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Literature, power, translation and Eritrea

In memoriam: Beyene Haile and Isayas Tsegai

Charles Cantalupo

Eritrea's famous stele at Belew Kelew and its inscription strike me as an archaeological, at least *ad hoc*, beginning of Eritrean literary production – be it written or oral.¹ “Adulite. / Join here and write,” it appears to proclaim (Cantalupo, *Light the Lights*, 2004: 77). Subsequently, as Kenya's and Africa's greatest living writer, Ngugi wa Thiong'o recognizes, “For at least four thousand years – from the ancient stele at Belew Kelew to the 20th century battlefields of Eritrea's struggle for independence – and into the 21st, Eritrean...[s] have never given up writing in their own languages, which is why their... [literature] thrives” (*Who Needs a Story*, 2005: back cover).

In most other African countries, literary (again oral and written) composition of the highest critical standard in African languages has been frequently derailed, most notably by the imposition of colonial languages. Eritrean literature has also suffered the occasional imposition of colonial languages – both European and African – although to a lesser extent than countries like Nigeria, Senegal, South Africa, Kenya and many more African nations.

¹ The author extends his deep and sincere thanks to Zembret Yohannes, Eritrea's Research and Documentation Center and Cultural Affairs Bureau, Hdri Publishers, and Penn State University, Schuylkill Campus, whose support has made this essay possible. It derives from a lecture delivered at the Cinema Odeon, July 23-24, 2012, Asmara, Eritrea: “Beauty and Truth ‘in midst of other woe’ – Eritrean Poetry.” Beyene Haile, the lecture's first dedicatee, died several weeks before. Isayas Tsegai, the lecture's second dedicatee, died the night before part 2 of the lecture took place. Written before their deaths, it presents their respective work as vital and prime examples of truth and beauty in Eritrean literature. The embodiment of its aspirations, their work can never die.

Thus, for Africa's declaration of language independence, the widely acclaimed and historic Asmara Declaration of African Languages and Literatures in January 2000 to come out of Eritrea, establishing once and for all an end to the hegemony of European languages in African literature, could not be more fitting and, in retrospect, is hardly a surprise.² In most other African countries, the composition of literature in colonial languages becomes a norm, but it never does in Eritrea. Yet precisely such compositions by African writers in European languages are what has been published as African writing up till now with rare exceptions by editors and publishers – European, American, and African – and what has been featured in literary conferences and festivals, and this is still the case.

Nevertheless, Ngugi identifies a supreme, longstanding and unique Eritrean resolve that its indigenous language literature should not merely survive yet “thrive” through the ages, even against all odds. Based on Ngugi's contention, moreover, that the largest and most successful conference on African language literature ever held took place in Asmara is also hardly a surprise.³

As one of the conference's organizing chairs, however, I can attest that it did not happen because Ngugi's recognition of Eritrea's longstanding African language literary history was widespread, at least in the project's planning stages, which went back over three years before it occurred. On the contrary, Eritrea's literary tradition was barely known, and only for the most part by

² Asmara Declaration on African Languages and Literatures. Charles Cantalupo, Kassahun Checole, Mbulelo Mzamane, Nawal El Saadawi, Ngugi wa Thiong'o, Zemhret Yohannes. (http://www.africa.upenn.edu/Govern_Political/asmlit.html. Accessed 17/06/2013.)

³ Against All Odds: African Languages and Literatures into the 21st Century, a literary conference and festival, took place in Asmara, Eritrea, January 11-17, 2000.

Eritreans. Ngugi himself did not fully realize its powerful existence, until 1999, when he first visited the country. Regardless, at the same time Ngugi's African language literary accomplishments were very widely known and acclaimed at least since 1986, when he shocked Africa's and the world's literary and publishing establishment by proclaiming, "his farewell to English as a vehicle for...my writings" (*Decolonising the Mind*, 1986: xiv), embracing the African languages of Gikuyu and Kiswahili instead. Subsequently, Ngugi's statement radically altered African literary history. Furthermore, Ngugi's critical writings after *Decolonizing the Mind* continued to argue ever more persuasively for and in his fiction powerfully to exemplify African languages as a primary means for African literature production and also won him universal critical acclaim.

Ngugi, his advocacy of and his writing in African languages were the cause célèbre and the biggest reason, in addition to the organizers' unflagging efforts, why *Against All Odds: African Languages and Literatures into the 21st Century* received international and institutional, financial and intellectual support to take place in Asmara in 2000. The project vitally depended on his renown and credibility to attract large amounts of funding and in kind support from the Ford and Rockefellers foundations, the World Bank, universities, nations, and other institutions and NGOs. A host of African international writers and scholars rode into town on this wave of support and, as the saying goes, the rest is history.⁴

This outline of the development and international financial support of *Against All Odds* demonstrates, nonetheless, a profound and fundamental incongruity. The African language

⁴ Cf. the documentary film *Against All Odds: African Languages and Literatures into the 21st Century* (2007). An historical account of the conception and development of the conference, *Against All Odds*, can be followed in Charles Cantalupo (2012) *Joining Africa: From Anthills to Asmara*, 125 – 204.

writing and advocacy beginning in the 1980s of one man was far more widely known and appreciated than the long, thousands of years long, African language literary history of an entire nation and even of a region.

Yet again not surprisingly, perhaps, the project would have been doomed had this incongruity in its development not changed. In May 1998, the bubble burst – one of many bubbles – with the outbreak of war again between Eritrea and Ethiopia. I had first conceived the title of the project, “Against All Odds,” to signify the literary achievement of twentieth-century African writers despite all of the political and social problems that contemporary Africa had to face. With the outbreak of war, and as a consequence the near-fatal decrease in international support that the project received, I saw its title transformed into signifying everything the project itself had to struggle against – including the war – if it was ever to succeed.

Furthermore, I realized that *Against All Odds* happened not merely because a kind of global coalition had converged with a brilliant and charismatic African writer as its leader, although this helped. Our real and greater power was local. Most of the national, international, academic, and corporate institutions and foundations that said they wanted to support us did not, and if they did, again it was with a lot less than we were originally promised. War or no war, we needed a lot more help if we were to continue.

Most of it came from one source: Eritrea. Eritreans mobilized, performing all the work such a gathering required: students and faculty from the university, the unions of Eritrean youth and women, local writers, musicians, dancers, businesses, clubs, state and city workers, *tegedelti*. Moreover, inside Eritrea, the conference’s happening was never “against all odds” – only outside. Of course, the historic example of Eritrea’s confidence

that it would win its thirty-year struggle for independence sustained our project, too. Whatever the odds, Eritreans had dealt with infinitely worse. How could they let us fail, mere child's play in comparison? Against what odds? *Dehan dehan. Non si preoccupi.* No problem.

Still, I wondered? Where did this attitude, or philosophy, this spirit, this resolve come from? Again, one answer was obvious: the Eritrean revolution; its indomitable nationalism; its unprecedented struggle to triumph in winning independence. But surely that did not come out of a vacuum. The “winds of change” sweeping other African nations in the third quarter of the twentieth century towards independence as well as popular Marxist insurgencies and revolutions worldwide also provided some context and inspiration for the Eritrean struggle, too.

But where else might I find its source? Might it be in Eritrea's literature, again oral or written? If so, this may also not be a surprise, but it is a story that is only beginning to be told. The stories of African literatures in colonial languages and even those of literary latecomers to African languages like Ngugi and others may be more widely known. This is a reality, yet it is a misconception that must change. And it is changing, thanks to *Against All Odds*, ironically with Ngugi's support, the Asmara Declaration, Eritrea's writers encouraging the translation of their work, Hdri Publishers, Africa World / Red Sea Press, and others.

Ghirmai Yohannes (San Diego) concludes in his now famous poem, “I...have a story / That nobody knows and it's great – / I am the story” (*Who Needs a Story*, 2005: 79). In *War and Peace in Contemporary Eritrean Poetry*, I write that all of Eritrea's poets clearly demonstrate that they have a story, too. “If ‘nobody knows’ them, or if they are only known for the most part to Eritreans, then” the “purpose” of my book is “to make them known.” Furthermore, “Eritrea can be truly known, only when” its

literature is “known.” Or in other words, as the journalist and scholar, Said Abdulhay, laments, after Eritrea’s armed struggle, “the other face of Eritrea” still needs to be known because “the world [has] never seen or heard our voices except through the gun.”⁵ On a more individual but related note, the historian, Alemseged Tesfai attributes his literary motivation to a desire for the history of Eritrea in the 1940s and 1950s to sound as a distinct, clear voice to fill a silence and a kind of vacuum of Eritrean historical knowledge when various countries are claiming Eritrea has no history of its own that is separate from theirs and thus falsely substantiating the rationale of Eritrea’s federation with and annexation.⁶

Precisely with such an Eritrean voice more widely and clearly heard, what is not Eritrean but what is all too frequently attributed to Eritrea might be replaced or, at least, more seriously and widely challenged and discredited, or at least balanced. Words like “secretive,” “isolated,” “belligerent,” “remote,” “unverifiable,” “unrepresented,” “unresponsive,” “negative,” “arms trafficking,” “starving,” “underreported,” and more might someday not be the most often used descriptors in headlines and news stories. Perhaps I should restate, “not...the most often used.” I cannot say, “never used” – literature has its limits, too.

Yet I have asked before and I ask again: “What nation can ever be known without” its literature being “known” (*War and Peace in Contemporary Eritrean Literature*, 2009: 115)? Furthermore, is a nation even conceivable, or little beyond that, without its literature, both for its inhabitants and for anyone else who would recognize it? The incisive yet near primal eloquence of Isayas Tsegai in his poem, “I Am Also a Person,” answers both

⁵ Said Abdulhay, email to Charles Cantalupo, 8 March 2008.

⁶ Alemseged Tesfai, lecture, Penn State University, Schuylkill Campus, 13 April 2010.

Charles Cantalupo

questions, re-enacting in personal terms a situation in which any denial of the existence of Eritrea by either an individual within it or the surrounding world is impossible.

When I saw the world didn't care
If I was stripped of everything,
Even my dignity,
And beaten like a slave
Less than human,
I lost all sense of peace except in saying
I am also a person. I'm an Eritrean.
(*Who Needs a Story*, 2005: 9)

Embedded within such lines or functioning as a kind of critical premise or *a priori* for their assertion is a reality, most famously phrased by Thomas Hobbes in his seventeenth-century, philosophical and literary masterpiece, *Leviathan*, about how the life of a human being can be “solitary, poore, nasty, brutish, and short” (1651: 186). While Hobbes imagines such a condition to be the only alternative to a strong nation and its government, history provides seemingly endless examples of situations in which people suffer such Hobbesian conditions precisely because of government. Can any nation on earth say that it cannot be held responsible for such misery at some time in history, although debate about to what degree is undeniable, too?

Literature should never be allowed to veil or deny such a human reality. Literature, however, presents the reality of a nation in addition to, even as a part of, such painful facts of history. Furthermore, the reality of a nation as realized through its literature can outshine the all too human and all too universal, historical failures of human politics and governance.

Notwithstanding caveats against literature's covering up and/or exposing any and all of the gruesome sides of the history of

nations, their authors inevitably seem to prevail, and their names achieve a kind of unique indelibility that only the rarest political leaders attain. Or as Shakespeare writes in sonnet 55, “Not marble, nor the gilded monuments / Of princes, shall outlive this powerful rhyme” (*Riverside Shakespeare*, 1759). Think of England and its famous authors along with Shakespeare: Chaucer, Milton, Wordsworth, Austen, Tennyson, Wolf. Think of France: Montaigne, Rabelais, Moliere, Sand, Flaubert, Proust. Think of Italy: Petrarch, Dante, Tasso, Leopardi. Think of Ireland: Joyce, Yeats, Beckett. Think of Rome: Ovid, Virgil, Horace, Juvenal. Think of Greece: Homer, Sophocles, Euripides, Sappho. Think of the United States: Emerson, Hawthorne, Thoreau, Poe, Dickinson, Wharton, James, Eliot, Pound, Hemingway, Williams.... The lists can go on and on. The names are familiar. But try to come up with as many names of prime ministers, kings, queens, presidents when these writers live and write. Other than for the rare historian, few or none can. If this is not literature as power, what is? Not that the political powers that be or the supreme responsibility of good governance should be denigrated. Without it, writers no more than anyone else can survive Hobbes’s state of nature. Still, the names and the works of the writers and other artists remain more widely recognized than all but a comparative handful of political leaders.

Still, no one should fail to recognize that such catalogues of writers are Eurocentric.

Which African nations and cultures can assert themselves similarly in terms of their writers when their political leaders may be forgotten? Such a question may be difficult, challenging, ignorant, insensitive, and even insulting. It is also status quo. But can it be inspiring, too?

The question reminds me of a meeting with Kassahun Checole and Ngugi wa Thiong’o when we were planning *Against All Odds*,

particularly how we would use \$250,000 from the Ford and Rockefeller foundations to fund African-language writers to come to Asmara: a lot less than we had been promised before the war, but enough to carry out at least part of our plan. Kassahun begins:

“You know, now we may have a problem. Whom should we invite? I can think of three or four in Tigrinya and many more in Amharic but . . .”

Now Ngugi interrupted, “Yes, I have several names of Gikuyu writers, both in Kenya and in here. Of course there are many Swahili and South Africans.”

I wrote down the names Kassahun and Ngugi suggested and said, “Who else?” Neither Ngugi nor Kassahun spoke. Hoping they weren’t expecting me to add any names, I said, if only to break the silence, “I’m trying to remember the name of the writer in Chichewa whom I heard in Malawi.”

“We will need help,” Kassahun sighed, smiling and shaking his head.

“Yes,” Ngugi answered, rubbing his hand on his forehead. “Who do we have in Mande, Akan, and Hausa?”

“And Yoruba, Sotho, Wolof, and Xhosa,” Kassahun added.

“We have so many, too many, but who are they? Where are they?” Ngugi responded, his voice trailing off, “It’s a mystery so far. . . .” (*Joining Africa*, 2012: 195 – 196)

The episode directly relates to the question of *why* African writers in European languages dominate what has been published as African writing up till now. The answer is, quite simply, that not

enough writers in African languages are known beyond their local, national and regional surroundings.

Yet to return also to the question, provoked by Ngugi's statement that Eritrean literature "thrives," *where* does Eritrean literature thrive: the first, most obvious answer is *in Eritrea*. Beyond this, Eritrean literature thrives in a good number of international journals, in print and online, and in books that since roughly the beginning of the twenty-first-century have mostly included translations of Eritrean poetry, both contemporary and traditional, as a Google search can readily demonstrate. Not as widely disseminated but still important, Nefa'e Ethman, Enno Littmann, Jacques Faitloovitch, and Johannes Kolmodin document a thriving Eritrean literature in early twentieth-century collections of Eritrean poetry.

Still, this is not enough. It barely scratches the surface of what can be known about Eritrean literature. (The same can be said for archeology in Eritrea.) From the time of the stele in Belew Kelew until now, the amount of literature, including orature or oral literature, approaches the inconceivable – not that all or even much of it is known. Fiction, nonfiction, poetry, drama – Eritrean literature has it all. There is plenty. I say this with total confidence, even though I only know the literature, for the most part, through translation. How can there not be? Where there is language, there is literature. Where there are nine languages or more, there are nine literatures or more. The opportunities for writers and scholars in Eritrean languages and literatures are innumerable. One outstanding example is Hdri's anthology of Tigre language stories, poetry, tales, curses, blessings, and more, titled *Mieras* (2010). The book is monumental and begging for literary critical and scholarly attention *and translation* as soon as possible.

Yet again, how can such an achievement and many more equally laudable, Eritrean literary projects become known outside of

Eritrea? Or is it time once more in describing such an endeavor to dust off that old phrase used to characterize Eritrea's 30-year armed revolution as well as the little African literary revolution that took place in Asmara in January 2000? Is a project to make Eritrean literature more widely known "against all odds," too? I have had reasons to think so, but I am not going to make the same mistake as I did back in the late 1990s and in 2000 when I tried to describe what can happen when Eritreans are involved. Still, difficulties remain.

One example would be my own efforts to publish *War and Peace in Contemporary Eritrean Poetry*, before it came out from Mkuki na Nyota Publishers in Dar es Salaam in 2009. The book was rejected by just about every publisher in the United States and England who publish titles in African literature, as well as by a clutch of publishers whom I thought should be publishing on African literature, and nearly all stated the same reason in their rejection letters – the topic was too narrow. In short, there really was not enough – subject matter or readership – to warrant such a book. Such an editorial judgment went against my own thinking, which I stated in the first sentence of the book's "Foreword": "To discuss the entire contemporary poetry" – not to mention all of the poetry, much less all of the literature – "of most if not all countries requires more than a book, and Eritrea is no exception" (xi).

To expand this assertion: the African language poetry and literature of nearly every country of Africa, or of most African languages – be they national or transnational or regional – warrant book length studies like mine. Nor is such an approach necessarily unique to Africa.

A colleague at Penn State, Michael Naydan, translates and publishes books of Ukrainian poetry and fiction. His multiform efforts have created a kind of critical mass that unprecedentedly

and unmistakably establishes Ukrainian literature in the annals of world literature, as it has never been before. Moreover, through translation he has majoritized a previously minoritized literature: minoritized, I should add, by a political history of brutal proportions and intensity, again not unlike many of examples of African language literature, particularly Eritrea's. For example, of the 1500 writers Stalin executed in the 1930s, at least half, 750, are Ukrainian.

A plethora of literary talent, they are, nevertheless, as Naydan recalls, "an executed Renaissance" (Naydan, 2006: 455). The recognition and critical study of African language literature is at the beginning of uncovering any number of examples of "an executed Renaissance" of writers or poets and storytellers. Yet working in African language literature and its translation is precisely a struggle to prevent such executions from continuing.

A major achievement in establishing once and for all the power of Eritrean literature and in beginning to make it known to the world is the first book by Ghirmai Negash, *A History of Tigrinya Literature in Eritrea*, subtitled "The oral and the written, 1890 – 1991" (1999). It is a model of what can and should be done for the literature of any African language in any African nation or region. The first, the pioneering, and thus far the only book of its kind on the subject, it is a 240-page testimony, providing the evidence for why Ghirmai Yohannes / San Diego's lines, "I ... have a story / That nobody knows and it's great – / I am the story" can represent the historical consciousness, the supreme confidence, and the fully justified high ambition of contemporary Eritrean literary practice.

Another major achievement by Ghirmai has dawned: one that will rewrite African literary history of the twentieth century. He has translated *The Conscript*, a novel written in Tigrinya by Ghebreyesus Hailu, initially in 1927, and first published in 1950.

The novel is undoubtedly great, but its translation is earthshaking, and I almost mean literally, at least for the literary world. In translation, moreover, *The Conscript* provides an example of how literature can most reveal its power.

The Conscript tells the story of an Eritrean whom the Italian colonial army conscripts and sends to Libya to quell a colonial uprising in that country. Hailu depicts his character's emotional struggles and develops a plot that leads him to refuse combat against Libya's Arab freedom fighters. He realizes that he should not be fighting the colonized instead of the enemy he has in common with them: the colonizers, in this case the Italians.

The book is a postcolonial long before the term became popular *and* written in an indigenous African language – two vitally important “firsts” in African literary history.⁷ With all due respect, the longstanding chorus of assertion that Chinua Achebe's *Things Fall Apart* (1958) written in English is the first modern African novel should pause and at least think twice. This most basic premise of twentieth and twenty-first-century African literary study is challenged and undone. Hailu writes *The Conscript* in Tigrinya over thirty years before Achebe's achievement. Not to question its unique literary power, but the fact remains that *The Conscript* predates the publication of *Things Fall Apart* (1958) by almost a decade. Furthermore, *The Conscript* in Tigrinya predates Ngugi wa Thiong'o's first African-language novel in Gikuyu, *Petals of Blood*, in 1977 by over fifty years.

