purpose of the Survey

The purpose of this survey was to obtain information concerning the Toka-Leya people and the Toka-Leya language in order to assess the need for a vernacular language development program. Such a language development program could include a translation of the Scriptures in Toka-Leya as well as other language development activities including literacy programs, mother-tongue authorship and translation of materials which the Toka-Leya people would find useful to their development.

The following questions outline the purpose of the survey:

- 1. Language Viability, Vitality, and Shift
 - 1.1. Is the Toka-Leya language alive and being widely used among all segments of society?
 - 1.2. Is the Toka-Leya language vital or necessary for all domains in the daily life of the Toka-Leya communities?
 - 1.3. Does a shift away from Toka-Leya to the use of another language appear likely in the future?
- 2. Dialectology
 - 2.1 What dialects of Toka-Leya are identified by the community?
 - 2.1 Are the various speech varieties mutually intelligible? Can speakers of all the dialects use the same literature and educational materials?
- 3. Relationship to other languages
 - 3.1 What are the lexical similarities between Toka-Leya and neighboring languages such as Tonga and Lozi?
 - 3.2 What are the lexical similarities between Toka-Leya and other languages such as Lenje, Soli and Nsenga, with which Toka-Leya is said to be related.
- 4. Church and community response to a language development project
 - 4.1 Would the Toka-Leya people use vernacular literature if it were available?
 - 4.2 Is the Toka-Leya community likely to support and respond well to a language project?

2.2. Survey Approach

The surveyors worked in cooperation with government and traditional leadership in order to obtain permission to do language survey in each region. In order to familiarize them with our work, we arranged meetings with traditional leaders and church leaders of the area. In each case the survey questions were

translated orally from English into Toka-Leya at the time of the interview for the participants. Responses were normally given back in Toka-Leya, Tonga, Chewa or English and responses were written in English.

2.3. Selection of Survey Locations

We visited a total of eight wards spread over three districts. These included four of the 14 wards of Kazungula District, three of the 17 wards of Livingstone District and one of the 22 wards of Kalomo District. Most of the data was collected in the eight wards that correlated with center of the five Toka-Leya chiefdoms that are in the heart of the Toka-Leya areas. Those five Toka-Leya chiefdoms are Mukuni, Sekute, Musukotwani, Sipatunyana and Nyawa. Group questionnaires were administered and word lists were collected in Mukuni, Sekute and Musukotwani. Individual questionnaires and village leader questionnaires were administered in all the chiefdoms except for Nyawa.

Villages to gather data in were selected based upon social conditions such as centrality to language community and homogeneity. For example villages were chosen based upon what were the most centrally located Toka-Leya villages, or what were the best locations to find Toka-Leya speakers instead of randomly selecting a set of locations. Although this method does not present an equal and complete representation of the entire community, it is most effective method for the purpose of this survey.

There is a margin of error in any survey because of mistakes, misinterpretations in the responses obtained, and inherent faults in the tools used. For example, when collecting data for the word lists it was learned that many Bantu languages do not have words that distinguish 'hand' from 'arm' both words were part of the word list. Also words from the word list could easily be misunderstood and have a wide range of meaning. One example is 'belly' which could include meanings ranging from 'belly', 'abdomen', 'stomach', or 'pregnancy'. Use of Zambian surveyors who had some knowledge of the language and culture helped to minimize many misunderstandings although time did not always permit that respondents clearly understood the nuances of meanings that they were being asked. Thus, like any survey the results from this testing are only an indicator of what the actual situation may be.

2.4. Selection of Participants

The categories for the selection of participants used were 'young' (those who are fifteen to thirty-five years old) and 'old' (those who are thirty-six years old and older). Respondents were classified as either 'educated' (having completed Standard Seven school level and above) or 'uneducated' (Standard Six school level and below). There was no other categorization such as by occupation since this was not significant to the survey.²³

The questions in the survey often distinguished between 'children' and 'young people.' 'Children' are those under the age of 13 approximately, and 'young people' are those who are between 13 and roughly 22 years of age.

For the group, village leader and individual questionnaires all of the participants were Toka-Leya. The average age of the participants in the individual questionnaires was 36 years old. The youngest participant was fourteen and the oldest was sixty-one years old.

2.5. Individual Questionnaire

Twenty-seven individual questionnaires were administered in fourteen different locations. They were designed to collect information on the issues of language vitality and viability, language attitudes, and

desire for vernacular materials. Mother-tongue usage in the home and neighborhood domains was investigated as the primary indicator of vitality.

2.6. Group Questionnaire

Eight group questionnaires were administered in eight different locations. Each group consisted of anywhere from 5 to 15 people. Several groups had an equal number of men and women. When men were present they tended to give most of the responses. Most of the participants in the group questionnaires tend to be older rather than younger as the older members of the community are customarily called upon to represent and share information about the village or people.

The group questionnaire included questions about differences between dialects, language vitality and viability, attitudes toward the mother tongue, and attitudes towards the development of vernacular literature. Also included in the group questionnaire was a dialect mapping exercise as described by Hasselbring (2010). Dialect mapping helped to clarify the relationships between varieties of Toka-Leya and the bordering languages and obtain an insider's perspective on intelligibility between the speech varieties.

One group interview was given each of the following locations according to these three chiefdoms:

Mukuni Chiefdom: Nsongwe Village

Kamwi Village Gundu Village

Musukotwani Chiefdom: Ikhashala Village

Siamwalu Village

Sekute Chiefdom: Sekute Village

Sikukwani Village Maibwe Village

2.7. Village Leader Questionnaire

Fourteen village leader questionnaires were conducted. These included interviews with two chief prime ministers, eight village headmen, two senior headmen, one pastor and one branch ward chairman. These questionnaires gather information on the demographics of the villages including the villages' composition of different ethnic groups as well as development, religious, educational and language development issues.

2.8. Word Lists

Analysis of wordlists, or lexicostatistics, is used to determine the relatedness of languages.

A language may split into two (or more) dialects, [and] later [develop into] two [distinct] languages. As they move through time, they share progressively less vocabulary. The more vocabulary they share, the more recent the split; the less they share, the more distant the split. Lexicostatistics is based on counting these shared words and is thus a measure of lexical similarity and retention.²⁴

For this study we collected word lists of 202 words from Mukuni, Sekute and Musukotwani chiefdoms. The words lists were double checked for accuracy. Then they were entered into the WORDSURV

program for lexicostatistical analysis and phonostatistical comparisons. The three varieties of Toka-Leya were compared to each other. Comparing these lists from different dialects within a language helps to know their relatedness. This is especially important in determining whether more than one translation project is needed in a language group or if the speakers of each dialect may use a common translation.

The same word list was used for phonological and lexical comparisons to the related languages Tonga, Ila, Lenje, Lozi, Chewa, Soli, Nsenga, Kunda and Nkoya. Only Tonga, Lozi and Nkoya share borders with Toka-Leya, by far the largest border and largest influence being Tonga. Lenje, Soli and Nsenga were included because of historical ties to Toka-Leya. Chewa was included merely as a matter of interest. According to the Ethnologue (2013),

The percentage of lexical similarity between two linguistic varieties is determined by comparing a set of standardized wordlists and counting those forms that show similarity in both form and meaning. Percentages higher than 85% usually indicate a speech variant that is likely a dialect of the language with which it is being compared. Unlike intelligibility, lexical similarity is bidirectional or reciprocal.

The analysis of word lists in this survey will be examined in relation to this 85% lexical similarity. The number is a debatable limit, but it provides an accepted point of demarcation between what is considered a distinct language and what is considered to be a dialect or variation of a language.

