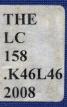
# NAIROBI EVANGELICAL GRADUATE SCHOOL OF THEOLOGY

The Impact of Tirrim Adult Functional Literacy Among The Nomadic Rendille Pastoralists and It's Implications
For Adult Literacy Education

BY
LUKA LOYBOKU LENGEWA

A Thesis Submitted To The Graduate School in Partial Fulfillment of the Requirements for the Degree of Master of Divinity in Educational Studies



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### **Student's Declaration**

# THE IMPACT OF TIRRIM ADULT FUNCTIONAL LITERACY AMONG THE NOMADIC RENDILLE PASTORALISTS AND IT'S IMPLICATIONS FOR ADULT LITERACY EDUCATION

I declare that this is my original work and has not been submitted to any other College or University for academic credit.

The views presented herein are not necessarily those of Nairobi Evangelical Graduate School of Theology or the Examiners.

(Signed) Auffull Luka Loyboku Lengewa

July, 2008

#### **ABSRACT**

Current pursuit of Education For All (EFA) and Millennium Development Goals (MDGs) call for serious attention into literacy and specifically adult literacy education. Such seriousness demand assessments into programmes that carryout literacy work in order to ascertain their level of impact and their contribution to EFA and MDGs.

Compelled by a low level of literacy among the nomadic Rendille pastoralists and their high level of marginalization, the researcher embarked on this study. This study sought to make inquiry into the impact of TIRRIM adult functional literacy (TAFL) among the nomadic Rendille pastoralists and the implication of this to adult literacy education. The study further aimed at exploring how literacy best meets the needs of the Rendille community.

This was an evaluative research study, which employed a quantitative research design. In the research three crucial questions were addressed. Data was gathered from twenty eight individuals through orally administered questionnaires in the Rendille language. The validity of the instrument was determined by a pilot test which was conducted by ten students in the Educational Department at NEGST. Data was statistically analysed and presented based on the research questions and hypotheses. There were four hypotheses which were tested using the Chi-Square test of independence at 0.05 level of significance.

The study revealed that TAFL is highly perceived to be relevant in meeting the needs of the nomadic Rendille pastoralists. The relevance of the programme was perceived only in terms of the programme's ability to meet the needs of the learners. The findings also showed that TAFL impacts its learners through acquisition of various skills through training but the applicability of these skills in daily life highly depends on the level of efficiency obtained on the same skills. The various factors perceived to influence the impact of TAFL were not perceived to be significant according to the respondents. However, the factors were still regarded to be of significant influence on impact based on additional knowledge of the researcher about the literacy programme.

Almighty God who by His mercies and grace I have become literate and to entire Gaal Ren'dille of whom I desire that they become literate.

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#### CHAPTER 1

#### INTRODUCTION

Literacy is one of the outstanding hallmarks of the twenty-first century. More people are exposed to learning how to read and write than ever before. This phenomenon has impacted and contributed to the development and industrialization of this age. In fact in the modern times literacy is used as a yardstick by which personal and national development is measured. The Government of Kenya, realizing the crucial relation between literacy and development, declared a war against illiteracy from the onset of its independence. The following are words of the recent survey on Kenya National Adult Literacy,

Since independence Kenya has placed adult literacy on its development agenda as part of the country's general policy of bringing about accelerated and sustainable socio-economic development. Over the years, Kenya has recognized the important role of adult literacy and education in maximizing the human resource potential. <sup>2</sup>

From the above statement it is evident that the Government of Kenya has tried to make provision for education to all, including adults. This has significantly impacted the development of the country economically, socially, politically, culturally and spiritually.

The Rendille community is one of the small groups of marginalized communities in the northern part of Kenya. This community is entirely dependent on

<sup>&</sup>lt;sup>1</sup> Mulira Enoch.E.K, *Adult Literacy and Development. A Handbook for Teachers and Adults.* Nairobi: East Africa Literature Bureau, 1975, 7.

<sup>&</sup>lt;sup>2</sup>Kenya National Bureau of Statistics. Yahoo search available from http://www.culture.go.ke/images/stories/pdf/adultreport1.pdf. Internet accessed on June 2007.

its livestock: camels, goats and sheep for their livelihood. Formal education is not well embraced among this community. In fact during the colonial period the Government intervened to forcefully enrol some nomadic children in school. The community held the belief that children enrolled in formal education would never return home alive. So, each of their families was compensated by other clan members with livestock.

In the late 1960s there were very few Rendille pupils (perhaps 20) sent to school and the Government provided the children with free books, food, and boarding school by missionaries. In 1970 a small number of Rendille saw the importance of school education. With the help of missionaries, both Protestant and Catholic, a good number of Rendille were educated in primary schools and a few entered secondary schools.<sup>3</sup>

Due to the above phenomenon of resisting formal education, most of the older people have not had an opportunity to go to school and the literacy rate among the Rendille is quite low. In fact only 1% of the entire population of approximately 45,000 is considered literate. However, through the efforts of The Integrated Rendille Rehabilitation Impacting Mothers (TIRRIM) project, some people were taught how to read and write the Rendille language.

The goal of TIRRIM Adult Functional Literacy (TAFL) is to make every Rendille person literate and be able to,<sup>5</sup>

i) Read the Bible in the Rendille language fluently.

<sup>&</sup>lt;sup>3</sup> Yahoo search available from http://www.rendille.com/education%20history.html. Cite access on 27<sup>th</sup> June 2007

<sup>&</sup>lt;sup>4</sup>Jenkins Orville Boyd, and an Anonymous Contributor, Yahoo search available from http:// strategy leader .org/ profiles/rendille.html. 2000. 1. Cite access on 28<sup>th</sup> June 2007.

<sup>&</sup>lt;sup>5</sup> Swanepoel Lynne, *A Comprehensive and Functional Literacy for the Nomadic Rendille Pastoralists*: Funding Proposal submitted to BTL, 1996, (Unpublished work), 1.

- ii) Write in the Rendille language.
- iii) Be skilled in basic veterinary practices.
- iv) Be skilled in healthcare.
- v) Do basic budgeting and bookkeeping.
- vi) Understand elementary geography and environmental issues affecting the Rendille.
- vii) Understand the basic civic structures and history of Kenya.
- viii) Understand the basic Christian doctrines as contained in the Bible.

#### Statement of Problem

Illiteracy is said to be a world problem. UNESCO carried out research and came up with figures stating that eight out of ten adults in Africa are unable to read and write. Despite the concerted efforts to promote adult literacy by its Government, Non Governmental Organizations, Community Based Organizations and other stakeholders, Kenya, for example, still has to grapple with large numbers of illiterate and semi-literate citizens. It is estimated that 4.2 million adult Kenyans are illiterate, two thirds of that number being women. There are a number of major factors that have led to this large number of illiterates in Kenya. These are:

- 1. Lack of access to formal education.
- 2. Low retention rates by the formal education system.
- 3. A high poverty index.

The TIRRIM project works among the Rendille community, the majority of whom is illiterate. The programme has been teaching adults since 1990. The goal of

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<sup>&</sup>lt;sup>6</sup> Republic of Kenya & UNESCO. Challenges of Implementing Free Primary Education in Kenya. Assessment Report. Nairobi: UNESCO, 2004, 2.

<sup>7</sup> Ibid.

the programme is to address community felt needs through functional literacy in order to reduce poverty and preserve Rendille culture and fragile environment. The goal of the programme is also to transform the often destitute and uneducated desert nomads and make them independent, profitable and knowledgeable livestock owners, who are able to live self-sufficient lives in a part of Africa where so many are desperately poor and starving.<sup>8</sup>

The intention of this research is to inquire into the extent to which TAFL has been successful in achieving its aforementioned goals in impacting the lives of its learners. The study aspires to assess the overall success of TAFL and investigate whether or not it is achieving these goals. The researcher hopes that the findings of this study will help TAFL to understand its level of impact and provide it with an impetus to improve where necessary.

# Purpose of the Research

The purposes of this study are to assess the overall success of TAFL and to investigate whether or not the programme has been successful in achieving its goals in impacting its learners and then make recommendations to the implementers and the planners of the literacy programme on the basis of the conclusion of the study.

### Significance of the Research

The significance of this study was first and foremost to investigate if literacy is what the nomadic Rendille Pastoralists actually need. The study also evaluated the extent to which TAFL meets the felt needs of the nomadic Rendille pastoralists through Adult Functional Literacy.

<sup>&</sup>lt;sup>8</sup> Swanepoel, 7.

With the influence of Education For All (EFA) and Millennium Development goals (MDGs) dated to be achieved by 2015, adult literacy has become the core of education and especially EFA and also as an effective method of implementing MDGs. However, most of the programmes have too often fallen short of meeting educational needs of nomads because of the specific challenges like high mobility posed by the nomadic lifestyle. This study evaluated how successful TIRRIM programme is in implementing EFA and MDGs. In the context of a renewed commitment to Education For All (EFA) at Dakar, this study examined the impact of the TIRRIM Project in providing educational services to nomadic Rendille pastoralists. The study provided an insight into the challenges, constraints and opportunities for using education as part of an intersectoral approach to meet the development needs of Rendille community in particular and nomadic communities in general.

The findings of this research will facilitate the lobbying of other literacy organizations to pursue Adult Functional Literacy programmes among the other marginalized societies of Kenya as viable tools to impact lives. The findings will also help in judging the viability of TIRRIM Adult Functional Literacy and also aid the project to establish a well-argued basis to merit continued support from its donors. The findings of the study will help the curriculum designers to evaluate the objectives of the programme in the light of its relevance to the needs of adult learners. Last but not the least; the study will also contribute to the area of knowledge in adult literacy education.

<sup>&</sup>lt;sup>9</sup> EFA, Monitoring Report. *Education For All: Education for Life*. France: UNESCO Publishing, 2006. 28.

<sup>10</sup> Ibid.

# Research Questions

- **RQ1**. In what ways do graduates perceive the relevance of TAFL in meeting the needs of nomadic pastoralists?
- **RQ2**. What skills for life, if any, do graduates acquire as a result of their training at TAFL?
- **RQ3**. What are the factors, if any, which are responsible for TAFL's impact on the graduates?

# Research Hypotheses

In order to test the impact of TAFL among nomadic Rendille pastoralists, the following null hypotheses were used in this study:

- $\mathbf{H_0}$ : 1. Differences in age will not significantly affect TAFL's impact on the graduates.
- H<sub>o</sub>: 2. Differences in gender will not significantly affect TAFL's impact on the graduates.
- $H_0$ : 3. Differences in occupations of the graduates will not significantly affect TAFLs' impact on the graduates.
- $H_0$ : 4. There will be no significant differences in the level of impact of different courses offered at TAFL on the graduates.

#### Limitations

An evaluative stud y intended to ascertain the relevance and the impact of an educational programme could be very elaborate if all the facets involved were considered. This research was limited to the impact of TAFL in the light of how it

impacts the lives of its graduates by meeting their felt needs. Thus the issues that were assessed in this study in relation to the relevance of TAFL and the impact of the programme were attitudes of the graduates toward the programme, skills acquired by the graduate and the extent of efficiency in the skill acquired.

The study was limited to summative evaluation of the programme and was not concerned with the formative evaluation.

#### Delimitations

This study is limited to a local TAFL among the nomadic pastoralists of Northern Kenya and it might not be necessarily a true representation of Adult Functional Literacy programmes in other parts of Kenya. TAFL is under the auspices of Africa Inland Church and it is mother-tongue literacy, so the findings of the impact in this project may not also be a true representation of Adult Functional Literacy in a secular setting or even taught in other languages such as Swahili or English.