⁷ Postcolonial: Occurring or existing after the end of colonial rule; of or relating to a former colony. In later use also: of or relating to the cultural condition of a former colony, esp. regarding its relationship with the former colonial power. *Oxford English Dictionary*. (<http://www.oed.com.ezaccess.libraries.psu.edu/view/Entry/263746?redirectedFrom=postcolonial#eid>. Accessed 17/06/2013.)

Hailu's narrative maintains a strong momentum: Tuquabo's passive and sentimental home life in an Eritrean village deepens into a scenery that transforms his psyche as he arrives in a sweltering Massawa to board a ship to Libya. Eventually he realizes that he is on a journey to hell, into a heart of darkness. Two horrific days in the Libyan desert include an even more horrific battle. He survives all but to die of thirst. Hailu devotes an entire chapter to it. Finally, Tuquabo returns to his homeland. He is a forsaken and guilt-ridden shadow – or is it simply a mature version? – of his former self.

The Conscript also contains a kind of proto-anthropological study of Libyan Arab culture in contrast to Habesha. Does its characterization raise questions about whether Tuquabo is truly Eritrean or unwilling and unable to distinguish between Habesha culture in Eritrea and Habesha culture in Ethiopia. Such self-consciousness and sensitivity, albeit pertinent in the present, can be irrelevant to the true identity of Tuquabo as Hailu presents him. He is born in an Eritrean village. He is raised there, and it is the home to which he returns at the end of the story. Hailu offers a distinctive portrait of Asmara and Eritrea, a specific place in a specific time. He portrays the life of a man, a father, a mother, and a citizenry who cherish and have a unique sense of their homeland. At the novel's outset, when Tuquabo departs for Massawa on his way to Libya, he feels he is on a fateful and long journey while he also suffers the pangs of being away from home. Where he is leaving from, passing through, and going to are all distinct and different places. Furthermore, Tuquabo can be endearing, engaging, charming, and shrewd, yet most credible in his general reticence, nearly always communicating through understatement.

A less local and regional or more pan African analysis of Hailu's Tuquabo reveals a stunning contrast with Achebe's Okonkwo in *Things Fall Apart*. Both characters embody a crucible for the

culture from which each emerges. Differing from Achebe's creation, Tuquabo's awakening to the evils of empire provokes his rebellion and survival rather than his destruction, indeed, his self-destruction. Tuquabo resolves on anything but Okonkwo's obsession with tradition that he fashions into a delusion of his macho prowess and indigenous exceptionalism as his people's hero manqué. Instead, Tuquabo is an everyman, a distinctly Eritrean one at that.

No other work of fiction that comes from Africa in the twentieth century is more important than Ghebreyesus Hailu's *The Conscript*. Ghirmai Negash's translation bathes in a similar light if the work is to be readily accessible to students, scholars, and general readers and enjoyed for generations to come, in and outside Africa. *The Conscript* is a timeless and unforgettable work of literary beauty for Eritrea, Africa, and for the world.

Such high praise for *The Conscript*, including a call for it to be a basis for the rewriting of twentieth-century African literary history, is based on its translation. In addition to *The Conscript*, nearly my entire engagement with Eritrean literature as well as with my Eritrean colleagues yet with any and all African language literature is based on translation. It is my lifeline, although this dependency is not unique to either Eritrea or Africa. I depend on the translation of all literature except English language literature. Albeit my first love to whom I remain faithful, it is still limited and not fully comprehensible without further knowledge of the literatures of Europe from its beginnings until now, the ancient Greeks and Hebrews, Eastern cultures, African cultures, as I have been arguing, and more – all of which I can know only through translation.

In the case of *The Conscript*, if it is to change, to rewrite, to correct African literary history – to replace inaccurate old knowledge with more accurate new knowledge – it must be through translation.

Similarly, to turn momentarily to another scholarly discipline, a likewise corrective effect on African and world political history would result through a translation of Alemseged Tesfai's *Aynfelale* ("Let Us Not Separate") and *Kab Matienzo ksab Tedla Bairou* ("Eritrean Federation with Ethiopia: From Matenzo to Tedla", 2005). Again similarly, an understanding of the traditional poetry of Eritrea, as an element of the traditional poetry of Africa, yet as an element of the legacy of poetry to the world, would result through the translation of Solomon Tsehaye's monumental *Massen Melgesn Qeddamoto* on the subject. And again, a better understanding of the art of the novel, the African novel, the Eritrean novel, and the novel in world literature would result from the translation of works like Beyene Haile's.

Take, for example, the novel he writes in his late teens in 1958, *Abidu Do Tibluwo*, now translated and published *Mezgebe: Would You Say He Was Mad*, the *Bildungsroman* and portrait of a young artist, written in the same year as the publication of Achebe's *Things Fall Apart*. In the 1970s, as Alemseged Tesfai can recall, the work is widely denounced for its lack of Marxist principles, which in retrospect can seem misguided, although it is, at least, in keeping with the times. Fortunately, however, *Abidu Do Tibluwo's* story does not end there. Its new translation heralds a rewriting of twentieth-century African literary history once again, and the voice that summons such a project is again Eritrean. Moreover, with the publication of the translations of both *The Conscript* and *Mezgebe* in 2013, it is an *annus mirabilis* yet a new beginning for Eritrean, African, and world literature.

Or is this to claim too much for the importance and the potential of the translation of literature in Eritrea from its indigenous languages? Are there not enough speakers, readers, or writers of its major languages? Are there more in London in Shakespeare's England, or in Dante's Italy, or in Virgil's Rome, or in Homer's Greece, or in King David's Jerusalem or in Edgar Allan Poe's

America? No. And would anyone argue that such works as Shakespeare's plays, Dante's *Divine Comedy*, Virgil's and Homer's national epics, the psalms of David and the Bible as a whole, and even the writing of Edgar Allan Poe, should not have been translated; that they have only local interest; that the world would be better off if they merely remained in their own original languages? Isn't the world unimaginable, vastly impoverished, and terribly misunderstood without them. Still the world, except in their respective native countries, only knows them through their translation.

Thus, the prospective outcome of African language literature translation and its publication is exceedingly bright. But its current state is dim. Consider this survey of poetry alone – not to mention fiction and literary nonfiction – in journals, books, and on websites (accessed 17/06/2013):

The UK's *Poetry Translation Centre*

(<http://www.poetrytranslation.org/>): Translations from nine African countries but only three in indigenous African languages.

Words Without Borders

(<http://www.wordswithoutborders.org/>): Eighteen poets in translation but only one from an indigenous African language (Ghirmai Yohannes' "Unjust Praise" in Tigrinya). Seven in Arabic but ten from French and Portuguese.

The UK's *Poetry Society*

(<http://www.poetrysociety.org.uk/>): Next to nothing.

The USA's *Poetry Foundation*

(<http://www.poetryfoundation.org/>): Nothing.

The UK's *SOAS Poetry Translation Centre* (<http://www.soas.ac.uk/cts/>): Translations from six of the fifty-four African countries; 11% of African countries, but roughly 0.2% of Africa's languages.

The literary journals *Wasafiri* (<http://www.wasafiri.org/>) in the UK and *Callaloo* (<http://www.callaloo.tamu.edu/>) in the USA, which claim a strong connection to African cultures: next to none.

Wild Berries Inside and Behind the Yard: An Anthology of Contemporary Botswana Poetry (2008): No African language poetry, although 2% of the country is English speaking and 78.2% Setswana speaking.

The Trickster's Tongue (2006): Nearly 400 pages of African poetry, and only one selection of indigenous language poetry – Yoruba. Nevertheless, the book includes the translation of inscriptions in Greek and Latin from Carthage, with an assertion that they should be recognized as African due to their geographical location in Tunisia.

Gods and Soldiers: The Penguin Anthology of Contemporary African Writings (2009): Of the thirty items, only four are translated, and those from the French. There is no mention of an African language.

The Penguin Book of African Poetry (2008): The most popular anthology of African poetry, and currently in its fourth edition. First published in 1963, it is all in English, contains few translations of African language poetry.

The *American Literary Translators Association*, ALTA (<http://www.utdallas.edu/alta/>): After thirty-five annual

conferences, it has still never included a single scholarly session on translations from African literature.

To go on would be to disregard the wisdom that discretion is the better part of valor. There is more poetry translated and published, to take one example, from a single country with one language like Romania than a continent with fifty-four countries and thousands of languages.

Such a vast imbalance or incongruity can be attributed to a similarly large misperception and the widespread inability to recognize a basic fact. African literature exists primarily in African languages, which require translation. To speak of the relationship of one continent's languages and literatures to another's and to the rest of the world, how could this *not* be the case – still Africa is the exception to such a common sense notion. Of all the continents, Africa has the least amount of translation from its languages' literature, excluding Antarctica, of course, although there is probably more widespread knowledge about penguins than about African language writers. Well-known political formulae attribute this wild imbalance, like countless other African problems, yet all too often as if they are unique to Africa, to the destructive nature of colonialism and neo-colonialism, which persist, of course. Still have such remedial efforts as these analyses provide done much to change the situation? If one African-language book was published and/or translated for every time these arguments have been made and agreed to – time and time again – the problem might be closer to being resolved.

I foresee a day, nevertheless, when reading African authors who only write in English, French or other colonial languages will look as obtuse as someone only reading authors who write in Latin during the European Renaissance? I foresee a day when there will be as many books and handsome volumes on the shelves of

African language literature – both in the original and in translation – as there are of beloved English and European vernacular Renaissance literature. What would be known about it without writers like Petrarch, Dante, Chaucer, Shakespeare, Donne, Rabelais, Montaigne, Cervantes and more, if only their Latin-composing contemporaries were read? Secretary of State delivering a lengthy policy speech in Kenya, Hillary Clinton can assert that although “the story of Africa is told in stereotypes and clichés about poverty, disease, and conflict...the story we also need to tell, and tell it over and over again, is that many parts of Africa are rising to twenty-first century challenges.... We have seen the changes, and we know what is happening right now.”⁸ But do we know, and what do we know about Africa, if we do not recognize that it must come from Africa first and in Africa’s languages and their translation?

Eritrean literature in African languages and their translation, nevertheless, is a bright and ever more glowing exception in a world and a literary world that has not yet realized that African literature in the future and in part already lives primarily in translation like the rest of the world’s literatures. There are more translations of poets from Eritrea in print and online than from any other country of Africa. Their work is the subject of songs, documentaries, radio broadcasts, articles, websites, and books. But Eritrean literature in translation has only begun with its contemporary poetry, a sampling of traditional oral poetry, a few plays, essays and short stories, an early twentieth century novel and a handful of outdated, colonial collections. A literary tradition reaching as far back as the stele of Belew Kelew, as the Bible, as the Koran demands and deserves more. This is the challenge.

⁸ Hillary Clinton (2009). “Remarks at the 8th Forum of the African Growth and Opportunity Act.” (<http://www.state.gov/secretary/rm/2009a/08/126902.htm>. Accessed 17/06/2013.)

Is it against all odds? May be to writers and scholars from outside Eritrea, but how can it be for Eritrea itself, where its literatures in all their languages are alive and thriving day in and day out. Eritrea's being a leader in Africa in promulgating a long, brave, and exemplary ancient and modern tradition in the development of its languages and of their literature, oral and written, has for too long gone either unrecognized, especially externally, or taken for granted, internally. Yet a recent essay by Ngugi wa Thiong'o⁹ suggests just how far ahead Eritrea is of the norm for Africa. In Kenya, for example, Ngugi laments that recently "Parliament voted to ban African languages in public places", an unconceivable prohibition in Eritrea, unless one could imagine "public places" utterly silent or devoid of people. Ngugi also observes that "in most African countries before but more so after independence the majority is denied access to their languages because the state has marginalized them to the point of official invisibility. English, French and Portuguese take the pride of place in the body politic" – yet another unthinkable state of affairs in contemporary Eritrea. Ngugi wonders, is it "not too much to ask that demonstration of competence in at least one African language be made a condition for promotion?" Should someone "be allowed to stand for councils and parliament without showing a certified competence in an African language?" And should not "a knowledge of one or more African languages...be a requirement at all levels of graduation from primary to colleges?" Requiring competence in at least one African language for promotion in school, graduation, and serving in public office? Such competence is universal in Eritrea: a given, established, historical, and undeniable matter of fact. It is not hope but a reality.

⁹ "Linguistic Power-sharing: Culture and the freedom of expression," *Sunday Times*. 2012 Literary Awards, June 21, 2012. (<http://bookslive.co.za/blog/2012/06/25/speaking-my-language-ngugi-wa-thiongos-address-at-the-2012-sunday-times-literary-awards/>. Accessed 17/06/2013.)

But Eritrea must set yet one more African example. Every great nation offers its literature to the world, beginning with the original, but it requires translation. Eritrea's unique and notable beginning in the translation of its literature notwithstanding, how can this effort continue to, in Ngugi's word, "thrive"?

Walter Benjamin, provides two ways to proceed to meet this challenge, one ideal or philosophical, and one more practical. First, the ideal: "It is the task of the translator to release in his own language that pure language which is under the spell of another, to liberate the language imprisoned in a work in his recreation of that work." (1923: 80)

By "pure language" Benjamin can mean a language that does not really or literally exist – at least as we commonly understand what language is – but is a kind of current of common understanding that flows freely from one human being to another, at least in writing, regardless if they speak the same language, even because they do not speak the same language or come from the same place, time, or people. Furthermore, the translator is inspired by the language "of another," even while not quantitatively understanding much or any of it, but qualitatively understanding a purer, more revealed sense of his or herself in that other language than could be known in his or her "own language." Still, this greater understanding cannot merely rest as an intimation from the other language but must be actively "liberated" not merely through listening but recreating or liberating from the other language through its *translation* a greater language that is still his or her own but greater than it has ever been. Thus a great translation increases the scope and power of the translation's language beyond what it was before the translation, for example, the way a translation of the Bible will inevitably and profoundly enrich the language it is translated into. The greatest translation of the Bible in English, the King James version, published in 1611, has famously had a profound effect on the history of English,

including its' literary history. Ngugi once said to me that the most influential and beautiful book in Gikuyu was its translation of the Bible. And as for the Bible's original language, while it cannot be literally enriched from the language of its translation, if only due to the temporal limitation of the original having come first, still the original's language is inevitably better understood, or more fully interpreted and comprehended, in terms of style, content, or both than before it was translated. This too can be a property of what Benjamin calls the "pure language" that both an original and its translation not only share but also aspire to.

Approaching the subject of translation in a more practical and less philosophical way, Benjamin also writes:

The basic error of the translator is that he preserves the state in which his own language happens to be instead of allowing his language to be powerfully affected by the foreign. Particularly when translating from a language very remote from his own he must go back to the primal elements of language itself and penetrate to the point where work, image, and tone converge. He must expand and deepen his language by means of the foreign language. (1923: 81)

Testifying for such a process based on my own experience, I recall the middle of February 1999 when I am in London and receive an email from Reesom Haile, containing the poem, "*Alewuna, Alewana*," the first poem for translation that he ever sent me, both in the original Tigrinya in Latin letters and with a half literal / half doggerel version in English.

In the Tigrinya version, nearly every line seemed to rhyme. Also, the singsong version in English settled on abstractions and generalities without a single image.

"Maybe you are right about Tigrinya being too difficult to

translate,” I said to Kassahun when I told him about the email as we emerged from the Piccadilly Tube station to walk to the British Council headquarters, International House, for our meeting [to discuss its offering financial support for Against All Odds].

“Still, you can try. You poets only speak your own language to yourselves anyway,” he replied as I thought about the rhythm of the poem I had heard in Asmara – “eZM! Z-eEZM! eZM! Z-eEZM! eBUM! Z-eEZM! eBUM! Z-eEZM!” It made the jostling Piccadilly crowds seem unreal, and I felt like a ghost passing among them. Even as we sat with the director of the British Council, well known for his work in African literature and whose ruffled demeanor enhanced his OBE status and supreme position in Britain’s cultural bureaucracy, his words and promises of support seemed no more substantial than the steam rising at first from the surface of our tea in comparison with the original Tigrinya rhythm I kept hearing behind my eyes. I worried about getting it into English instead of getting more than verbal support for our project from the patronizing director. (Joining Africa, 2012: 181)

The scene takes place at the same time that the war between Eritrea and Ethiopia reveals Against All Odds’s wide ranging NGO and international funding as empty rhetoric. But

...in translating the poetry of Reesom Haile, I was finding the opposite....an independent voice steeped in Eritrean oral poetic traditions and, as the poet Rimbaud – who may have lived in or at least passed through Eritrea in the 1880s – demanded, “absolutely modern” (43), yet in a way I had never experienced and had to learn. For example, “*Alewuna, Alewana*” in Reesom’s eponymous poem meant “we have, we have,” the “u” and the “a” signifying gender, respectively

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men and women. Since the words recurred so frequently in the poem, in my first translation I set up a kind of grid, with “We have” positioned at the corners and key points, as in concrete poetry. Next I had them feed into the poem’s second recurring words – “men” and “women” – via the poem’s third most recurring word, “Who,” which led to a verb describing what men and women could do to rebuild Eritrea: sacrifice, gather, provide, lead, grow, study, persist...and so on. Along the lines of the innovative 20th century [American] poet Charles Olson, I imagined the poem as a kind of field of energy filled with the poet’s spontaneously projected language.

When I emailed my translation back to Reesom, he rejected it in an email the same day. As I read past the rejection and Reesom explained what he was looking for instead, I thought of Kassahun...[Checole’s] contention about the twentieth century...writers collected in the book *Black Lions*: that they were modern but in ways that still weren’t recognized. I also recalled what Zemhret Yohannes said in our first meeting: that he looked for a parallel between tradition and change. I had to find an English approximation for the poetic process of writing in Tigrinya....

The poetry Reesom wanted had few critical equivalents in English, especially not modern: spontaneous, fresh, oral, unforgiving, accessible, and public without becoming empty words, broken promises, and sinking expectations: a kind of daily bread or common currency for all kinds of people – writers, children, artists, young professionals, working people, the elderly, government people – to create a universal rapport of give-and-take. (*Joining Africa*, 2012: 184 – 185)

This incident marks the beginning of my experience in translating poetry from Eritrea: trial, error, and failure; a wrong first step precisely because I was relying on my own language and only on the poetic tradition that I knew, both in terms of history and composition or techniques, however informed and current. To cite Benjamin's terms once more, the language of my translations had "to be powerfully affected by the foreign... [which was so] very remote from my own...[and I had to] go back to the primal elements of language itself...[to] expand and deepen" what I wrote. Still, how could I not, confronted with a poem so monumentally ambitious, calling for yet another kind of rewrite of history, in this case, through the repeated assertion of "We have...we have...we have...we have," profoundly reversing the most popular misconception of Africa, as well as of Eritrea, that it was a place that did not have; that did not have medicine; did not have money; did not have governance; did not have languages; did not have freedom? With "*Alewuna, Alewana*" Reesom Haile (2000: 44 – 45) created a new icon not only of Eritrea but also of all of Africa.

After this initial experience, Eritrean poets continued to confront me – unknowingly and not deliberately I should add – with a style and a content that further required I change any preconceptions I had about their work that were not at least in part derived from their experience and language as much as from my own. For example, I had to move from an understanding of poetry's existing for the most part despite a surrounding culture, which is an American experience, to a culture in which poetry appeared central, as in Eritrea, appealing across a broad social, educational and political spectrum. A recognition of which position for literature and poetry was better or worse was not so much my concern, nor is it now, as simply realizing this difference and letting it affect the way I would write a translation.

