

TIGRAY

Bibliography and Bibliometry

1996-2021



YOHANNES ABERRA

TIGRAY
Bibliography and Bibliometry
1996-2021

YOHANNES ABERRA

Mekelle 2022

Dedicated to:

The Heroic Medical Personnel of Tigray who suffered with the people and served thousands of victims of sexual violence, airstrikes, weaponized hunger, and gunshot-wounds without pay, without equipment, and without medicine for over two harrowing years.

Preface

Dr. Tewodros Adhanom, Director General of the World Health Organization, described the gruesome situation in Tigray to the World Community in these words: “Nowhere in the World would you find a crisis like what is seen in Tigray. Nowhere in the World are we witnessing hell like in Tigray”. There is not an iota of doubt about it that super-resilient Tigray will survive and thrive. Every Tigrayan shares the optimism and is looking forward to a period of restoration and an era of sustainable development in Tigray. The enlightened founder of Buddhism, Guatama Buddha, is quoted to have said: “It is during our darkest moments that we must focus to see the light”. It requires the blessing of a prophet to foretell when exactly Tigray will be free and embark on the herculean task of restoration with a sustainable development to follow. However, the certainty of the Tigray predicament coming to an end sooner or later demands that those who possess the requisite knowhow need to be proactive and start “buying summer boots in the winter season”.

I am one of the tens of thousands of Tigrayan scholars who are motivated by the thought of a possible uplift of Tigray once the long and devastating siege is over. Knowledge produced earlier is like seeds that remain in the soil long after the vegetation cover is gone. With the right restoration measures the seeds can spring up into bush first and into forest next. The creation and dissemination of knowledge in Tigray has an ancient beginning. Axumite scholars, the accomplished predecessors of the present day Tigrayan academics, have given us the rich Geez alphabet the use of which spanned for thousands of years.

After several centuries of medieval darkness and brutal dictatorships Tigray experienced a renaissance in which the creation and dissemination of knowledge reached an unprecedented level. The three decades between the two wars saw a golden age of research and publications in a vast array of disciplinary and interdisciplinary fields. The book captures as much of the research output of the period between 1996 and 2021 as was possible for the single-handed and ill-equipped author under a lot of stress, inconvenience, and insecurity. Although it is neither listed in the bibliography nor included in the bibliometric analysis the limited volume of literature belonging to the entire century proceeding the year 1996 is

summarized briefly in the Introduction. The year 1996 was chosen as a start-year because it is the year after the Federal Constitution came into force, marking the official end of the 17-years of war in Tigray. By Constitutional provision Tigray attained its proper territorial extent befitting the compilation of the bibliography.

Restoration and sustainable development in Tigray need not start from scratch. This book is intended to provide a launch-pad for restoration and sustainable development in Tigray by making the research outputs more accessible to planners and decision makers in all sectors and at all levels. The compilation of the comprehensive bibliography is the first of its kind for Tigray. It is hoped that it can also serve as a foundation-stone for the establishments of an umbrella organization: Institute of Tigray Studies (ITS). Although a lot is already done, as revealed in the bibliography, there is still an insatiable demand for more advanced research output to realize a Super-Technological Society (STS) in Tigray.

Yohannes Aberra
Mekelle
April 2022

<u>Contents</u>	<u>Page</u>
Part I Bibliographic Analysis	1
1. Introduction	1
1.1. Background	
1.2. Methodology	4
2. Bibliographic Analysis	12
2.1 Publication analysis	
2.2. Citation analysis	29
Conclusion	32
References	33
Part II Bibliography (List)	35
Administrative	38
Agriculture	42
Economy	89
Environment	102
Geology	157
Health	163
History	257
Social	264
Annex I: List of Journals	274
Annex II: Details of Ranked citation count list 100+	294
Annex III: Impact Factor Score of Journals 100+	304
<u>List of Figures</u>	<u>Page</u>
Fig. 1 Social science cluster of the subject matter categories	9
Fig. 2 Natural science cluster of the subject matter categories	10
Fig. 3 Research output by type	13
Fig. 4. Annual Research output	15
Fig. 5 Total research output by subject area category	17
Fig. 6 Annual Research Output and Trend	19-20
Fig. 7 Study area distribution of research output by subject area	22
Fig. 8 Study area distribution of research output by year intervals	22
Fig. 9 Number of authors/publication by subject area category	27
Fig.10 Number of authors/publication by year interval	27
Fig.11. Publication frequency in particular journals	29
Fig. 12 Citation counts of publications	30
Fig. 13 List of journals for which ranking is provided	32

Part I

Bibliographic Analysis

1. Introduction

1.1. Background

Humanity recorded the knowledge it gained through time, in the course of its interaction with nature, since antiquity. Men of the stone-ages painted the understanding of their environment and their own lives on the walls of their cave dwellings. The Summerian civilization was engraved on clay-tablets with the cuneiform. What was happening for thousands of years in the Lower Nile is extensively portrayed by the hieroglyphics on papyrus and the walls of temples and pyramids. Above all, the Dead-Sea scrolls have blessed us with the scriptures.