3. RESULTS AND DATA ANALYSIS

The individual questionnaire collected 58 questions or pieces of information from each informant. Not every person answered every one of the 58 questions. In several instances, such as in a 'yes or no question', the follow-up question was only answered by a sub-set of the respondents because the follow-up question may or may not have applied. The responses from these ten open-ended questions were analyzed separately. Responses from the remaining 48 questions were tabulated into a spreadsheet for comparison and totaled in various ways. Many of the endnotes are included to help the researchers validate and pinpoint the source of a particular piece of data.

From the 48 questions that were tabulated 28 questions were selected for special consideration and divided into three categories: language viability, language vitality and language shift. Often it is impossible to divide data that supports one of these three categories from the other two because they are all interrelated and the terms themselves have overlapping meanings. Simple definitions to keep in mind are the following:

Language viability – How alive a language is?

Language vitality – How important a language is?

Language shift – When a community stops using one language to begin using another.

3.1. Language Viability

Language viability is how well a language is thriving or how 'alive' it is. The opposite of a viable language is one that is being used less and less, is dying, or going extinct. Survey questions related to this focus upon the language which is being studied as opposed to questions on language shift which focus upon other languages that the primary language is in contact with.

Some summary statements regarding Toka-Leya language viability are:

- 96% of adults speak only Toka-Leya to their children at home.
- 100% of the children respond to adults using Toka-Leya at home.
- 100% said that children use Toka-Leya when playing together with other children.
- 100% said that Toka-Leya alone is used when the Toka-Leya people gather together.

Details on the above summary statements are as follows:

The primary indicator that a language is no longer serving a community is when children no longer use the language and parents speak it only to older people. At that point the language is in danger of dying and will likely be replaced by another language within a generation. When asked what language adults use with children at home 96% of adults responded that Toka-Leya is used. The one respondent who did not speak to her children in Toka-Leya used Lozi. She identifies herself ethnically as Toka-Leya, but as her mother is Lozi, she also speaks to her children in Lozi. The following chart indicates these findings.

Language adults use to children at home?		
Toka-Leya	Lozi	
96%	4%	

Table 13 Languages adults use when speaking to children at home

When asked what language the children respond to at home 100% of the respondents said that the children respond to their parents using the Toka-Leya language. 26

What language do children respond in at home?	
Toka-Leya	
100%	

 Table 14
 Language children respond to adults in at home

When asked what language children use when playing with other children, 100% responded that the children use Toka-Leva.²⁷

What language do children use when playing?	
	Toka-Leya
	100%

Table 15 Language children use when playing

When asked what language those interviewed use with friends of the same age, 93% used only Toka-Leya and the remaining 7% responded that they use Chewa or Leya and English. ²⁸

Language adults use when speaking with friends?				
Toka-Leya Toka-Leya & English Chewa				
93% 3.5%		3.5%		

Table 16 Language adults use when speaking with friends

When asked what language is used when the Toka-Leya people gather in the evening and talk the respondents said only Leya.²⁹

Language used when Toka-Leya people gather		
Toka-Leya		
100%		

 Table 17
 Language used when Toka-Leya people gather

3.2. Language Vitality

Language vitality considers how important or necessary the language is to the daily life of the people. If other languages work just as well or are being used in certain contexts, then the first language is said to have lost some of its vitality. For example, if the Toka-Leya people do not use their language for some particular aspect of life, such as praying, then we can say that Toka-Leya has lost some of its vitality. According to SIL language vitality is "demonstrated by the extent that the language is used as a means of communication in various social contexts for specific purposes".³⁰

Besides the points above on language viability that also apply to language vitality, some additional summary points are as follows:

- 96% of the respondents said that Toka-Leya was sufficient to express all their thoughts and 100 % said that an argument such as a dispute in court could be totally resolved by using Toka-Leya. 31, 32
- 89% said when speaking about religion that they use Toka-Leya but only 67% said they would pray for a sick person using Toka-Leya alone. ^{33, 34}
- 93% said they use Toka-Leya to discuss politics with other Toka-Leya.³⁵

Details on the above summary statements are as follows:

Regarding the use of Toka-Leya to resolve an argument in court, for example, 35% of the respondents said if they had to use another language it would be Lozi but 50% of those who gave this answer were from Sekute chiefdom and another 25% were from Musukotwani chiefdom. The remaining 25% were from Mukuni Chiefdom. The following table includes all the languages cited when this question was asked:

Language used besides Toka-Leya to resolve an argument in court					
Lozi	Tonga	Chewa	English		
35%	25%	20%	20%		

 Table 18
 Second language used in courts

When asked what language is used for religious functions such as praying for a sick person only 67% said Toka-Leya alone is used while another 22% said that both Toka-Leya and another language such as Chewa, English or Tonga are used. Seven percent said that Lozi alone is used. Some reasons given as to why other languages are used are because the Bible is printed in these languages or the preaching in the church where they attend is done in that language. Some reasons given as to why other languages are used are because the Bible is printed in these languages or the preaching in the church where they attend is done in that language.

Language used for religious purposes		
Toka-Leya	Toka-Leya and some other language	Lozi
67%	22%	7%
89%		

 Table 19
 Language used for religious purposes

Nine factors used to judge low language vitality (Bergman, 2001) include the following:

- 1. Generational shift. Children no longer speak the language.
- 2. Lack of homogeneity. When a stronger surrounding language group, or groups, intermingles and lives among the group such that there is mixture of languages being used especially by the children.
- 3. Small proportion of speakers within the ethnic group. The language is likely to have some people who use it and others who do not.
- 4. Small population for the region.
- 5. High proficiency in a second language.
- 6. Positive attitude toward a second language.
- 7. No use in religious domain.
- 8. Use of vernacular not strategic for reaching the people at the deepest level.
- 9. Education in a language of wider communication is widespread.

Regarding homogeneity, few villages are purely Toka-Leya but more than half would have Toka-Leya people in the majority.

After studying the above results, the following chart is an attempt to express the overall impressions of the surveyors for where Toka-Leya may be in regards to these nine indicators of language vitality.

	Factor	Vitality	Lack of Vitality
1.	Generational shift	Parents speak to children in Toka-Leya	
2.	Lack of homogeneity	Low degree of mixture in villages	
3.	Small proportion of speakers within the ethnic group ³⁹	High proportion	
4.	Small population for the region		Small population of speakers (56, 000) relative to other Bantu groups
5.	High proficiency in a second language.		yes, most often in Tonga
6.	Positive attitude toward a second language.	not opposed to other languages but proud of their own	
7.	Use in religious domain.		No written scriptures in Toka-Leya
8.	Use of vernacular not strategic for reaching the people at the deepest level.	yes, churches are often weak	
9.	Education in a language of wider communication is widespread.		yes, in Tonga
	Total	4	5

 Table 20
 Nine indicators of Language Vitality for Toka-Leya.

From this attempt we see that Toka-Leya has about 11 % more factors indicating its lack of vitality as opposed to its vitality. The feeling is that the Toka-Leya language is likely to be around for a long time but will face continual and slow loss of status and vitality in the coming generations.