Only the process did not stop there. I felt powerless and even regretful when I began to realize that through this linguistic cultural exchange of writing translations of Eritrean poetry my own poetry began to change. I neither sought nor wanted it to change and even tried to resist. I had written and published six long poems, four of them in my book of 2004, *Light the Lights*, totaling over 3700 lines in all, which I considered to be a kind of epic recounting the cultural shift I had made in coming to African cultures from Western cultures. I staked my literary reputation on this. Critics called it experimental, urgent, imagistic, wild, churning, visceral, surreal, and dynamic. It garnered critical praise, professional recognition, and promotion. But nearly all of the writing predated my translating Reesom Haile and later the poets of the anthology, *Who Needs a Story*, after which I found myself unable to write poetry as I had been, even if and when I wanted to. In sonnet 111, Shakespeare wrote about a person's "nature" being "subdued / To what it works in, like the dyer's hand" (*Riverside Shakespeare*, 1769): the way through immersion that a hand becomes the same color as the cloth or leather it is dying. Translating Eritrea's poetry "subdued," dyed my poetry in a way I never expected and that even now I am not able to fully explain. I tried to explain, nevertheless, in these opening lines in a poem from a book I have been working on. Written on a previous visit to Asmara, they described a process of casting off one's cultural moorings, not necessarily intentionally, but being buoyed up, nevertheless, by the *plus ultra*, Latin for "further beyond," where literature and power cannot be attained without translation.

Traveling, passing the portals
Of dissociation and older
Than anyone I see, alone
And in a language not my own,
Why end up here again? Abstract
Except for the pangs of leaving
Home? The reasons have no effect.

The eloquence of the unknown
Takes over.¹⁰

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¹⁰ Charles Cantalupo, *Words for Willows*, unpublished ms., 47.

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Towards a sustained use of Adhanet improved biomass cook stove: Issues in dissemination

Khalid Mohammed Idris

Abstract

The tested performance of Adhanet improved biomass cook stove was hailed a success by the media and its potential for improving the quality of lives in rural and urban households was equally lauded. This study explores the process of actualizing this potential by attempting to identify and analyzing issues in the dissemination process that affect the proper and sustained use of the stove. For this, the study employed in-depth interviews, focus group discussions among stakeholders, and field observations of its implementation to generate firsthand accounts of the dissemination process. The findings indicate the need for closer interactions among the designers and key implementers and to a more efficient follow up of the installation process to better materialize the benefits of the improved stove.

1. Introduction

Improved biomass cook stove holds the promise of alleviating the energy crisis in rural and urban areas because of its multiple advantages. The major ones are: significant reduction in fuel wood and biomass used, improving the quality of livelihoods by reducing indoor smoke and associated social benefits of reducing the time and energy spent in fetching firewood especially by women and children (Maes and Verbist, 2012). Early literature has indicated ample opportunities for improved stove programs. However, only programs that target regions with severe lack of fuel wood, stove designs that fit the local needs and taste, and programs that had slowly shifted from state/donor funding to commercializing the stove were regarded as successful programs (Barnes, Openshaw, Smith and Van der Plas, 1994). The literature (Agarwal, 1983; Barnes et al., 1994; Gill, 1987; Manibog, 1984; Ruiz- Mercado et al., 2011)

also caution not to buy success stories based on the number of stoves installed, efficiency tests, degree of acceptance and adoption. The project on the dissemination of Adhanet improved biomass cook stove (hereinafter Adhanet stove) in Eritrea was carried out with the participation of local women, NGOs, donors and individuals, coordinated by government bodies in the different regions. Women, as implementers and beneficiaries, are the main actors during the implementation process and this ensures the sustainability of the project.

Adhanet stove was hailed as a success in the country's media and received international awards.¹¹ Adhanet, which means 'saviour' in Tigrinya, one of Eritrea's main languages, lives up to its name as it markedly reduces fuel wood and biomass consumed with minimum indoor smoke. This revolutionizes the quality of life in rural areas especially those of women and children who usually suffer the brunt of stove related activities, such as collecting fuel wood and cooking in smoke-filled kitchens.

Despite Adhanet's robust performance and anenthusiastic reception by the public, little research has been conducted on the process of dissemination of Adhanet. This article tries to analyse the process of translating the stated benefits of the improved stove by exploring the actual role of actors in the implementation process. The analysis will indicate issues related to the process of adoption of the stove as specified by the designers in the Renewable Energy Centre (REC) at the Ministry of Energy and Mines. It first reviews relevant literature to highlight the complexity of the implantation process of improved stoves in the developing world. After introducing the methodology employed in the study, it will then introduce the case study by stating the technical superiority of the stove. The role of key stakeholders in the process of dissemination is then identified and discussed. Using

¹¹ Adhanet was awarded the 2003 Ashden Awards for Sustainable Energy given by a London based organization for local sustainable energy projects.

Agarwal's (1983) frame of analysis, various issues that affect the optimal use of the stove are also discussed. Finally, the paper draws lessons from the case study to build on the popularity of the stove in rural and urban Eritrean households.

2. The promise and practice of improved cook stoves in the global south

Although people will probably switch to cooking with modern fuels in the very long term, many hundreds of millions will be using biomass stoves for decades (Barnes et al., 1994:30).

The dissemination of improved cook stove has been one of the main development interventions in the past three decades (Ruiz-Mercado et al., 2011). Globally, 2.7 billion people - some 40 % of the global population - rely on traditional use of biomass for cooking (IEA, 2010). This trend affects ecological sustainability, especially in regions with fuel wood scarcity. Rapid depletion of fuel wood and other biomass sources of energy also adversely affect livelihoods, notably of women and children in rural regions. Improved cook stove programs have proliferated in developing countries in an effort to reduce deforestation and improve the quality of living of communities especially women and children. Oparoacha (2009:16) has stated that more than half of rural women in Africa are affected by fuel scarcity, which leaves them "with appalling health situation, overburdening of household tasks, and in some cases rape while fetching wood in remote areas".

Like many other development interventions, improved cook stove programs face challenges of implementation (Gifford, 2010). Campbell (1994), while analyzing the problem of sustainable development interventions in general and the introduction of improved cook stoves in Ethiopia in particular, pointed to the poorly managed, top-down intervention approaches and the

apparent disconnect between the project's intentions and the needs of the locals. He emphasized that "centralized planning and the wider socioeconomic and political context of rural development, within which development projects operate, directly affect the extent to which innovations are constrained or promoted" (Campbell, 1994: 20).

Studies also indicate that the technical superiority of an improved stove does not always guarantee its automatic adoption and proper use. For example, Tsephel et al. (2009) underlined that socioeconomic factors (income, age, gender and education) and product-specific factors (safety, indoor smoke, usage cost and stove price) are important in better understanding decisions on whether to adopt a particular innovation. An internationally renowned Patsari improved stove from Mexico, for example, offers a clear improvement from the traditional stove - an integrated energy efficiency scheme using Water-Boiling Tests (WBTs) and Controlled Cooking Test (CCT) proved 67% reduction in energy consumption in households which only use fuel wood (Berrueta et al., 2007). But this performance on the test did not necessarily complete the picture of 'successes', as it did not closely and consistently verify similar performance levels from other perspectives. Individual household's preferences and adoption style, and the effect of the processes of dissemination on households' cooking practices need to be taken into account for explaining the proper and sustained use of improved stoves in households. As Adrianzén has noted, "the endogenous nature of improved stove usage decision makes it complicated to obtain clear implications about environmental and health effects of these devices" (2010: 43).

A. Analytical framework

Some important general considerations need to be taken into account for assessing the stated benefits of improved biomass cook stoves in general and wood-burning stoves in particular, in the

context of developing countries. The successful dissemination, i.e., meaningful adoption and sustained use, of such stoves depends on their perceived economic benefits (or drawbacks), infrastructural and technical aspects and compatibility to the wider socio-cultural context (Agarwal, 1983). In the analytical frame drawn by Agarwal, the different aspects encountered in the dissemination process are identified (see Fig. 1).

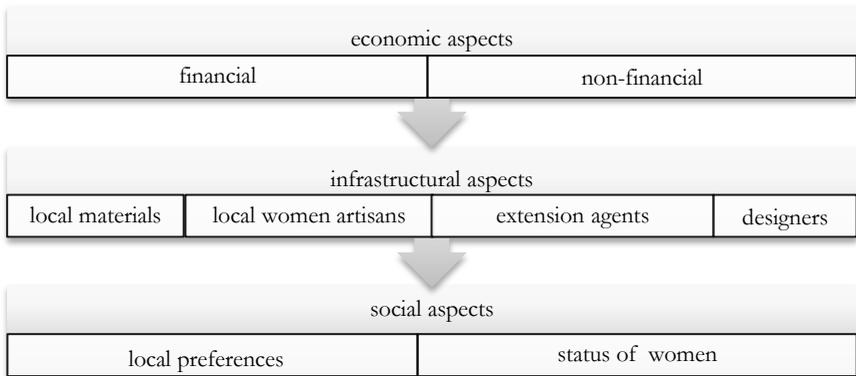


Figure 1: Analytical issues related to the diffusion of wood-burning stoves (Agarwal, 1983).

3. Methodology

The research, conducted in mid-2011, explored the process involved in the dissemination of Adhanet cook stove by examining the role of key stakeholders in the process and identifying, using Agarwal's (1983) frame of analysis, various issues that affect the optimal use of the stove. The study was qualitative and explorative in its approach and employed in-depth interviews with key stakeholders: women beneficiaries; designers of the stove; Women Extension Agents (WEA); director of the Department of Energy (DoE); REC monitoring team; agents of the National Union of Eritrean Women (NUEW) and People's Front for Democracy and Justice (PFDJ) organizers. Furthermore, focus group discussions with local women

artisans and field observations were employed to complement the interview data.

Overall, ten villages¹² and thirty households were visited in three administrative sub-regions¹³ of Zoba Maekel. Some of the households were from Asmara. The households included in the study were households that installed the stove on site; that had used the stove for over five years; that had installed the stove for less than six months and that had not installed the stove at all. The selection was done after the researcher's consultation with WEA and the NUEW village agents.

The study region seemed ideal for the purpose. Zoba Maekel region is in the central highlands where the semi-enclosed traditional stove is part of a household tradition in rural, semi-urban and in the capital city of Asmara. The dissemination process also started here in the late 1990s. This is a region where there is a relative density of interventions/projects carried out by government bodies, non-governmental organizations (NGOs), and donors.

To capture the nuances of the dissemination process on the ground, a focus group discussion was conducted with local women artisans in Laguen (15 women) and Beleza (18), two villages that were installing the improved stove onsite.¹⁴ Focus group discussion suited the research problem as it needed in-depth account on "how people think about an issue, their reasoning about why things are as they are and why they hold views they do as members of a group" (Laws et al., 2003: 299). The key disseminating agents in the villages were the women artisans trained by WEA. Their views helped to

¹²Adi Abeyto, Adi Raesi, Adi Hamushte, Laguen, Abarda'e, Beleza, Serejaka, Guritat, Tsaeda Kristian and Weki Duba

¹³Galanefhi, Serjaka and Berik sub-regions of Zoba Maekel

¹⁴Three of the villages visited – Laguen, Beleza and Abarda'e – were installing the stove for the first time and this generated firsthand accounts of the actual implementation process when the key participants were involved on site.

have a deeper understanding of the dissemination process on the ground. The discussions were conducted in Tigrinya, which facilitated communication and helped address multiple issues pertaining to the dissemination process.

In addition to interviews and focus group discussions, documents from the Department of Energy and the Renewable Energy Center were consulted to support the analysis. Moreover, informal discussions with village community members were conducted whenever possible and field observations, which were recorded on field notes, were also used to complement interview and focus group data. Interview and focus group discussions were audio-recorded and transcribed. Data collection was all administered by the researcher in mid-2011.

The scope of this study is limited to exploring the process of dissemination of Adhanet cook stove and will not go into patterns of use of the stoves in households visited.

4. Adhanet cook stove

Eritrea is part of the Sahel region that is experiencing the brunt of climate change and drought. With increasing loss of scarce fuel wood, household energy is in a critical condition, especially in rural areas. As the source of fuel wood is from common land and the market, households that fetch fuel wood have to make trips ranging in distance from less than 0.5 km in urban areas of all regions to about 45 km in semi-urban areas, where it takes as much as 14 hours (DoE, 2004: 10). Because of this, locally compatible, simple and efficient device like Adhanet stove means a great deal to people in their day-to-day lives. Unlike the traditional cooking stoves in most parts of the sub-Sahara region, in which cooking is conducted in simple three stone fire or ‘open fire’ (Adkins et al., 2010), the traditional stove in the highlands of Eritrea is semi-enclosed, but it does not prevent the loss of heat and indoor smoke.

Improvement was, therefore, sought to conserve heat and prevent indoor smoke. The critical component of the improved design is the 54 cm diameter fire grate located inside the stove. This circular component with cylindrical holes creates change in pressure and accelerates the fire-up of the stove and slips off ashes. The complementary (and crucial) components include: the bottom wide and narrowing gate which accelerates wind, a ceramic block with a measured thickness insulating heat, a sliding door and a chimney with attached valve to regulate heat.

Various local and non-local organizations and individuals have contributed to the development of Adhanet stove. According to Van Buskirk, “the improved cook stove designs are inherently robust; many are not installed according to design specifications, but still perform quite well while properly installed stoves appear to exceed initial performance expectations” (2004:2). The efficiency level of the improved stove has been lab tested to be 20–25%¹⁵, and between 18–20% in properly installed households. The stove is expected to last 10 years (ERTC, 2003). Moreover, it is expected to decrease deforestation as well as emissions of greenhouse gases by about 0.6 ton CO₂/household/year globally (DoE, 2003).

In Eritrea, the national media played a key role in the initial popular reception of the stove. All interviewed households pointed to the national radio, newspaper or TV as their source of information about Adhanet stove. REC personnel have also projected it as a good fit for carbon trading in the international Clean Development Mechanism (CDM) scheme.

¹⁵ In the traditional way of cooking, the heat utilization efficiency of biomass stoves is very low averaging around 10% or below for the semi-enclosed stoves common in the highlands and around 5% for the open hearths common in the lowlands (ERTC, 2003: 1).

A. General fuel consumption patterns of households

In the visited households, women use wood, sticks, kindling, dung patties, loose dung, grass, saw dust and other agricultural residue for their stove, both for the traditional and the new Adhanet stove. The households also indicated that with the improved stove they used nearly *half* of the biomass that they used before.

Twenty five (83%) of the visited households stated that they collected wood and other biomass supplies for their stoves themselves from their surroundings. They did not have any difficulty in fetching such fuels. Despite government restrictions on the logging of trees, on an average, households fetch wood once or twice a week, depending on how much cooking is needed and family size and availability of family members -children between seven and fifteen - to do it.

Households had also other sources of fuel for heating and cooking. These include kerosene, gas stoves, and electric stoves in five households. These affirm the conclusion reached by Masera et al. that “multiple fuel users constitute an important market niche for improved cook stoves than exclusive fuel users” (2005: 35). Ruiz-Mercado et al. also noted that “evidence from Africa, Asia and Latin America increasingly suggest that when new cooking devices are incorporated, it is seldom that the old ones are completely phased out immediately; in many cases old and new devices coexist on a long-term basis” (2011: 7562). Agarwal also adds that “different technologies co-exist even though the households are located close to one another and the existence of efficient wood-stoves is common knowledge” (1983:369).

5. Channels of dissemination and the participation of women

The dissemination of Adhanet stove was carried out by government bodies, with heavy reliance on local women and materials. The

dissemination channels also involved different stakeholders across NGOs (local and international), donor organizations, ministries and local administrations. The Eritrean Research and Training Center (ERTC, now the REC) was responsible for researching, testing, disseminating, training and monitoring the stove. Later REC's role was limited to monitoring and verifying emission levels for carbon trading.

The first field test conducted by the ERTC in 1999 in a village close to the capital was successful. Encouraged by the efficiency and local acceptance of the stove, REC embarked on its promotion. This was temporarily disrupted by the outbreak of the border war with Ethiopia from 1998 to 2000. From 2002 -2010, over 80,000 stoves were disseminated throughout the country, which is nearly 10 % coverage for the country as a whole. Table 1 shows the number of installed stoves in different regions of the country.

Administrative region	No. of disseminated Adhanet stoves
Debul (highland region)	40,335
Makel (highland region)	19,635
Anseba (partly highland)	7,120
Gash Barka (lowland region)	11,431
Northern Red Sea (coastal lowland)	1,565
Southern Red Sea (coastal lowland)	380
Total	80,466

Table 1: Number of installed stoves from 1999-2010 in all the regions (REC, 2010).

During the period of the fieldwork, stakeholders that were actively involved in the dissemination process included the Ministry of Agriculture (MoA) (mainly through its field agents, WEA), local NGOs, village administrators, village agents of the NUEW and the People's Front for Democracy and Justice (PFDJ). The participating stakeholders had specific roles:

- The NUEW organizer was in charge of selecting village trainees, ensuring that households have the necessary materials for installation, guiding and promoting the program to increase awareness;
- The village administrator mobilized households for speedy installation;
- The WEA were actively engaged in selecting villages for installation, training local artisan women and mobilizing the community with local authorities; and
- The NGOs participated in development and promotion of the stove mainly through financing and, at times, by actively campaigning for using more of Adhanet stoves.

A. Participaiton of women and the NUEW

A notable aspect of the dissemination process is the participation of women both as implementers and users. This ensures the sustainability of the project since it is women who traditionally use the stoves.

The NUEW, established in 1979 as one of the mass organizations of the Eritrean People's Liberation Front (EPLF), is a local NGO whose stated goal is to improve the status of women in Eritrean society. As a key stakeholder in the dissemination process, the NUEW has a key role in mobilizing women in villages. Because women's participation in the program is always assumed, women in the villages are expected to be part of the activities organized by the NEUW, which include community programs coordinated by it and other government bodies.

6. Translating the stated stove benefits: discussion of findings

This section attempts to discuss issues that affect proper and sustained usage of Adhanet stove in the process of dissemination.

The analytical issues raised by Agarwal will be the framework for discussing the dissemination process of Adhanet stove.

A. Economic aspects

Adhanet stove does not require lots of fuel wood and/or biomass. The thickness of its fire box (ceramic block or clay) is designed to preserve heat and bake *injera* (traditional thin bread) with optimum heat and uses anything other than fuel wood - sticks, kindling, dung patties, loose dung, grass or saw dust. As the prices of fuel wood spiraled and is expected to increase further, installation of Adhanet stove seems a very sound option even in urban Eritrean households. The stove also provides other benefits; it is convenient and improves kitchen aesthetics. Women can cook *injera* and traditional hard bread while standing and do other household chores with minimal or no smoke. Agarwal similarly observed:

Among the non-financial benefits of investing in an improved stove could be the saving of women's labor time, the absence of smoke (although this may not always be seen as a benefit), the greater ease of cooking where the stove is adapted to the most comfortable cooking posture, the saving of cattle-dung (currently burnt as a fuel) which has an alternative use as manure, and being able to maintain or improve nutritional levels. (1938:367)

Because of these benefits, women users were willing to fetch local construction materials. This active involvement and the use of local materials are considered crucial to ensure the sustainability of the project. However, as Ruiz-Mercado et al. (2011) wrote with regard to the complexity and dynamism in the adoption process, the technical and infrastructural aspects also matter in reaping the stated benefits and ensuring that the new stove lives up to its name.

B. Infrastructural aspects

Though the newly installed stove is definitely superior to the traditional one and women are excited about using it, many of the stoves observed were not built according to the design specifications provided by REC. The lack of optimal interaction or coordination among the designers, i.e., the REC, and the implementers, notably the WEA, are the main reasons for inconsistencies in its implementation. In Serejaka and Galanefhi sub-regions, for instance, the WEA dropped the use of the valve that regulates the heat, which is considered a crucial stove component by designers and monitors in REC. During informal discussions, the WEA expressed the view that it is too complicated and technically not feasible for local women (field notes 2011). In this regard, Agarwal's argument is worth noting, that "a close interaction between designers, users, local artisans and extension agents is likely to be a crucial element in the successful diffusion of wood stoves" (1983: 367).

i. Improperly installed stoves

As Ruiz-Mercado et al. (2011: 7565) stated, "the dispatch and initial acceptance of a stove is not a sufficient condition to ensure the delivery of its benefits." This was also reflected in the field visits where some households were observed misusing some crucial stove components, significantly reducing the stove's potential benefits.