With the advent of the population boom and its corollary, the information boom, written records of knowledge acquired through observation and experience increasingly became far beyond the capacity of walls to accommodate them. The literature soared to millions and billions. Hence, the discipline of Bibliography evolved. Bibliographies have been compiled for many years now. Conrad Gesner, who is called the father of bibliography, published “Bibliotheca Universalis” as far back as 1545 AD. Carter and Barker (2004) distinguish enumerative and descriptive bibliographies. The former is a list of the literature consulted or meant for further study; whereas the latter is the systematic description of it. This book is of the second genre. The measurement of all aspects related to the publication of books and

documents (Rousseau 2014) or more specifically, the application of mathematics and statistical methods to books and other media of communication (Pritchard, 1969), is known as bibliometry.

Compilation of the bibliography in Ethiopia, in which a specific collection of the literature on Tigray is expected to be included, is only a few decades young. The ‘Bibliography of Ethiopian Studies’, edited by Abbink (1990), covered the years from 1957 to 1990. The bibliography with ‘Tigray’ indicated in their titles appear in the Ethnographic section. Only a PhD thesis on land, leadership and legitimacy; a book on economy and social analysis, and two other publications on land, capital and social stratification and local-level politics and social change are listed.

A year after the ‘Bibliography of Ethiopian Studies’ was published, another compilation of bibliography was made available for readers. This time it was a discipline-specific compilation for the health sciences. The book by Kloos and Ahmed (1991) is entitled ‘Health, disease, medicine and famine in Ethiopia: a bibliography’. It covers the period between 1940 and 1985. Soon after the two bibliographic compilations on Ethiopia were published Sushma (1992) conducted an assessment of the state of the bibliography in Ethiopia and recognized the possibility for individuals to publish national bibliographies although the responsibility lies in the hands of the national library.

The compilation of a bibliography could have several goals. It could be for archiving the literature in which case information contained in the bibliography can be stored for a long enough time. The compilation and analysis of the bibliography in this book is intended for an urgent purpose as an assistance to facilitate the restoration and sustainable development in Tigray. The

bibliography of Tigray is a compilation of research output that is critical for a jump start of the process of restoration and sustainable development. Fayomi, Okokpujie, Mfon (2018) asserted that research will forever be a very important ingredient of development and its significance will forever remain relevant for any system that wants to grow. Intervention strategies that reflect long-term goals need proper application of key research findings and utilization of appropriate technologies (Calame 2005).

The book is organized in two parts. The first part is the bibliographic analyses and the second the bibliography list. The scope of the bibliographic compilation and analysis is at the level of Tigray state, inclusive of all disciplines, and spanning between 1996 and 2021. A survey of the literature for the entire century before 1996 shows that not much was written about Tigray. A web search resulted in 50 books, articles, papers and other documents from 1903 to 1995. Until the Italian occupation of Ethiopia most of the writings on Tigray were written in the Italian Language and focused on the native language of Tigray and cultural songs. A few works of geology are reported during the period of Italian occupation, followed by more attention given to archeological studies and some geology, after liberation. During Military rule in Ethiopia Tigray studies continued to focus on archeology and geology. Research on famine and rural development also came into the spotlight; but it was too weak to be illuminating. Although the emphasis on archeology and geology is reasonable in view of the fact that Tigray is endowed by nature and by history to be an open-air geological and archeological museum.

Extensive research in Tigray before the 1990s was considered to be inconvenient, costly, dangerous, and even undesirable. Given the location of the main research centers of Ethiopia, several

hundred kilometers away from Tigray, a deep sense of unconnectedness prevailed exacerbated by the difficult transport and chronic insecurity. Of course, researchers are not war correspondents; peace and stability is a strict precondition for research to be conducted successfully. However, taking convenience into serious consideration in research is like ‘looking under the lights for something you lost in the darkness’. The best research problem to pick up for research is where it is most significantly manifested. In the research institutions outside Tigray what many know but few talk about is that selecting Tigray as a research site was and still is actively discouraged. It sometimes turns out to be penalizing in cases where students or researchers fail to comply with the norms and engage in research on Tigray. Assuming that it is mainly researchers of Tigrayan origin who would be interested in doing research on Tigray the two decades of war of rebellion in Tigray had engaged almost the entire Tigrayan intelligentsia in armed struggle.

1.2. Methodology

It is absolutely necessary to remind readers at the outset that the analysis is less rigorous than the level reached in international bibliometry. The goal of the analysis is far from involving in methodological debates; it is rather intended to help scholars and ordinary readers alike to get uncomplicated picture of the state of the literature in Tigray and use it as a springboard for action.

1.2.1. The tool-kit

The procedures in bibliographic analysis as set forth, by Donthu et al (2021), are: Step 1: Define the aims and scope of the bibliometric study before the selection of bibliometric analysis techniques and the gathering of bibliometric data (units of publication and

citation); Step 2: Choose the techniques for bibliometric analysis that can meet the aims and scope (performance analysis and science mapping); Step 3: Collect the data for bibliometric analysis in which search terms are defined in a way that will yield search results large enough to warrant bibliometric analysis and focused enough for the scope of study; Step 4: Run the bibliometric analysis and report the findings: The use of bibliometric visualization in figures and tables to curate analytical over descriptive discussions.

For Step 1 a brief statement is made about the aim and scope of the bibliographic analysis in the background sub-section. The techniques for the bibliographic analysis is elaborated by Donthu et al (2021): One is performance-analysis (*contributions* of research constituents (e.g. authors) and the other is science-mapping (*relationships* between the constituents). The former is used as an analytical technique as data for latter is could not be derived from the bibliographic data available to the author. Performance analysis has two components: publication-related metrics and citation-related metrics.