3.3. Language Shift

Language Shift is the process whereby a language community gradually stops using one language in favor of using another language that it is in contact with. Language shift research focuses upon the speakers'

attitudes toward their own language as well as their attitude towards the second language that they may be shifting to use. It includes, for example, studying in what domains speakers use each language.⁴⁰

Some summary statements related to language shift among the Toka-Leya found in this survey are:

- 7% of the Toka-Leya interviewed said they did not know any other language. 41
- Tonga and Lozi are the predominate second languages for Toka-Leya speakers.
- 32% of adults married someone of another language group. 42
- 100% of the Toka-Leya people said that their grandchildren would continue to speak Toka-Leya. 43
- 26% of adults believed that young people are leaving Toka-Leya to use other languages.
- Every group responded that they are proud of the Toka-Leya language and want to hold on to it

Details on the above summary statements are as follows:

Of the two respondents (7%) who said that they do not know any other language besides Toka-Leya, we looked further to see if they were only the very old people. The surveys showed that one was 19 years old and the other 31 years old indicating that indeed a significant percentage of the population is monolingual.

From the individual questionnaires it was found that 68% of the Toka-Leya are married to another Toka-Leya person. Thirty-two percent of the Toka-Leya people had a spouse from another language group either Tonga or Lozi. 45

When participants in the group interviews were asked how often intermarriage with other language groups occur, 75% said it occurred rarely. Sixty-six percent concluded that it was good to marry outside of your language group. One third (33%) decided that it was bad to do so. Intermarriage may not necessarily be a clear indicator of language loss because it would depend upon whether a Toka-Leya man or a Toka-Leya woman is marrying an outsider, since it is usually the mother's language that is taught to the children first, but it also depends upon where the intermarried couple reside. However compared to four surveys among other people groups we have done in Zambia, it can be shown that a high level of intermarriage means that there is usually a greater degree of language shift occurring in the society.

The Toka-Leya language like other minority languages in Zambia could be declining due to several factors. A major factor is the government's endorsement of only seven official languages for use in Zambia's primary and secondary school system. Tonga is the language taught in schools in the Zambia's Southern Province where the Toka-Leya reside. The Zambian government in 2014 decided that the seven official languages should be used from grades 1-4 with an increasing use of English at each level. After Grade 4 English is the primary means of teaching, but the vernacular, in this case Tonga, remains a separate and compulsory subject in all grades of primary schools. Secondary schooling is dominated by the use of English although Tonga can be taken as an elective course. If other languages beyond the present seven now permitted, were used in schools it would help these other languages to be less threatened.

But in comparing the linguistic situation of Toka-Leya with other groups in Zambia, such as the Soli [sby] of Zambia's Lusaka Province, the Toka-Leya language is more stable. The Soli people have a higher exposure and influence from the Chewa language due to the Soli areas being bisected by a road that is Zambia's trade route with Malawi. When the Soli were surveyed 92% of them believed that their

language community was shifting to another language while only 26% of the Toka-Leya believe that their children are leaving their language. 46

Of the 26% of the respondents who said that young people are leaving Toka-Leya to speak another language, 83% said they are leaving Toka-Leya to speak Chewa, 50% included English as an option and 33% included Lozi as a response.⁴⁷

Languages Children are switching to use besides Toka-Leya						
Chewa	English	Lozi	Bemba			
83%	50%	33%	17%			

Table 21 Languages children are switching to use

However in the group questionnaires when the question was asked, "What language will the children of your children speak?" 100% said that their grandchildren would continue to speak Toka-Leya. 48

When asked, if young people (those between the ages of 13 to 20) are leaving the Toka-Leya language to speak only other languages 26%, as well responded affirmatively.⁴⁹

Are young people leaving Toka-Leya for other languages only?				
Yes	No			
26%	74%			

 Table 22
 Young people leaving Toka-Leya for other languages

Toka-Leya is the language most often used by adults in a variety of settings with Lozi and Tonga being the second most commonly used languages. Twenty out of the 27 respondents included Lozi as a second language that they knew and 19 included Tonga. Because the sampling size was so small the difference between Tonga and Lozi here is inconsequential.⁵⁰

When asked if there are Toka-Leya people who do not know how to speak Toka-Leya well, 33% the respondents said that they are familiar with such people.⁵¹ Most often respondents will say that such people live in larger towns like Livingstone or have moved away from the main area where the language is spoken. A number of respondents said that there are some Toka-Leya people scattered in villages as well who do not know Toka-Leya well. Intermarriage was the reason cited for such instances.

When asked if there were people who are ethnically Toka-Leya but do not speak Toka-Leya and instead speak other languages, six of the eight, or 75%, of the group interviews said that there were. Most often this was due to people living in towns or in villages on the margins of Toka-Leya land.⁵²

Speaking ones vernacular language is an important part of a Zambian's heritage. When asked if a person was still a Toka-Leya if they could not speak the language, an equal number of respondents said that a person was no longer considered to be Toka-Leya compared to those who said that such a person was still Toka-Leya.⁵³ This is in contrast to other groups we have surveyed. Most are much more inclusive with who they consider to be a member of the language group.

If someone no longer speaks the mother tongue are they still a member of the language group?						
Toka-Leya		Batwa		Kunda		
Yes	No	Yes	No	Yes	No	
50%	50%	88%	13%	84%	16%	

Table 23 Comparison of Language Attitudes

From this we can postulate that groups like the Batwa in which the language has a much higher degree of endangerment are more likely to include those who do not know the language. They are open to others being in their group, even though they may have lost the language identity battle and they want to claim the membership of those who have already shifted to speaking a different language. While groups in which the language is less threatened are more likely to deny "membership" to those who no longer can speak the language. They can afford to do this, while groups that are more endangered cannot afford to exclude others. In other words the greater level of exclusiveness in language attitudes would indicate a lower level of endangerment level of the language. From this we conclude that Toka-Leya is less endangered than Batwa or Kunda for example.

When asked what other languages respondents knew, the following results were collected. Percentages total more than one hundred percent because respondents could include more than one language as an answer.

What other languages do you know?						
Lozi	Tonga	Chewa	no other language known			
74%	70%	22%	7%			

Table 24 Other languages Toka-Leya people know

Seventy-five percent of those who took part in the group interviews said that the children were speaking the language correctly and an equal percentage said that the young people (those between 13 to 20 years old) were speaking the language correctly.⁵⁴ As already mentioned as well, 100% of the Toka-Leya people believed that their grandchildren would be speaking Toka-Leya.⁵⁵

Besides the government promotion of Tonga as a recognized language for schools of the Southern Province there is along with this the lack of any materials printed in Toka-Leya. Seventy-nine percent of respondents of the village leader interviews included education as a major need for development. A more frequent need was sources of water or dams for livestock with 86% of respondents including that. Health care such as clinics was expressed 43% of the time and road or transport problems were included 22% of the time. ⁵⁶

Every group felt without a doubt that it was important to keep speaking Toka-Leya and they expressed great pride in their language. ⁵⁷ They do not think that the Toka-Leya people will stop using Toka-Leya to speak only some other language. None of the groups we interviewed included anyone who had ever seen anything published in Toka-Leya but they were very enthusiastic about the possibility of having something written. ⁵⁸

3.4. Word Lists Results

3.4.1. Lexicostatistical comparison within Toka-Leya Speech Varieties

Seventy-five percent of the Toka-Leya group interviews agreed that there are dialectical variations in their language and that they could tell where a person is from by how they spoke the language.⁵⁹ The most common differences expressed are that the varieties of Toka-Leya which are spoken outside of Mukuni Chiefdom have a higher frequency of Lozi words.

The same percentage of the group interviews, 75%, also said that the purest form of the language is in Mukuni Chiefdom. Two group interviews said the purest form of the language is in Sekute Chiefdom and one group said the purest form is found both in Mukuni and Musukotwani Chiefdoms.