In the research site, more than 21,294 stoves were built between 2001 and 2010 (MoA, 2011).¹⁶ Of these, in one sub-region (Serejaka) alone, 7, 206 stoves had a faulty design (ibid), which is about 33% of the stoves built in the region. During the field visit, the MoA was in the process of reinstalling such improperly designed stoves. In many surveyed stoves in other sub-regions as well, stove components were

¹⁶ WEA Zoba Maekel branch office.

not being properly used. Barnes et al. (1994: 19) further observed a critical problem in installing improved stoves:

quality control is certainly difficult to ensure when householders themselves build the stoves and it is probably quite uneven even when trained builders/installers perform the work on site, because small variations in the specified dimensions of the stove's interior ceramic or metal parts can cause critical decrements in the stove's efficiency.



Figure 2: Improperly installed “Adhanet” stove ablaze with smoke in Beleza village

ii. Women extension agents

Operating under the MoA, the stated mission of the WEA is to ensure the Ministry’s goals of achieving food security in the country. Their activities include introducing improved, clean, affordable and accessible household utensils; helping rural households practice improved dietary habits; providing training in handicrafts; and introducing income generating activities (poultry, bee farms, gardening, etc.) to improve the purchasing power of rural households. They were involved in testing, promoting and

installation of Adhanet stoves from 1998 to 2010, facilitated the installation of new Adhanet stoves in 103,253 households throughout the country (MoA, 2011).

The WEA identifies with the local women by participating in local community events, and training selected local artisan women to install stoves in villages. They also make use of social customs to effectively mobilize women to rapidly disseminate the required information. Forming informal women ‘Adhanet Association’ (*ə'qub*) among local women, for example, helped in creating bonds and speeding up the installation process in villages. The WEA members’ knowledge of the local language and customs make communication smooth, which is one of the key elements in Roger’s (1995:19) theory on diffusion of innovation-communication channel:

More effective communication occurs when two or more individuals are homophilous [empathetic], when they share common meanings, a mutual subcultural language, and are alike in personal and social characteristics, the communication of new ideas is likely to have greater effects in terms of knowledge gain, attitude formation and change, and overt behavior change.



Figure 3: A Woman Extension Agent in action

Despite the strength of such social networks, it was observed that the construction of some stoves was not properly executed as per the specifications of REC. Since REC's role was confined to monitoring built stoves, the WEA members representing the MoA were the *de facto* experts in charge during the construction of the stoves. After participating in the initial installation of stoves in three villages, WEA today:

- actively participates in the selection of villages for intervention;
- provides training and design specifications for construction; and
- gives suggestions on any technical problem or recommendations.

Therefore, WEA is a crucial agency that works independently, far from the coordinator's offices in the field, with limited or no supervision of their activities. This could have an unintended side effect of proliferating improperly designed stoves, which is exactly what has happened in one sub-region.

iii. Local materials

A crucial factor in a successful adoption and sustained use of improved stoves is the use of local materials (Agarwal, 1983, Barnes et al., 1994). Though the project supplies crucial stove components – cement tubes, chimney cap, sliding firebox metal gate, mold for construction of bricks etc. – they are procured locally. Clay, sand and stones are collected from the surrounding areas in close consultation with WEA.

As the local factory (in Ghindae town) that produced standardized mold and fire grates to the villages has been closed, the WEA had to rely on local expertise and materials to design and produce according

to specifications. The labor invested by local community, especially the women, for fetching the right soil and constructing the stove was enormous. But this needed to be complemented by critical technical advice regarding the right combination of construction materials, supervision and follow-up. This role was entrusted to local women artisans under the supervision of the WEA.

iv. Local women artisans

The active involvement of local women artisans is considered crucial to ensure the sustainability of the project. Agrawal argues that “to enable the user to successfully adapt to the design requires making the user more familiar with the basic principles underlying the improvements” (1983: 366). Equipping artisan women with the necessary skills and knowledge about the innovation can be one logical approach that ensures successful installation.

The women artisans who install the stove in the villages are selected on the basis of their experience in constructing the traditional stove, age, and commitment to the project (field notes 2011). The WEA then help in training them for at least ten days, depending on the availability of funds. The interaction of the WEA and the local women artisans amounts to what Wilson calls the third movement in the continuum of technocrats in development from being “expert professionals” to “professionals and the population learn together and synthesize new knowledge” (2006:519). For instance, in Shinjibluk village, which can be reached by a three-hour walk from the main Asmara-Keren road, the provision of stove components was delayed.¹⁷ Local women artisans (with the help of the WEA) took matters into their own hands. By forming learning groups, they started constructing the fire grate. Some of these women had acquired expertise and a way of making a living by constructing stoves in nearby towns. Though there was no assessment of the

¹⁷There was no transport route connecting the village to the main road.

stoves constructed in this village, these women created a space for learning and a way to improve their traditional stoves.



Figure 4: Local women artisans in Laguen village in a task of installing new Adhanet stove

Other critical issues that have affected the process of implementation through local women artisans have to do with remuneration. Financial rewards for these artisans were meager¹⁸ and intermittent depending on the nature of the funds and the NGO behind it. As more households in neighboring villages requested the skills of the artisans to install the stove, it was clear that the artisan women were not always being paid even though some of the households had the financial ability to pay the women for building the stove for them (field notes 2011).

Networking of these artisans also affects their participation. “Though community-based development seems likely to be more effective in more cohesive and better managed communities, evidence also indicates that better-networked or better-educated groups within a community may be better able to organize and thus

¹⁸ 120 Nakfas (8 USD) per stove which is divided among the team of women (field notes 2011).

benefit most from projects” (Mansuri and Rao, 2004: 31). Through the process of interaction such women groups learn and grasp the basic operational techniques and their applications with ease than those women who are less networked and who don’t participate much in community activities.

C. Coordination

Manibog stated that one of the problems in delivery and support of improved stove programs in developing countries is “low level of official commitment and lack of coordination among the stove groups” (1984: 204). Problems of coordination in the installation of Adhanet stove were manifested in the lack of:

- Standardization, because of which procedures of training, design prescriptions, right combinations of local construction materials and incentives varied in different sub-regions. REC disseminates brochures for standardizing stove installations, but the adherence to such procedures by field implementers, women artisans and beneficiaries needs to be ensured; and
- Regular contact and consultations among key project implementers, government bodies and NGOs.

Development implementers usually contend that they enable project participants in the development process, but the extent to which beneficiaries are allowed to participate in a right way is another matter (White, 1996:14). Though the WEA are credited with being catalysts for change, they face a complex implementation process characteristic of such participatory development projects. O’Reilly (2004:182) shows how field women workers in India are considered critical to a project implementation, while at the same time they are excluded from important decisions. Similarly, during interviews, WEA protested against the “hijacking” of their efforts in the field by

local authorities that try to benefit from resources allocated by a project for building stoves in villages.

D. Social aspects

i. Status of women

Improved cooking stoves in the developing world have been studied because they address the wider subordination of women in society (Agarwal, 1983; Mueller, 2009). Moreover, meaningful participation of women in projects that hail participatory approaches is usually absent, as Cornwall, (2003: 1329) stated that “[t]he very projects that appear so transformative can turn out to be supportive of a status quo that is highly inequitable for women”. Akerkar (2001) further argued that participatory programs do not tend to do justice to the gender dimension in two ways: firstly, their very focus on the community grossly overlooks the heterogeneity of the social systems and interests and, secondly, working through the established bureaucracies/organizations and individuals may further perpetuate women’s subordination.

In the dissemination of Adhanet stove, most of the cooking-related activities, from installation to collection and maintenance of the stove, are done by female household members, mostly the mother. Other female members do help in cooking but know little about maintenance. Moreover, the ‘no-war-no-peace’ socio-political situation in the country adversely affects women. As most of the male household members are not usually around, women bear the brunt of domestic and external chores.



Figure 5: Digging soil for the stove, a laborious task, mostly carried out by women

ii. Local preferences

A survey conducted in Uganda and Tanzania to evaluate the performance and usability of household biomass cook stoves showed that “while cooks recognize fuel wood savings as an important benefit, overall stove preference depends upon a combination of this and other factors, including cooking time, stove size and ease of use” (Adkins et al., 2010:176). Though Adhanet stove was customized to fit the traditional households in the highlands – *bidmos* (field notes 2011), its optimal use has yet to depend on many socioeconomic and cultural aspects of individual households:

- Tastes: individual households take time to properly understand the principle behind each design and the proper use of each stove component. During monitoring, many mothers alter the original design based on their customary tastes.
- Old cooking habits: some mothers forget to use the sliding firebox’s gate and cook while it is half open. This reduces its efficiency and releases smoke.
- Generating other fuels: some mothers use big sticks or wood because after its use in the stove, they get charcoal for

preparing traditional coffee. This practice adversely affects its heat conservation and leads to the release of smoke.

- Using stove as ‘cupboard’: some mothers use the space that accelerates wind, the bottom wide narrowing gate, i.e., the lower half of stove (see Fig. 2), for putting household utensils. This affects the working of the fire grate.

7. Conclusion and lessons learned

A review of the previous literature on improved cook stoves indicates that the conceived logic and design of stoves does not play out as it encounters social reality. Improved cook stove interventions do improve the quality of living in developing countries, but assessing their success on the basis of the number of stoves installed, efficiency tests, degree of acceptance and adoption may not provide the complete story. Moreover, measures of successes are changing as contextual and structural issues are increasingly recognized in the adoption process and as improved cook stove programs themselves evolve over time (Manibog, 1984: 215).

In the case of Adhanet stove, there are two issues that affect the proper and sustained use of the stove. First, in the process of interaction among the WEA and the women artisans, who are in a position to direct the installations, some of the messages are ‘lost in translation’ (e.g., dropping the use of the valve by WEA which is considered a crucial component by REC). The second issue relates to time: as women beneficiaries need time to adopt the operations of the stove (Masera et al., 2005: 35) and as most projects suffer from lack of consistent follow-up mechanisms, proper and sustained use of the installed stoves is affected despite enthusiastic popular reception.

Important lessons learned from the case study that could complement the sustained use of Adhanet stove include:

- Local authorities and local NGOs effectively helped in the dissemination process, which was relatively rapid. However, as the installation of the stoves in households was mostly compulsory, socioeconomic characteristics, preferences and adoption styles of individual households have been overlooked;
- Apart from providing right equipment for rapid installation, it is important to provide proper orientation to households on how to use and maintain it. This could be done through a more enhanced, consistent and standardized training for individual household users (e.g., through intensive media campaigns);
- Lack of critical components, especially the fire grate, in the market has resulted in the customization of stoves in individual households and proliferation of non-standard items in the informal market. However, efforts to overcome this problem and manufacture stove components by engaging local women in creative learning groups have social and technical benefits and should be complemented by standardized monitoring;
- The project's frame limits the meaningful participation of local women. The short time for training, the limited funds allocated for follow up and per diems are among its critical limitations;
- The lack of coordination among the critical stakeholders has created confusion in local women about procedures and design prescriptions;
- WEA knowledge of local customs and rapport with local women proved a big asset in the dissemination process, which has to be acknowledged and supervised to ensure a more sustainable implementation process;
- The installed physical structure of Adhanet stove has an aesthetic value for women, but this has to be matched with optimum functioning of the stove; and

- Further research is needed to examine whether the implementation process of Adhanet is reinforcing existing inequitable gender roles in the communities adopting the stove.

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Recruiting *askaris* (1885-1896): Military requirements and jurisdiction in Italian official documents and personal memoirs

Alessandro Volterra

Abstract

This article attempts to piece together the first steps of the Eritrean units following their formation. The sources taken into account are exclusively Italian. An analysis of the regulations, or more precisely the legal records and ministerial orders, has helped piece together a clear picture of how the first *Askari* battalions were formed. The paper then goes on to cover aspects of military service such as the methods of recruitment; the composition of the departments, given that recruitment was carried out over an area with multiple cultural, religious and linguistic differences; troop discipline, with particular emphasis on punishment. To better understand the nature of the times the vast range of literature produced in Italy during the period commonly called, by Italians, "First war of Africa" has been fundamental. The picture that emerges is far more complex and articulated than that put across by Italian historians over a long period, which only further emphasises a need for new works of synthesis.

The reasoning behind this choice of title underlines the endeavour in this paper to reconstruct and unravel the circumstances, events and, above all, the motives behind the choice of a significant number of African men to serve under the colonial banner. I speak of endeavour because, especially in the nineteenth century, descriptions relating to the African continent recount almost exclusively the history of Europeans in Africa and very little, if at all, of Africans. In the former Italian colonies in particular the available records are often insufficient as a valid basis for any in depth analysis of the events that swept up the indigenous peoples of that part of Africa. Only in recent years have Italian, the published works of Scardigli (1996), Volterra (2005), Zaccaria (2013), and Eritrean, Uoldelul Chelati Dirar (2004; 2007; 2008),

Zemhret Yohannes (2010), academics begun to piece together the military history of colonial Eritrea using different interpretative methods upon those documents which for decades have tended to be at the heart of numerous Italian colonial memoirs.

1. Raising the military requirements and regulations

Native African troops were officially born of the Ministerial Decree of June 15 1886, in which the rules of conduct in the administration of African soldiers were laid down. Article 35 in particular outlines the special provisions for troops defined as irregular. In practice it gave the commanding officer wide ranging powers to recruit the indigenous population as auxiliary troops and to determine their remuneration whether in cash or in kind. An Italian officer was placed in command of these companies known as the irregular African troops (Mori, 1914). The presence of a company of indigenous troops in the midst of the ranks of the Royal Army was thus officially recognised. In actual fact, this presence went back to pretty much the same time as the occupation of Massawa by Colonel Saletta in February 1885, when some of the Egyptian troops, the *Bashi-Buzuk* recruited on the spot, were transferred to the Italian ranks. It was further stabilised with the definitive departure of the last of the Cairo authorities in December of the same year from the area.

The *Bashi-Buzuk* were divided into two *ortu*¹⁹: the home brigade dealt with public order and customs duties; the much more numerous foreign brigade with the defence of the garrisons and outposts around Massawa. By 1886, the strength of the indigenous companies had grown to 2000 men under the command of Colonel Giovanni Battista Begni, “a retired officer, experienced in African customs and knowledgeable of the

¹⁹ In all works and documents consulted the terms *ortu* and *orda* are used interchangeably.

language and the everyday life of the coastal tribes of the Red Sea” (Scala, 1952: 551). General Genè, Saletta’s successor, decided to create companies of indigenous soldiers under the command of Italian officers. The War Office felt, however, that Italian officers were not "sufficiently experienced in commanding extraordinary troops with a disposition to exceptional mobility" and limited itself instead to agree to the division of the two *ortu* into 68 *buluk*. These were formed between March and April 1887 (Scala, 1952: 552).

Following the events at Dogali, General San Marzano’s expeditionary force was dispatched, sparking further changes, in particular in the foreign *ortu*, which was now divided into two *halai* (a type of battalion) made up of three *tabur* (companies). Each *tabur* was composed of about eight *buluk* (platoons). The command of the two *halai* was put in the hands of Majors D’Aste and Barberis. A small exploratory force was also created (*orda kaiala*) to provide the original nucleus of the future Eritrean cavalry squadron commanded by Captain Toselli.

From an administrative point of view, the Ministerial Decree of June 30, 1887 that *approves the exceptional formation and command of African troops*, in article 37 confirms the same provisions as article 35 of the D. M. of June 15, 1886. It specifies, however, that the power conferred on the commanding officer to recruit irregular troops had been granted by delegation of the War Office. Article 37, in reference to the expansion of the body of *Bashi-Buzuk*, goes on to affirm: "the irregular troops are placed in one or more battalions and each battalion is under its own command, as regards the management of funds, this is in accordance with the regular rules laid down for detachments" (Mori, 1914: 460-461). Therefore, from an administrative point of view, the native battalions were treated on the same level as the Italian. It was

Saletta's idea, born of necessity²⁰, to recruit irregular native troops and San Marzano who set the body in motion. Baldissera, the commanding officer between 1888 and 1889, transformed this irregular militia into a regular army.

With the Royal Decree 6215 of June 30, 1889, relating to the creation of a company of native soldiers for the defence of Africa, a regiment of infantry was formed on the orders of Colonel Avogadro di Vigliano. This was structured into four battalions each of four companies, one squadron of explorers, one mountain battery, two *zaptie buluks* (native carabinieri), and a home guard of two or more companies. Each battalion, numbered from 1 to 4, kept their original name of *halai*; each *halai* was made up of four *tabur*, divided into two half companies (*nusftabur*), these in turn divided into four patrols (*buluk*). Any divisions more numerous than the *buluk* were commanded by Italian officers (Mori, 1914). The total strength of the regiment on the first of July 1889 was of 95 officers and 3265 men (Scala, 1952: 552).

On top of this, *provisional instructions as to the recruitment, organisation, and management of indigenous African troops* (Ministero della Guerra, 1889) were set in motion. Here, methods of recruitment, deployment and payment were laid out. Recruitment of the indigenous troops was voluntary. The Supreme Commander supervised operations, relying on the work of the permanent Council of Enlistment (this was comprised of a president: the commander of the indigenous infantry regiment; and various members: a superior officer of the same regiment; an officer of the royal carabinieri; two medical officers; and possibly a leading citizen, *sheik* or *naib*, of the volunteer's tribe). Any native that met

²⁰ It is known that the expedition to occupy Massawa was totally improvised, both politically and militarily. The decision to enlist an indigenous unit was also dictated by necessity: In fact about half the men of the various contingencies that served in the first year of military occupation were left unfit for active service by fever and sunstroke.

the following requirements was entitled to sign up: age between 16 and 30, physically and morally fit, and available for one year's service. Military service ran from the date of enlistment and could be renewed until the completion of the soldier's 36th year. In actual fact a soldier (*askari*) remained attached to the division to which he was assigned until his thirtieth birthday when he was transferred to the home *ortu*, if there was an available post, where he could remain for a further period of six years. The transition to the home *ortu* also took into account any special merits the *askaris* might have accrued during his military service²¹.

After five years' service and good conduct, an *askari* could be promoted to the rank of *muntaz* (the equivalent of a corporal in the Royal Army); promotion was decided by the corps commander. Only in exceptional circumstances was a soldier promoted for good conduct in battle or for showing competence in his role as a soldier. An *askari* was paid £1.50 per day, plus one kilo of flour. A soldier could also expect a pay rise based on years of service (Raimondo, 1901). The mobility of the indigenous troops and the constant dispersion of the different divisions to fulfil the specific needs of the colony meant that they had to act autonomously, very often over considerable distances, little in keeping with an orderly regimental running of the outfit. Experience in Africa had shown that both in war and peace the largest effective tactical, logistical and administrative unit was a battalion. This was put in writing in the R. D. 7100 of September 3, 1890 which *amends the formation of the indigenous troops*, and was later improved by the R. D. of June 11, 1891 n. 286. The regiment was disbanded and the four battalions fell under the autonomous command of Majors Cortese (I), Fadda (II), Bosco di Ruffino (III) and Captain Turitto (IV). Furthermore, the creation of new

²¹ Unlike the troops, NCOs had a three year term of office. They underwent training with their indigenous infantry regiment where a platoon of non-commissioned officer cadets was set up which admitted young Africans under the age of twenty.

military contingents, enlisted in the spring of 1890, offered the possibility to form another provisional battalion, under the command of Major Hidalgo, doubling up the battery and exploratory squadron into two units. In this way two native batteries and two native squadrons had been formed, numbering in all, by June 1891, 90 Italian officers, 49 native non-commissioned officers and 4860 *askaris*, plus the military *bande indigene* (of about two thousand men) (Scala, 1953: 553).

A further step forward came with the aforementioned R. D. of June 11, 1891 and with that of November 11, 1892 which established the integration of indigenous troops into the Royal Army going by the name of Royal African Troops. As for the *askaris*, they were to be split into four infantry battalions of four companies, two cavalry squadrons, two four piece mountain batteries and a mixed train company (in part made up of natives). From a legislative point of view a continuous correction and improvement of the laws relating to native troops²² can be observed up until March 1895²³ when, after the Akele-Guzai uprising, two new battalions were formed: the V and VI under the command of Majors Giovanni Battista Ameglio and Giuseppe Cossu and, towards the end of the same year, the VII and VIII under the command of Rodolfo Valli and Giovanni Gamerra.