### Definition of Key Terms

**TIRRIM** - This term is the Rendille word for 'kingpost'. The project adopted this word to illustrate its kingpost role in developing the community. The term is also an acronym that stands for **The Integrated Rendille Rehabilitation Impacting Mothers**.

TAFL - Stands for TIRRIM Adult Functional Literacy.

**Nomad** - Refers to a community that moves from place to place in search of pasture and water for their livestock<sup>11</sup>

**Pastoralist** - is a term used interchangeably with nomadism. It reflects a lifestyle based upon maintenance of herds of animals that depend on natural vegetation for their food. <sup>12</sup>

Adult - Grown up, having reached the age of maturity, fully developed. 13

**Functional Literacy** - is the process and content of learning to read and write to the preparation for work and vocational training, as well as a means of increasing the productivity of the individual. <sup>14</sup>

<sup>&</sup>lt;sup>11</sup> Fratkin Eliot M., Roth Eric Abella, 1999. *When Nomads Settle: The Effects of Commoditization, Nutritional Change, and Formal Education* [Journal online]. *Current Anthropology*, 1999, Vol. 40 Issue 5, available from http:rehab/negst.elibrary. Internet accessed on the 17<sup>th</sup> July, 2006.

<sup>&</sup>lt;sup>12</sup> Car-Hill Roy and Edwina Peart, *The Education of Nomadic Peoples in East Africa. (Djibouti, Eritrea, Ethiopia, Kenya, Tanzania, Uganda)* Review of the related Literature. [article online] Nairobi: UNESCO Publishing, Available from http://www.unesco.org/iiep/. Internet accessed on 13<sup>th</sup> July 2007.

<sup>13</sup> Brown Lesley, *The New Shorter Oxford English Dictionary*. Oxford: Clarendon Press, 1993, 30.

<sup>&</sup>lt;sup>14</sup> Verhoeven, Ludo (ed.) Functional Literacy. Theoretical Issues and Educational Implications. Amsterdam: John Benjamins Publishing House, 1994, 6.

#### **CHAPTER 2**

#### REVIEW OF THE RELATED LITERATURE

#### Substantive Literature

This chapter contains a review of substantive literature relevant to the topic studied. The essence of this chapter is to incorporate this study with current thinking of the experts on Adult Functional Literacy.

# Development of Adult Literacy in Kenya

The Government of Kenya has been in the forefront in promoting adult literacy through the Department of Adult Literacy in the Ministry of Labour and Human Resource Development. Adult literacy programme was started in Kenya in 1979 with clearly defined goals such as to eradicate illiteracy by providing basic skills of reading, writing and numeracy and sustaining literacy through continuing education 15. However, adult literacy programmes are often faced with hurdles that tend to challenge efforts to reach all the corners of the country through the Government's administrative system. 16 Thus in some parts of the country the Government efforts of promoting literacy are supplemented by the International organizations, and Non-Governmental organizations. 17

<sup>&</sup>lt;sup>15</sup> n.a. International Conference in Education. Fourth Session Geneva; 3<sup>rd</sup> – 8<sup>th</sup>. October 1994.
Development o Education 1993-1994. National Report from Kenya, July 1994. Nairobi: Ministry of Education, 1994, 25.

<sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Mwangi Anne, Strengthening livelihoods with Literacy: Cases from Kenya. Yahoo search available from http://www.iiz-de/englisch/Publikationen/Weltbank/anahang4.htm.Internet accessed on 14th October 2007.

# **Education For All (EFA)**

Literacy is at the core of education and specifically the Education For All (EFA) programme. <sup>18</sup> The first world conference on Education For All (EFA) was held in Jomtein in 1990. It was affirmed by World Education Forum, meeting in Dakar in 2000. Delegates at the meeting declared that by 2015, all children of primary school age would participate in free schooling of acceptable quality and that gender disparities in schooling will be eliminated. Adult literacy was to be halved, early childhood education and programmes for out-of-school youth would be greatly increased, and all aspects of education will be improved. The first two of the objectives were accepted with wording that is different but not in intent as two of the Millennium Development Goals (MDGs) to which all countries are committed. <sup>19</sup> Adult literacy then is without doubt an instrumental means of realizing both the EFA and MDGs.

# **Nomadic Pastoralists and Education**

It is estimated that nomads constitute 6 per cent of African population and can be found in no less that 20 African countries. Nomadic populations are generally under the category of the disadvantaged and hard-to-reach groups, and this presents a particular challenge for development in general and education in particular. Because of this most of the Nomadic pastoralists are often marginalized. However, in the spirit of promoting Education For All (EFA) both international and Non-Governmental organizations are trying to develop the nomadic pastoralists through education.

Unfortunately National policies and programmes that have given some attention to the social-economic needs of nomadic communities have too often fallen short of meeting

<sup>&</sup>lt;sup>18</sup> EFA, 31.

<sup>&</sup>lt;sup>19</sup> Yahoo search available from http://portal.unesco.org/education/en/ev.php. internet accessed on October 15<sup>th</sup> 2007

ELICAL GMADUAMA

educational needs of nomads because of the specific challenges posed by the nomadic lifestyle. These challenges are harsh, precarious conditions, and high mobility.<sup>20</sup> The other reason is the failure of educational provisions to respond appropriately to the nomadic way of life, to the nomads' traditional culture and their need to retain flexibility in dealing with changing and possibly adverse circumstances such as droughts, above other needs. There are debates as to the extent to which formal education is relevant to the nomadic pastoralists and how much it can add to their already existing knowledge.<sup>21</sup> The other reason why formal education often fails among nomads is probably because of the mistrust they have for formal education. Parents among most of nomadic communities believe that education will spoil their children and lead them away from their most treasured traditional values and lifestyles.<sup>22</sup>

Any educational programme that seeks to succeed and meet the needs of the nomadic people should endeavor to take into account the peculiarities of the nomadic people which include their needs and lifestyle and develop curriculum that seek to relevantly respond to this. It should not be assumed that curriculum developed for sedentary communities will definitely be also appropriate for nomadic people and can be imported wholesale. This might just be one reason why the above mentioned programmes have failed.

<sup>20</sup> Car-Hill Roy, and Edwina Peart, *The Education of Nomadic Peoples in East Africa. (Djibouti, Eritrea, Ethiopia, Kenya, Tanzania, Uganda)* Review of the Related Literature. [article online] Nairobi: UNESCO Publishing. Available from http://www.unesco.org/iiep/.2005.

<sup>&</sup>lt;sup>21</sup> Ibid. 21

<sup>&</sup>lt;sup>22</sup> Car-Hill Roy, and Edwina Peart, 17.

# **Definition of Functional Literacy**

Functional literacy has become a popular approach to literacy in recent times. This form of literacy is based on the assumption of a strong link between literacy and social development. UNESCO claims that literacy, via the attitudes and cognitive skills that it fosters in the individuals, prompts economic development and prosperity in the general society. Literacy then becomes an essential first step in the attempt to develop 'underdeveloped' countries. The aim was to eliminate poverty, disease, and so-called 'traditional but unproductive' forms of social organization.<sup>23</sup>

From the above discussion functional literacy can then be defined as the type of literacy training operation that is centered on development and integrated in it. It is literacy that is not confined to learning elementary mechanisms of reading, writing and arithmetic but gives the learners both the general and technical knowledge necessary for the individual, vocational, social, and cultural training through development.<sup>24</sup>

Functional literacy links reading, writing, and development closely to the ways in which an average person uses literacy in his own culture. UNESCO adopted the idea of functional literacy programmes focused on teaching literacy while teaching health, agriculture or some other development programmes.<sup>25</sup> UNESCO used the term functional literacy in 1960 to mean

...the process and content of learning to read and write to the preparation for work and vocational training, as well as a means of increasing the productivity of the individual. <sup>26</sup>

<sup>&</sup>lt;sup>23</sup> Barton David, *Literacy: An Introduction to the Ecology of Written Language*. USA, 1994,192.

<sup>&</sup>lt;sup>24</sup> Furter Pierre, *Possibilities and Limitations of Functional Literacy. Iranian Experiment.* France: UNESCO Publishing, 1973, 13.

<sup>&</sup>lt;sup>25</sup> Waters Glenys, *Local Literacies: Theory and Practice*. Dallas: Summer Institute of Linguistics, 1998, 6.

<sup>&</sup>lt;sup>26</sup> Verhoeven, 6.

UNESCO further says that a person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the communities development. <sup>27</sup>

The meaning of functional literacy has changed over the years. It has become more and more closely tied in with economics. Today functional literacy programmes have three curriculum components: literacy, functionality and awareness; with economics still being the major focus.<sup>28</sup>

Gray, an authority in the subject of functional literacy says that someone is functionally literate if they are able to engage effectively in all those activities in which literacy is normally assumed in (their) culture or group.<sup>29</sup> This definition refers to the normal uses of literacy. However, the definition still fits well even among non-literate groups because literacy in this case goes beyond a mere acquisition of reading and writing skills to other skills that impact life holistically.

# **Proponents of Adult Functional Literacy**

Paulo Freire - 'literacy as consciousness raising'

Freire is one of the well known proponents of adult functional literacy. He is best known for his influential role in the development of REFLECT adult literacy programme. His thoughts and vision help in clarifying many complicated questions related to life, learning and liberation. <sup>30</sup> The central premise of Freire's theory is that

<sup>&</sup>lt;sup>27</sup> Bhola, H. S. *A Source Book for Literacy Work: Perspective from the Grassroots.* Bristol: UNESCO Publishing, 1994, 29.

<sup>&</sup>lt;sup>28</sup> Bhola, 397.

<sup>&</sup>lt;sup>29</sup> Barton, 193.

<sup>&</sup>lt;sup>30</sup> Yahoo search available from http://www.reflect-action.org/ enghome.html. Cite accessed on 13 July 2007.

no education is neutral – it can be used for domination/domestication or liberation. Fundamental to Freire's educational philosophy is the notion of collective action and continuing struggle on the part of the oppressed to liberate themselves from all forms of domination. The oppressed are active subjects in their own struggle.<sup>31</sup>

Freire in his endeavor to promote adult literacy greatly condemned the 'banking' concept of education, where the learner is seen as a passive empty deposit into which knowledge and literacy can be invested. He sought to provide the analytical framework and skills for people to define, challenge, change and make their own development depending on their specific cultural and historical context. He perceived literacy as 'consciousness raising'. This means that the learner needs to perceive social, political and economic contradictions and take action against the oppressive elements of reality so that the learners would perceive the reality of oppression, not as a closed world from which there is no exit, but as a limiting situation which they can transform<sup>32</sup> The major criticism of his work is that sometimes he appears to respect non-literate people and regard them as knowledgeable, while at other times he portrays them as powerless and ignorant.

Amartya Sen - 'Literacy as freedom'

Sen is another proponent of functional literacy. He calls on the world to reconceive the development process and place freedom at the centre of its concern. For Sen education is at the centre of this new process, and there is nothing more fundamental in education than literacy-so for him it is entirely logical to reflect on 'literacy as freedom'. In his discussions he attaches the value of literacy to freedom.

<sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> Yahoo search available from http://www.reflect-action.org/ enghome.html.

Literacy for him is an aspect of development that brings about freedom. However, for this freedom to be realized he stresses the crucial place of both the individual and society.<sup>33</sup> For Sen development entails freedom to choose the kind of life which the people have reason to value. On the other hand he sees lack of access to education or health services, insecurity, famine, lack of work and denial of political and civil liberties as 'unfreedom'. Putting emphasis on illiteracy as form of 'unfreedom' Sen says,

A child who is denied the opportunity of elementary schooling is not only deprived as youngster, but also handicapped through life (as young person unable to do certain basic things that rely on reading, writing and arithmetic).<sup>34</sup>

From the above quote it is evident that Sen views illiteracy as a bondage and literacy as means of liberation. He purports that literacy is one of the elements of empowering women to make choices to acquire new freedom. However, for this to happen, literacy must be approached both from individual and societal perspective rather than just individual. This will give more support to freedom.