A word list of 202 words was collected from Mukuni, Musukotwani and Sekute Chiefdoms. The percent similarity of the three locations is as follows.

Variety	Mukuni	Musukotwani	Sekute
Mukuni	100%	86%	91%
Musukotwani	86%	100%	86%
Sekute	91%	86%	100%

Table 25 Percent of lexical similarity among Toka-Leya varieties

The above results show that in the simplest analysis the Mukuni and Sekute dialects are the most closely related dialects, sharing 91% lexical similarity. The percent lexical similarity between the Mukuni and Musukotwani and Sekute and Musukotwani are both 86%.

For this study the number of dialects compared is small; only three. However to carry the analysis further we can investigate how the factor of geographical distance affects the lexical similarity between these three dialects. One would expect that if there were no other factors involved (such as political allegiances, traditional trade routes, or geographical barriers between the dialects), that the farther apart two dialects are the greater their lexical difference would be. By dividing the lexical similarity by geographical distance we can get a more even comparison between the three dialects.

In our study we divided the percent of lexical similarity between the dialects by the distance between those two dialects are from each other. The lower the result, the more similar those two dialects are to each other regardless of their geographical distance.

The following table shows the results organized according to the correlation of lexical similarity divided by geographical distance.

Sorted by Correlation of Lexical Difference Divided by Distance						
	Percent similarity	Percent difference	Distance in Km	Correlation of lexical similarity divided by distance		
Mukuni-Sekute	91	9	41	2.220		
Mukuni-Musukotwani	86	14	31	2.774		
Musukotwani-Sekute	3.308					
Average	Average 88 12 33 2.767					

Table 26 Correlation of lexical similarity divided by geographical distance between varieties

Table 26 shows the three varieties reorganized from the lowest correlation of lexical distance divided by distance to the highest value. The results show that the Mukuni and Sekute dialects share the highest rate of lexical similarity even if compared as a correlation of their geographical distance to each other. Because the Mukuni and Musukotwani are farther apart than the Musukotwani and Sekute dialects are, yet both have 14 percent difference, the Mukuni and Musukotwani varieties are more similar to each

other when their distance apart is factored in. One would think that the other varieties, Musukotwani and Sekute, while in closer proximity to each other should have a higher percentage lexical similarity, but this is not the case. Therefore, the difference between these varieties of Toka-Leya is not simply a direct correlation to the geographical distance between those varieties. Beyond this little more can be said about the comparison of Musukotwani-Sekute and Musukotwani-Mukuni since these two comparisons have the identical lexical percentage of 86%.

The overall average of similarity for the three Toka-Leya dialects is 88%. As a comparison with other Zambian languages, Chitwa, averages 93% similarity among its three varieties, and Soli and Kunda each have 86% similarity with their varieties. What is considered as the purest form of the language, the Mukuni variety, has the highest similarity with another chiefdom, Sekute. This is not always the case. In some languages, such as Kunda, in which there is an invasion of neighboring languages into the border varieties, what is considered the purest form of the language may have the least similarity with other speech varieties. 63,64

3.4.2. Phonostatistical comparison within Toka-Leya Speech Varieties

Besides the lexicostatistical analysis a phonostatistical comparison was made as well using the WORDSURV program. The phonostatistical analysis calculates the average degrees of difference per correspondence of phonetic segments. The WORDSURV program exports this analysis as the degrees of difference values divided by the correspondences value. Therefore the lower the ratio, the closer the similarity is between the two varieties. However for our purposes and to more easily show the correspondences to the lexicostatistical data we converted the ratios to percentages. The following table shows the phonostatistical similarities between the varieties of Toka-Leya,

Variety	Mukuni	Musukotwani	Sekute
Mukuni	100%	97%	97%
Musukotwani	97%	100%	98%
Sekute	97%	98%	100%

Table 27 Phonostatistical Analysis results for Toka-Leya varieties.

Since the percentages are all very close to one another little can be learned from the different varieties except that they all share a high percentage (an average of 97.3%) similarity in their phonemes.

The following table shows the percentage of lexical similarity between the varieties of Toka-Leya as well as the percentage of phonostatistical similarities.

Varieties of Toka-Leya lexical & phonostatistical similarity			
	Lexical similarity	Phonostatistical similarity	
Mukuni-Sekute	91	97	
Mukuni-Musukotwani	86	97	
Musukotwani-Sekute	86	98	

Table 28 Lexical and Phonostatistical similarities for Toka-Leya varieties.

3.4.3. Most Linguistically Central Toka-Leya Variation

The comparison within varieties is important when making decisions as to what variety of Toka-Leya will be most understood by the largest portion of the Toka-Leya population. For example if Musukotwani is chosen as the variety for written materials the populations of other chiefdoms would understand perhaps only 86% of the vocabulary.

One more analysis is in the following table. The percent lexical similarities for the five varieties of Toka-Leya as shown in Table 25 are organized into separate columns and totaled as follows:

	Mukuni	Musukotwani	Sekute
Mukuni-Sekute	91		91
Mukuni-Musukotwani	86	86	
Musukotwani-Sekute		86	86
Totals	177	172	177

Table 29 Percent lexical similarity organized for each Toka-Leya variety.

The totals above show that the Musukotwani variant has a slightly lower total than the Mukuni and Sekute variants which both have a total of 177. This result shows either the Mukuni or Sekute variants are the best alternatives for reaching the largest number of Toka-Leya people, however as mentioned in section 3.4.1 86% of the group interviews agreed that Mukuni was the location where the best form of the language was spoken.⁶⁶ For reasons of status then, as well as the evidence of lexical similarity, the Mukuni variant, is the best choice as a medium to reach all Toka-Leya areas.

3.4.4. Comparison of Toka-Leya to Other Languages

Because of the claim that Toka-Leya has connections to so many other languages as explained in section 1.3 we have included a comparison of the three Toka-Leya varieties to nine other languages. These are Tonga, Ila, Lenje, Lozi, Chewa, Soli, Nsenga, Kunda and Nkoya. The following percentage similarities were obtained.

Variety	Mukuni	Sekute	Musukotwani	Average
Tonga	60	61	65	62.0
lla	48	49	53	50.0
Lenje	48	49	49	48.7
Lozi	17	18	17	17.3
Chewa	21	22	22	21.7
Soli	34	34	34	34.0
Nsenga	26	27	26	26.3
Kunda	24	25	26	25.0
Nkoya	17	16	17	16.7

Table 30 Lexical similarity of Toka-Leya varieties compared to other languages.

This shows that of the nine languages compared to Toka-Leya, Tonga shares the highest lexical similarity at 62%. Considering that Toka-Leya has been classified, by the Ethnologue, as a dialect of Tonga for so long and that normally, dialects of a language have 85% or more lexical similarity, this lexical similarity of 62% is relatively low.

It is also worth noting that Toka-Leya shares only 17.3% lexical similarity with Lozi. We had been told that Toka-Leya is mixture of Lozi and Tonga. This is true. However if we took the percent lexical similarities of Tonga to Toka-Leya and Lozi to Toka-Leya the ratio of Tonga in Toka-Leya as compared to Lozi in Toka-Leya is 3.6 to 1. Simply stated, Toka-Leya shares about three and a half times as many Tonga words as it does Lozi words.

Lenje is included because as mentioned in section 1.3 it is believed that the Toka-Leya people have descended from the Lenje. Of the nine languages that were compared with Toka-Leya Lenje has the third highest lexical similarity with Toka-Leya, 49%, after Tonga's 62% lexical similarity.