2. Enlistment, the structure of the military units, discipline

Native recruitment was governed by two principles: "on the one hand military service was not compulsory as it was for Italian citizens" (Solinas De Logu, 1905: 23-24) because the natives were subjects and after the acquisition of Assab in 1882 Italian foreign

²² Royal Decree of December 11, 1892. See also R.D. of December 14, 1892; War Office decree 20 November 1893 *Regolamento pel reclutamento*; R.D. of February 18, 1894 n.68; R.D. of November 3, 1894 n.463; Manifesto 9 November 1894.

²³ Gubernatorial decree, 1 March 1895 n. 185.

policy moved in a direction that legal historians have defined as differential legislation; "secondly, the natives do not fall into the general ranks of our national army but are an attachment of the special colonial force (*askaris*)" (Solinas De Logu, 1905: 23-24). There was, therefore, a distinction in the military service between citizens (conscripts) and subjects (volunteers) even though the latter could be called up by the *kitet*. The *kitet* was a colonial contingent formed from all those able to bear arms and drew its name from the traditional call to arms used by the Eritrean chiefs who, as Hidalgo tells us:

would play at length and for several days *negarits* [hemispherical bronze drums]. During the last campaign [that of 1895-96] the indigenous Eritrean troops were split up into ordinary active battalions, mobile militia, formed from retired veteran *askaris* called back to active service, and into *kitet*. (Hidalgo, 1910: 138)

Unlike the *kitet*, whose origins lay in what could be defined as a local custom, the mobile militia was formed and organised by Gen. G. Arimondi on September 23, 1894 (Cesari, 1913: 15). Initially structured into eight companies (following the Order of the Day 104 in February 1895), these were later reduced to six (1st Hirgigo, 2nd Adi Ugri [present day Mendefera], 3rd and 4th Asmara, 5th Keren and 6th Akordat), for a total of 1700 actively mobile men ready for any eventuality and set to march at short notice. In fact, between March and September 1895 alone, the mobile militia was called up for active service on six different occasions²⁴. The effectiveness of this type of mobilisation and the troops' reliability were put to the test during the battle of Adwa, where a battalion

²⁴ Gubernatorial decree 9 March 1895 n. 194 (*Bollettino Ufficiale della Colonia Eritrea*, anno IV n. 62, Massaua 17 April 1895) "... the 1st company of mobile militia (Archico) is called into service with effect from 12 of this month". And again in the gubernatorial decrees of 31 March n. 199 bis; 12 April n. 203; 13 April n. 204; 1 June n. 215 and 25 September n. 255.

of the mobile militia (950 men commanded by Major de Vito) and the Asmara *kitet* company (210 men commanded by Capt. Sermasi) were annihilated alongside the Dabormida column. In practice, apart from the troops on active service, there was a mobile militia and what could be defined as a territorial militia. Thus the same military organisation that already existed in Italy was repeated in Africa, providing, in addition to the regular army, a reserve force and a territorial militia. This process was equivalent to other examples of bureaucratic state jurisdiction where the apparatus used in the homeland followed the same parameters in the colony. In this particular case, however, as far as colonial administration was concerned, the imported model was adapted to fit snugly into the institutions already in place prior to the occupation of the colony. While decrees and orders explain with little eloquence the recruitment and regulation of indigenous troops, it is the memoirs of the Italian officers caught up in the first African war that provide a more faithful version of events. What follows helps shed light on the reality of the situation described above. The first eyewitness account is that of G. B. Raimondo, an officer in the third battalion indigenous:

... once a year enlistment is organised in the tribes subject to us; the news ... runs rife, spreads, reaches all over Ethiopia, and a fair share of the Sudan ... the participants are put through a trial run of fifty or sixty kilometres under the supervision of an officer on horseback, at a speed of at least 8 km per hour. At the end of this a special commission chooses from those who still show good signs of resistance. (Raimondo, 1901: 85-86)

Again:

thus the Niam-niam cannibal finds himself side by side with the Arab, the Shewan with a Halanga, one of the Galla with a Habab and a Beni-Amir, the Tigrean with one from

Goggiam, a Bària with a Somali, a free man with a slave by his side, Christians – coptic and catholic – with Muslims or idolaters; and yet in spite of these deep rooted differences of race, tradition, homeland and creed, these individuals get on perfectly well together. They know that they all have one and the same objective in mind, namely to serve and defend the colony, and each and every one works towards this end, without having anything else in common in their daily life. (Raimondo, 1901: 41)

Major Hidalgo of the second battalion indigenous provides another eyewitness account:

... the *askaris* were assembled in *buluk* depending on the creed which they professed. Almost every company included two *buluk* of Abyssinians (mainly Christian Eritreans) and one made up of Muslims (Islamic Eritreans, Yemenites, Sudanese and Somalis). Grouped in *buluk* by race, and under the supervision of graded soldiers of the same creed [interesting to note that this officer confuses race with religion], training and supervision of the recruits was made easier and there was less likely to have friction. Another advantage was the creation of a sense of rivalry between the *buluk* that, if skilfully exploited by the officers, reaped an abundant harvest. Nor should it be forgotten that this also simplifies service operations and discipline; in particular, the distribution of food and the thankless, but indispensable task of dealing out floggings with the *kurbash*. (Hidalgo, 1910: 86)

The latter refers to the fact that both Christians and Muslims have special methods of butchery that must be executed by those of the same creed as those destined to eat the meat and this attention vis-à-vis food stretched to corporal punishment that could only be administered "by direct superiors and brothers in the same

religion” (Hidalgo, 1910: 87)²⁵. From these accounts it emerges that the composition of these military units was by choice far from standardized due both to the method of recruitment and, apparently, the intended use that they were to be put to. Raimondo continues:

When fighting the Abyssinian sallies forward full of drive and impetuous zeal to fight, to strike the enemy, but woe betides if he fails to fight him off! His morale low, he falls out of rank, routed, and for the rest of the day it's improbable he'll return to battle. A Muslim on the other hand is less impetuous but more resolute. His fatalistic belief and the reward of the one hundred Uri, promised by the Prophet Mohammed to those who fall in battle, fires his courage and steadies him in even the most trying times. Leaving them to fight flank by flank the one takes from the other what he lacks resulting in balanced units full of zeal. (Raimondo, 1901: 88)

²⁵ Though referring to a later period than the one under analysis this is a description of the punishment: "... the punishment of flogging is only carried out on *askaris* and in the presence of the whole unit gathered together. The guilty man is called to the front, where his misconduct is explained in clear terms, so that all can be convinced of his guilt. A brief observation on the deed follows and the number of lashes of the sentence is inflicted by the commander of the *buluk*, who must be of the same creed as the punished man, bearing in mind that the tip of the *kurbash* must not touch on the ground. The floggings must be inflicted on the gluteus region of the body, half on one side and half on the other, having checked that the *kurbash* is free of knots in the flexible part. The punished man must wear only his regulation shorts, salute before getting down on the ground in order to receive the flogging and salute again once redressed, with cummerbund and *tarbusc*, before returning to his place. At the 'break ranks' the unit usually responds with the traditional cry of 'harrai' in sign of approval. If, by chance, there were no cry and the ranks break in silence, it would be a clear sign of discontent within the unit caused by the belief that the punishment was unjust. As a rule for religious reasons, if possible, refrain from flogging Christians on Sundays, and Muslims on Fridays." (Guzardi, 1935: 88-90).

At other times this differentiation is lost with the question of tribe, race and creed often referred to in an indiscriminate manner. The end result is what could be defined as the homogenisation of the *askaris*, as noted by Raimondo: "... incredibly tenacious at work and in every kind of hardship ... agile as squirrels ... accustomed to eat and drink when provisioned, to sleeping rough ... sufficiently intelligent and warriors by tradition, they exemplify the type of soldier ideal for colonial endeavours, in which logistical resources always run thin" (1901: 90). What is more, the picture painted of the intellectual capacity of the *askaris* in general is, to say the least, contradictory:

On the whole their intelligence is rather limited ... they do, however, find it easy to understand and speak our language, give and take a bit ... any lack in intelligence is compensated for by their craftiness and cunning, and if these two instinctive qualities are brought out they make excellent tools for exploration and espionage. They are completely void of any literary education; but they do know the main events of their own history because they provide a never ending source for their conversations, handed down orally from father to son. (Raimondo, 1901: 91)

So the *askaris* were competent soldiers with a disposition to learning languages, able to execute tasks of espionage, and whose culture was based on oral tradition. All of this emerges from this description as well as the sense of white supremacy. Ferdinando Martini stands alone in his attempt to cut this sense of supremacy down to size to some extent: "In that heat, we blanched in comparison to the locals: at least as far as marching was concerned, the inferior being isn't black, he's white" (Martini, 1895: 118). The idea of supposed white supremacy was tied to the question of military discipline. The phrase with which the *askaris*

saluted their commanding officers, "Thou art my father"²⁶, has apparently encouraged the authors of the vast number of memoirs of the war in Africa to think that the *askaris*' (always seen as a homogenous entity) respect for authority went no further than that for the family. Even such a conscientious witness as Martini declared that the authority of officers derived not from their rank but their personality: "What do you think an *askari* knows about a chain of command? It's the ones who at the end of the month shell out the thalers, they're the ones in charge that they love and serve" (1896: 118). It's a clear demonstration of the Italian's utter ignorance of the complexities of Eritrean society from which about two-thirds of the active indigenous force was drawn. The only means of communication, the infamous "lexicon"²⁷, was the *kurbash*. Flogging and other means of punishment - that even the officer Baratieri summed up as, "used (or rather abused)"²⁸ - were based on two precise principles: The first was that flogging, and corporal punishment in general, was common in Eritrea (and throughout the Horn of Africa) and far preferred by the natives to financial punishment. The second was that *kurbash* was seen as an instrument of authority in a place where the European concepts

²⁶ "... the unconditional gift that an *askari* makes of his life in the hands of his commanding officer is summed up by the traditional phrase, repeated hundreds of times by the throng: 'You be my Father and my Mother ...'" (Caccia Dominioni, 1995: 572).

²⁷ Right from the first years of the occupation of Eritrea, Italian officers [as well as NCOs and soldiers] were encouraged (apparently with little success) to attend Arabic classes, the commonest language along the Eritrean coast. With the proclamation of Eritrea as an Italian colony this necessity seems to disappear: it's no longer the Italians that need to learn the local languages but the Eritreans to learn Italian, so much so that in order for the *askari* to gain promotion or to become a *zaptiè* it became necessary to be able to speak Italian. Serious problems of communication and understanding remained, however, though a not an inconsiderable number of Italian officers believed these could be overcome with a lash of the *kurbash*. Hence its name, the "lexicon".

²⁸ Archivio Storico dello Stato Maggiore dell'Esercito (AUSSME), *Carteggio Eritrea* (L7), box 89. *Regolamento di disciplina per le truppe indigene*, Massaua 15 gennaio 1893.

of honour and discipline held no weight and where the white man could only assert his supremacy with force. "The law of the *kurbash* became the norm for those unwilling to lose time in discussion with beings considered inferior to them" (Scardigli, 1996: 75).

3. Conclusion

At this point I feel it's important to put forward certain questions. How come so many enlisted to serve under the Italian flag? How could such an extreme variety of religious and ethnic groups manage to survive in the same military unit? Why were they willing to lay down their lives for the Italians, bearing in mind that about 5,000 men fell during the period 1890-96 and 210 silver medals and 645 bronze were awarded "with prudent parsimony" (Cesari, 1913: 25)? Martini may have the answer when, stressing the difference in salary between those serving in Abyssinia and in the Colony, stated: "... but the annual pay of a soldier in Abyssinia is four thalers, about twenty lire ... here they rake in one lira and sixty cents a day i.e. fifty a month, six hundred per year. They come running. As you can see, *they are tied to us by constrictions that are longer lasting and stronger than friendship*" and again "... but we must remember that we are in Africa, and to leave any European clichés at home. Here authority doesn't come from rank but personality. Their major or colonel hasn't a tenth of the authority over an *askari* as that exerted by a captain or lieutenant. Their colonel is seen, saluted, respected; but they share their lives with their lieutenant and captain, discuss the slightest issues, in short as one of the family. What's more *they're the ones that pay them* ... As long as this mutual cordiality holds, and there is no reason why it shouldn't, you can remain confident: The *askaris* will faithfully follow their officers, obey their orders, fight by their side, and, if necessary, lay down their lives for them ..." (Martini, 1895: 116-120; Italics are the author's).

It is true, however, that after the battle of Adwa the treatment received by the *askaris* taken prisoner by the Menelik army was discriminatory: while the Muslims were later released, the Christians had their hands and feet mutilated (Dominioni, 2009). It can be assumed that the *askaris* who spoke Tigrinya and were of the Christian faith, that is the majority of the enlisted, knew they were violating a convention, both cultural and religious, certainly stronger than any that bound them to the Italians. It was, then, a personal choice that many continued to make given that by June 1896, just three months after the battle of Adwa and the annihilation of the indigenous brigade, all the battalions of *askaris* had already been reconstituted. In my opinion, I don't believe that one can put such a perilous choice as this down to reasons of a purely economic nature. However, given the current state of research and the sources available, these questions will, for the moment, have to remain unanswered.

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Tobacco use and control: A national survey of students in Eritrea

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Abstract

Tobacco was first introduced to Eritrea by the Portuguese in the 16th century and was further developed into an industry by the different colonizers. Studies into the use of tobacco products have been conducted by the Ministry of Health which has carried out three major surveys in 2004 and 2005. The current study, a tobacco use survey among students conducted in 2009, aims at covering a wider range of age and at assessing the impact of Proclamation 143/2004: A Proclamation to Provide for Tobacco Control. The core objectives of the survey were to find out the prevalence of tobacco use, knowledge and attitude of students, influence of media and advertising, access to and availability of tobacco products, and tobacco use prevention in the school curricula. The survey included junior, secondary and college students (age range 12 – over 23 years). It was conducted after the implementation of Proclamation 143/2004 and thus expected to reveal the proclamation's impact on tobacco use control among students in Eritrea. This paper reports on the results of this national survey.

1. Introduction

Tobacco use has become a complex global health hazard today. A single cigarette contains more than 4,000 chemicals, of which 40 are known carcinogens and 500 are poisons chemicals such as arsenic, cadmium, hydrogen cyanide and ammonia (WHO, 2006). Tobacco use causes more than 13 types of cancers such as lung cancer, esophagus cancer and stomach cancer, chronic obstructive pulmonary diseases, coronary heart diseases, atherosclerotic peripheral vascular diseases, loss of sensations and memory,

stroke, reduced fertility, sudden infant death syndrome among infants, etc. Tobacco is thus a major cause of preventable death. At present, there are over 5 million deaths due to tobacco-attributable diseases, of which 80% occur in developing countries. If the present trend is not curbed, the death toll due to tobacco-attributable diseases is projected to reach 10 million by 2030 and one billion by 2100 (WHO, 2008). Again over 70% of this death is expected to occur in less developed countries.

The continued use of tobacco is also an economic and social burden. Directly or indirectly, tobacco use drains income and productivity and adversely affects the well-being of families and vulnerable groups like women, the youth and children. The income spent on tobacco products could significantly improve the nutritional, educational, and health status of families. The medical costs to tobacco users and their families, including the wages forgone due to illness and premature death, is another form of economic burden. The continued use of tobacco is an impediment to socio-economic development. The growing body of evidence (Barkey, 2005; CDC, 2012) suggests that tobacco is not only a killer of people, but also a killer of jobs and wealth. Public policies that seek to limit its use have thus a strong justification.

Despite the compelling scientific evidences of the adverse health, social and economic effects of tobacco use, many people, particularly the youth, continue or start to use tobacco. Everyday about 80,000 – 100,000 young people get addicted to tobacco use (WHO, 2008). It generally begins during adolescence and continues throughout adulthood, sustained by addiction to nicotine in tobacco. In many countries, tobacco use is rising among young people and at the same time the age of initiation is falling.

Moreover, as the developed countries introduce more stringent tobacco control legislations and public education campaigns, the tobacco industries are focusing their marketing strategies on the developing countries. Internal documents from some tobacco companies that have gone public recently clearly show that tobacco industries are targeting the youth and women in developing countries (Bates, 2004).

2. Background

Tobacco use is believed to have been introduced into the present day Eritrea by a Portuguese army contingent that was sent to help an Abyssinian King (Emperor Lbenedngl) in the 16th C. Tobacco is cultivated in some parts of Eritrea, such as Tokombia in Gash-Barka, and around Segheneiti in Zoba Debub, although on a small scale. The Italians tried to improve the local variety, and this led to the expansion of tobacco cultivation in Eritrea. In 1920, a Greek company, Mina Ananistilia, was established to produce hand rolled cigarettes such as *Ideal*, a cigarette without filter. In 1929, the Italian government took over the factory and renamed it *Monopolio Tabacco Del'Eritrea*. In 1962, it was taken over again by the Ethiopian government and renamed *Tobacco Monopoly of Ethiopia*. In 1976, the Military Government of Ethiopia (*Derg*) renamed it *Asmara Cigarette Factory*. In 1988, new machinery was installed and the production capacity of the factory increased to 2,500 cigarettes per minute. After the liberation of Eritrea (1991), the factory's name was changed to *Gash Cigarette Factory* and privatised in 1998. The new owner, British-American Tobacco Company (BAT), a renowned international tobacco manufacturer, introduced new machinery and further increased the production capacity of the factory.

The Ministry of Health has spearheaded tobacco research in Eritrea. It conducted three surveys: National Non-Communicable Disease (NCD) Risk Factors Baseline Survey (August-November

2004); Knowledge, Attitude and Practice (KAP) Survey on Non-Communicable Diseases (March, 2005); and Global Youth Tobacco Survey (GYTS) and Global School Personnel Survey (GSPS) (November, 2005). These culminated in the promulgation of Proclamation 143/2004 - Proclamation to Provide for Tobacco Use Control in Eritrea.

According to the NCD survey (2004), conducted among age cohorts of 15-64 years covering all regions, 8% of the sampled population (n = 2,352) smoked, of which 7.2% smoked on a daily basis while 0.9% smoked on non-daily basis. The prevalence of daily smoking was 0.9% in women. The survey revealed some regional variations. The prevalence of daily smokers ranged from 11% in Gash Barka region to 4.2% in Debub region. About 6% of smokers started at <12 years of age while 34.5% started at 12-19 years of age.

The GYTS (2005) - a school-based survey - focused on adolescents aged 13-15 years. The survey revealed that percentage of any tobacco product users ranged from 11.2% in Southern and Northern Red Sea to 6.4% in Debub administrative region, with a national average of 8.2%. Similarly, the percentage of current smokers ranged from 3.4% in Southern and Northern Red Sea to 0.7% in Debub region with national average of 2%. The prevalence of smoking among female students was found to be low, with a national average of 0.7%.

All these surveys were conducted before the promulgation of Proclamation 143/2004. The GYTS covered only students aged 13-15 years. In general, therefore, the current study, a survey conducted in 2009, aimed at covering a wider range of age, assessing the impact of Proclamation 143/2004, and identifying the determinants of tobacco use and trends among students. This paper reports the results of the national survey. The core objectives of the survey were to find out the prevalence of

tobacco use, knowledge and attitude of students, influence of media and advertising, access to and availability of tobacco products and the introduction of tobacco use prevention in the school curricula. The survey is the only study to date in Eritrea that included junior, secondary and college students (age range 12 – over 23 years). Moreover, it was conducted after the implementation of Proclamation 143/2004 and was thus expected to reveal the proclamation’s impact on tobacco use control among students in Eritrea. Thus, it has implications for designing post-proclamation tobacco related health policy in Eritrea.