#### **Criticisms on Functional Literacy**

Functional literacy has been criticized a great deal by different authors for various reasons. Though functional literacy is successfully impacting the lives of adult learners in myriad of ways, we cannot deny that it has also significant weaknesses and that it has often failed. A case in point is the UNESCO Experimental World Literacy Programme.

Many writers in criticizing the functional literacy cite the failure of

Experimental World Programme by UNESCO which was promoted by United

Nations in the late 1960's around the world. The writers argue that by all estimates,

<sup>&</sup>lt;sup>33</sup> Aksornkool Namtip, *Literacy as Freedom: UNESCO Round-table*. Paris: UNESCO Press, 2003.

<sup>34</sup> Aksornkool Namtip,

the Experimental World Literacy Programme was unsuccessful.<sup>35</sup> Jonathan Kozol claimed that UNESCO in its own assessment of the effort "Virtually conceded that it had just wasted thirty-two million dollars". UNESCO writers further explored the failure of the campaigns and speculated about the validity of their original notion of functional literacy. And out of their self analysis, there emerged a more complex understanding and definition of literacy that is more in tune with recent scholarship in literacy. They concluded that literacy is not solely a technical problem, just as lack of development in a country is not just the result of uneducated, illiterate workforce. In order for literacy programmes to be fully functional UNESCO writers said, those programmes must "accord importance to social-cultural, and political growth.<sup>36</sup>

The failure of UNESCO's Experimental World Literacy Programmme can be attributed to the UNESCO's approach to functional literacy then. In its endeavor to promote functional literacy UNESCO developed programmes to teach people based on jobs the students were doing. For example people who were growing cotton might join a special class for cotton growers. In this class they use a primer which talks about the cotton in all the stories, and teaches the student how to grow better cotton.<sup>37</sup>

UNESCO hoped that this sort of programme would give people a strong reason for joining classes. They also hoped that it would increase cotton grown in that particular country. There were other classes for other jobs, for example, factory workers, fishermen, women who want to learn how to sew.<sup>38</sup> This type of approach to functional literacy is excellent but also has some major problems as listed below,<sup>39</sup>

<sup>&</sup>lt;sup>35</sup> Moran, Michael G and Martin James Jacobi. *Research in Basic Writing: A Bibliographic Sourcebook.* Greenwood Press, 2000, 57.

<sup>36</sup> Ibid

<sup>&</sup>lt;sup>37</sup> SIL, *Literacy Handbook*. Younde, 1978, 73.

<sup>38</sup> Ibid.

<sup>&</sup>lt;sup>39</sup> Ibid. 74

- 1. Students are expected to learn two things at once; how to read and how to do their jobs better. In the past the result of this sort of programme have been that students either learn how to grow cotton but not how to read, or how read but not how to grow cotton. It is a sound principle in education that a teacher should teach only one thing at a time.
- 2. It is not practical to make many different reading books in one language. It is very expensive to do this and needs people with special training for each individual job. For example an expert in growing cotton to teach the cotton growers.
- 3. The whole of life does not consist of work; people are interested in other things and want to read about other things. The students should be able to use his/her literacy skills in his/her life, in his/her community and as well as at home.
- 4. The teacher needs to be expert in two things. He needs to be able to teach reading and writing but also needs to know all about growing cotton for example. It is often hard to find teachers who know those two things.

### **Rationale for Adult Functional Literacy**

Most people in our time do not see any rationale for adult education. In fact many will tend to ask themselves what is the place of adult literacy and what is its importance? Governments conducting large-scale literacy will answer this question with "for economic advancement" or "for political solidarity". In the context of Bible translation for illiterate people, which is the focus of this study, this question will be answered "for fluent reading and understanding of the Bible" However emphasizing the crucial place of adult literacy, Mulira says, <sup>41</sup>

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<sup>&</sup>lt;sup>40</sup> Gudschinsky, 1.

The English have a saying, "Look after the pennies and pounds will look after themselves". I could easily say, "Teach the adult and the children will teach themselves". Once you teach the father and the mother, the teaching of the children will be half done; parents are the best teachers. Again if you give functional literacy to parents and plan a good community development programme, you will find that the society will be richer, healthier and more ready to respond to modern demands.

The above quote is a strong case for adult education. Mulira is saying that education of children is entirely dependent on the education of parents. For example among the Rendille community most of the children blame either their lack of education or quality of education on their parents, who have never gone to school. Today when a Rendille man sees a man with a huge amount of wealth in the urban setting, he always exclaims "These are men whose dads have worked hard in school a long time ago when our dads were out with the camels in the desert". This is because most uneducated Rendille parents greatly despise formal education and are hesitant to send their children to school. However, through Adult Functional Literacy this can be turned around by equipping the parents with information about the importance of education that can impact the lives of future generation.

Anna Lorenzatto in Mulari's book, also underscoring the significance of adult education and says,

When an illiterate adult starts a course to learn how to read and write, society itself goes to school with him and with him the school opens its doors to life's experiences, work problems, tragedy of poverty. Society goes to school and learns how to read and write, and this process can release forces which are unknown quantities, and may even be dangerous—with children's education, you cannot rightfully say, when a child starts on a course to learn how to read and write, society itself goes to school.<sup>42</sup>

Concurring with Lorenzatto's quote, the vast majority of Summer Institute of Linguistic (SIL) work in the field of literacy has focused on adult education for two

<sup>&</sup>lt;sup>41</sup> Mulira, 84.

<sup>&</sup>lt;sup>42</sup> Mulira, 84.

reasons. First, adults are the ones who bear the responsibility of seeing to the welfare of their families and communities. They must make decisions having long term consequences for themselves and their children. They need to make use of every possible resource to carry out this responsibility well. Secondly, experience has shown that when children become literate while their parents remain illiterate, a process of social disruption and disorientation is apt to set in, producing confusion on all sides. A culturally sensitive approach to literacy must give serious attention to this issue. A

For example the recent introduction of Universal Free Primary Education by the Government of Kenya has been hailed by some as a great milestone in the Kenyan educational sector. However, the effectiveness of this Free Primary Education might just be a mirage if adult literacy is not taken seriously. Research has shown that literacy rates have a bearing on school enrolment and gender issues. For example, in Bangladesh and Nepal, children's school attendance increased when their parents attended classes. Non-literate parents tend not to value education of their children. With the current high dropout rate, especially for girls, and a number of people relapsing into illiteracy, Universal Primary Education alone cannot eradicate illiteracy without resorting to adult literacy as an additional remedial measure, especially in the short and medium term. In observing the importance of Adult Education Kamanda, the Minister for Sports and Natural Heritage said,

<sup>&</sup>lt;sup>43</sup> Yahoo search available from http://www.sil.org/literacy/lit90/adullite.htm. Cite accessed on 13th July 2007.

<sup>44</sup> Ibid.

<sup>&</sup>lt;sup>45</sup> EFA, 31.

<sup>&</sup>lt;sup>46</sup> Kamanda Maina, http://www.culture.go.ke/index.php?Cite access on 27<sup>th</sup> June 2007.

In this regard, it is particularly important for us to note that the gains of the much celebrated achievements of our Free Primary Education (FPE) programme risk to be lost and achievement of EFA goals will remain elusive if we do not obtain reliable data to plan and revamp the adult literacy programme. The education of parents is key in ensuring the retention of children in schools. Literate parents also provide the much-needed literate environment in the home.<sup>47</sup>

Agreeing with the words of the Minister, there has been either little or no increase in the numbers of school enrollments among the nomadic communities in Northern Kenya. The introduction of Free Primary Education did not automatically change the negative attitude of illiterate parents toward formal education. To date most of the Rendille children age seven and above care for their livestock. Girls and young boys herd the small stock, while warriors (morans) and elder boys care for camels. Most of them have no idea of the existence of Free Primary Education. So to realize the success of Free Primary Education among the nomadic pastoralists, the education of parents, who make vital decisions for their children, is not optional but compulsory. This is because parents who are educated are more likely to send their children to school than those who have not attended school. The same is true for parents who have participated in adult literacy programmes.

Adult literacy is not only beneficial to the adult learner but to the entire nation. Adults are people who are well placed in terms of their varied experiences to impact their nation in various ways. Emphasizing the crucial place of adult literacy in nation building Kamanda, said in one of the recent Kenya National Adult Education seminars,

Ladies and gentlemen, it is a well known fact that illiteracy especially among the adults frustrates Government efforts to bring about socio-economic development. Adults are the producers of a country's goods and services. They are the creators and custodians of our national wealth. Illiteracy however, locks their potential to perform this noble duty effectively. It deprives them of

<sup>&</sup>lt;sup>47</sup> Ibid.

the opportunities to exercise their democratic rights and inhibits their potential to produce and contribute towards the country's economic growth. ... This is a serious matter considering that literacy is a prerequisite that transcends all development sectors including agriculture, health, education, trade and technology, among others. No meaningful progress will be made in any of these sectors if Illiteracy is still prevalent in our society. Illiteracy must therefore be eradicated from our midst. <sup>48</sup>

Agreeing with words of the Minister the only solution to the escalating poverty level in the continent of African might just be through unlocking the indispensable potentials of the adult through literacy. Emphasizing this further in the recent times Functional Adult Literacy has been acknowledged as one of the significant tools for poverty eradication. Studies in Uganda have revealed that the regions that have high levels of illiteracy also have high levels of poverty while adult literacy correlates positively with low levels of poverty. <sup>49</sup> The study goes on to reveal that,

Accelerated growth in the next years can only come from those who are now between 16 and 55 years of age but of whom a large number are illiterate and therefore unable to effectively receive extension messages, initiate local business development ...The Government should seriously consider outreach programmes to attack illiteracy nationwide. This should be done without delay in order to equip Ugandans with basic literacy and numeracy skills to be better able to participate in development activities and bring about growth required for poverty reduction. <sup>50</sup>

The Kenyan Government aping the Ugandan model to attain economic sustainability among its citizens has strived to support private sector and civil society organisations to establish micro-credit schemes to stimulate rural enterprises and reduce poverty. Functional Adult Literacy skills have also been employed to empower rural communities to utilise this money better. <sup>51</sup>

<sup>&</sup>lt;sup>48</sup> Baryayebwa Herbert, *n.d. Functional Literacy and Poverty Eradication. Ministry of Gender, Labor and sociald evelopment, Uganda.* Yahoo search available from http://www.gla.ac.uk/centres/ cradall/docs/ Botswana papers/baryayebwapaper\_8.pdf. Cite accessed on 13<sup>th</sup> 0f July 2007.

<sup>&</sup>lt;sup>49</sup> Baryayebwa.

<sup>&</sup>lt;sup>50</sup> Ibid.

<sup>&</sup>lt;sup>51</sup> Ibid.

As regards health, adult literacy empowers the learners to be able to read and correctly interpret prescriptions by health workers. They will be able to administer drugs to the sick in correct dosages. They will also be able to interpret HIV/AIDS messages correctly and can be used as a vital means of reducing the scourge of HIV/AIDS in Africa.<sup>52</sup>

# Forms of Education for Adult Functional Literacy

Non – formal education

This is the form of education that is largely organized out-of-school and it is involves practical skills. In characteristic, it tends to be basically non-sequential or not ladder-like, does not emphasize pre-requisites or be credential-oriented. It is designed as short-term education that promises immediate results, compared to the delayed results of the formal mode. This immediacy of result allows, then, for quick hands on learning experience. It is therefore noteworthy that although it is organized education as with formal mode, it is out-of-school, rather than in school education. By the deliberateness of this mode of education, teaching and learning occur in a consciously planned environment. All the curriculum covers is related to day to day experiences of life. It heavily put emphasis on doing as an objective. <sup>53</sup>

#### Formal mode of education

Formal education is the most known and common form of education today. It is a well organized and it is often carried out in a school setting.<sup>54</sup> The characteristic of this mode of education is that it is sequential or ladder-like, put emphasis on prerequisites, and geared toward future results rather than on-course results<sup>55</sup> Other

<sup>&</sup>lt;sup>52</sup> Ibid. 3.