Bibliographic information for publication patterns analysis includes productivity indicators: 1. Number of publications and types of publications (books, journal articles, theses); 2. Subject area of publications (agriculture, health, environment); 3. Publications by year; 4. Number of contributing authors and status of author on a publication (sole-authored, co-authored) (Carpenter et al 2014, Donthu et al 2021, Padrós-Cuxart et al 2016, and Padrós-Cuxart et al 2016).

How frequently authors publish in flagship journals of the discipline is also a crucial measure of performance (Wallin 2005).

This leads us to the other performance measure visibility of publications may be assessed from citation counts of articles. Citation-related metrics measure the impact of an author's articles based on the assumption that influential works or scientists are cited more often than others; citation reflects the merit (Vucovich, Baker, and Smith 2008). Citations are proxies for research impact and quality assuming that a simple linear relationship between quality and citation exists. However, it must be kept in mind that citation patterns vary greatly between disciplines, publication types and authors (Wallin 2005) and may lack the consistency as a measure of quality.

1.2.2. Bibliographic data collection

The collection of bibliographic data in this book depended on the Scholar Google search engine. It is arguably a global leader in the search for academic publications and other works. It provides search results with links to PDF and HTML copies, as well as citations with or without links. Attaining exhaustive search results depends on how skillfully the search term or phrase is chosen to ensure a maximum and relevant search output. My Scholar Google search used the 'Advanced Search' window and entered the search term in: 'With the exact phrase', 'In the title of the article', and 'Return articles dated between'.

The search word and phrase were strictly required to appear on the title. The search term selected is the geographical scope of the bibliographic analysis. Two words and a phrase that needed to be entered into the search bar were: 'Tigray', 'Tigrai', and 'Northern Ethiopia'. The two names alternatively used in the literature for the geographical unit under consideration are: 'Tigray' and 'Tigrai'. The reason why 'Northern Ethiopia' was used as a search phrase

is that hundreds of publications don't show 'Tigray' or 'Tigray' on the titles. There would be no problem if 'Northern Ethiopia' were a reference only to Tigray. The lack of standardized guidelines for stating the location of study areas has messed up the use of compass direction to indicated location of study areas.

Multitudes of writers including international agencies have indicated the compass location of Amhara, Tigray and Afar as 'Northern Ethiopia'. One has to open the text of each of the hundreds of publications to find out whether the study was conducted in Tigray, Gojjam, Gondar, Wello or Afar. For many publications even opening the text did not solve the problem. The abstract or full text of a number of publication did not clearly indicate in which region the study was conducted. Presuming that the study area of the publications may be outside Tigray they were removed from the list. Search in the text of several publications which indicated only 'Northern Ethiopia' as a study area in their titles revealed that the study areas were in Gojjam. Referring to Gojjam as a 'Northern Ethiopian' region is sheer negligence. The author had to discard so many search results after a waste of time and energy.

For zonal level analysis within Tigray there were also many publications that did not indicate their study zones not only in the titles but also in the text. Such publications were deemed as Tigray level studies and analyzed accordingly. This may have inflated the number of Tigray level studies giving a wrong information about the whereabouts of study areas. This had its adverse effect on classifications based on the geographical component of the publications. Of course, authors do not prepare their manuscripts with a post publication bibliographic analyses in mind which could include their publications. Since bibliographic studies are expected

to continue long into the future authors of books and journal articles should care to indicate in the titles the political geographic unit in which their study areas are located in a more specific way.

The thousands of results of the Scholar Google search gave the list of publications and other academic research output on which the bibliographic analysis was launched. In addition to the citation details (author, title, year, and source), citation counts were also available for each search result. However, the way the Scholar Google search results are displayed did not make the ride smooth. The Citation details in most cases were incomplete: not all author names are displayed, not complete titles are displayed, and the sources (e.g. journal names are not written in full. This required pasting the title or any part of it available on the Scholar Google search bar and access the abstract or full text of the publication.

Although most of the abstracts and/or full texts of the publications provided the missing bibliographic information numerous publication did not. Decisions were made to remove such publications from the final list for bibliographic analysis. Some search results were just citations from the reference sections of other publications. Wherever such publications are deemed significant they are included in the analysis after searching for their complete citation from other sources like Scholar Google 'cite' or a new search in Google.com.

1.2.3. Classification

Classification is at the heart of scientific methodology. It is an exhaustive process which creates mutually exclusive categories, where similarity within group is maximized and difference between groups is maximized (Kenneth 2005). This is a neat characterization of the process of classification which does not

match with reality. Practice rather than theory reveals that classification is not a perfect science. Even if it is possible for it to be exhaustive for a given data set, it is difficult to attain complete mutual exclusivity. Sharp boundaries are rare in nature and society; diversity, continuum, and nexuses are the norm. The only realistic option left for classification is to minimize the difference between classes and maximize the similarity within classes. This implies that individual knowledge, skill, and a keen sense of detecting differences and similarities is critically important for successful classification.