3. Methodology

A. Study population and sampling

The survey was administered to a representative sample of the students of middle school, secondary school and institutions of higher education students in Eritrea. The target population was first divided into eight clusters: the six zobas, Warsay Yikealo Secondary School (WYSS) and institutions of higher education (IHE). The sample size was determined using the following formula:

$$n_i = z^2 * p * q / (e^2)$$

Where n_i is the sample size of the i^{th} cluster; z is z-score value for 95% confidence level; p is average prevalence rate of tobacco use among students (8.2% from earlier survey), q is $1-p$, and e is margin of error (3% for the study).

This formula yielded 315 samples for each cluster. Adjusted for an assumed non-response rate of 4.5%, the sample size for each cluster was 330 students. The survey design called for a representative probabilistic sample of 2,640 students at national level for the eight clusters. The actual number of the study participants was 2521, yielding a response rate of 95.5%.

The survey involved a two-stage cluster sample design. In the first stage, the Primary Sampling Units (PSU), that is, schools in each cluster were selected on the basis of the Probability Proportional to Size (PPS), size being the number of students in each school. In the second stage, students were selected as Secondary Sampling Units (SSU) using a linear Systematic Random Sampling (SRS) methodology from the list of students in the selected schools. The sampling procedure required complete enrolment lists of all the schools with class-wise strength of both boys and girls. This information was collected from the Ministry of Education head office in Asmara and cross checked in each selected school.

The randomly selected students in each sampled school were weighted to account for probabilities of selection that varied from school to school, and to minimize non-sampling error. A probability-of-selection weighting factors were calculated to produce relative and expansion weights in the SSPS software. The analyses and interpretations in this article are based on the weighted sample. The formulas used are:

$W = W_1 * W_2 * f_1$ for middle and secondary schools

$W = W_2 * f_1$ for WYSS and IHE

where: W_1 is the inverse of the probability of selecting the school; W_2 is the inverse of the probability of selecting students in a selected school; and f_1 is a student level non-response adjustment factor.

B. Data collection

Quantitative and qualitative data were collected. The survey questionnaires for students were developed and designed through continuous collaboration with stakeholders and consultation of wide-ranging literature. The core questions for GYTS used in the 2005 survey in Eritrea were adapted and/or modified to reflect current conditions and suit the purpose of the present study. This would ensure the comparability of the results. Moreover, many

new questions were added to the core questions to address topics and/or issues not covered in previous surveys. These questions helped to gain information that was not available in the earlier surveys. The items included in the questionnaire for students explored attributes like the respondent's current smoking status, age of smoking initiation, lifetime smoking history including daily consumption, attempts at quitting, levels of addiction, exposure to second-hand smoke, media and tobacco, schools and the tobacco industry, general knowledge, attitudes, behaviour and practice about smoking, access to cigarettes and other tobacco products, tobacco-related lessons, socioeconomic background of students, etc. The questions were organized and grouped under ten headings. Since, the global WHO standardized procedures of the GYTS were adopted, and since the GYTS questionnaire was used in earlier surveys, there was no need for a pilot test. Two-day training was given to field research assistants and supervisors to acquaint them with the objectives, procedures and protocols of data collection. Moreover, qualitative data were collected from 31 focus group discussions with students, teachers and key informants from National Union of Eritrean Youth and Students (NUEYS), National Union of Eritrean Women (NUEW), Ministry of Education, Parents and Teachers Association (PTA) and Ministry of Health to supplement the quantitative survey data. Schools were notified by a letter from the Ministry of Education in advance. Before the questionnaire was administered to the randomly selected students, the field supervisors explained the purpose and procedures of the survey to the students in each selected school. The selected students finally participated on voluntary basis. Data were collected anonymously through self-administered questionnaire.

C. Data analysis

A comprehensive tabulation plan was developed in consultation with statisticians and computer programmers before analysis. The

tabulation plan was designed to facilitate the generation of frequency tables and descriptive statistics to examine the distribution of responses across regions (Zobas), clusters, grades, gender, etc. A CS-PRO programme was used to keying data into computers. Each questionnaire was reviewed prior to keying for any errors. After entering all questionnaires, 10% were randomly selected and re-entered. The two sets were checked for consistency. No data entry errors were detected.

Data was analysed using SPSS statistical software. Whenever data allowed, attempts were also made to examine relations between variables. Statistical tests - Chi-square and column proportion tests - were made to determine differences across demographic, cluster and regional variables. Differences were considered statistically significant at $p < 0.05$.

Qualitative data collected was transcribed and annotated around major thematic areas. They are used to support the findings of the quantitative analysis and, in general, to triangulate the findings of the study.

4. Empirical results

As indicated above, there were 2521 valid responses. Respondents aged 13-18 years accounted for 65% of the total number of respondents; 22.6% were ≤ 12 years old while 12.6% were ≥ 19 years old. Sex wise, male respondents accounted for 56.7% while female students accounted for 43.3%.

A. Prevalence

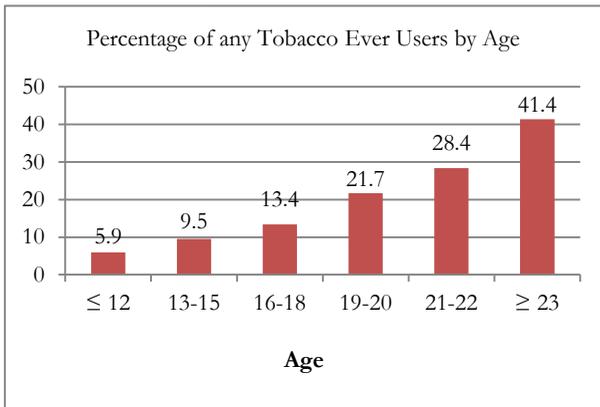
Prevalence primarily refers to the proportion of students who have experimented with smoking cigarettes or used other forms of tobacco products. It is expressed in relation to the age at which students begin cigarette smoking or use of other tobacco products. A distinction is made between ever users and current users. *Ever users* are those who have ever tried or experimented

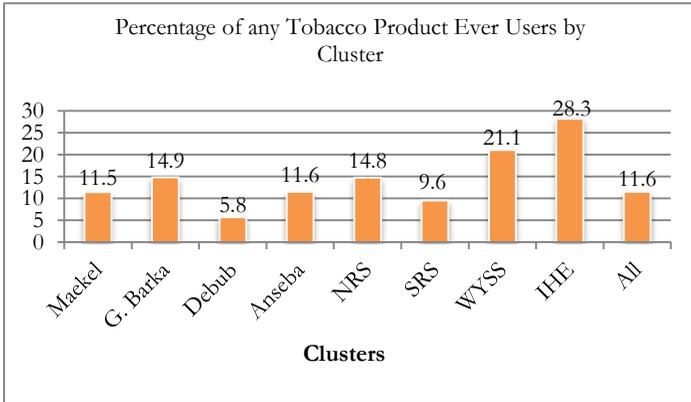
with a tobacco product. Ever smokers, for instance, are those who reported to have tried or experimented with cigarette smoking even if it were one or two puffs. Students who reported using any tobacco product at least once in the 30 days preceding the survey date are regarded as *current users*. *Never users* are those who reported that they have never tried or experimented with any form of tobacco products.

i. Any tobacco product ever users

Any tobacco product ever users combines ever cigarette smokers and ever users of tobacco products other than cigarettes. The survey showed that 11.6% (CI: 9.7-13.5) of the students reported that they have experimented with any tobacco products. Age wise, it varied from 6% for the ≤ 12 to 41% for the ≥ 23 cohort (see diagrams below). The overall differences were significant ($\chi^2=55.4; p < 0.05$).

Figure 1: Percentage of any tobacco ever users by age and cluster



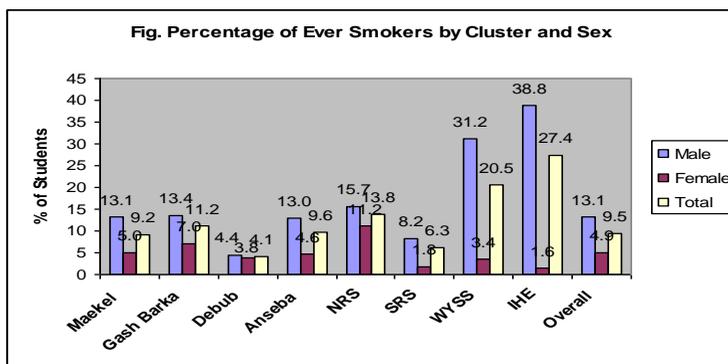
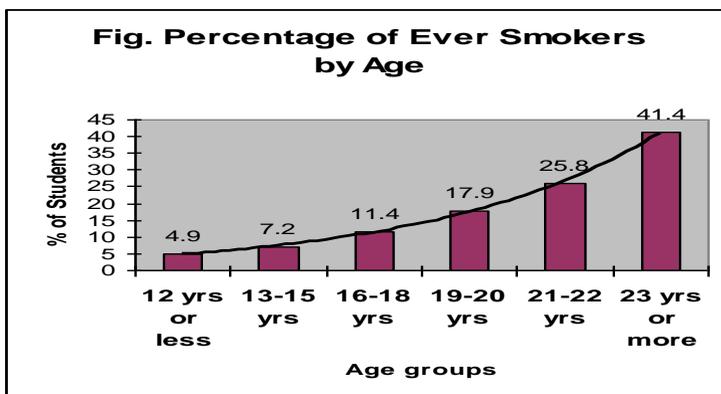


There was also a significant difference by sex ($\chi^2 = 44.2; p < 0.05$). Male students (15.4%) were twice more likely to have ever used any tobacco product than female students (6.7%). Cluster wise, IHE reported the highest percentage (28.3%) while Debub region reported the lowest (6%).

ii. Cigarette ever smokers

The survey results revealed that 9.5% (CI: 7.8-11.2) of the students reported they have ever smoked a cigarette, but it varied from 4.9% for students who were ≤ 12 years old to 41.4% for those who were ≥ 23 years old, suggesting that more students tend to experiment with cigarette smoking as they grow.

Figure 2: Percentage of ever smokers by age, cluster and sex



There was a significant difference in the percentages of ever smokers for male and female students ($\chi^2 = 47.4$; $p < 0.001$). Overall, the percentages for boys and girls were 13.1% and 4.9% respectively. There were also interesting variations across the clusters, ranging from 1.6% in Institutes of Higher Education (IHE) to 13.8% in Zoba Northern Red Sea for female students and from 38.8% in IHE to 4.4% in Zoba Debub for male students. Female students in Zoba Northern Red Sea are more likely to have smoked a cigarette than in any other cluster. This is consistent with the GYTS survey of 2005.

Institutes of Higher Education contained the highest proportion of ever smokers (27.4%; CI: 24.4-30.7) followed by grade 12 students in Warsay Yikealo Secondary School (20.5%; CI: 13.9-27.0), which were significantly higher than the percentages for other clusters.

There is a direct relation between level of education and the proportion of ever smokers. The percentage of ever smokers increases from 7.2% for junior secondary students (grade 6-8) through 9.9% for senior secondary school students (grade 9-11) to 20.5% for grade 12 students to 27.4% for the IHE students. It is worth noting that the percentage of female ever smokers decreases as the level of education increases while the trend is the opposite for male ever smokers. In the junior secondary level, male students are about twice as more likely to have tried a cigarette than female students, while in IHE male students are 24 times more likely to have tried a cigarette. It looks that as female students approach the marriageable age, they tend to shy away from cigarette smoking because in the Eritrean socio-cultural context such girls are not considered respectable. This factor was also highlighted during the focus group discussions. On the contrary, there is a sharp increase in the proportion of male ever smokers from grades 9-11 to grade 12 students (WYSS). While the proportion of ever smokers is around 9.0% on the average for grade 9-11 students, the proportion makes a sudden jump to 20.5% for grade 12 students (WYSS). This could be due to the detachment from close parental control when students join WYSS and IHE, which provide in-campus boarding facilities.

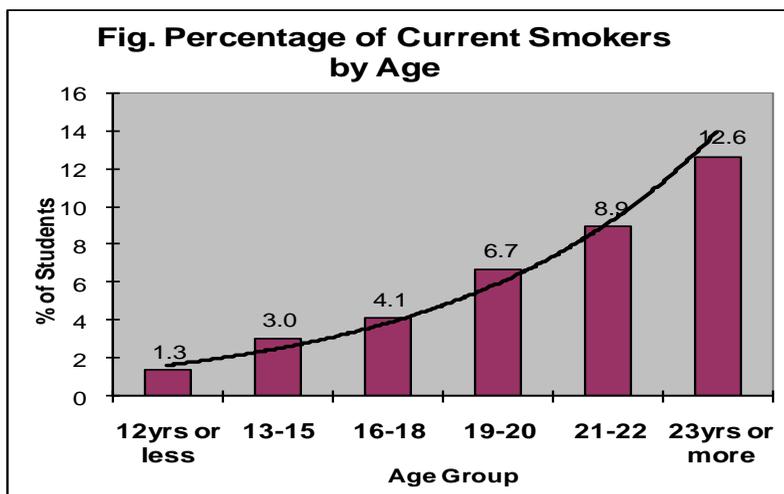
Moreover, most students are provided with some money by parents and relatives when they leave for the WYSS or IHE. These factors combined with exposure to contact with wider student body of diverse cultural backgrounds (the focus group discussions indicated that in some sections in Bidhaawyeet ethnic group, and in some Catholic and Muslim communities tobacco

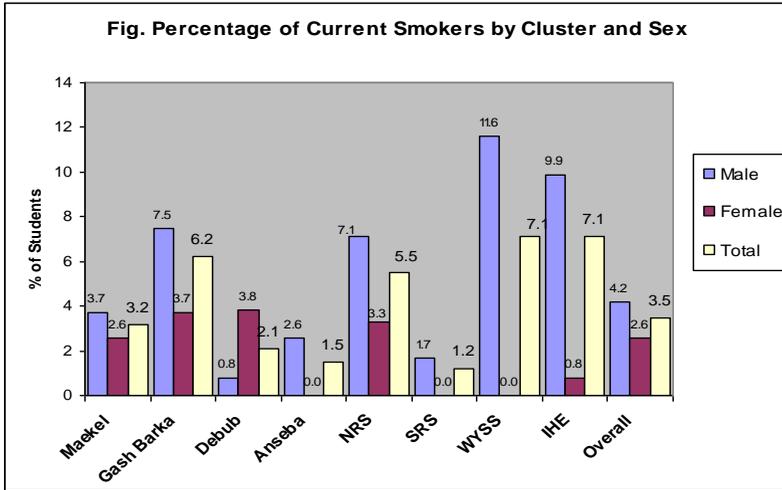
use is relatively more tolerated), increased socialization, peer pressure and even possibly industry undercover promotional activities (WYSS has the highest proportion of students who reported to have received free cigarettes from tobacco industry agents), may prompt many students to experiment with cigarette smoking.

iii. Current smokers

Students who reported smoking cigarettes at least once during the 30 days immediately preceding the survey are regarded as current smokers. The findings revealed that 3.5% (CI: 2.5-4.8) of the students currently smoke cigarettes. This means that, on an average, in every class of 60 students, there are at least two current smokers. There was no statistically significant difference in the proportion of male students (4.2%) and female students (2.6%).

Figure 3: Percent of current smokers by age, cluster and sex





Institutions of Higher Education and WYSS contained greater proportions of current smokers (7.1% each; CI: 3.0%-11.3% and 4.8%-10.4% respectively), while SRS has the lowest (1.2%). All the current smokers in WYSS and IHE are male. Zoba Gash Barka and NRS have the highest proportion of current cigarette smokers. Age wise, smoking cigarettes peaks at ≥ 23 years age cohorts.

In general, prevalence of current cigarette smokers increases with educational level and hence with age, although the pattern is not smooth. It is again surprising that middle schools have more current smokers (3.5%) than secondary schools (2.6%) although the differences are not statistically significant. Grade eight students showed higher prevalence of current smokers (4.4%) than any other grades from 6 to 11. Students take a national examination at the end of grade eight. Moreover, students who did not pass the national examination are retained in 8th grade. Thus, young students who feel stressed or frustrated due to failure in the national examination may tend to start and continue smoking. Their age also corresponds with the age when the youth are most likely to experiment with cigarette smoking. Again, the

sudden jump in prevalence from grade 11 to grade 12 and IHE is quite striking.

Percentage of current smokers peaks for WYSS (7.1%) but slumps for other secondary school students (3.7%), and rises for middle school students (4.3%). There is an interesting difference in the trends for male and female students. For female students, there is a steady decline from middle school (3.3%) to IHE (0.5%). Grade six students registered the highest percentage (5.8%) compared to grade 7 (3.3%), grade 8 (3.1%), grade 9 (2.5%), and grade 10 (3.7%) but was comparable to grade 11 students (5.7%). Then the figures steadily increase and peak for college diploma (9.4%) students, but again go down to 5.5% for college degree students.

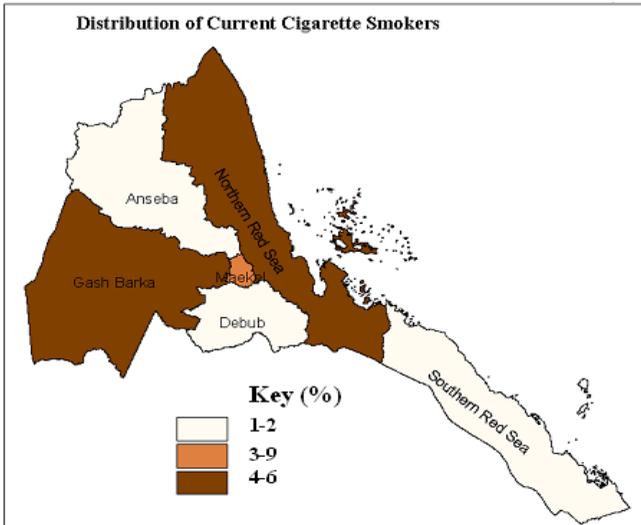


Figure 4: Distribution of current smokers by Zobas

By ethnicity, Bidhaawyeet (51.6%) stands out prominently, followed by Rashaida (25.7%). Whereas the proportion for current tobacco users remains the same as the proportion for

current any tobacco product users for Bidhaawyeet, suggesting that all current smokers also use other tobacco products simultaneously, the proportion of current smokers for Rashaida has decreased by half. Muslim and Catholic students show higher prevalence of current smokers than Orthodox and Protestant students, but the difference was not statistically significant. There seems to be higher tolerance for tobacco use and cigarette smoking among some Muslim and Catholic communities. A focus group discussion in one dominantly Catholic locality revealed that cigarettes are sometimes distributed as a sign of hospitality during social events and festivities like weddings. Moreover, in the focus group discussion, it was revealed that many Muslim mothers tend to tolerate tobacco use by their children, but strongly oppose alcohol use. On the other hand, many Orthodox Christian mothers tend to tolerate alcohol use by their children, but they strongly oppose tobacco use.

iv. Current other tobacco products users

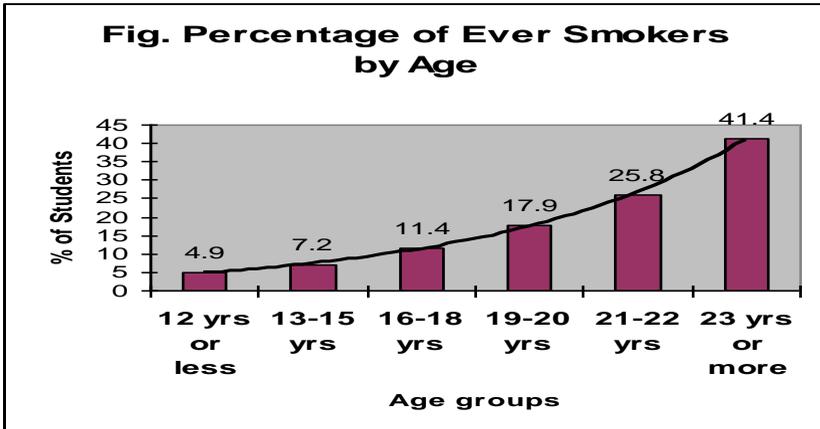
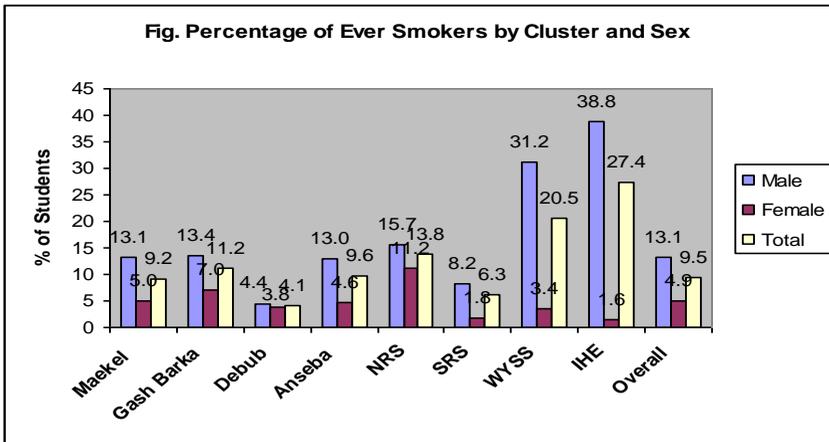
Students were also asked if they used tobacco products other than cigarettes in the 30 days preceding the survey; 2.8% (CI: 1.8%-4.3%) reported that they currently use other tobacco (non-cigarette) products, mostly chew tobacco. There is almost a uniform prevalence level of current non-cigarette tobacco product users across the age groups, excepting for students who are 23 years old and above. This sharply contrasts with the earlier cases where prevalence rates increased with age.