<sup>&</sup>lt;sup>53</sup> Cole Victor B., *Training of the Ministry: A Macro – Curricular Approach.* Bangalore: Theological Book Trust, 2001, 131.

<sup>54</sup> Cole. 130.

<sup>55</sup> Ibid.

characteristics that mark formal education are as follows: it tends to be teachercentered, as curriculum is highly teacher determined; what is taught in school is generally not related to day-to-day life experiences; hence school learning is characteristically theoretical; and lastly, formal education is cost-prohibiting.<sup>56</sup>

Objectives are necessary elements in any mode of education. In formal education the training objectives are, to know purely in cognitive sense. The hierarchy of the objectives includes the ability: to know, to understand, to apply cognitively, to analyze, to synthesize and to evaluate. 57

## The Goal of Adult Functional Literacy

There is no agreed definition among scholars in defining the term 'goal'. However, Cole defines the term as the end-results desired, planned and attempted by an organization.<sup>58</sup> Any educational activity is always geared toward achieving a desired outcome. The goal of functional literacy as envisaged by UNESCO stresses the three literacy goals: 1) learning the rudimental lessons in reading, writing and arithmetic; 2) reading follow-up books, practicing writing and working harder arithmetic exercises up to the standard of proficiency; and 3) following a process of continuing education or adult education which should lead to self-improvement throughout life. These three goals can serve a newly literate adult better if they are made as practical as possible.<sup>59</sup>

# **Teaching Methods for Adult Functional Literacy**

Selection and use of appropriate teaching methods is crucial in the achievement of the curriculum aims and objectives. Gangel defines 'method' as a word that "simply describes the process and the techniques used by the teacher in

<sup>&</sup>lt;sup>56</sup> Ibid.

<sup>&</sup>lt;sup>57</sup> Ibid.131.

<sup>&</sup>lt;sup>58</sup> Ibid. 257. <sup>59</sup> Mulira, 92.

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communicating information from himself to his learners". <sup>60</sup> One school of thought purports that adult learners come into formal learning with a myriad of problems. This is an old school of thought that is built on a deficit model of adult non-literates. They view adult learners to be lacking many things that literacy is going to give them. In his observation of this trend of thought Rogers says,

We thus fall into unquestioned and possibly false presuppositions about our prospective student participants. We may on occasion assume that the learners are at the opposite extreme from our goals: that they possess no skill at all, if our goal relate to the acquisition of skills; that they are completely ignorant of the subject at hand, if our goals are knowledge related; that they hold negative attitudes, if our goals are attitude change; that they have not begun to comprehend, if our goals are related with understanding; that they lack all forms of confidence, if our goal is confidence building. None of this may be true. Indeed, it is most unlikely to be true.

Contrary to the above paradigm of viewing adult learners, current thinking about literacy emphasizes that adult learners bring a great deal of ability to the learning situation. These abilities are experiences, ability in life skills and knowledge of a real world. A good teacher builds on those competencies and knowledge as he or she teaches the adult learner. Agreeing with this Soifer et al says,

Learners are whole people whose wholeness must be consciously recognized. Their educational backgrounds, their personal experiences, their work situations and particularly their language and cultural backgrounds must be respected...Adults are responsible for their own learning. Strategies that foster self-determination are essential.<sup>63</sup>

Against the above truth about adult learners much of the education for adults in practice treats the learners in the same way as children are treated; their experience, their expectations, their intentions and purposes, their particular learning style are

<sup>&</sup>lt;sup>60</sup> Gangel, O. Kenneth and Hendricks G. Howard (eds.) *The Christian Educator's Handbook on Teaching*. USA: Victor Books, 1983, 179.

<sup>&</sup>lt;sup>61</sup> Rogers, Alan. Teaching Adults (2<sup>nd</sup> ed.). Philadelphia: Open University Press, 1996, 52.

<sup>&</sup>lt;sup>62</sup> Cass Angelica, *Literacy Discussion*. New York: International Institute of Adult Literacy methods, 1973, 93.

<sup>63</sup> Soifer Re na, et al. *The Complete Theory-to-Practice Handbook of Adult Literacy*. New York: Columbia University Teachers College, 1990, 13.

ignored or even denied. 64 Rodgers describe the differences between adult learners and younger learners: a) The experiences of adults and thus the expectations of learning which they bring with them ... Adults will inevitably have a larger range of experience and will have developed different approaches to the process of assessing his experience...b) Their orientation to learning: the intentions and focus which adults have towards their education are distinctive ... Unlike younger learners, most adult come to their education with a specific life-related intentions of their own and a determination to do something about these intentions. Adult learners are 'political' persons in the sense that they can act immediately in relation to the learning they are pursuing ...c) Their ways of learning: by the time adults come to their education experiences; they have established learning strategies of their own. Even literate adults have been learning all sorts of things for many years and have developed effective ways of learning.65

Considering that adult learners are different from the young learners, the teachers should not assume that the teaching methods appropriate for youth are automatically suitable for adult learners. Adult teachers should employ specific methods that best addressed the adult needs.

## **Teaching Materials for Adult Literacy**

The teaching materials are also vital elements that contribute to realization of the programme goals. While it is difficult to reach complete agreement on the most desired characteristics for such materials, among basic adult education practitioners it is generally agreed that adult educators everywhere are interested in materials that 1) develop competence in basic academic skills for the illiterate adult. However, Cass also goes further and adds the second characteristic of adult material and says it is that

Rodgers Alan, Adult Learning for Development. London: Cassell Educational Publications, 1992, 24.
 Ibid. 23.

which 2) permits redirection of mental energy into avenues toward positive career development and away from dependency, usually compounded by benevolence and underexposure. This second characteristic is definitely built on the deficit model of non-literates which assumes that learners brings nothing good to the classroom, that is not how literacy is conceptualized today. Learning materials that are geared for adults have to show respect for what adult learners already know and not to re-direct the adult's thinking patterns.

# **Planned Activities for Adult Literacy**

Any educational programme should have planned activities that will reinforce the lesson objectives and the programme goals.<sup>67</sup> The planned activities for Adult Functional Literacy are grouped in three major categories which are significant components of adult functional curriculum, namely; literacy, functionality and awareness.<sup>68</sup>

# Literacy skills

The planned activities under the literacy skills include reading and writing. These are skills that enable the adult learner to be able to read and write about their own world. These comprise of their name, memories, songs, beliefs, ideas and personal knowledge. <sup>69</sup>

<sup>66</sup> Rogers, 96.

<sup>67</sup> Richards O. Lawrence, Bredfeldt. *Creative Bible Teaching*. Chicago. Moody Press, 1998, 168.

<sup>&</sup>lt;sup>68</sup> Bhola, 57.

<sup>69</sup> Ibid.

#### Reading

The definition of literacy was given in terms of reading. The question might be asked, what is reading? Cater defines reading as the dynamic interaction between the readers and the text in which the readers attempt to construct meaning from the text.<sup>70</sup>

A programme for non-readers should emphasize all the skills necessary for adults to begin reading. The beginning stages in the growth of reading skills are crucial to the acquisition of higher-level skills in the future of the adult student.

Unlike a child beginning to read, the adult comes to the classroom with many years of experience in living. The reading problems of adults are as varied as the background they represent.<sup>71</sup>

#### Writing

Adult functional literacy does not just involve how to read but also how to write. Learners are introduced to skills in writing. At the first stage of literacy, adult learners are introduced to holding a pencil and a book. They are also introduced to where to start writing. For most of the learners their arms are quite stiff during the initial days of writing and the adult educators must be patient with their learners at this stage. Some may even require having their hands held in order to actually write.

However, it is important for the adult educators to give their learners clear instructions on how to write. It may be advisable for them to relate writing a certain letter or number to a familiar thing they already know. This will help them overcome fear of writing.

<sup>&</sup>lt;sup>70</sup> Cater Carolyn J., *Innodata Monographs -8. Reciprocal Teaching: The Application of a Reaching Improvement Strategy on Urban Students in Highland Park.* Geneva: International Bureau of Education, 2001, 23.

<sup>71</sup> Cass Angelica, 90.

#### Functional skills

These are skills that are applied in everyday life to enable the adult learner to engage in activities that will help in improving their livlihood. Such activities include; agriculture, poultry farming, veterinary skills, cattle farming and fish farming.<sup>72</sup>

#### Awareness skills

These are skills that enable the adult learners to be aware of various things that they were formerly ignorant about. This include; their human rights, unemployment, HIV/AIDS, environment, deforestation, and pollution. The aim of the awareness skills is to help the adult learners to keep pace with in terms of information and activities in this fast moving world. <sup>73</sup>

### **Summary of the Substantive Literature**

A survey of the substantive literature reveals helpful information on the impact of adult functional literacy. Adult literacy is crucial in the fulfilment of both Education For All (EFA) and Millennium Development Goals (MDGs). To make this a reality it is then important to impact the often marginalized nomads through literacy. Literature reveals that efforts to impact nomads through literacy have often failed because of the enormous challenges posed by the nomadic lifestyle. So for adult functional literacy to effectively impact nomads it is important to study their lifestyle and develop a curriculum that best responds o their needs in their context.

The impact of adult literacy cannot be overstated. Literature reveals that the economy of any country for example depends on the literacy rate of the adult.

Children's education is also highly dependent on the education of their parents. In

<sup>&</sup>lt;sup>72</sup> Bhola, 57.

<sup>&</sup>lt;sup>73</sup> Ibid. 60.

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Kenya for example the recent introduction of Free Primary Education may not just see the light of the day without equally taking seriously the education of the parents.

Moreover, the literature reveals that literacy is seen as both 'conscious raising' and as 'freedom'. This to some extent explains why many of the nomads have perhaps lived in ignorance and bound by all sorts of problems for lack of literacy.

### Methodological Literature Review

### Rationale for Research Paradigm

Creswell groups research approaches into three major categories: quantitative, qualitative and mixed methods<sup>74</sup> Qualitative research is an approach to research in which the inquirer makes knowledge based on a constructive perspective. It is often viewed to be less organised because it does not have finalised hypothesis since this can be formulated in the field. Mixed method involves collecting of data either simultaneously or sequentially to understand research problems. "Data collection involves gathering both numerical information as well as text information so that the data base represents the qualitative and quantitative information."75

Quantitative approach which was adopted in this study is a form of descriptive research in which the inquirer primarily examines cause and effect thinking, reduction to specific variables, hypotheses and questions. The approach also uses measurements and observation and employs strategies of inquiry such as experiments, surveys and other methods of data collection. In this approach the researcher collects data based on predetermined instruments that yield statistical data.<sup>76</sup>

<sup>&</sup>lt;sup>74</sup> Creswell John W., Research Designs: Quantitative, Qualitative and Mixed methods approaches, 2<sup>nd</sup> ed. London: Sage Publication, 2003, 18. <sup>75</sup> Ibid.

Based on the above three approaches to research, the researcher chose the quantitative research approach to enable him find answers to research problem through analysis of variable relationships. The quantitative approach also enabled the researcher to come up with unbiased and objective approach to issues.