Fig. 1 Social science cluster of the subject matter categories

History	Administration	Economy	Social
<ul style="list-style-type: none"> • Archeology • History <ul style="list-style-type: none"> ○ Ancient ○ Church ○ Political 	<ul style="list-style-type: none"> • Conflicts • Decentralization • Governance • Land administration • Policies • Services • Traffic problems 	<ul style="list-style-type: none"> • Development • Employment • Income • Manufacturing • Market • Micro-Enterprises • Micro-Finance • Miscellaneous • Saving-Behavior • Supply/Value chain • Tourism 	<ul style="list-style-type: none"> • Bereavement • Cooperation • Demography • Domestic violence • Education • Food security • Gender • Humanitarian • Livelihoods • Marginalization • Sexual behavior • Miscellaneous

Classifying the social sciences cluster was not easy but not as complex as the cluster for the natural sciences. History and archeology have a greater proximity to one another than they do to other social science fields. Moreover, the two disciplines have a time dimension which makes them stand more distinctly than others. The more serious challenge posed in the classification of the social science cluster is drawing a bold enough boundary

between what can be considered as administrative matters, which subjects are for economic analysis, and how distinct could social issues be from administrative and economic research problems. At a closer examination of Fig. 1, one can notice, for example, that some issues listed under ‘administration’ could possibly be recategorized under ‘economy’ and the vice versa.

Fig. 2 Natural science cluster of the subject matter categories

Environment	Health	Agriculture	
<ul style="list-style-type: none"> • Climate Change • Carbon stock • Drought • Ecosystem • Enclosures • Exclosures • Energy • Forest • Wildlife • Hydrology <ul style="list-style-type: none"> ○ Reservoirs ○ Groundwater ○ Water harvesting • Watershed Management • Soil erosion/ Land degradation • Soil conservation • Soil and Water Conservation • Natural resources • Land cover • Pollution <ul style="list-style-type: none"> ○ Heavy metals • Paleo-environment • Land management • Sanitation use • Waste disposal • Restoration 	<p><u>Diseases</u></p> <ul style="list-style-type: none"> • Cervical cancer • COVID-19 • Diabetes • Hepatitis • HIV/AIDS • Hypertension • Leishmaniasis • Malaria • Tuberculosis <p><u>Reproductive Health</u></p> <ul style="list-style-type: none"> • Neonatal • Antenatal • Pregnancy • Postnatal • Perinatal mortality • Pre-term birth • Birth weight • Breast feeding • Maternity <p><u>Other Health</u></p> <ul style="list-style-type: none"> • Malaria • Nutrition • Drug • Medicinal plants • Contraceptive • Family Planning <p><u>Miscellaneous</u></p>	<p><u>Animal Farming</u></p> <ul style="list-style-type: none"> • Cattle breed • Goat breed • Sheep • Bee keeping • Dairy • Poultry • Pigs • Silk worm • Feed • Veterinary • Miscellaneous <p><u>Other Agriculture</u></p> <ul style="list-style-type: none"> • Irrigation • Soil fertility • Agro climate <p><u>Miscellaneous</u></p>	<p><u>Crop Farming</u></p> <ul style="list-style-type: none"> • Cereals <ul style="list-style-type: none"> ○ Barley ○ Finger Millet ○ Maize ○ Rice ○ Sorghum ○ T eff ○ Wheat • Legumes <ul style="list-style-type: none"> ○ Cow peas ○ Dekeko ○ Faba beans ○ Masho • Vegetables <ul style="list-style-type: none"> ○ Cabbage ○ Garlic ○ Lettuce ○ Mushrooms ○ Onions ○ Pepper ○ Potatoes ○ Tomatoes • Sesame • Apples
		Geology	
		<ul style="list-style-type: none"> • Cenozoic • Mesozoic • Paleozoic • Precambrian • Miscellaneous 	

Geology, in the natural science cluster has a much stronger time dimension than even history and archeology do. There is also no significant subject matter shared between geology and the rest of the members of the cluster (agriculture, environment, and health), except for example the analytical methods in landscape evolution of geomorphology and the processes of induced soil erosion in environmental studies. Next to geology health has a more visible distance from the remaining two categories in the natural science cluster (agriculture and environment). Agriculture also has crop production and animal husbandry lying almost exclusively in the field of agriculture.

At least in the context of a semi-arid, drought-prone, and land-degraded geography agriculture and environment are so interwoven that assigning them into two categories requires a well-informed judgment. The major challenge the classification scheme faced here is firstly, whether or not to categorize silviculture, hydrology, and pedology on their own separately in par with agriculture and environment. Secondly, if this becomes less desirable given the apparent skew of the research output on forest, soil and water to environmental concerns in Tigray. Hence, including the three in the environment category becomes more reasonable.

In view of the fact that forests in Tigray are more valued as providers of environmental services related to air, water and soils rather than their economic value as sources of timber; since water in Tigray is more relevant to the maintenance of ecosystem integrity rather than being an input for mega projects; and soils are viewed more in terms of their erosion and conservation, forests, water, and soils are assigned to the 'environment' category. Irrigation, soil fertility, and some agroforestry are more

appropriately brought under agriculture. Wherever, classification of sub-categories (See Fig.1 and Fig. 2) becomes difficult a sub-category (“Miscellaneous”) is created.