Overall, male students (3.5%) are twice more likely to be currently using non-cigarette tobacco products than female students (1.8%), but the pattern is not uniform across clusters. The proportion of non-cigarette tobacco using female students (3.1%) is higher than male students (2.7%) in Zoba Debu. Perhaps female students are more inclined to use non-cigarette, and hence less noticeable or visible, tobacco products to escape ostracization. The proportion

of current non-cigarette tobacco users is the same for male and female students in NRS (3.4% for both).

By region, current non-cigarette tobacco use is relatively high in Gash Barka (5.9%) and SRS (4.3%) compared with the other clusters. Students in Gash Barka show a relatively consistent high use of any tobacco products compared to the other clusters.

Figure 5: Percentage of current non-cigarette tobacco products users by age, cluster and sex



The distribution of current non-cigarette tobacco users by ethnicity shows an interesting pattern, characterized by reversal of previous patterns for Bidhaawyeet and Rashaida. Although the proportion of current non-cigarette tobacco product users is very high for students from both ethnic groups compared to other ethnic groups, the prevalence rate is higher among Rashaida students (50.3%) than among Bidhaawyeet students (32%) unlike in previous cases. In relation to religion, prevalence is again higher among Muslim (4.4%) and Catholic (4.0%) students than among Orthodox Christian (2.1%) and Protestant (1.0%) students.

B. Age of smoking initiation

The mean age of cigarette smoking initiation was 14-15 years for both sexes. About 34% of ever smokers started when they were 11 years old or younger; 26% of the ever smokers had actually their first trial of cigarette smoking before they were 10 years old; some had their first cigarette when they were 7 years old or younger. Overall, over two third (68.3%) of the ever smokers started cigarette smoking at the age of 15 years or less.

When aggregated into three age cohorts and separated by sex, we see that female students tend to experiment with smoking at a much earlier age than their male counterparts, perhaps due to association with older boys. Close to 47% of the female ever smokers tried their first cigarette smoking when they were 11 years of age or less compared to 30% of the male counterparts, while over 37% of the male ever smokers tried their first cigarette smoking when they were 12-13 years old compared to 34% of their female counterparts. Disaggregating by level of education showed similar results. About 47% of female ever smokers in middle school and 49% in secondary school reported they tried cigarette smoking when they were 11 years of age or less compared to respectively 36.4% and 32.7% of their male counterparts. On the other hand, 50% of the female ever smoker

students in WYSS and 100% of those in IHE tried their first cigarette when they were 16 years old or older. The differences tend to even out as the age of initiation increases. The overall results suggest that female students tend to start and quit earlier compared to their male counterparts.

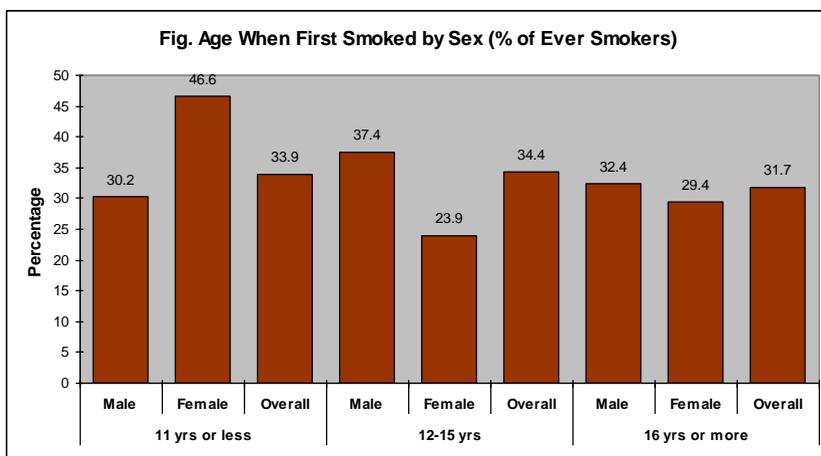


Figure 6: Age when first cigarette was smoked by sex

There is also an interesting difference in age of initiation between the regions.

- Respondents in Zobas Gash Barka and NRS, with a higher proportion of ever and current smokers, and Zoba Maekel, with a higher proportion of male ever smokers (over 40%), reported that they first smoked a cigarette when they were 12-15 years old.
- While a higher proportion of the female ever smokers in Gash Barka (55%) reported to have first smoked cigarette when they were 16 years old or above, a higher proportion of the female ever smokers in NRS (52%) and Anseba (83%) reported to have first smoked cigarette while 11 years or less.

- In SRS region, while majority of the male ever smokers (68%) reported that they were less than 11 years when they first smoked a cigarette, all of the female ever smokers reported that they first smoked a cigarette when they were 16 years and above.

C. Access to tobacco products

i. Usual sources of cigarettes

Close to 43% of the current cigarette smokers bought their cigarettes from shops or street vendors by themselves. Close to 32% of the current smokers obtained their cigarettes from social sources, of which 25.4% obtained cigarettes from friends while 6.4% reported that older people offered cigarettes to them. It is interesting to note that about 9.6% of the current smokers gave money to other persons to buy cigarettes for them, either because they were minors or did not want to expose themselves as smokers while 7.3% of the current smokers reported that they stole cigarettes.

ii. Mode of purchase of cigarettes

Overall, only 5% (CI: 2%-12%) of the current smokers bought cigarettes in packets. Close to two-third (63.8%; CI: 53.1%-73.2%) of current smokers bought their cigarettes in single sticks, while the rest (31.3%) bought some times in packets and sometimes in single sticks. Relatively, a higher proportion of current smokers in secondary schools (13%) bought in packets followed by current smokers in WYSS (9%). The two regions with higher proportion of current smokers - NRS and Gash Barka - had a smaller proportion of current smokers buying in singles (57%) compared to the national average of 64%. There was no significant difference in the mode of purchase by female and male current smokers. The fact that most current smokers buy in single sticks means that,

- they have limited opportunity to read and understand the details of the health warnings and messages on the packets and thus, such labels have little deterrence effects on youth smoking; and,
- they have easier access to cigarettes.

Cigarettes are readily available around schools including those procured through illicit trade, which are sold openly in shops and streets. Obviously, cigarettes obtained through illicit trade do not fulfil the health warning labelling requirements of Proclamation 143/2004. Over one-fifth (22.3%) of the students stated that cigarettes are available within 25 meters or less from the gates of their schools, with 16% reporting within 10 meters or less. A survey of shops around schools by the research team also revealed that all shops around schools sell cigarettes. In fact in some schools, street vendors and shops sell an assortment of cigarettes right at the school gates. There is no law in Eritrea that specifies the distance from school at which cigarettes and other tobacco products should be sold. There are also reports that cigarettes and other tobacco products, especially chew tobacco are sold within some school premises in violation of the proclamation. Such easy availability of cigarettes and other tobacco products is one of the major factors that encourages initiation of smoking and use of other tobacco products.

5. Tobacco influence in the media

This section discusses the role of the media and advertising on students' use of cigarettes focussing on awareness and exposure of young people to antismoking messages, and on how receptive young people are to cigarette advertising and other activities that promote cigarette smoking.

A. Exposure to pro-tobacco messages and advertisements

Proclamation 143/2004 prohibits all forms of tobacco promotional activities in Eritrea. No sponsorships or tobacco advertisements are allowed in the TV, radio or newspapers. Items carrying tobacco logos are also illegal. Despite such measures, the Eritrean youth is not totally protected from pro-tobacco messages and promotions. There is an increasing diffusion of information technology in Eritrea, including remote rural areas, in the form of satellite TV, the Internet and print media. This provides access to unregulated advertising of cigarettes and other tobacco products, allowing the tobacco industry to circumvent government's ban on advertising. Eritrean youth watch satellite TV channels, watch films, use the Internet, and some of them have access to magazines printed outside the country.

Films are the major carriers of pro-tobacco messages. Overall, 76.9% of the students reported that they see leading actors smoking in the films they watch, with 46% stating they see actors smoking a 'lot of times' while 31% stated they see them smoking 'sometimes'. There is a strong tendency among the youth and young people to imitate people they admire such as film actors, singers and other role models. Moreover, many teachers smoke and even send their students to buy cigarettes for them, although Proclamation 143/2004 bans selling cigarettes to minors of 18 years old or less.

The survey further revealed that 53.2% (CI: 50.2%-56.3%) students, regardless of their tobacco use status, reported to have seen tobacco brand names in the TV channels they watch; close to 37% (CI: 32.5-41.3) saw ads for tobacco in magazines printed outside Eritrea and the Internet; 47.4% (CI: 42%-52.8%) saw ads for tobacco when they watched cultural/sports and other similar events either in person or on TV.

6. School curriculum and school policy

The Ministry of Education introduced Life-Skill-Based Health Education in the academic year 2003/04 and Health Science Technology Education in 2005/06. The former is a core subject which is offered to students in grades 4 to 12, while the latter is an optional subject offered to students in the natural science stream in grades 11 and 12. The survey attempted to assess the extent to which tobacco use prevention education is included in the school curriculum, and if schools respect the Ministry's Golden Rules and Proclamation 143/2004.

From the perspective of the students, the school curricula seems to be deficient in lessons on tobacco use and its hazards, with half the students reporting that they surely did not have any lesson on the hazards of tobacco use. Only 38% (CI: 32.9%-44.1%) reported that they had lessons on the health hazards of tobacco use; 11.4% were not sure. When disaggregated by sex and by Zoba, the percentages of students who reported that they had lessons are comparable. The proportion of students who reported having no lessons is highest in the IHE (77%) and WYSS (61%) compared to the others; both also reported high prevalence of tobacco use ($X^2 = 123.0$; $p < 0.000$).

Students were also asked to indicate the time when they had their last lesson on cigarette smoking and its consequences. Only 9% of the students reported that they had their lessons on tobacco hazards in the semester when the survey was conducted, while 17% reported that they had it in the previous semester. Over 22% reported that they took their lessons more than a year ago.

These figures suggest that there is no strong public education on the health hazards and the economic and social burden of tobacco use. There are few counselling services related to tobacco (e.g., NUEYS on-line service). Thus young people have inadequate

information about addiction. The surveyed students underestimated the psychological addiction to smoking and the physiological addiction to nicotine. For instance, 59% of the surveyed students thought it is safe to smoke for one or two years and then quit, while 70% of the current smokers said they can quit whenever they want. However, 93% of the current smokers who attempted to quit in the year preceding the survey reported that they failed to quit.

7. Awareness about anti-tobacco regulations

Adolescents who have poor awareness of, or are not properly sensitized to, the hazards of tobacco use are unlikely to be careful with their decisions to start tobacco use or to understand the significance of existing anti-tobacco regulations. It has been clearly indicated in the preceding section that only a small percentage of the student body was exposed to formal and non-formal anti-tobacco, pro-health messages.

Close to three-fourth of the schools and classrooms (73%) have no no-smoking signs or posters, although this is stipulated in Proclamation 143/2004. When students were asked specifically if they knew about Proclamation 143/2004, only 26.7% of the respondents said yes. However, when they were asked if they think there is a law in Eritrea that prohibits tobacco use in schools, 66.5% said yes. Close to 73% (CI: 66.9%-77.7%) students are aware of the Golden Rules of the Ministry of Education that totally bans the use of any tobacco in school compounds. This is not surprising because the Golden Rules are codes of behaviour for students and they are read to them at the beginning of each academic year. Moreover, they are printed on the covers of exercise books.

One of the major reasons why students are not aware of the Eritrean tobacco use control law is due to lack of its enforcement.

This proclamation, which is based on WHO Framework Convention on Tobacco Control (FCTC), contains key provisions for tobacco control, but there is no institutional arrangement for its enforcement. In the absence of effective enforcement with firm implementation at site level (e.g., public places where smoking is banned), the proclamation is openly violated.

8. Knowledge of the hazards of tobacco use

Most students (81.2%) believe that tobacco use is harmful to health. Only 8% students in the study believed that tobacco use is definitely not harmful to health. Another 2.0% said it is probably not harmful to health, while 7.9% thought it probably is harmful. The rest (1.0%) could not give their judgment. However, close to 80% of the students also believed that tobacco use results in loss of weight, 3.2% believed it results in gain of weight and 15.8% believed it makes no difference, while 1.8% did not know.

Preliminary assessments (e.g., discussions with key informants) indicated that many students smoke – or try their first cigarette – in festivals, parties and other social gatherings. Students were asked whether or not smoking makes them less/more comfortable around people. About 28% of the respondents thought it makes them more comfortable while 61% said it makes them less comfortable. About 9% said it does not make any difference, while 2% could not state their judgment.

Proclamation 143/2004 – A Proclamation to Provide for Tobacco Control in Eritrea – requires that at least 30% of the area in cigarette packages manufactured locally or imported be devoted to health warning labels. There are now six health warning labels that are used by rotation. These warnings are in Tigrigna, Arabic and English. Unfortunately, many current smokers (46.5%) have no chance of reading them because they said they always buy in single sticks. Of those who buy in packets, only 17.6% read the warning labels with attention, while 23.4% read the labels always, but with

no particular attention given to the message. Besides many students smoke smuggled cigarettes. Some of these cigarettes have warning only in English or in Arabic, and are written on the narrow side of the packets in small fonts (e.g., Royal). Whatsoever the reason, health warning labels do not reach students who smoke cigarettes.

Many students associate health hazards of tobacco use with longer duration of use. To gauge this perception, students were also asked whether or not smoking for only one or two years and quitting later poses any health hazards. Only one in five students (22%) believed that it is definitely not safe to smoke for one or two years. Overall, about two students in three (61.6%) believed it is safe, with four students in ten stating it definitely is safe. These are high-risk groups, because they forget that tobacco products are addictive substance. Of those who think it is not safe, 21.9% were definitely sure it is not safe to smoke for one or two years and would quit after that period, while 16.6% thought it probably is not safe.

The high-risk group (those who said they definitely and probably think it is safe) is further analyzed by grade and cluster. The proportion of middle school students who definitely think it is safe to smoke for one or two years is much higher (42.1%) than the proportion of students in secondary schools (31.8%), WYSS (18.5%) and IHE (31.1%). Students in middle school are twice as likely to think it is safe to smoke for one or two years as students in WYSS (grade 12). It is interesting to note that the percentage of IHE students who think it is definitely safe and probably safe are almost the same (32.0% and 31.1% respectively). These are students who should have been more knowledgeable about the risks of smoking because of their age and level of education, but their knowledge about risks is the same or lower than that of secondary school students.

More students in Gash Barka (46.3%) think it definitely is safe to smoke for one or two years and quit later, followed by Debub (43.1%) and Anseba (39.8%). However, when the values for definitely and probably safe are combined, Anseba ranks first (67.4%), followed by Debub (65.4%) and Gash Barka (61.1%). Excepting Debub, these regions have high rate of prevalence of tobacco use.

The pattern for grade level trend reveals that the response patterns for definitely safe and probably safe follow opposite trends for grades 9-12, but converge for IHE students. Again the data reveals that students in lower grades are a high-risk group because most of them believe it is safe to smoke for one or two years and quit later. This is the group often targeted by the tobacco industry. The tobacco industry encourages the initiation of tobacco use by this age cohort knowing that people who start cigarette smoking at this age remain lifelong smokers.

A. Knowledge of, and exposure to, environmental tobacco smoke (ETS)

Smoking tobacco is equally harmful to non-smokers because they are exposed to environmental tobacco smoke. Environmental tobacco smoke is a complex mixture of gasses and particles produced from a burning cigarette, cigar, pipe, *shusa* and exhaled smoke. It includes nearly 4,000 different chemicals and over 150 toxins. Many people are exposed to tobacco smoke in their homes, workplaces and recreational areas. Exposure to ETS causes disease and death. For instance, in children it causes ear infections, bronchitis, pneumonia, asthma and others. Similarly pregnant women exposed to ETS can pass carcinogens to the blood of the unborn and face the risk of low birth weight.

Students know that environmental tobacco smoke (ETS) is harmful to the health of non-smokers exposed to it. Overall, 56%

(CI: 51.5%-60.3%) of the students (59.4% male and 52.2% female) were definitely sure that ETS is a health hazard to non-smokers; another 19.2% (CI: 15.8%-23.1%) said it probably is harmful. Against this, 16% (CI: 13.7%-19.2%) were definitely sure ETS is not harmful to health of non-smoker exposed to it, with another 8% stating it probably is not.

There are interesting differences between male and female students. Statistically, the percentage of male students reporting ETS is definitely harmful to health is higher (59.4%; CI: 53.7-64.9) than that of female students (52.2%; CI: 47.5-60.1), while percentage of female students (21.7%; CI: 16.5-30) stating that it is probably harmful is higher than the percentage of male students (17.2%; CI: 12.6-20.6) stating it is probably harmful ($X^2 = 17.6$; $p < 0.001$).

Knowledge of the health hazards of ETS is low among middle school students, but improves with age and level of education. The proportion of students who said ETS is definitely not hazardous to health decreases from 21% for grade six students to 9.2% for IHE students. When aggregated by level of schools, it varied from 18% for middle school students to 9.2% for IHE students.

9. Reasons for smoking

There are various reasons why the youth start smoking cigarettes and continue to smoke. The decision to try cigarette smoking is not the same as the decision to continue smoking, although the two are interrelated. The table below summarises the major reasons for smoking.

Influencing Factors	Percent	Cumulative Percent
Influenced by friends who smoke	34.1	34.1
For fun/relaxation	28.2	62.3
To get free from stress	23.2	85.5
To look civilized/modern person	8.1	93.6
Influenced by parents who smoke	4.1	97.7
To show that one is an adult	2.3	100.0

Table 2. Reasons for Starting Smoking

The focus group discussions also provided interesting insights into factors that influence students to smoke. The following reasons were given as influencing factors in the quantitative and qualitative surveys:

- i. Peer pressure: this was found to be the leading factor in both the quantitative survey and focus group discussions. Some students are even offered free cigarettes by their smoker friends.
- ii. Escape from stress: many students start smoking either for fun or to escape from stress, without adequately assessing the dangers of nicotine addiction. Some students believe cigarettes will keep them alert during study hours, and start smoking while preparing for their exams.
- iii. To look more attractive and modern: 34% of the surveyed students believed that boys who smoke look more attractive while 40% believed boys who smoke have more friends. The corresponding figures for girls were 24% and 19% respectively. Female students from Eritrea Institute of Technology who participated in the focus group discussions disclosed that they know female students who prefer to have smoker boyfriends. Some students also believe that smoking cigarettes is a sign of modernity and sophistication.