Nkoya was included simply because it is a neighboring language and we wanted to explore if there was any linguistic relationship. It shares nearly the same 17% lexical similarity with Toka-Leya as does Lozi. Chewa is included, not because it is considered to be closely related, nor because it shares a border, but simply because the data was available. Surprisingly it has 5% more lexical similarity with Toka-Leya than Lozi does. Perhaps some of the lexical similarity with Chewa is due not to an historic linguistic connection but because of the recent adoption of Chewa words into the Toka-Leya vocabulary since Chewa is used increasingly as a trade language across Zambia.

Soli, which was also mentioned in section 1.3 as having an historical connection with Toka-Leya, shares 34% lexical similarity with Toka-Leya. Nsenga and Kunda likewise shared 26% and 25% respectively.

When the group interviews were asked which language is most similar to Toka-Leya, 63 % said Tonga, 38% said Lenje and 13% said Lozi. These answers concur with the results shown in table Table 30 above.

The following is the same as Table 30 above except that the languages are in a descending order of lexical similarity to Toka-Leya.

Variety	Mukuni	Sekute	Musukotwani	Average
Tonga	60	61	65	62.0
lla	48	49	53	50.0
Lenje	48	49	49	48.7
Soli	34	34	34	34.0
Nsenga	26	27	26	26.3
Kunda	24	25	26	25.0
Chewa	21	22	22	21.7
Lozi	17	18	17	17.3
Nkoya	17	16	17	16.7

Table 31 Descending order of lexical similarity to Toka-Leya of nine languages.

3.4.5. Comparison of Languages other than Toka-Leya

The following table shows the lexical similarity of the ten languages used above, Toka-Leya, Tonga, Ila, Lenje, Chewa, Soli, Nsenga, Kunda, Lozi and Nkoya compared to one another.

	Ten Language Comparison													
	Toka-Leya	Tonga	lla	Lenje	Lozi	Chewa	Soli	Nsenga	Kunda	Nkoya				
Toka-Leya	100	62	50	49	17	22	34	26	25	17				
Tonga	62	100	67	53	15	22	35	24	26	14				
lla	50	67	100	51	13	19	34	26	27	17				
Lenje	49	53	51	100	14	22	48	30	28	15				

Lozi	17	15	13	14	100	11	14	12	12	11
Chewa	22	22	19	22	11	100	28	48	46	16
Soli	34	35	34	48	14	28	100	36	37	21
Nsenga	26	24	26	30	12	48	36	100	78	17
Kunda	25	26	27	28	12	46	37	78	100	17
Nkoya	17	14	17	15	11	16	21	17	17	100

 Table 32
 Lexical similarity comparison of ten languages.

The following table sorts the lexical similarity of these ten languages from largest (most related) to lowest (least related).

Language pair	% lexical similarity
Nsenga - Kunda	78
Tonga - Ila	67
Tonga - Toka-Leya	62
Tonga - Lenje	53
Ila - Lenje	51
Ila - Toka-Leya	50
Lenje - Toka-Leya	49
Lenje - Soli	48
Chewa - Nsenga	48
Chewa - Kunda	46
Kunda - Soli	37
Nsenga - Soli	36
Tonga - Soli	35
Ila - Soli	34
Toka-Leya - Soli	34
Lenje - Nsenga	30
Lenje - Kunda	28
Ila - Kunda	27
Tonga - Kunda	26
Toka-Leya - Nsenga	26
Toka-Leya - Kunda	25
Tonga - Nsenga	24
Toka-Leya - Chewa	22
Tonga - Chewa	22
Lenje - Chewa	22
Soli - Nkoya	21
lla - Chewa	19
Ila - Nkoya	17
Toka-Leya - Lozi	17
Toka-Leya - Nkoya	17
Nsenga - Nkoya	17
Kunda - Nkoya	17
Chewa - Nkoya	16

Tonga - Lozi	15
Lenje - Nkoya	15
Tonga - Nkoya	14
Lenje - Lozi	14
Soli - Lozi	14
Ila - Lozi	13
Nsenga - Lozi	12
Kunda - Lozi	12
Chewa - Lozi	11
Nkoya - Lozi	11

Table 33 Sorted lexical similarity comparison of languages other than Toka-Leya.

A few things can be noted from the above table: Toka-Leya has a lower lexical similarity with any other language, in this case Tonga, than the lexical similarity shared by the Nsenga and Kunda languages as well as less than Tonga and Ila do. Language development projects are currently being done in all four of these other languages. Also Lozi and Nkoya are obviously more distant in their relationship to Toka-Leya and the other languages being compared. In the table above Lozi and Nkoya have the lowest percent of lexical similarity.

A few examples from the word list help to show the differences in these languages.

i	i	i i	i i	i	i
	head	God	dog	eye	lung
Toka-Leya	mutwe	Leza	mubwa	linso	mapunga
Tonga	mutwe	Leza	mubwa	linso	fufe
lla	mutwe	Leza	mubwa	linso	ifufwe
Lenje	mutwi	Lesa	kabwa	linso	pwapwa
Soli	mutwi	Lesa	kabwa	linso	mulomo
Chewa	mutu	Mulungu	galu	diso	pwapwa
Nsenga	mutu	Mulungu	imbwa	liso	pwapwa
Kunda	mutu	Mulungu	imbwa	liso	pwapwa
Lozi	toho	Mulimu	nja	liito	liswafu
Nkoya	mutwe	Nyambi	kawa	liho	mila

Table 34 Examples from word list

According to Grimes (1988b),

The threshold levels high enough to guarantee good communication from the central dialect to its periphery is usually 85% or above. When the percentage of similarity in the two languages is 85% or above, it is then reasonable to speak of the two as a dialect cluster of a single language. From the linguistic point of view speech varieties that come together only at 70% or below are too distinct to qualify as the same language. In between, 70% to 85% is an area of marginal intelligibility where some communication is satisfactory and some is not. The threshold depends on the risk associated with not communicating well. The final criteria for making these decisions are normally not purely linguistic criteria.

Toka-Leya's lexical similarity with any other language is below the 70% that is often used to distinguish one language from another. Therefore, it should be considered as language separate and distinct from Tonga or Lozi.

3.5. Dialect and Surrounding Language Mapping Exercise

The mapping exercise depends upon the speakers' knowledge and insight of their language. A group of knowledgeable speakers are gathered and asked to identify the different varieties of their language. The names of each dialect are written on a card and the speakers are asked to arrange them in how they are geographically located in relation to each other. The participants are also asked general questions about the degree to which the speakers of each variety can understand one another or whether or not they must change how they speak in order to effectively communicate. After mapping dialects of their language the group is then asked about other surrounding languages that they have contact with.

Two mapping exercises were conducted, one in Mukuni Chiefdom and one in Sekute Chiefdom. The first purpose was to examine the comprehension and relatedness between the speech varieties that are recognized by each group. Secondly, the comprehension and location of bordering languages are explored and participants are asked what adjustments they or others make to their speech when interacting with neighboring groups.

3.5.1. Within Toka-Leya Varieties

Table 35 below summarizes the exercises completed in the dialect mappings done in Mukuni chiefdom of Shumgu ward.

	VARIETY		COMPREHENSION	COMMUNICATION
	 Musukotwani 		full	No changes made to communicate
VARIANTS OF	2. Sipatunyana	East	full	No changes made to communicate
THE SAME	Z. Sipaturiyana	West	full	No changes made to communicate
	Sekute		full	No changes made to communicate
LANGUAGE	4. Leya – Shumg	u ward		
	5. Nyawa		more than half	We change the way we speak. They do not change the way they speak.