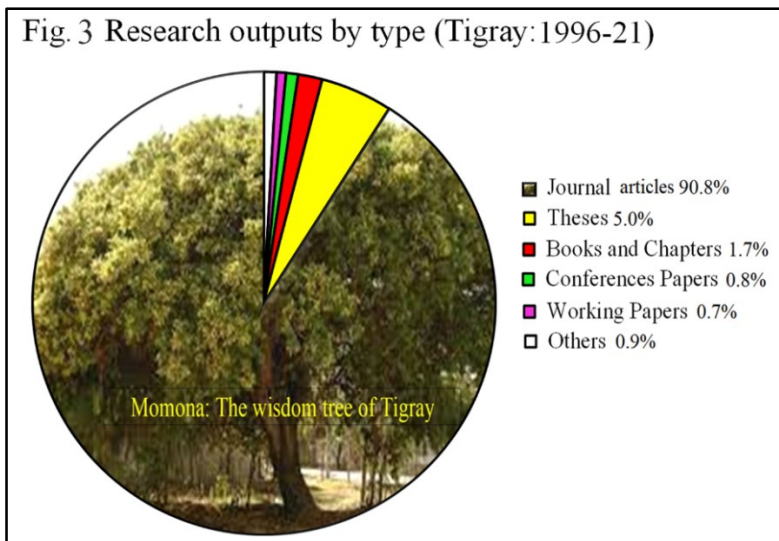
2. Bibliographic Analysis

Bibliographic analysis is presented in two sections: Publication Analysis and Citation Analysis. Publication analysis constitutes: research outputs by type; annual research output; total research output by subject area category; annual research output and trend for agriculture; environment and health; study area distribution of research output by subject area categories; study area distribution of research output by year intervals; number of authors per publication by subject area category; number of authors per publication by year interval; and journals with high publications frequency. Citation analysis constitutes: select articles published in journals for the analysis; rank articles by citation counts since the year of publication; select articles with 100 and above citation counts for in-depth analysis; identify the subject matter, the journal, and the author(s) with higher rankings for agriculture, environment and health.

2.1. Publication analysis

The initial search for the bibliographic list came up with over nearly 3000 results. The removal of duplicates and triplicates, those with unclear or unspecified location of study areas, incomplete sources for which thorough web-search did not help, and those that neither had accessible abstract or full text nor complete citation drastically reduced the bibliographic list to 1675. The search for the bibliographic list in the Scholar Google was not specific to any form of publication or source. The search results were located in journals, as theses, books and book chapters,

conference papers, working papers, and other miscellaneous sources. By far the largest proportion of the sources (91%) are journals. The distribution by source is depicted in the pie-chart (Fig.3).



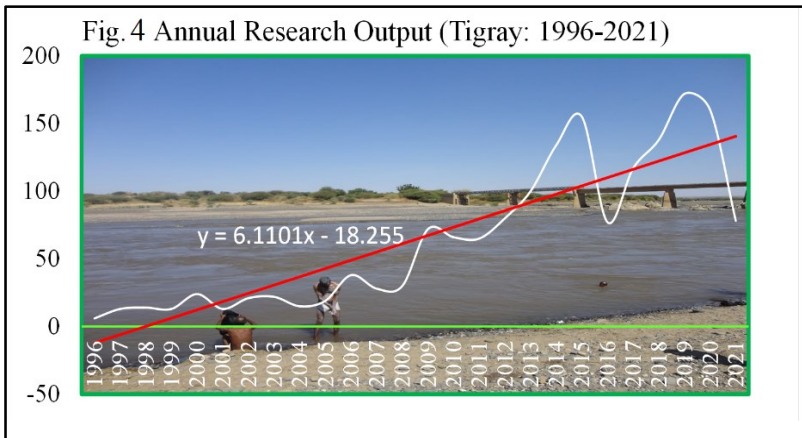
2.1.1. Annual trend of research output

The yearly distribution of the research output in the 26 years from 1996 to 2021 is represented by a line-chart in Fig. 4. The trend line fit into the distribution reveals a relatively high gradient. This can be explained by the coming into existence of high capacity and fervent political and academic enablers that never existed before. The two decades of armed struggle in Tigray, which came to a close by instituting radical changes to the political-administrative setup in Ethiopia in the hands of the leaders of the coalition in the Capital, provided a very fertile ground for the long awaited economic and social development in Tigray.

The significant scale devolution of central power and the resulting administrative autonomy of Tigray allowed the age old aspirations of the people to be realized by laying down the institutional foundations for sustainable development based on research. The critical preconditions for this are higher education for generating knowledge and institutions for putting research output into development practice. The key trigger to the colossal research output in what can be considered as a relatively short duration is the founding of the College of Dry land Agriculture, popularly known by local folks as just “Arid”. The college which was destined to become the seedling for the establishments of Mekelle University, was founded in 1993 under the shade of a Momona tree. Teaching and research activities in the College were integrated with the operations of two giant quasi-government environmental organizations in Tigray. The older and more experienced Relief Society of Tigray (REST) and the young but fervent Commission for Sustainable Agriculture and Environmental Rehabilitation in Tigray (Co-SAERT) were responsible for the world renowned soil and water conservation and extensive re-greening in Tigray.

Mekelle University, which flourished to become the second ranking university in Ethiopia by 2020 was then 20 years old. The founding father of the University-Professor Mitiku Haile-linked it to several universities in Europe and in other continents. Research funds, collaboration, staff exchange and training, literally put universities in The Netherlands and Belgium in one campus with Mekelle University. Some like Jan Nyssen, a Belgian professor, became naturalized natives of Tigray. The expansion of the University, which started from scratch and was drastically enhanced during the decade of Prof. Mitiku’s presidency, reached

its zenith in the following decade led by Prof. Kindeya Gebrehiwot. In the meantime there were other related developments in Tigray that boosted the capacity for research and publication. Three other universities were established in Tigray: Axum (2007), Adigrat (2011), and Raya (2011). The jewel in the crown of research and publication in Tigray is the founding of Mekelle University’s Ayder referral and research hospital in 2008. As it is revealed in the discussion to follow health research and publication has been most dominant.