#### Likert Scale

A Likert scale was adopted in this study since the data was collected by use of questionnaires in which some contained matrix questions. Likert is used to measure level of agreement by responding to categories such as strongly agree, agree, disagree, or strongly disagree. This ordering is such that it indicates the presence or absence of characteristics under consideration.

### Null Hypothesis (H<sub>0</sub>)

Borg and Gall define the term hypothesis as researcher's anticipated explanation concerning likelihood of result of a study, usually based on past experience or information. Researchers have identified three types of hypotheses: the null hypotheses, the alternative non-directive hypotheses and alternative directional hypotheses<sup>77</sup> (Borg and Gall 1989, 15). Null hypothesis is stated in negative form as it states that there is no relationship between two variables due to chance or error. In this study null hypothesis was employed to determine relationships between variables.

The rejection or acceptance of a null hypothesis was set at the alpha level of 0.05.

# Chi-Square test of independence $(\chi^2)$

Chi-Square test is a test of independence which shows that one variable of observed frequency is not affected by, or related to, another variable. This test only applies to discrete data and it is not a measure of the degree of relationship but it is an

<sup>&</sup>lt;sup>77</sup> Borg, R Walter and Meredith D. Gall. *Educational Research*. New York: Longman Press, 1989, 15.

attempt to estimate the probability that a factor, other than sampling error may be reason for the relationship. This relationship is evaluated against this conclusion and if it falls at the 0.05 or 0.01 level of significance, the null hypothesis is rejected Chi-Square is employed when the data is in the form of frequency counts and when the categories into which the frequencies fall are separate rather than continuous. In this study Chi-Square test was employed as statistical method because some data were in form of frequency counts and the categories of frequencies were separate rather than continuous.

 $<sup>^{78}</sup>$  Best, John W. and James V. Khan. *Research in Education*. Boston: Allyn and Bacon, 1998,415 -418.  $^{79}$  Borg, R Walter and Meredith D. Gall. 562.

#### CHAPTER 3

#### **METHODOLOGY**

This study involves evaluation of the achievement of TIRRIM Adult Functional Literacy (TAFL). This chapter describes the methods and the procedures that were utilized in this study. The chapter, therefore, discusses entry procedure, research design, population of the study, instruments design, pilot testing, validation of the instruments, administering the instruments and methods of data analysis.

## **Entry Procedure**

Having served with the TIRRIM project between 1994 and 2000, the researcher was able to maintain contact with the current leaders of the TIRRIM Project. However, the researcher sought to avoid the inevitable bias of having been a worker. He sought to achieve objectivity by becoming an active participant.

The researcher also obtained a letter of introduction from the Academic Dean of Nairobi Evangelical Graduate School of Theology (NEGST). This letter acted as a formal introduction in the field and aided the researcher to get official access to useful data for this study from TAFL.

## Research Design

The research design that was used in this study is quantitative approach. The researcher used evaluative research design. The form of evaluation used for this study

is programme evaluation. This form of evaluation was used to determine the effectiveness of a programme. <sup>80</sup>

### Population of the Study

Mugenda and Mugenda define population as a complete set of individuals, cases, or objects with some common observable characteristics. The population for this study is nomadic pastoralists and accessing them can be a real challenge. The population was comprised of all the students who have had three years of functional literacy in TAFL programme. Those who have had one or two years of either preliteracy or post-literacy were not considered to be part of the population.

According to the population under study there are four independent variables which were identified. These are: gender, age, occupation and courses offered.

Since the population of the study is too small to warrant a selection of a sample, the entire thirty eight individuals in the target population were included. Mugenda and Mugenda advise that, "at times the target population is so small that selecting a sample would be meaningless. Taking the whole population in such a case is advisable". 82

### The Instrument Design

In developing instruments for this research, the researcher saw in the literature that there are three types of skills acquired through Adult Functional Literacy. These are functional, awareness and literacy skills. Following this model the researcher formulated a questionnaire to gather data on the extent of impact of these skills on the

<sup>&</sup>lt;sup>80</sup> Best, John W. and James V. Kahn. *Research in Education*. 8<sup>th</sup> ed. Boston: Allyn and Bacon. 1998. 225.

<sup>&</sup>lt;sup>81</sup> Mugenda Olive, M. and Obel G. Mugenda. *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: Acts Press, 1999, 41.

<sup>82</sup> Mugenda 1999. 44.

graduates of TAFL. The questionnaire contained both close-ended and open-ended questions. The close-ended was used to gather factual information, while the open-ended was to give the respondents freedom to express themselves using their own words.

In constructing the questions on the questionnaire, various steps were taken by the researcher. Through the studying of TAFL literacy curriculum the researcher was able to see the goals of the programme which were mentioned earlier in this study. In addition, the researcher through the study of relevant literature was able to divide the questions in the questionnaire into three major parts which represent the three major components of Adult Functional Literacy curriculum—Literacy, Awareness, and Functionality.

Some of the questions in the questionnaire were formatted using the Likert scale to test the graduate's opinion of the impact of TAFL. Likert scale is known to have some limitations. For example it is somewhat inexact and fails to measure opinion with the precision one would desire. For example there is no basis for belief that the five positions indicated on the scale are equally spaced. It is also unlikely that the statements are of equal value in "for-ness" or "against-ness". It is unlikely that the respondent can validly react to a short statement on a printed form in the absence of a real life qualifying situation. <sup>83</sup> To compensate for these weaknesses and achieve objectivity the questions were pilot tested among the students who have done a course on research methods. The questionnaire was also passed through validity and reliability test.

<sup>83</sup> Best and Kahn, 1998, 317.

#### Pilot Testing

The questionnaire was pilot-tested among ten students in Christian Education Programme at NEGST. This is because they are also writing theses. They were in position of testing the clarity of the items tested in the questionnaire since they have taken a course on research methods where these aspects were well addressed.

### Administering the Instruments

The researcher administered the questionnaires to the respondents individually and directly. The researcher carried out the questionnaires orally with translation in Rendille instead of asking people to write answers.

### Validity and the Reliability of the Instrument

Considering that questionnaires are often one-time data-gathering devices with a very short life, administered to a limited population, the questionnaire must be valid and reliable.<sup>84</sup> Validity refers to the degree to which an instrument measures what it purports to measure, while reliability is defined as the level of internal consistency or stability of a measuring device over time. 85 The reason the researcher ascertains that the instruments are valid and reliable is to minimize the chances of an error occurring due to invalid and unreliable instruments.

In order to increase the likelihood that the questionnaires are both valid and reliable, the researcher asked three lecturers to critically examine the instruments and pass judgment on them. Three areas were examined in the validation of the instruments: The clarity of the questions, level of difficulty, and appropriateness of question. Any question that does not meet these three standards in term of validity was rephrased.

<sup>84</sup> Ibid., 1989. 193.

<sup>85</sup> Borg, Walter R, Meredith D. Gall, Educational Research. New York: Longman Press. 1989, 257.

### Method of Data Analysis

Since the questionnaire was to collect two types of data by the virtue of having both open-ended and closed-ended questions, both qualitative and quantitative methods of data analysis were used. Closed-ended questions were analyzed quantitatively while open-ended questions were analyzed qualitatively. The open-ended questions were meant to further probe responses given to the closed-ended questions and to give respondents the choice of free expression and comment.

Data from the Likert items was analyzed using Likert Scale of Summated Ratings. The frequency counts of the ratings on the 5-point Likert Scale were computed, having 'very high' on one end and 'very low' on the other end. However, the two ends of Likert Scale were collapsed to form three cells. In a 5-point Likert items respondent's answers were considered high if they checked "Very high" "Very relevant" and "Always". On the other hand the respondent's answer was considered low if they checked "Low" and "Irrelevant" "Fair" and "Unsure". Null hypothesis was tested using a Chi-square test of independence formula as shown below

$$\chi^2 = \sum \underline{(O-E)^2}$$
 where  $\chi^2 = \text{Chi-square of the independence};$ 

 $\Sigma$  = Summation sign; O = Observed frequency and E = Expected frequency.

In a 3 X 2 table or more, the formula was used to compute the values of the Chi-square. If the computed Chi-square was not equal or exceeds the critical value necessary to reject the null hypothesis at 0.05 level of significance, then hypothesis was not rejected.

#### **CHAPTER 4**

### DATA ANALYSIS, FINDINGS AND INTERPRETATION

The goal that was aimed in this study was to inquire into the impact of TAFL among the nomadic Rendille pastoralists and its implication for adult literacy education. In order to achieve this, this chapter deals with the analysis, findings and interpretation of data that was collected from twenty eight individuals through verbally administered questionnaires. The aim of the questionnaire was to find personal opinions about the impact of TAFL. The data collected was statistically analyzed and presented based on the research questions and hypotheses.

### Population Accessed

The population for this study as earlier mentioned is nomadic pastoralists and accessing them was a real challenge. However, a good number of them were accessed by January 30<sup>th</sup> 2007.

Table 1. Rate of the questionnaires administered

No. of Questionnaires to be Administered	Number of Questionnaires administered	Number of Questionnaires not Administered	Percentage of Questionnaires Administered	Percentage of Questionnaires not Administered
38	28	10	74%	26%

### Data Analysis and Interpretation

Observing the Table 1 above we note that a majority of the respondents are staff in TAFL programme. The population for this study as earlier mentioned is those

who have had a three year course on functional literacy. Most of the population was employed in the same programme as the teachers. The reason for this is that TAFL aims at training men and women who will in turn go back to their villages and teach their own village-mates.

This population has a firsthand experience of the impact of the programme both as students and as workers and this provides a greater scope for this study and further makes it worthy. Three out of the ten people who were not accessed were teachers in the literacy villages at home. Seven of them were housewives who were not around during the collection of data.

## Demographic Distribution of Respondents

Table 2. Distribution of Respondents by Gender

Gender	Number	Percentage
Male	8	29%
Female	20	71%
Total	28	100%

n = 28

#### Data Analysis and Interpretation

From the above distribution of the respondents by gender it is evident that there are more women attending the literacy programme than men. This phenomenon is rooted in the social-cultural setting of the learners. As earlier mentioned in this study in chapter one, most of the Rendille have a low value attached to formal education. This phenomenon is highly observed among men who attach higher value on their livestock than anything else. This explains why there are more women in the programme than men.

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Men in Rendille culture have also more social responsibilities and moreover they are the bread winners and they are often in the bush looking after their livestock while women stay at home looking after the children. Considering this TAFL has paid attention to the demands of the social-cultural setting and has aimed at impacting mothers as the acronym TIRRIM suggests as stated in chapter one (definition of terms). The idea of many women attending the literacy programme might also be rooted in how literacy was first introduced among the Rendille. This is so because this is also a common phenomenon in the government literacy programme. Interestingly it is observed that female population both in primary and high schools is less compared to male but there are more female in the adult literacy than male students. This can be interpreted to mean that the cultural barriers among the Rendille community that hinder a female to go to school at tender age tend to lessen when they become adults.

### **Findings**

The foregoing analysis of data reveals that there is a link between education and social-cultural setting of a learner. As seen in the case of TAFL the type of learners in a given educational programme is determined by the social-cultural context they live in. So in the process of designing a curriculum for any educational programme social-cultural context should be addressed as a matter of concern in the needs analysis stage.

The data also revealed that there is relationship between education and values of the learner. If the education is not rooted in the values of the learner the education programme is headed for a doom. The data also revealed that cultural barriers that threaten education of a learner are not static because culture in which they are rooted in is not static but dynamic.

Observing the data it is also evident that TAFL through literacy has impacted more women than men among the Rendille. However, it should be understood that literacy of Rendille women in many ways depends on their men on whom all the authority is vested. Authority here may include the man taking his wife out of literacy school anytime he wants which has happened before. So in the same way the education of children depends on the education of their parents as seen in the literature review, the education of Rendille women also depends on the education of Rendille men. So for TAFL to have a sustainable literacy success among the Rendille getting men into literacy is not an option but recommended.