Table 35 Dialect mapping result of Mukuni group interview for Toka-Leya varieties

Table 35 below summarizes the exercises completed in the dialect mappings done in Sekute chiefdom.

	VARIETY	COMPREHENSION	COMMUNICATION				
VARIANTS OF	1. Musukotwani	full	No changes made to communicate				
THE SAME	2. Sipatunyana	full	No changes made to communicate				
	3. Sekute						
LANGUAGE	4. Leya – Mukuni	full	No changes made to communicate				
	5. Nyawa	full	No changes made to communicate				

Table 36 Dialect mapping result of Sekute group interview for Toka-Leya varieties

The only differences were that the Mukuni Chiefdom separated Sipatunyana varieties into east and west and said that the Nyawa variety had less than full comprehension and adjustments were needed with the Nyawa variety to communicate.

3.5.2. With other Languages

According to the group interviews there are six languages that border the five Toka-Leya chiefdoms. The following map illustrates the approximate location of these bordering languages.

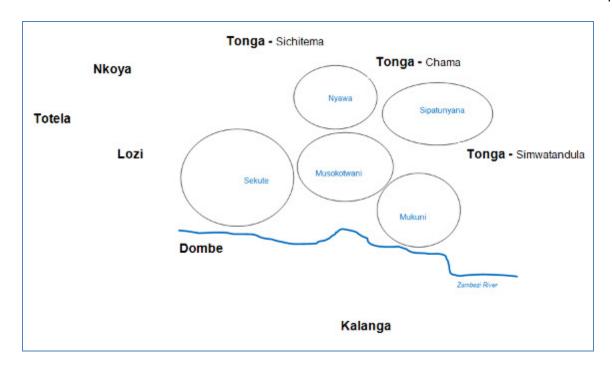


Figure 16: Approximate locations of surrounding languages according to group interviews. The Zambezi River is shown in blue.

In comparing Toka-Leya with neighboring languages the Leya of Shumgu ward gave the following responses.

	FFERENT INGAUGES	How much do Toka-Leya speakers understand of the other language?	When you meet someone of the other language do you, they, or both of you change the way you speak in order to communicate?
1.	Tonga of Simwatandule	most	We change the way we speak. They do not change the way they speak.
2.	Tonga of Chama	most	We change the way we speak. They do not change the way they speak.
3.	Tonga of Sichitema	half	We change the way we speak. They do not change the way they speak.
4.	Lozi	most	We change the way we speak. They do not change the way they speak.
5.	Totela	little	We change the way we speak. They change the way they speak.
6.	Kalanga of Zimbabwe	some	We do not change the way we speak. They change the way they speak.

 Table 37
 Dialect mapping result of Mukuni Group Interview for other languages.

	FERENT NGAUGES	How much do Toka-Leya speakers understand of the other language?	When you meet someone of the other language do you, they, or both of you change the way you speak in order to communicate?					
1.	Lozi - Mlandi	some	We change the way we speak. They do not change the way they speak.					
2.	Lozi- Namibia	some	We change the way we speak. They do not change the way they speak.					
3.	Nkoya - Mamba	most	No changes made to communicate					
4.	Dombe of Zimbabwe	little	No changes made to communicate					

 Table 38
 Dialect mapping result of Sekute Group Interview for other languages.

It is obviously expected that the Toka-Leya of the east, Mukuni Chiefdom, are more familiar with other languages on the Toka-Leya eastern border and included details about them that the Sekute Toka-Leya group of the western side did not. Likewise the Toka-Leya of the west, Sekute Chiefdom included more details regarding the western border but omitted information about the languages of the eastern border. We perceived from the results that Toka-Leya speakers of Mukuni and Sekute chiefdoms interact in the central area around Livingstone but do not venture far or often into each other's areas.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the data obtained in this survey we were able to formulate several conclusions for each of the areas studied.

4.1. Language Vitality and Viability

For the majority of the Toka-Leya people their language is essential for them and is used in all domains of daily life. Ninety-six percent of adults speak only Toka-Leya to their children at home and the children respond back to their parents in Toka-Leya ad well. When Toka-Leya people gather together, 100% of them said that the Toka-Leya language alone is used. The people are proud of their language but there are no materials written in Toka-Leya and in some domains, such as religion, languages like Lozi or Tonga which have a complete Bible, are more commonly used.

4.2. Language Shift

Toka-Leya does show signs of loss to other languages like Tonga, Chewa, Lozi and English in some aspects of life, such as in education and in daily life in large towns. Almost one third of Toka-Leya adults intermarry with people of other language groups. All of those involved in the group interviews said that their grandchildren would speak Toka-Leya. Only 26% percent of adults believed that children are leaving Toka-Leya to use other languages. This is a relatively low number compared other minority languages in Zambia which experience greater pressures of language shift.

The data overall indicates that Toka-Leya is more stable than some other threatened minority languages in Zambia but a language development project is important at this time if Toka-Leya is to remain viable for very long and not lose more ground to its neighboring languages. A language development project ensures that the people would have a better prospect of preserving their language and bring more recognition to it as a separate and distinct language.

4.3. Dialectology

The Mukuni variant of Toka-Leya is the most often named accepted standard form of the language by the people and evidence from the word list supports this as well. While there are certain to be differences between the varieties, a major challenge for any language development project would be the reconciling the differences between the different forms of the language and the acceptability of a standard Toka-Leya that can be used throughout the chiefdoms.

4.4. Relationship to other Languages

Toka-Leya has the highest lexical similarity with Tonga at 62% than with any other language. Both Tonga and Toka-Leya seem to have originated from Lenje, but how or when Tonga was formed is unclear. The Toka-Leya oral history clearly claims that Leya separated from Lenje and today Toka-Leya and Lenje share 49% lexical similarity. Toka-Leya has only 17% lexical similarity with Lozi with which it has no historical connections but does share a common border.

4.5. Church Response

Responses to the surveys indicate that the Toka-Leya people would use literature and Toka-Leya Scriptures would be of great benefit to them. The church leaders that we interviewed during our survey expressed an interest in having Toka-Leya Scriptures and a showed a willingness to participate in a language project.

The use of the vernacular languages in written or audio materials may not stem the influence of other languages like Tonga but that is not the goal of a language development project. Rather development of the Toka-Leya language would help raise the literacy level, give greater recognition to the Toka-Leya language and help the Toka-Leya people transition to other languages like Tonga or English while positively affecting the survival of their language.

The Toka-Leya community would likely respond well to a project but much needs to be done in this area to educate the people so that they would understand their important role in supporting the project. We suggest that a program of church education and mobilization for the support of the project begin immediately with the guidance of an organization like Partners in Bible Translation. Support of the project needs to be sought not only from the church but from all who are interested in the Toka-Leya language.

It is important that the support of the project be centered among Toka-Leya people themselves for it to be sustained. Without local support and involvement in the project, there may not be a wide acceptance and use of materials that are necessary for sustaining long term advances in literacy and education.

4.6. Recommendations

Based on the results showing that the Toka-Leya language is a vital part of daily life for a significant percentage of the population, the following is recommended:

- That the Toka-Leya people convene to discuss the present situation of the Toka-Leya language and the language's expected slow decline over future generations. To not take action at this time would be to allow Toka-Leya culture and the Toka-Leya language to further degenerate. They should invite qualified linguists such as those available from Partners in Bible Translation to help guide their discussions and planning.
- Discussions should include the level of commitment that the people would need to put forward to support of a language development project.
- Discussions should include what are the goals of the project. These can include the creation of literacy primers in Toka-Leya, small booklets of interest to the Toka-Leya people such as folktales or their history, the translation of Scriptures such as portions of the Old Testament or the Gospel of Luke, for example. Depending upon the reception of these Scripture portions, as well as the continued support of the Toka-Leya people, efforts could later be made to translate the entire Bible or other materials in Toka-Leya.