A closer look at the line-graph in Fig. 4 shows a significant dip in the year 2016. Along the otherwise steeply rising annual research output curve. It is hard to explain the anomaly; but some conjectures can be made based on some events that may have had a retarding effect on the flow of research and publications. A year before the 2016 dip in the curve is experienced. A devastating drought hit entire Ethiopia, including Tigray. This was compounded with the youth-led rebellion against the ruling party which had its home-base in Tigray. The uprising had spread to all universities and might have had its adverse influence on the

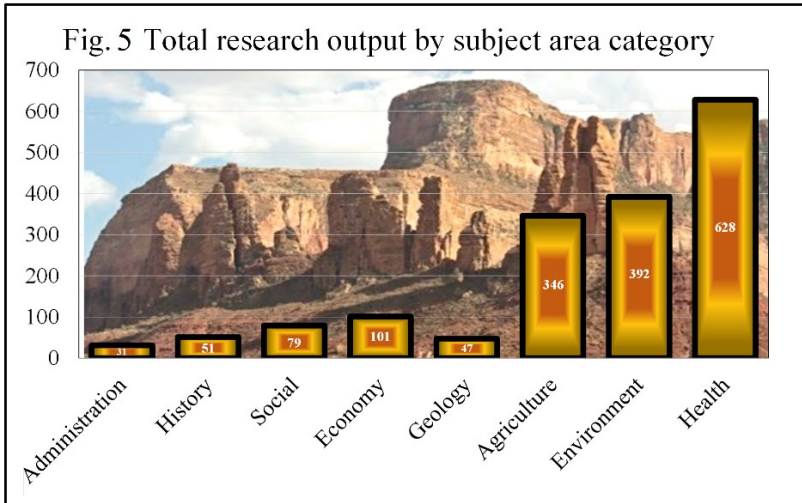
enthusiasm of researchers. There could possibly be other reasons that are internal to the universities in Tigray which the author is not aware of.

2.1.2. Research output by subject matter categories

The share of research output each of the eight subject matter categories have is depicted in Fig. 5. There is a great deal of imbalance in the share of research output among the subject matter categories. Five of the eight categories (administration, economy, geology, history, and social) account for only 18 percent of the total, while three categories (agriculture, environment, and health) form the bulk of the research output: 82 percent. The heavy skew is not only understandable but also desirable. Research output on the three categories has virtually been absent in Tigray before the 1990s. Research on these three categories is indispensable for any adequate level of standard of living to be attained. Unfortunately, research on such subject matters requires huge sums of money and technical assistance. In previous administrations this was far from being a priority for Tigray. Relief aid, rarely made available, is what is felt the people need in perpetuity. As a drought-prone and degraded province the Center saw little value in Tigray to invest in research for. The most durable recommendation for Tigray had been soldiers not researchers.

Research on social affairs, economy, and administration was not considered as significantly pressing as it could imply as expression of dissent on the prevailing political and socio-economic system. It is tacitly agreed, though not with a universal consensus, that the politico-administrative system, which has reshaped the economic systems as per the goals of the armed struggle, is agreeable or at least tolerable. Fig. 3 shows what the areas of focus for research in

the social science cluster have been. Most are diagnostic research with the intension of helping the system to be run more efficiently and/or somehow modify its problematic working procedures. The age-old ‘techno fix’ approach to solving all problems, including social one, has been actively pursued and given a policy uplift in the educational system by the 30:70 ratio for social and natural sciences respectively. The deleterious bias against social science, as a logical outcome, found its way into the system of research funding and has been having a decelerating effect on social science research. Thinking against the current of paradigmatic change, drawing attention to the decisive role social science research can play in solving development and environment problems, most doggedly continue to feel that little of value can be gained from social science research.



The history of historical research in Tigray has been mostly about archeology and church history. Such research was done by native historians of Tigray but largely by non-Tigrayan historians and

archeologists. Except for the value the research output could have for tourism in Tigray, which in fact is for big business rather than for the ordinary people, it fails to be as urgent as agriculture, environment, and health are. Only since the invasion of Tigray in November 2020 has the dearth of research on the political and geopolitical history of Tigray been noticed and also deeply regretted. Professors of history of Tigray origin can only be finger counted and are alleged to be less enthusiastic about historical research autonomous from the research undertaken by the alma mater at AAU. Historical research in this Department, which forms the motive force lying at the core of the Institute of Ethiopian Studies, actively discourages ‘devolution’.

Geological research in Tigray is where it can best be done. Four billion years of earth history can be investigated in a ‘miniature’ in the 50,000 km² area of Tigray. For over a century geological research has been conducted in Tigray and probably suffers from redundancy. What Tigray needs from geological research is in the economic value of its geology. Economic geology is what could be more valuable than the purely academic curiosity about the chemical and physical properties of rocks.

2.1.3. Trends of research output by subject area categories

The annual distribution and trend for the total of the research output, shown in Fig. 4, exhibits the overall picture which hides significant disparity between subject area categories. Fig. 6 (1, 2, and 3) are three charts for the eight subject area categories. To avoid the problem of overcrowding if eight curves and eight trend lines are displayed in a single chart, a situation where legibility or distinguishing one curve and one strandline from the rest becomes difficult due to the limited choice of line colors with sufficient

contrast, three separate charts are prepared. This is a tradeoff between readability and the comparison on the same y-axis value. Three charts means three different y-axis values weakening the possibility for comparison in the relative magnitudes of the eight categories.