Table 3. Distribution of Respondents by Occupation

Gender	LTR	EVN	Row Total
Male	8	0	8
Female	18	2	20
Column Total	26	2	28
Percentage	93%	7%	100%

n = 28

KEY:

LTR – Literacy Teacher

**EVN** – Evangelist

#### Data Analysis and Interpretation

Table 3 presents the distribution of the respondents based on their occupation.

The data reveals that most of the respondents have lived to the expectation of both the goals of the programme and the curriculum goals. The programme goals as earlier discussed in chapter one comprise of teaching how to read and write in Rendille

language and to teach basic doctrines in the Bible. Both the teachers and the evangelists are used in fulfilling the goals of the programme. They do not just fulfill these goals but they also earn income that impacts their lives in a big way.

### **Findings**

The data above reveals that the learners' occupation or what they are capable of doing after they graduate provide a basis for measuring the success of the entire educational curriculum. The outcome of the learning programme which is the learners' occupation acts as a dipstick to measure the success of the input which is the curriculum.

Through the analysis of the data above we see that there is relationship between education and improvement of learner's life in a positive way. This is seen when learners who were illiterate before rise through the literacy programme and become teachers or evangelists and earn income. In other words the ultimate goal of education is to bring positive transformation in a learner.

Table 4. Distribution of Respondents by Age

Gender	Male	Female	Row Total	Percent
20 – 30	1	12	13	53%
30 – 40	5	7	12	36%
40 – Above	2	1	3	11%
Row Total	8	20	28	100%

From the distribution of the respondents by age we see that most of the respondents belong to the age bracket twenty to thirty years. The simple reason for this is that most respondent would want to attend the programme while they are still young and have good understanding and memory required for learning than someone of forty years and above. The other reason is that most of the respondents in the age bracket rated high are within the average age of marriage which is twenty five years. So this means that most the female respondents are newly married women who have less responsibilities at home compared to others in older age bracket. At older age most people also think that they have are passed their fruitful years and education at that age is just but a waste of time.

## Findings

In the data analysis we see that there is relationship between age and education. Age plays a key role in determining the learner's interest in education. Education then should be introduced in regard to the learner's age. The data reveals that twenty to thirty years of age bracket might be the most appropriate age to attend the literacy programme considering that this might be the years considered by most people as their prime years.

## The Impact of TIRRIM Adult Functional Literacy

In investigating the impact of TAFL the researcher formulated three key research questions that guided the study. The first research question states:

**R.Q.1** In what ways do graduates perceive the relevance of TAFL in meeting the needs of nomadic pastoralists?

A question was formulated in the questionnaire so as to answer this research question. Table 4 below summarizes the respondents' views of questionnaire item 1 in

Part B. The questionnaire item sought the respondent's perception of relevance of TALF in meeting the needs of nomadic pastoralists.

Table 5. Graduates' perception of the relevance of TAFL

Gender	Highly relevant	Relevant	Uncertain	Irrelevant	Highly Irrelevant	Total
Male	2	6	0	0	0	8
Female	13	7	0	0	0	20
Total	15	13	0	0	0	28
Percentage	54%	46%	0%	0%	0%	100%

n = 28

## Data Analysis and Interpretation

Table 4 shows that none of the respondents perceived TAFL was either irrelevant or was uncertain about its relevance. In other words 100% of the respondent perceived that TAFL was relevant in meeting the needs of the nomadic pastoralists.

The analysis reveals that high perception of relevance was observed despite respondents' differences in age, gender and occupation. This trend may indicate that TAFL is living up to the ultimate purpose of its existence. The ultimate objective of TAFL is as follows.

The programme developers strongly believe that if only the knowledge base of the Rendille community is strengthened with new information of which they have been previously unaware, they will gain a foundation necessary for successfully managing themselves and their resources in a rapidly changing socio-economic and natural environment. 86

#### **Findings**

The data revealed that perceived relevance was the same regardless of the respondents' age, occupation and gender. So the relevance of an education programme must be rooted in factors other than the aforementioned.

<sup>86</sup> Swanepoel. 10.

So in attempt to inquire further into factors responsible in determining perception of relevance the graduates were further probed through the questionnaire item 2 Part B, to state the reason why they either perceived that TAFL was relevant, irrelevant or uncertain about it. Since in table 4 they all responded that TAFL was relevant, table 5 below shows the reasons for this response.

Table 6. Reason for the Relevance of TAFL

Serial No.	Reason	Frequency	%
1	I learnt how to read and Write	28	100%
2	I learnt the word of God	17	61%
3	I got saved	6	21%
4	I learnt about personal hygiene	8	29%
5	I learnt how to generate income	4	14%
6	I learnt how to treat my animals	3	11%

#### Data Analysis and Interpretation

The analysis of the data tabulated in table 5 reveals that the respondents perceived the relevance of TAFL only in terms of the needs it meets. So the relevance of the programme was stated in terms of needs it fulfills in the learner. The data can also be interpreted to mean that since the needs of the learners are met, the courses offered at TAFL are also relevant and applicable in the learners' context.

The fact that the respondents perceived the relevance of TAFL indicates the relationship between the applicability and relevance. The respondents could only explain the relevance of the programme in terms of their experience and how applicable that experience was. As people who were illiterate before, the literacy classes skill such as reading and writing rated high as reason for relevance of TAFL.

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Learning the word of God also rated high. Rendille people really fear God and have great reverence for His word and there was little doubt that this reason rated high.

The reason for accepting Jesus as Savior and acquiring of health skill rated averagely low. The reason for this is that the Rendille view Christianity as a threat to their so treasured culture and only few of them tend to make radical decision to become Christians. That is why they can be comfortable with learning the word of God (61%) and not getting saved. Most of the respondents are not Christians but church goers who do not profess Christian faith. So they understand the terminology 'saved' but hardly commit their lives to it. Acquiring of health skills also rated low because some of the skills acquired in a formal setting such a TAFL might be impractical in its application when it comes to nomadic lifestyle where for example water is quite scarce.

Generating of income could be thought to be the high reason why the program would be regarded relevant. However, though income generating is appealing to many Rendille who are languishing in poverty but the practicality of initiating an income generating enterprise is an impossible task for many Rendille who live from hand to mouth. Many may be lacking capital to start business and so it is not applied as often.

The learning of how to treat animals also would have been regarded as utmost reason as to why respondents would respond in terms of the relevance of the TAFL. Especially considering the livestock as the sole lifeline for Rendille nomadic pastoralists. The reason why it was rated low can be attributed to the fact that only men are taught the veterinary skill in the programme. Most of these men graduate from the programme without basic veterinary tools to treat their animals. Most of them for example rely on borrowed syringes. So because of such hurdles they rarely use their skills and most of them even forget it with time.

### **Findings**

The foregoing data analysis revealed that there is relationship between relevance of an educational programme and the needs of the learners. The relevance of an educational programme can only be measured against the needs of the learner. This fact explains the rationale for needs analysis as the first step in designing a curriculum for any educational programme. As earlier discussed in the literature, the curriculum should always be rooted in the needs of its learners and all it seeks to do is to meet these needs.

The above data also revealed that the relevance of an educational skill all by itself does not guarantee its applicability without provision of means to enhance applicability. So literacy education should transcend the mere knowledge level and evaluate how specific skill can be applied by the means available within the context of learner.

The researcher further probed the respondents through the questionnaire item 5 Part B, to see if the needs met above by TAFL are also the general needs of the other Rendille nomadic pastoralists. The analysis was done by the use of frequencies and percentages.

Table 7. Graduates perception of felt needs of the Rendille

Serial No.	Felt needs	Frequency	%
1	Adult Literacy	26	93%
2	Health care	17	61%
3	Veterinary Service	11	39%
4	Income generating	5	18%
5	Evangelism	7	25%

Analyzing the respondents' response on the needs of Rendille, adult literacy and health care need was rated the highest. The reason for this is that most of the respondents are adults who have earlier been denied chance to go to school in their youthful years and have lamented over this all their life. Through their experience of learning how to read and write in TAFL it was like gaining sight a fresh. Many of them desire that all the Rendille adults become literate and this explains the reason why the percentage is high.

The healthcare need was also high. The reason for this is that there are a few health care services in Rendille land. Most people die of curable diseases because of lack of these services. TAFL seeks to meet this need by equipping its learners with not just skills to treat some common diseases but also in teaching them on how to prevent them.

Veterinary and evangelism needs were rated relatively average. Veterinary need might be regarded average because of lack of enough awareness when it comes to conventional veterinary medicine. However, veterinary need is still high in men because of the value they attach to the livestock. This explains the reason why veterinary is only taught to men because it is a gender defined skill in Rendille culture. It best suits men who have strong values attached to livestock although this was also prior mentioned as an obstacle to their interest in formal education. Evangelism need rated relatively average because of the fact that many Rendille have not yet had the word of God. The respondents some of whom have come to hear the word of God through TAFL and some of whom have even been saved see evangelism as need among the Rendille.

The income generating skill rated lowest. The reason for this is that most Rendille believe they were created to take care of their livestock and not to engage in active business enterprise. In fact most of the Rendille who have tried business before and are still doing it even now have not succeeded much. So, many are comfortable even without doing business.

#### **Findings**

The analysis of the data reveals that in a typical educational curriculum the need of an individual learner represents the need of a bigger community which the curriculum seeks to meet. In comparing the needs of the Rendille in table 6 alongside the felt needs that TAFL meets in its learners as revealed in table 5 we discover that TAFL, in meeting the needs of its learners, actually meets the needs of the Rendille. This is so because the needs analysis for the TAFL curriculum was carried out among the entire Rendille community which is the macro-level of the curriculum and the individual learners who represent micro level of the curriculum are part of the community. So this truth reveals that there is coherency between the macro-curriculum aimed at impacting all the Rendille community and micro-curriculum aimed at impacting an individual learner. In other words what the learners learn actually matches with Rendille needs. So in impacting the learners TAFL actually impacts the entire Rendille community in one way or another.

Acquisition of skills through training at TAFL

**RQ2**. What skills for life, if any, do graduates acquire as a result of their training at TAFL?

In answering R.Q. 2, no hypothesis was generated; rather only one open-ended questionnaire item was analyzed (no. 4, Part B). In the item each respondent was

asked to indicate the skill or skills he or she has acquired through the training at TAFL. The responses were tabulated as shown in the table 7 below.

Table 8. Skills acquired by graduates from TAFL

Gender	Teaching Skill	Reading Skill	Writi ng Skill	Hlth Skills	Vet Skill	Income Gen. Skill	Evangelis m Skill
Male	8	8	8	0	8	3	3
Female	18	20	20	10	0	7	6
Total	26	28	28	10	0	10	9
%	93%	100%	100%	36%	7%	36%	32%
Freq.	Often	Often	Often	Often	sometime	Sometime	Sometime

The respondents were further probed through the questionnaire item Part C 1, 4, Part D 1, 4 to test the frequency of the usage of these skills.

### Data Analysis and Interpretation

Analyzing the data we find that all the acquired skills are functional skills that are geared toward improving the lives of the learners. The lower percentage for the veterinary skill is so because it is only taught to male students which 100% of the total eight have responded to have acquired the skill.

In analyzing the frequency of the usage of the skill, we find out that most the skills are often used and only two of them are used sometimes. This tells us that the skills acquired from TAFL are truly functional in the daily lives of the respondents. In qualifying how the students use every skill in relation to its frequency a question was set in the questionnaire to get the relevant information for this. Regarding the teaching skill most of the respondents responded that they apply this skill through their teaching at the literacy classes in the villages. They use the writing skill for example

writing a letter to their husbands in Nairobi, writing their credit in the shops and compiling relief food lists for their respective villages.