- iv. Smoker parents: children who grow up observing their parents smoke may think that smoking is a normal activity. Over 10% of the students reported that they come from smoker parents, of whom 9.5% reported that only their father smokes, while 0.6% reported that both parents smoke. Another 2% did not know.
- v. Exposure to pro-tobacco advertisements: Proclamation 143/2004 prohibits any form of advertisement of tobacco products and other promotional activities. However, Eritrean students are exposed to tobacco advertisements through satellite TV channels, the Internet, videos, and other printed or digital materials. Overall, 53.2% (CI: 50.2% - 56.3%) of them, regardless of their tobacco use status, reported to have seen tobacco brand names in the TV programmes they watch; close to 37% (CI: 32.5 - 41.3) saw advertisements for tobacco in magazines printed outside Eritrea and on the Internet.
- vi. Changing values, norms and parental weakness: there is a growing tendency among parents to give unlimited freedom to children and also provide them pocket money. If not checked, these are abused by some children. Moreover, according to the PTA, when the once intact traditional family is eroded, there is a loose relationship between children and parents. Many parents do not provide their children with proper guidance and advice, and refrain from reprimanding them for wrong-doings. Many parents do not even know that their children smoke cigarettes or use other tobacco products.
- vii. Tobacco industry's clandestine promotional activities: about 2% of the respondents stated that they were offered free cigarettes by tobacco industry agents. Moreover, 11.6% of the students reported that they possess items like pens, caps, T-shirts, bags, etc. with tobacco brand names or tobacco logos. These figures suggest that the tobacco industry try to promote and popularize cigarette smoking

through such activities in stark violation of Proclamation 143/2004.

Students who smoke or use other tobacco products were also asked whether or not their parents know that they smoke cigarettes or use other types of tobacco products. The gender-based differences are striking. In the case of male tobacco users, 20% of them reported that their parents do not know while 100% of the female students reported that their parents do not know. This means that parents cannot provide advice and help to their smoker children.

10. Conclusions and recommendations

In spite of Proclamation 143/2004 – A Proclamation to Provide for Tobacco Control in Eritrea, the use of tobacco by students is on the increase. The percentages of ever smokers, current smokers and any tobacco current users were respectively 4.4%, 2% and 8% in the GYTS survey of 2005, which covered only students that were 13-15 years old. The percentages of ever smokers, current smokers and any tobacco users for the same age group in this survey are respectively 10.9%, 4.6% and 6%. Many students continue to experiment with tobacco products at an early age. The average years of initiation are 14-15 years for both sexes. By age 12, more than half of the ever smokers have finished a whole cigarette. It is unlikely that students know the full consequences of their trials with tobacco products at this age, and therefore run high risk of becoming long-term addicts.

The factors that contribute to this trend are many. Firstly, there is no institution or body that oversees the implementation of the Proclamation. The tobacco industry, for instance, is promoting cigarette smoking by selling T-shirts and plastic bags with cigarette brand names, such as *Reds*, in blatant violation of the Proclamation. The Proclamation has not been strongly

popularized, and few people are aware of its existence. Secondly, street vendors and shops that display their tobacco products in attractive ways provide the youth free access to cigarettes, including in single sticks. Although the Proclamation prohibits sale of tobacco products to minors (≤ 18 years old), under-age children are seldom refused cigarettes because of their age, and adults send them to buy cigarettes for them. Thirdly, pro-tobacco and promotional messages reach the youth via satellite TV channels, the Internet and other print media, thereby neutralizing the advertisement ban by the Proclamation. Fourthly, loose parental control, coupled with socialization and peer pressure, prompt the youth to start smoking. Fifthly, there is wrong perception concerning cigarette smoking among the youth. Most of the sampled students think it is safe to smoke for only one or two years, or one to three cigarettes a day. Similarly, over two-third of the current smokers think they can easily quit smoking if and when they want, but over 90% of those who tried to quit smoking failed. Sixthly, the school curriculum is deficient in content about the hazards of tobacco use. Few students reported to have taken lessons on tobacco and its hazards. Hence the majority of the current smokers do not have correct knowledge of the hazards of tobacco use.

At present, exposures to pro-tobacco advertisements are poorly matched by anti-tobacco, pro-health messages and advertisements. Almost all schools do not have coherent and sustained anti-tobacco policy. The tobacco industry is targeting the youth and the age of initiation of smoking is falling. More effort has to be done at school and other levels to combat the tobacco epidemic. Schools are ideal entry points to combat the tobacco epidemic. There is a need for strong and sustained programmes to counter the tobacco industry's clandestine promotional activities. A body or institution must be established to implement the Proclamation. Massive tobacco use prevention education and campaigns through the mass media must be

initiated and sustained. There is thus an urgent need for aggressive anti-tobacco use campaign involving school personnel, students, the NUEYS, the NUEW, local health personnel, the mass media and the community to combat the growing threat of tobacco in schools.

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Book Review

Joining Africa: From Anthills to Asmara, by Charles Cantalupo; East Lansing: Michigan State University Press, 2012; pp. xi +270; price: \$27.95; PB.

Charles Cantalupo is a poet, academic, and critic based at Penn State University, Schuylkill, in America, whose connection with African people and their literature, but most especially with Eritreans and their literature, has already turned into such a long and memorable one that it truly merits the book under review. It is in the shape of a fascinating journey, in which his personal and professional life is woven into an inextricable mosaic of fraternal bonding, intellectual camaraderie, and human warmth.

The book begins with Cantalupo's visit to Jerusalem, in search of peace and consolation, after losing his wife to cancer. When he goes from there to Egypt, and sees the Pyramids and the museum at Cairo, he has a revelatory experience, which melts away his earlier resolve that he should study the whole of Western culture before thinking of other cultures. So begin his visits to the various countries of Africa, which lead to a steady expansion in his understanding of their people, in which images from his ancestral past, of his immigrant parents and their lives, reconfirm his new perspective. In fact, as he sees more of these countries, he feels overpowered: "I felt like an erased slate, and these places, and their people began writing on me." Cantalupo's participation in literary activities brings in other gains, too. During the production of a play in Morocco, he makes friends with Barbara, and eventually marries her in the US in a barn; the priest chosen by them refused to marry them in his church.

After five years of his visits to various parts of Africa, Cantalupo goes to New York to interview Ngugi wa Thiong'o, for the special issue of a journal on his writings that he was to edit. The interview proves a memorable experience for him, for it leads to

an enriching association between the two. It confirms his opinion of Ngugi's stature as a writer of eminence and excellence; the readers too learn several interesting things about Ngugi the man and writer. Encouraged by this meeting, Cantalupo plans the biggest ever conference on his writings, where he meets Kassahun Checole, the president of the Africa World Press and Red Sea Press. He proves a blessing for him, for he offers to publish the volume based on the essays presented in the conference and another one on the essays that had appeared in the journal earlier. When he tells Checole that he is to attend a conference in Israel, he tells him to visit his country, Eritrea, which he does. It begins his enduring relationship with the country, turns into the richest part of his African experience, and constitutes the major part of his book.

Cantalupo makes several visits to Eritrea, acquaints himself with the heroic struggle of its people to gain liberation from colonial oppressors, partakes of the friendship and warmth of its people, and feels at home wherever he goes. This gives him new ideas, and he starts looking at its capital city Asmara as a suitable venue for hosting a conference on Amiri Baraka. He gives it up for planning a bigger conference on African writers, and works towards making it possible, with the support of Ngugi and his university at New York, his own university, and a host of many other bodies and agencies, from inside and outside Eritrea. The President of Eritrea and the Prime Minister of Ethiopia also lend their full support to the idea.

The holding of the conference however runs into trouble because of the breaking of hostilities between Eritrea and Ethiopia. The attitude of the donor bodies, especially the world bodies, changes dramatically. His meetings with officials turn cold and unproductive. At some places, he has to suffer embarrassing moments. But his hopes are kept alive by the officials in Asmara, and the unstinted support of Zemhret Yohannes. However,

because of tension-ridden atmosphere, the conference had to be postponed from June 1999 to January 2000.

In spite of all the hurdles that Cantalupo and his team of dedicated workers and officials had to face, including the indifferent attitude of the ambassadors of different countries resident in Asmara, the conference, aptly called “Against All Odds,” does finally take place and proves a great success. It is attended by some of the most distinguished writers of the continent, who added colour to it by wearing their native dress. Since the conference was about African literatures in their own languages, Ngugi, the moving spirit behind it, emphasized the desirability and importance of such writings. The detailed account of the conference proceedings and the numerous activities that took place in different parts of the country, culminating in the signing of Asmara Declaration on African Languages and Literatures, make for an absorbing reading.

During one of his numerous visits to Asmara, Cantalupo attended a poetry reading session in which he witnessed how the Eritrean poet Reesom Haile, who had returned to Eritrea after many years of exile, read his poems amidst a huge gathering of people, including women and children, who also participated in the making of his poems. He was so captivated by the sight and by the rhythmic power of his poems that he decided to try translating them into English. During his several meetings with the poet, he felt encouraged to go ahead with his plan. In the midst of depressing meetings with the ambassadors of various countries in Asmara, his sittings with Haile provided him welcome relief. The chain of e-mails between the two, in which the poems moved across locations, turned into a sheaf of translated poems, which took the shape of a published volume. A second one followed soon after. But by that time, Reesom was, once again, out of Eritrea.

Tej N. Dhar

Having succeeded in translating an Eritrean poet into English, Cantalupo was invited by Zemhret Yohannes to translate poems from three different languages of Eritrea—Tigrinya, Arabic, and Tigre—in collaboration with Ghirmai Negash, who headed the department of Eritrean Languages and Literatures in the University of Asmara. After some hesitation, he accepted it and the result was a volume of poems *Who Needs a Story?* The story of the making of this book and its eventual publication is another heart-warming story, which added one more dimension to Cantalupo's connection with Eritrea and its literature.

Joining Africa is a well written account of Cantalupo's extraordinary exploration into the literary and cultural diversity of Africa. He recreates the sights, sounds, smells, and colours of the different parts of the continent in a rich context of his extensive reading of the literature of the West, and with significant moments of his life. The book demonstrates that with goodwill and effort connections between different cultures and languages are possible, and citizens of one country can "join" other countries of the world. It is a must read for people interested in journeys of life and histories of literary connections.

Tej N. Dhar

Book Review

Mə'bul Mäzgäbä-Qalat English-Tigrinya (English-Tigrinya dictionary), by Tekie Tesfai; Asmara: Hdri Publishers, 2012; pp. viii + 1348; price: 550 Nakfa.

The history of Tigrinya lexicography spans over a century. During the Italian colonial era, some Tigrinya-Italian dictionaries were used by Italian researchers, missionaries and colonial administrators. These were limited in their contents and distribution and were written exclusively for expatriate Tigrinya users.

After four decades of post-Italian era appeared Yohannes Gebregziabhier's Tigrinya-Amharic dictionary (1957) and Berhe Weldemariam's Tigrinya-Amharic reader for children (1960s).

Work on Tigrinya dictionary was revived after 1982. In this year alone three dictionaries (English-Tigrinya-Arabic dictionary, Tigrinya-English dictionary and Tigrinya-English medical dictionary) were published by the EPLF. Though these works did not contain pronunciation guide, and did not identify parts of speech of the words and provide examples of usage, they helped in standardizing the language, enabling it to become a language for literature, technology, art, management and education.

Not so long after, a Tigrinya-Tigrinya dictionary, *Ləsanä-'Ag'azi Ze'əm Gərma*, was prepared for the first time in 1984 by Grmatsion Mebrahtu. With close to 20,000 entries, it contains information on the constitution of Tigrinya language and its main characteristics and its relationships with other languages. It also contains phonology and other grammatical descriptions of the Tigrinya language. Verbs are expressed in the form *sähifu* instead of the usual form (*sähafä*) that one finds in other Tigrinya dictionaries. Grmatsion Mebrahtu's first monolingual Tigrinya

Dictionary has a special place in the development of the Tigrinya dictionary work.

Work on dictionaries progressed fast after the independence of Eritrea in 1991. The works include:

- Solomon Gebrekrstos' *Harägat Tägräyna* (Tigrinya Phrases) (1993);
- Musa Aron's *mäzäbä-qalat mäshaf-qäddus* (Bible dictionary) (1996);
- Tekie Tesfai's over 1100 page-long *Zämänawi Mäzäbä-Qalat Tigrinya* (Modern Tigrinya Dictionary) (1999);
- Kidanemariam Zereazgi's over 1200 page-long *Zämänawi Mäzäbä-Qalat Tigrinya bähaddis Bälhat* (Modern Tigrinya Dictionary with a New Approach) (2008);
- Yemaneberhan Grmazion's *Qalat Tigrinya 'ab Säräh* (Tigrinya Words in Use) (2011) which went beyond a list of Tigrinya vocabulary; and
- Ymesgen Hailegeorgis' 12,000 entry *Nay Tigrinya Sənəya Nägəggər Məttun Mäzäbä-Qalat* (Concise Tigrinya Figure of Speech Dictionary) (2011).
- Tigrinya-French/French-Tigrinya dictionary prepared by a group of Eritreans in Diaspora (1990);
- Teklu Lebası's German-Tigrinya dictionary (1991);
- Uqubamikael Habtemariam's English-Tigrinya dictionary (1993);
- Ysaaq Tsegay's *Mahdär*, an English-Tigrinya dictionary (1997);
- Thomas Kaine's two volume Tigrinya-English dictionary (2000);
- Amanuel Sahle's simplified English-Tigrinya dictionary (2006);
- Gebre-egzi Adhanom's Geez-Tigrinya dictionary (2010); and
- Ruth Simon's French-Tigrinya dictionary (2012).

These works have greatly contributed in compiling the words of the Tigrinya language and in expanding the scope of usage of the language. However, most of them do not contain as many words as would be expected, some are very expensive.

Tekie Tesfai's *Advanced English-Tigrinya dictionary* which has over 62,000 entries gives more energy and clear direction to the hitherto advancing initiatives by citizens and researchers of the language. It has two parts. It does not have any appendices or annexes. The first part, the front matter, contains gratitude and a short introduction by the author, a two page statement of the publishers, Hdri, tabulated phonetic symbols and pronunciation guide, an illustration of abbreviation signs used by the author and references.

The English sounds are represented in the Geez script. Representing a language that has twenty-two vowels (English) with a script of a language that possesses seven-vowels (Tigrinya) is a difficult task. The lexicographer has done this by using the symbols for the seven Tigrinya vowels severally, by adding various Tigrinya punctuation marks and often by joining the Tigrinya syllables with the semi-vowels “**ወ**” (“*we*”) or “**የ**” (“*ye*”). Geez alphabets which have been out of use because of redundancy such as “**ሠ**”/“*se*” have been employed to represent unique English sounds. Thus, all English sounds including the twenty two vowel sounds and diphthongs have been represented by one or two symbols of the Geez script. For purposes of ease in pronunciation, the English words, instead of being followed by the International Phonetic Alphabet (IPA) representation, have been typed in Geez script inside forward slashes using the style of representation created by the author. If the English word has a different pronunciation in England and in the United States, the former has been typed first. This will help users of the dictionary (most of whom are not conversant with IPA) pronounce the

English words as near to their correct English pronunciation as possible.

The second part contains the main content, in which every English entry is followed by its pronunciation represented in Geez script, its part of speech, its varied meanings illustrated in different words and phrases, example sentences, figures of speech and phrases that show the different usages of the word. Related sub-entries are marked by asterisks. By way of an example, the main entry ‘abandon’ /አ : ’ባ : ን ድን / in the first page of the main content is described as follows:

abandon /አ:’ባ:ንድ:ን/አ:’ባ:ንድ:ን/ ግ. 1. ጠንጠነ፤ ራሕርሐ፤ ገዲፋ ኸደ፤ ረጥረጠ፤ ሓዲጉ ኸደ (ኣብ እዋን ጸገም፡ ብሸለልትነት፡ ብፍርሒ፡ ወዘተ)። 2. አቋረጸ፤ ምዝውታሩ ሓደገ፤ ገደፈ. (ኣብ ምዝውታር፡ ኣብ ስራሕ፡ ኣብ ይግበኣኒ ምባል ወዘተ)። 3. abandon oneself to ይኹን ሓደገ፤ ንገዛእ ርእሱ ኣደዳ ናይ ሓደ ስምዒት ወይ ድርኪት ይኹን ገደፈ።
abandon oneself to something ንገዛእ ርእሱ ረስዐ። he abandoned himself to despair ንነብሱ ኣደዳ ተስፋ ምቕራጽ ገበራ፤ ኣብኡ ኸሎ ሕልንኡ ኣዕረበ።

Under the above substance for the main entry ‘abandon’ we find the asterisked subentries: abandon ሰ. (Noun), abandoned ቕ. (Adjective), and abandonment ሰ. (Noun).

The dictionary contains not only single and compound words but also phrases and figures of speech which use the main entry listed as subentries. For example, the main entry ‘agree’ (verb) is followed by the subentries *agree to differ, be agreed (on/about sth), couldn’t agree (with sb) more, agree with sb* with sentence formulations to illustrate how they may be applied. These help users to know the meaning of the entry in depth. However, since some of these subentries have been misplaced in alphabetical arrangement, the reader may not easily locate the subentries. Cross-referencing them would have solved the problem.

In his *Linguistics and Bilingual Dictionaries* (1977), Ali M. Al-kasimi, has a section – Criteria for the Evaluation of Dictionaries – which provides three major tests: purpose, contents and form, which I use to evaluate Tekie Tesfai's work.

Regarding purpose, the introduction to the dictionary states that it is intended to serve Eritreans, and not native English speakers. It is not limited to comprehending English language but also encourages users to produce works in it and in their own language. It is descriptive and not conservative or prescriptive, because the author has adopted as Tigrinya words a number of loan words that are widely used in Tigrinya in the domains of science, technology and other terminologies not hitherto formally considered as Tigrinya words. Although such practice is not supported by some linguists, it is possibly the only way to make the language meet its growing needs.

In the contents of the dictionary, the front matter appears before the main body of the dictionary and meets almost all the expected criteria: purpose, audience, guide to pronunciation, keys to abbreviations, and references. A more complete front matter should have contained a short guide to Tigrinya grammar and its orthography. To make it easier for readers, the author could have kept the symbols representing the English sounds at the bottom of each page.

The main body fulfils nearly all the criteria for evaluating a standard dictionary, though pictorial illustrations would have added to its value. I am very comfortable with Tekie Tesfai's approach of illustrating the meaning of words. However, the different dialects of Tigrinya could have been better reflected. Moreover, some experts have expressed reservations about the way new Tigrinya words were created by the author. Tesfay Tewolde, in his comments during the inauguration of the dictionary, noted, after lauding the author's onerous research, that

it does not benefit the readers for the author to create new Tigrinya words/phrases for those English words/phrases for which other scholars had created other Tigrinya words/phrases and such efforts have to be carried out in discussions and consultations with experts. Tesfay Tewolde also stressed that words/phrases have to be created following the rules of the language's phonology, morphology, and syntax. By way of example, he stated that the author did not follow the Tigrinya phonetic rule of spirantization of velar /k/, /k^w/ and uvular /q/, /q^w/ consonants. These consonants are spirantized in intervocalic and post-vocalic positions only. In Tekie Tesfai's work, however, the consonants are spirantized in positions outside these phonetic environments.

I agree with these remarks, especially with the last one.

The third test focuses on form and appearance including typography. In terms of design, volume, appearance and sturdiness, Tekie Tesfai's English-Tigrinya dictionary is the best published so far.

With its novel way of helping readers pronounce English words using Geez characters, and its solid form and elaborate introduction, Tekie Tesfai's English-Tigrinya dictionary is a useful tool for students and researchers.

Saleh Mahmud Idris