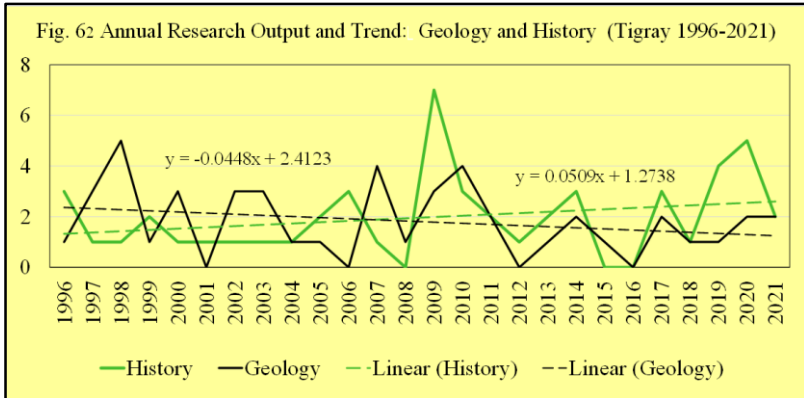
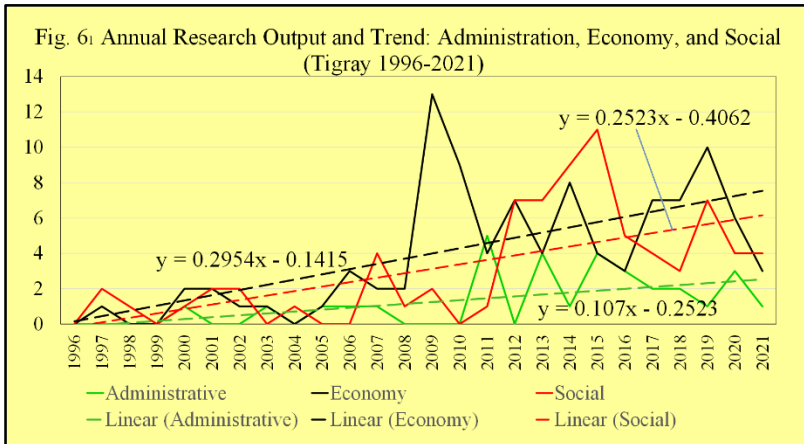
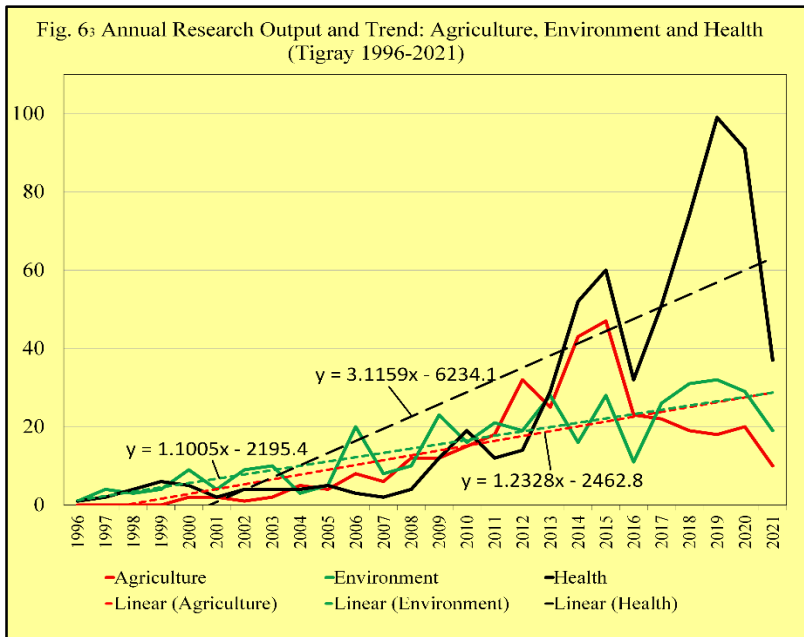


Fig. 61 represents the three components of the social science cluster: administration, economy, and social. The yearly distribution of the three subject area categories shows a high degree

of fluctuation. The trend lines and the corresponding equations illustrate the fact that each of the three categories experienced a positive changes though with varying gradients decreasing from economy, social to administration. The curves for history and geology display drastic fluctuation through the years. The trend line for history portrays a positive change though along a low gradient; but geology as the trend line shows experienced a negative change and is predicted to decline at relatively more rapid rate.



The annual distribution of research output and trends of the three most dominant subject areas (agriculture, environment, and health) is depicted in Fig. 63. Fluctuation is also evident here although the distribution the distribution shows a greater skew to the second half of the period. The steepest of the trend lines is for health. The high

gradient for health is attributed to the rapid ascent after 2008. The “Ayder factor” has energized the research output in the health category. Ayder referral and research hospital, which is a medical faculty of Mekelle University has attained a level of excellence that transcended the health needs of the state of Tigray.

The pioneering subject area categories (agriculture and environment) have had a high standing throughout the period. The rate of positive change, as represented by their respective trend lines, has been moderate. This is clearly due to the dwarfing effect of the volume of health research and publication. Moreover, the curves for agriculture and environment reveal that, in the last quarter of the period environment has outpaced agriculture. Nevertheless, a possible distorting influence of the classification scheme might have contributed to the new trend.