Most respondents also responded to be using the reading skill quite often. Most of them responded that they use the reading skill to read their vernacular scriptures since their orientation is in vernacular. Analyzing this it was evident that the usage of the reading skill was limited in a sense since there are not many materials written in Rendille. It was also found that most of the respondents use the health skills quite often. In finding out how this skill is actually applied they responded that they apply the skill by applying basic skills such as: washing of hands before eating, cleaning of utensils after use, shaving with different razor blade and so forth. Analyzing this it was found that there is practical impact in term of the usage of skills. This so because the respondents are now aware of what unhygienic conditions can bring about and they are more cautious. For relevant knowledge brings about responsibility. Relevant knowledge here refers to knowledge that is acquired by the learners and helps them to practically deal with their life's challenges. In most cases such knowledge brings responsibility with it since it is attached to learners' need. Veterinary skill is used sometimes. The reason for this is that animals do not get sick often and that explains why the skill is only used sometimes. The usage of income generating skill has been dependent on the availability of capital and many of the respondents only had capital only once in a while and so the skill has only been utilized sometimes. The evangelism skill is used only sometimes. This is because most of the Rendille people are generally busy and due to their so demanding nomadic lifestyle it is often hard to find someone to evangelize to and so the evangelists do evangelism only when people are available.

#### **Findings**

The frequent use of an acquired skill suggests the functionality of the same skill. So from the data it was found out that the skills gained through TAFL are truly functional skills since they are often applied. The data also revealed that there is relationship between acquisition of skills and frequency with which the skills are claimed to be used. The skills with the high percentage of acquisition are often used, while less acquired skills are used only sometimes. The correlation of reported learning with reported use of skills suggests the high relevance of the same skills.

In order to know the impact of TAFL on its graduates it was not enough just to know the skills acquired and the frequency of when each skill is used. So the researcher tried to ascertain the level of efficiency of every skill as shown in table 9.

Table 9. Level of efficiency in using the skill acquired.

Skill	High Efficiency	Average	Low efficiency
Teaching	26	0	0
Reading	21	7	0
Writing	19	9	0
Human Health	10	0	
Veterinary	2	6	0
Income Generating	4	6	0
Evangelism	2	7	0

### Data Analysis and Interpretation

Table 9 shows that most of the skills acquired by the respondents are used with high efficiency and this might be a great indicator of high level of impact of TAFL. However, veterinary, income generating and evangelism skill are used with

average level of efficiency. The reason for this might be the skills are only used sometimes as earlier indicated in table 7 and so they lack enough practice that will gradually prompt high level of efficiency.

### **Findings**

In comparing table 7 and 8 we find that there is relationship between the efficiency of a specific skill acquired and use of the same skill. Skills with the high percentage of efficiency were often applied. This means that the applicability of gained skill highly depends on the level of efficiency gained on the same skill. So for TAFL to make a significant impact among the Rendille it is not enough to impact them with just the skill but high level of efficiency of the same skill. For this is what will determine the applicability of the skill. It is also found that gender is also a factor that determines the applicability of skill because some skills are culturally defined for particular gender. That is why the average for veterinary skill is generally low but it is high for men.

### Factors Affecting the Impact of TAFL

**RQ3**. What are the factors, if any, which are responsible for TAFL's impact on the graduates?

In response to this question three null hypotheses were formulated and tested and results were analyzed in tabular form.

H<sub>0</sub>: 1 Differences in age will not significantly affect TAFLs' impact on the graduates.

The item (Part E: 4a) of the questionnaire provided the data for exploring this hypothesis. In the item each of the respondents were asked to indicate their age and indicate their opinion about the relationship between the age and the level of impact of TAFL training. Their responses were grouped into three categories and the results tabulated as shown in table 10.

Table 10. Effect of difference in age on the impact of TAFL on graduates

<b>Graduates Age</b>	Disagree	Uncertain	Agree	Row Total
20 – 30	2 (1.85)	3 (2.32)	8 (8.82)	13
30 – 40	2 (1.71)	2 (2.14)	8 (8.14)	12
40 – Above	0 (0.42)	0 (0.53)	3 (2.03)	3
Column Total	4	5	19	28

$$n = 28$$

$$\chi^2 = 1.76$$
.

Significance level = 0.05

df = 4

### Data Analysis and Interpretation

A Chi-square test of independence was done to test the null hypothesis (see table 10). The result of the computed Chi-square of 1.76 was far below the critical value of 9.49 which was necessary for rejecting null hypothesis at 0.05 level of significance with 4 degrees of freedom. This means that the null hypothesis was not rejected. So from the analysis there was no statistically significant difference of impact of TAFL in relation to the age of the graduate. That is, difference in age among them did not affect the level of impact of TAFL.

From this analysis of data we find that respondents with relatively younger age did not perceive TAFL to have had more impact on them than those who were older. Thus age is not perceived as a factor that affects the impact of TAFL on its learners.

Ho: 2 - Differences in gender will not significantly affect TAFLs' impact on the graduates.

The item (Part E: 4b) of the questionnaire provided the data for exploring this hypothesis and the response tabulate as shown in table 11.

Table 11. Effect of difference in gender on the impact of TAFL on graduates.

<b>Graduates Gender</b>	Disagree	Uncertain	Agree	Row Total
Male	5 (5.4)	2 (1.42)	1 (1.14)	8
Female	14 (13.5)	3 (3.57)	3 (2.85)	20
Column Total	19	5	4	28

$$n = 28$$
  $\chi^2 = 0.40$ .

n = 28  $\gamma^2 = 0.40$ . Significance level = 0.05

df = 2

The null hypothesis was tested using the Chi-square test. The computed Chi-square result was 0.40 which was far less than the critical value (5.991) necessary for the rejection of null hypothesis at 0.05 significance level with 2 degrees of freedom. Therefore the there was no significant statistical difference in the range of responses among the TAFL graduates regarding the impact of TAFL based on the difference of gender.

The analysis of the above data reveals that the male respondents did not perceive TAFL to have more impact on them than female respondents. From this we can deduce that gender is not perceived as a factor that influences the level of impact of TAFL. However, there is possibility that gender can be a significant factor even though the respondents did not perceive so. This is so because as mentioned earlier veterinary skills for example is culturally defined as a gender skill that is taught only to men and not women.

 $H_o$ : 3. – Differences in occupations of the graduates will not significantly affect TAFLs' impact on the graduates.

The item (Part E: 4c) of the questionnaire provided the data for exploring this hypothesis the result was recorded as shown in table 12.

Table 12. Effect of difference in occupation on the impact of TAFL on graduates

Graduates	Disagree	Uncertain	Agree	Row Total
Occupation				
Literacy Teacher	10 (10.2)	3 (2.8)	13 (13)	26
Evangelist	1 (0.78)	0 (0.21)	1 (1)	2
Column Total	11	3	14	28

n = 28

 $\chi^2 = 0.29$ . Significance level = 0.05

df = 2

In testing this hypothesis a Chi-square test of independence was carried out. From the table the computed Chi-square is 0.29, which is far less than the critical value of rejecting the null hypothesis at 0.05 significance level of 2 degrees of freedom. Therefore the null hypothesis was not rejected. The conclusion arrived from this analysis is that there was no statistically significant difference in the level of impact of TAFL on graduates of different occupations.

#### **Findings**

The analysis from the data above reveals that literacy teachers did not perceive TAFL to be more of impact to them than the evangelists. So this means that occupation is not perceived as a factor that affects the impact of TAFL. Or it may also mean that TAFL teaches satisfactorily to both of these occupations.

 $H_o$ : 4. - There will be no significant differences in the level of impact of different courses offered at TAFL on the graduates.

The item (Part E: 4d) of the questionnaire provided the data for exploring this hypothesis. The null hypothesis was tested using the Chi-square test as shown in the table below.

Table 13. Effect of differences in courses offered on the impact of TAFL on graduates

Graduates	Disagree	Uncertain	Agree	Row Total
Male	5 (6)	1 (0.85)	2 (1.14)	8
Female	16 (15)	2 (2.14)	2 (2.85)	20
Column Total	21	3	4	28

$$n = 28$$

df = 2

$$\chi^2 = 1.17$$
. Significance level = 0.05

From the table, it is shown that the computed Chi-square is 1.17, which is far less than the critical value of (5.991) necessary for the rejection of the null hypothesis at 0.05 level of significance, with 2 degree of freedom. Therefore the null hypothesis was not rejected. From this analysis it was evident that there was no statistically significant difference in the level of impact of different courses offered at TAFL.

Analysis of the questionnaire item 1 Part F, provided details on the same issue about the level of impact of different course offered at TAFL.

Table 14. Level of impact of various courses taught in TAFL

TAFL Courses	High Impact	Uncertain	Low Impact
LITERACY			
COURSES			
Reading	28	0	0
Writing	28	0	0
Mathematics	28	0	0
FUNCTIONAL COURSES			,
Veterinary	8	0	0
Human Health	28		
AWARENESS COURSES			
Geography	19	4	5
Environmental Awareness	17	6	5
Christian Religious Education	28	0	0

#### Data Analysis and Interpretation

Table 14 shows the respondents' response on the level of impact of various courses offered at TAFL. The table indicates that the courses offered are for the most part perceived to have high impact. The functional skill courses like writing, reading, mathematics, human health have high impact than awareness skill courses like

geography and environmental awareness course. As earlier mentioned in the literature functional or practical skill course have more impact for adults than awareness skills and the data affirms this.

### **Findings**

Different courses offered at TAFL almost have equal impact. So the analysis of the data showed that difference in courses offered at TAFL was not perceived as factor that influences the impact of the programme.

#### Summary of the Findings from the Hypotheses

The result of the findings from hypotheses are linked to each other in that none of the perceived factors like age, gender, occupation, and different courses offered at TAFL thought to influence the impact of TAFL was considered to be significant in their influence of impact of TAFL. However, though these factors were perceived to be insignificant in their influence of impact of TAFL, they can be a possibility that they still impact the effectiveness of the programme but the respondents do not see it that way. For example in the recent past some of the older teachers were stopped from teaching adult literacy classes because of their under performance that comes with the challenges related to age, while the younger teachers are still actively involved in teaching. This points out to the fact that age actually affects the impact of TAFL. The programme has more impact on the comparatively younger adults than older ones.

The younger adults often read, write and teach effectively than the older ones.

Gender was one of the factors that influenced the population accessed. This is because as earlier mentioned there are more female adult learners in the programmme than male. Based on this fact TAFL impacts more female adults than males. In accessing even the literary skills, female adults are more competent in reading,

writing and teaching than the males. This difference of impact in relation to gender is based on the fact that female learners devote more time to learning, compared to male learners who are often busy as earlier mentioned. Because of this the programme heads have often used female adult learners for publicity to exhibit the success of the programme to their donors.

Though the difference in the courses offered at TAFL was not perceived to be significant, however, literary skill and functional skill courses have often proved to be more efficient in application than awareness skills. This can be attributed to the fact that literary and functional skills are more appropriate to learners in their context than awareness skills.

#### **CHAPTER 5**

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This evaluative study was an attempt to ascertain the impact of TAFL among the nomadic Rendille pastoralists. The work further attempted to investigate the relevance of TAFL in meeting the needs of its learners.

#### Statement of the Problem

Considering high level of Illiteracy and marginalization among the Rendille, the researcher sought to find out the impact of TAFL in improving the lives of the nomadic Rendille pastoralist. The study embarked on investigating the extent to which TAFL successfully impacts its graduates.