• Further work needs to be done to determine the grammatical similarities of Toka-Leya with Tonga or Lenje. Such a study of the grammar can greatly help a translation project. For example, linguists today are able to do adaptations that would assist Toka-Leya translators to produce a draft copy of translated Scriptures fairly quickly.

Should there be enough local support for a language project, some factors related to the location of the project should be considered. The Toka-Leya community needs to also discuss these issues:

- The acceptance of the Mukuni variant as the standard form of the language across different chiefdoms.
- What location is best suitable for a professional work environment, including access to reliable electricity and communication networks (phone and Internet services)?
- What location would allow the highest degree of community ownership and access to all the Toka-Leya areas?

It is important to note that the location where most of the translation work occurs does not limit the participation of other areas. There are needs for local revision committees, literacy centers and other related project activities to occur throughout the Toka-Leya areas.

 Toka-Leya should be listed in the Ethnologue as a separate language and not as a dialect of Tonga.

5. NOTES

5.1. Distribution of Results

The results of the survey will be distributed to the following Toka-Leya leaders:

Chief Mukuni Chief Sekute Chief Musukotwani Chief Sipatunyana Chief Nyawa

A copy will be given to the Office of the President, Provincial Administration, Livingstone, Kazungula, Zimba and Kalomo. Copies will be submitted to the University of Zambia Linguistics and Literature Department, the Bible Society of Zambia and also to the headmen in those centers that helped us during the survey. Copies may also be available to interested agencies upon requests.

Some information will be made available to the public by making our survey results available in public libraries or the internet.

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APPENDIX A

125 TOKA-LEYA VILLAGES BY CHIEFDOM

	Muku	ni		Mı	usokotwane			Sekute		;	Sipatunyana
1.	Chiababi	32.	Siamvula	1.	Chazanga	1.	Bovu	32.	Shantumbo	1.	Dindi
2.	Chianika	33.	Sianjabe	2.	Ikashakala	2.	Chalimbana	33.	Sialwindi	2.	Dunka
3.	Chibalani	34.	Sianjase	3.	Kambole	3.	Chibomba	34.	Siamate	3.	Kalumbasianene
4.	Chibule	35.	Siankondo	4.	Kanki	4.	Kabika	35.	Siankwanzi	4.	Kanchele
5.	Chilanga	36.	Siazibola	5.	Kazala	5.	Kabuyani	36.	Siantumbu	5.	Mabuyu
6.	Gundu Zone	37.	Sichiasa	6.	Khuli	6.	Kambongo	37.	Siba luboi	6.	Mukwahara
7.	Gwalula	38.	Sichilobe	7.	Maduli	7.	Kasala	38.	Sikokwani	7.	Mungala
8.	Jafuta	39.	Siejoba	8.	Maria	8.	Keenga	39.	Silishebo.	8.	Mungulu
9.	Kafekwa	40.	Silozi	9.	Musokotwane	9.	Kookwe	40.	Simulinda	9.	Mutangani
10.	Kakamba	41.	Silozi	10.	Nyambe	10.	Kooma	41.	Zweenga	10.	Namaduki
11.	Kandu	42.	Tembo	11.	Siakwayi	11.	Liyemo			11.	Siamenja
12.	Kapinde	43.	Zangala	12.	Sialwandi	12.	Lubango			12.	Siansuma
13.	Kebeka			13.	Siamwalu	13.	Lubingo			13.	Siloka
14.	Lutwa			14.	Sianengo	14.	Mabole			14.	Sioni
15.	Mandandi			15.	Siantalusya	15.	Maibwe			15.	Zimba hill
16.	Mchinga			16.	Sikabimba	16.	Majwanga				
17.	Mpotola			17.	Simaroro	17.	Mandwanga				
18.	Mtonga			18.	Simasiku	18.	Miyibwe				
19.	Mubila			19.	Similitani	19.	Molosi				
20.	Mubwana			20.	Simuyani	20.	Mooka				
21.	Mukakahani			21.	Syachuma	21.	Mubalu				
22.	Mukuni			22.	Syamu	22.	Mufiya				
23.	Muntusweni			23.	Syamunengo	23.	Mungandi				
24.	Namutongo			24.	Syamwalu	24.	Musiya				
25.	Namuyala			25.	Syantalusya	25.	Mutoiwa				
26.	Ndele			26.	Wamundila	26.	Mutoyuwa				
27.	Ng'andu					27.	Nalungwana				
28.	Nsongwe - Manjeledi					28.	Nawalizazi				
29.	Siachalwa					29.	Nzwenga				
30.	Siachuma					30.	Paulo				
31.	Siamapa					31.	Sekute				
32.	Siamutele					32.	Shakwazi				

<u>APPENDIX B</u>
ETHNIC COMPOSITION OF TOKA-LEYA VILLAGES

Chiefdom	Villaga	Village				F	Percentage	e of each l	anguage	group			
Chleidom	Village	Population	Leya	Lozi	Luvale	Tonga	Chewa	Nkoya	Ngoni	Tumbuka	Ndebele	Bemba	Unclassified
	Chibalani	224	99	0	0	0	0	0	0	0	1	0	C
	Chibule	200	95	0	0	0	5	0	0	0	0	0	C
	Chilanga	455	98	0	0	1	0	0	0	0	1	0	C
	Gundu Zone	7000	95	1	0.5	1	0	0	1	0	0.5	1	(
	Gwalula	310	95	1	0.5	1	0	0	1	0	0.5	1	(
	Jafuta	182	100	0	0	0	0	0	0	0	0	0	
	Kafekwa	224	100	0	0	0	0	0	0	0	0	0	(
	Kakamba	77	98	1	0	0	0	0	0	0	1	0	(
	Kazala	170	80	3	0	15	0	0	0	0	0	2	(
	Mandandi	84	100	0	0	0	0	0	0	0	0	0	(
Mukuni	Manjeledi	500	55	30	5	5	0	0	0	0	0	0	į
	Mchinga	707	93	2	2	1	0	1	0	1	0	0	
	Mpotola	1000	85	7	0	0	4	0	0	0	0	4	
	Mtonga	448	94	0	0	2	0	0	0	0	1	0	;
	Mukuni Village	8000	80	10	2	0	0	0	5	0	0	3	,
	Ndele	434	99	0	0	0	0	0	0	0	1	0	
	Siajoba	150	80	20	0	0	0	0	0	0	0	0	
	Siankondo	140	100	0	0	0	0	0	0	0	0	0	(
	Siazibola	224	100	0	0	0	0	0	0	0	0	0	
	Siejoba	238	98	0	0	1	0	0	0	0	1	0	
	Silozi	70	100	0	0	0	0	0	0	0	0	0	
	Ikashakala	1000	75	7	5	10	3	0	0	0	0	0	
	Siamanengo	60	90	0	0	10	0	0	0	0	0	0	
Musokotwane	Siamwalu	200	75	7	5	10	3	0	0	0	0	0	
Maconomano	Simasiku	1000	93	0	0	7	0	0	0	0	0	0	
	Syakwayi	150	100	0	0	0	0	0	0	0	0	0	
	Syamwalu	150	100	0	0	0	0	0	0	0	0	0	
	Chibombo	70	100	0	0	0	0	0	0	0	0	0	
	Keenga	30	100	0	0	0	0	0	0	0	0	0	
	Maibwe	64	75	25	0	0	0	0	0	0	0	0	
	Molosi	48	100	0	0	0	0	0	0	0	0	0	
Sekute	Mooka	50	90	5	0	5	0	0	0	0	0	0	
	Mubalu	192	100	0	0	0	0	0	0	0	0	0	
	Mutoiwa	35	90	10	0	0	0	0	0	0	0	0	
	Nalungwana	120	80	20	0	0	0	0	0	0	0	0	
	Sekute Village	300	92	2	2	2	0	0	0	0	2	0	