#### Purpose of the study

The goal of the study was to find the impact of TAFL among the nomadic Rendille pastoralist. The study also further investigated the specific ways TAFL impacts its graduates. That was done through the generation and finding of answers to the following research questions.

- R.Q. 1. In what ways do graduates perceive the relevance of TAFL in meeting the needs of nomadic pastoralists?
- R.Q. 2. What skills for life, if any, do graduates acquire as a result of their training at TAFL?
  - R.Q. 3. What are the factors, if any, which are responsible for TAFL's impact on the graduates?

### Significance of the Study

This study was intended to be useful in the following areas:

- 1. To investigate if literacy is what the nomadic Rendille Pastoralists actually need.
- Evaluate the extent to which TAFL meets the felt needs of the nomadic Rendille pastoralists through Adult Functional Literacy.
- 3. Evaluate how successful TIRRIM programme is in implementing EFA and MDGs.
- 4. Provide insight into the challenges, constraints and opportunities for using education as part of an intersectoral approach to meet the development needs of Rendille community in particular and nomadic communities in general.
- 5. Facilitate the lobbying of other literacy organizations to pursue

  Adult Functional Literacy programs among the other marginalized societies of Kenya as viable tools to impact lives.
- 6. Help in judging the viability of TIRRIM Adult Functional Literacy and also aid the project to establish a well-argued basis to merit continued support from its donors.
- 7. Help the curriculum designers to evaluate the objectives of the programme in the light of its relevance to the needs of adult learners.
- 8. Contribute to the area of knowledge in adult literacy education.

### Research Design

The identified population for this study was quite small, hence no sampling was done.

The instrument that was used for this study was a questionnaire which included both open ended and close ended questions. This was formulated through the study of the literature. The Chi-Square test was also employed to test the significance of the four null hypotheses that was used to measured how different variables affected the impact of TAFL.

#### Findings

The three research questions that the researcher tried to answer were:

R.Q. 1. In what ways do graduates perceive the relevance of TAFL in meeting the needs of nomadic pastoralists?

- R.Q. 2. What skills for life, if any, do graduates acquire as a result of their training at TAFL?
- R.Q. 3. What are the factors, if any, which are responsible for TAFL's impact on the graduates?

In relation to R.Q. 1 there was no hypothesis that was formulated. However, the data revealed that all the respondents perceived TAFL to be relevant in meeting the needs of the nomadic Rendille pastoralists. 54% perceived it to be highly relevant and 46% perceived to be relevant. The reason for student perception of relevance was strongly attached to achievement of TAFL in meeting the felt needs of the learners.

The findings arrived at through this question is that all the respondents perceived TAFL to be relevant in meeting the needs of the nomadic Rendille

pastoralists and that there is a strong link between perception of relevance and needs of the learners. Relevance is gauged in the light of the needs of the learners. The data also revealed that what the learners learn actually match with felt needs among the Rendille.

In relation to the R.Q. 2 there was no hypothesis formulated. Through the inquiry into this question it was found out that each learner has acquired several skills through his or her training at TAFL. In inquiring into the practicality of these skills it was found out that most of the skills acquired are often applied and only few are applied less often. This means that TAFL do not just impact its learners with skill but skills that are practically used in life. It was further found that the application of a given skill depends on the level of efficiency gained on the same skill.

In relation to R.Q. 3 four hypotheses were formulated and each was tested. H<sub>o</sub>: 1. – Differences in age will not significantly affect TAFLs' impact on the graduates.

This null hypothesis was not rejected as it was found out that difference in age does not significantly affect the impact of TAFL on the learners. Most respondents did not perceive age as a factor that could affect the impact of the programme on them. So there is no perceived relationship between the impact of the programme and the age of the learner.

H<sub>o</sub>: 2<sub>.</sub> - Differences in gender will not significantly affect TAFL's impact on the graduates.

This null hypothesis was also not rejected because there was no significant difference in level of impact of TAFL between male and female respondents. So there was no perceived relationship between the level of impact of TAFL and the gender of the learner.

 $H_o$ : 3. – Di fferences in occup ations of the graduates will not significantly affect TAFL's impact on the graduates.

This hypothesis was also not rejected as there was no significant difference in the impact of TAFL on the learners of different occupations. This meant that there is no perceived relationship between the impact of TAFL and the occupation of the graduate.

H<sub>o</sub>: 4<sub>.</sub> - There will be no significant differences in the level of impact of different courses offered at TAFL on the graduates.

This null hypothesis was also not rejected. There was no significant difference in the level of impact between different courses offered at TAFL. This means that there is no perceived relationship between the Impact TAFL and different courses it offers.

## Conclusions and Recommendations

The above findings raise a number of issues which TAFL and other similar institution may have to engage. Generally it was found that the respondents perceived the relevance of the programme in relation to their needs. From the study the programme seem to successfully meet the felt needs of its learners which are also the needs of the entire Rendille community. However, from the findings it was evident that the programmes mostly meet more of literacy skills and less of functional skills which would have been more appropriate to adult learners. The assumption is that the programme might be rooted in the notion of formal education that gives more value to literary skills at the expense of any other skill. For TAFL to be relevant to the needs of its learners it has to stress more on the functional skills that are both achievable and operational in terms of the means available in the learners' context. The programme

must seriously consider enrolling more men to guarantee sustainability of literacy among the Rendille. The findings also revealed that functional literacy does not have to be in the official language to be useful, the use of vernacular language also produces more or less impact as seen in the case of TAFL.

## Recommendations for Further Research

The impact of TAFL is a vast subject and there are definite issues that have not been captured well in this study. For example evaluation of how teaching methodology, physical facilities available to the programme and teaching materials contribute to the impact of TAFL is an area of study that could be pursued

It is also very important that further evaluative research be done among current students in the programme rather than the graduates. The findings that will emerge from such a research will provide a sound and consistent basis for a thorough evaluation of the programme and give suggestion of what to adjust before the student graduates and it becomes too late.

Another area of interest for further research could be the study of the impact of literacy on the Rendille culture. It will also be interesting to investigate more on the kind of knowledge that brings about responsibility in adult functional literacy and to ascertain if this is always true. It will also be crucial to investigate into reasons why the respondents did not consider the perceived factors to be of significance in impact of TAFL.

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#### APPENDIX 1

## QUESTIONNAIRE FOR TIRRIM ADULT FUNCTIONAL LITERACY GRADUATES

NB: (This was translated into Rendille language)

Dear Graduate

PART: A - PERSONAL DATA

Kindly respond to this questionnaire as truthfully as possible to the best of your knowledge.

# 1. What is your is your age 15 - 2020 - 3030 - 4040 and Above 2. Please indicate your gender: Male \_\_\_\_\_ Female \_\_\_\_ 3. What is your occupation PART: B - OVERALL EVUALTION OF TAFL 1. How do you rate the relevance of the TAFL to your need? Very Relevant ( ) Relevant ( ) Not Sure ( ) Irrelevant ( ) Very irrelevant ( ) 2. Why do you consider TAFL either relevant or irrelevant? Relevant 3. What specific felt needs did training at TAFL meet in you life?

b)							
c)							
4. What specific skills have you acquired through your training at TAFL?							
a)							
b)							
c)							
5. What do you consider as the felt needs for the nomadic Rendille community?							
PART: C – LITERACY SKILLS							
1. How often do you read the Bible in Rendille Language?							
Always ( ) Sometimes ( ) Never ( )							
2. How do you rate your reading skill?							
Very Excellent ( ) Excellent ( ) Fair ( ) Poor ( ) Very Poor ( )							
3. Apart from reading the Bible how else do you use your reading skill?							
4. How often do you use writing skill?							
Always ( ) Sometimes ( ) Never ( )							
5. What do you use your writing skill for?							
6. How do you rate your writing skill?							
Very Excellent ( ) Excellent ( ) Fair ( ) Poor ( ) Very Poor ( )							
PART D: FUNCTIONAL SKILLS							
1. How often do you use your veterinary skills acquired in TAFL?							
Very often ( ) Often ( ) Not sure ( ) Never ( )							

2.	What are some of the veterinary skills you often use?								
	a)								
	b)								
	c)								
3.	. How do you rate the efficiency of your veterinary skill?								
Ve	ery Excellent ( ) Excellent ( ) Fair ( ) Poor ( ) Very Poor								
4.	How often do you use your health skills acquired in TAFL?								
	Very often ( ) Often ( ) Not sure ( ) Never ( )								
5.	How does the Mathematic skill acquired at TAFL help you in your daily life?								
	a)								
	b)								
	c)								
6.	Did the TAFL empower you in any way to start an income generating business?								
	YES ( ) NO( )								
7.	How do you rate the relevance of geographical knowledge taught at TAFL?								
	Very relevant ( ) Relevant ( ) Not Sure ( ) Irrelevant ( ) Very Irrelevant								
)									
8.	How does geographical knowledge acquire in TAFL help you in your daily life?								
	a)								
	b)								
	c)								

(

## PART: E. AWARENESS SKILLS

1.	What are som	e of the health skills th	nat you often use?				
	a)						
	b)						
	c)						
2.	How often do y	vou use you Environme	ental awareness skill acquired at TAFL?				
	Very often ( )	Often ( ) Not sure	() Never ()				
3.	What are the sp	pecific Environmental	awareness skills you use?				
	a)						
	b)						
	c)						
1 17	actors affecting	g impact of TAFL					
		the following question	as carefully				
	-						
		effects the impact of T					
i) .	Agree	ii) Uncertain	iii) Disagree				
b) My gender has effect on the impact of TAFL on me.							
i) .	Agree	ii) Uncertain	iii) Disagree				
c)	My occupatio	on affects the impact of	TAFL on me.				
i) .	Agree	ii) uncertain	iii) Disagree				
1400	- 100	00 1 1 7 1 1	11.00				
d)	Different cour	rses offered at TAFL h	have different levels of impact on me.				
i) .	Agree	ii) Uncertain	iii) Disagree				

## PART: F

Below is a list of courses offered at TAFL programme. The courses are grouped according to the skill they impact. Kindly give a response as to how you think the courses have impacted you for nomadic life.

In your opinion, to what extent have the courses below have impacted you for nomadic life? Please truthfully answer the level of impact for each course.

TAFL Courses	Very High Impact	High Impact	Uncertain	Low Impact	Very Low Impact
LITERACY	Impact	Impact		Impace	220.]
COURSES					
Reading					
Writing					
Mathematics					
FUNCTIONAL COURSES					
Veterinary					
Human Health					
AWARENESS COURSES					
Geography					
Environmental					
Awareness		1000 1000 1000			
Christian Religious Education					

## **APPENDIX 2**

## INTRODUCTION LETTER



## NAIROBI EVANGELICAL GRADUATE SCHOOL OF THEOLOGY

O. Box 24686 - 00502 Karen, NAIROBI, KENYA

Tel: 254 (020) / 882104/5, 882038 Fax: 254 (020) 882908 Mobile: 0722-882104/ 0734-123123 Email: info@negstated Website: www. negst.edu

April 9, 2008

TIRRIM Development Programme P.O. Box 21028 – 0505 Nairobi

Dear Sir/Madam,

## RE: RESEARCH WORK

The bearer of this letter, Mr. Luka Lengewa is a student at Nairobi Evangelical Graduate School of Theology (NEGST) and is doing research towards the completion of the Master of Divinity in Christian Education degree. The research is on "The Impact of TIRRIM Adult Functional Literacy among the Nomadic Rendille Pastoralist and its Implications for Adult Literacy Education"

Any assistance that you can give to Mr. Lengewa will be highly appreciated

Sincerely.

John Ochola, (PhD.) <u>Academic Dean</u>

APPENDIX 3

The location of TIRRIM Adult Functional Literacy (TAFL)