	Shakwazi	250	80	0	0	0	15	0	0	0	0	5	0
	Sikokwani	208	100	0	0	0	0	0	0	0	0	0	0
	Dunka	800	75	15	5	0	5	0	0	0	0	0	0
Sipatunyana	Sikanchele	1200	70	0	20	0	5	0	0	0	0	5	0
Oipaturiyana	Siloka	500	60	5	20	0	15	0	0	0	0	0	0
	Simwami	600	60	0	20	0	10	0	0	0	0	10	0
Average		663	89	4	2	2	2	<1%	<1%	<1%	<1%	1	0

5.3. Endnotes

¹ A language development project would include the promotion of an alphabet in the vernacular language, a basic orthography statement and the production of literacy materials such as primers for first and second language readers. The language community should select the topics and the media of materials that they find most helpful. Mother-tongue authorship could also be encouraged. Printed and audio materials produced in the vernacular language could include health books, folk tales, agricultural information or whatever may be helpful to the people as well as the translation of the Bible or Bible portions.

The dialect of the language spoken in Zambia (E. Province and Lusaka) is of course different from that in Malawi (due to local language "interference" and mixing), and the orthographies are somewhat different perhaps to express national identities. The Nyanja language is spoken by a number of different ethnic groups.

¹⁸ 2010 Census has the following breakdown:

	Ethnicity	Predominant Language of Communication
Chewa	929,842	499,671
Nyanja	50,761	1,643,686
Total	980,603	2,143,357

¹⁹ http://www.tothevictoriafalls.com/vfpages/people/tokaleya.html

² Langworthy. 1972. p. 23.

³ Vogel. 1975 p 47.

⁴ Siloka & Mukuni. 2013. p. 46.

⁵ Ibid p. 34.

⁶ Ibid p. 82.

⁷ Ibid pp. 13-14.

⁸ http://www.tothevictoriafalls.com/vfpages/people/tokaleya.html

⁹ http://en.wikipedia.org/wiki/Southern_Province,_Zambia

¹⁰ http://en.wikipedia.org/wiki/Southern_Province,_Zambia

¹¹ International Travel Maps Zambia http://www.itmb.com.

¹² http://en.wikipedia.org/wiki/Southern_Province,_Zambia

http://www.tothevictoriafalls.com/vfpages/people/tokaleya.html

¹⁴ Nyanja is a trade language in Zambia and there are no tribal Nyanja chiefs or traditional ethnic systems whereby one could claim to be from a Nyanja ethnic origin. Nevertheless this is the data as collected by the Zambia Central Statistics Office.

¹⁵ http://www.indexmundi.com/zambia/demographics_profile.html

¹⁶ EGIDS is the Expanded Graded Intergenerational Disruption Scale which is an attempt to measure all of the world's languages in relation to their vitality and level of endangerment. A language can be evaluated in terms of the EGIDS by answering five key questions regarding the identity function, vehicularity, state of intergenerational language transmission, literacy acquisition status, and a societal profile of generational language use. (Lewis 2009).

¹⁷ Dr. Ernst Wendland, Personal communication: Chewa and Nyanja are essentially the same language (or different dialects of the same)--known as Chichewa (the ethnic group name) in Malawi and as ciNyanja in Zambia, the "language of the lake" (Malawi/Nyasaland). During Central African Federation days, pre-1964, the term ciNyanja was used in both Malawi (Nyasaland) and Zambia (N. Rhodesia).

²⁰ Munokalya and Mukuni (2013) p 49, 57-58.

²¹ This information is gathered from personal interview with Toka-Leya people in the course of our research.

²² Munokalya and Mukuni (2013) p 55-66.

For more details on sampling see Bergman, T. G. 1990, Wetherill, G. Barrie, 1995, and Hasselbring, Suc. 1996.

²⁴ Nurse, Derek p.1

²⁵ Individual questionnaire: question number 3.1a.

²⁶ Individual questionnaire: question number 3.1b

²⁷ Individual questionnaire: question number 3.7

²⁸ Individual questionnaire: question number 3.2a.

²⁹ Individual questionnaire: question number 3.4a.

³⁰ http://www.sil.org/language-assessment/language-vitality

³¹ Individual questionnaire: question number 3.14a.

- ³² Individual questionnaire: question number 3.15a.
- ³³ Individual questionnaire: question number 3.9.
- ³⁴ Individual questionnaire: question number 3.5a.
- ³⁵ Individual questionnaire: question number 3.6.
- ³⁶ Individual questionnaire: question number 3.15b.
 ³⁷ Individual questionnaire: question number 3.5a.
 ³⁸ Individual questionnaire: question number 3.5b.

- ³⁹ Bergman (2001) cites Grimes (1986) who suggested that when a group becomes sufficiently small, they are in danger of being absorbed by a larger population. There is a critical size, below which a language is less likely to maintain itself. This critical population size for Africa is 10,000 language speakers.
- 40 Ravindranath. 2009. p.1
- ⁴¹ Individual questionnaire number 1.4
- ⁴² Individual questionnaire number 1.2d
- ⁴³ Group questionnaire: question number 4.8.
- ⁴⁴ Individual questionnaire: question number 3.12a.
- ⁴⁵ Individual questionnaire: question number 1.2d. Fourteen out of 33 respondents that were married have a Toka-Leya spouse.
- ⁴⁶ Sawka. 2006. Individual questionnaire: question number 3.11b. 11 out of the 12 responses said Nyanja
- ⁴⁷ Since more than one answer was given the percentages can total more than 100%. Individual questionnaire: question number 3.12b.
 ⁴⁸ Group questionnaire 4.8.
- 49 Individual questionnaire: question number 3.12a. 50 Individual questionnaire: question number 1.5b
- ⁵¹ Individual questionnaire: question number 3.16a
- ⁵² Group questionnaire: question number 4.3, 4.4.
- ⁵³ Individual questionnaire: question number 3.16a, b, c, 3.17.
- ⁵⁴ Group questionnaire: question 4.1 & 4.2.
- ⁵⁵ Group questionnaire 4.8.
- ⁵⁶ Village leader questionnaire: question number 7.3.
- ⁵⁷ Group questionnaire: question number 4.9, 4.10a.
- ⁵⁸ Group questionnaire: question number 6.1 to 6.2.
- ⁵⁹ Group questionnaire: question number 2.6, 2.8.
- 60 Sawka, August 2013. 61 Sawka, November 2013
- ⁶² Sawka, 2006.
- ⁶³ Sawka, November 2013. p. 34.
- ⁶⁴ In the Kunda language the Nsefu variety is considered the purest form of the language but has the least similarity with all other varieties studied as it has shielded itself from the influence of other languages more than the other varieties did.
- 65 WORDSURV 6.0. 2000 pg. 32.
- ⁶⁶ Group questionnaire: question 2.10a