2.1.4. Study area distribution of research output

When embarking on a field research project, Sheppard (2020) elaborates, one of the two major aspects to consider is where to observe which will have consequences for the data you are able to gather. Choosing a site is shaped by area of interest, limitations, opportunities, and being in the right place at the right time. The selection of study sites in Tigray varies from taking the entire state or one or more of its administrative zones. For the analysis in this sub-section the smallest geographic units are taken to be administrative zones although specific villages, micro-watersheds, geologic formations, archeological sites, reservoirs, hospitals, or experimental stations may have been the actual study sites. It is beyond what can possibly be accommodated to cross-tabulate study areas and research output with micro-sites as geographical co-variables.

Fig. 7 Study area distribution of research output by subject area categories

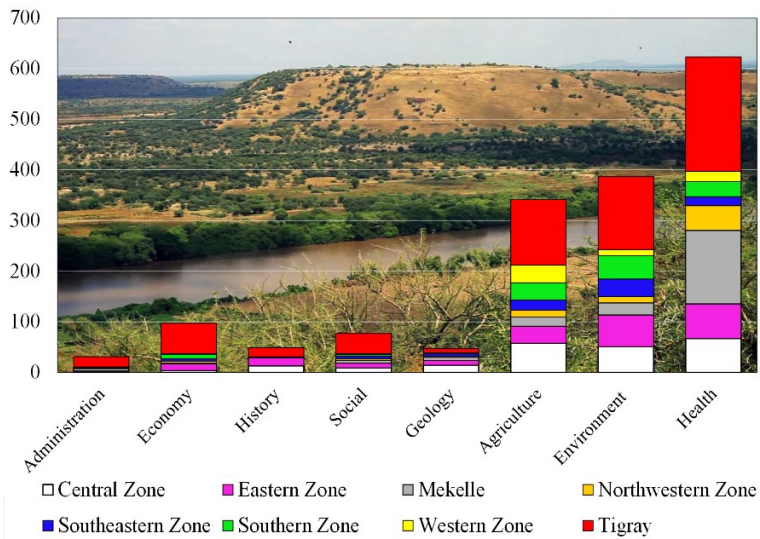
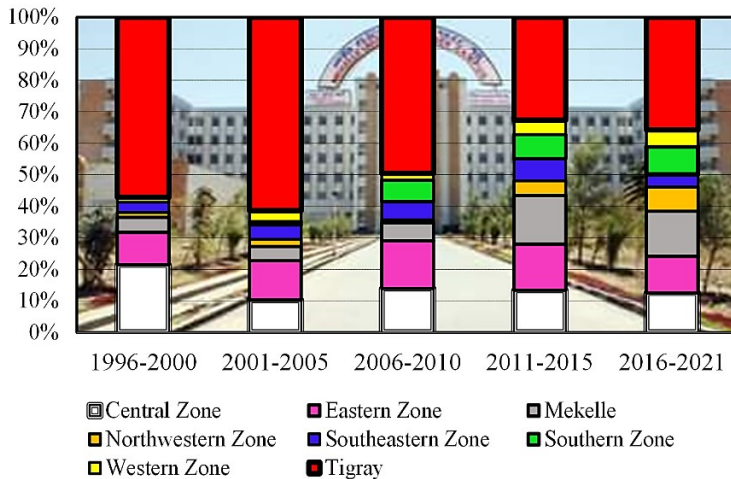


Fig. 8 Study area distribution of research output by year intervals



Tigray is divided into seven administrative zones, one of which is the Capital City Mekelle. In some cases the entire Tigray is taken as a study area, at other times, samples are taken from three or more administrative zones. In both cases the study area is designated as 'Tigray'. If samples are taken from two zones the one point allotted for one zone is split between the two zones. For research in any field Tigray possesses a great deal of diversity in geomorphology, geology, climatology, biology, pedology, hydrology and many other natural, economic, and social phenomena. Hence, the narrower the study site is the more valid research will be. However, research in Tigray cannot be idealized as there have been several enabling and disabling factors which may have had a skewing effect concentrating research in fewer zones. The location of universities, research hospitals, experimental stations, and the attitudes and conveniences of researchers may have had a role in the selection.

Fig.7 is a stacked column chart which depicts both inter-column comparison of total values and intra-column comparison of proportions. Here subject area categories are plotted against the study areas research was conducted in. Over half of the research output on administration, and the economy is at the geographic level of Tigray. So is the research on social issues, nearly half of which is done at the macro Tigray level. In view of the nature of disciplinary focus of history/archeology and geology there is a greater share of zonal location of study sites. Study areas in Central and Eastern zones dominate for history and geology. The location of Axum and Yeha in the Central zone and the significant presence of numerous archeological sites in the Eastern zone could explain the preference in the selection of study sites for history in the two zones. For geological research the diversity and localization of

geologic formations calls for a lower-tier geographic unit selected as a study site. The high spatial concentration of rocks belonging to the four geologic Eras could most likely explain why the ‘hammer’ is tilted towards the two zones.

The three subject area categories (agriculture, environment, health), which make up over 80 percent of the total, have been well distributed among Tigray and the remaining seven zones. Tigray as a study area takes slightly over a third of the total for each of the three subject area categories. No doubt, agriculture, environment, and health research are much more micro level than macro level studies. The most credible explanation to the Tigray level study area designation for the three categories could likely be that three or more samples are taken from different zones. Given the diversity of agriculture, environment, and health conditions in Tigray taking more samples from as many zones as the research design allows tends to make comparisons and conclusions more valid.

For agriculture, Central, Eastern, Southern, and Western zones in that rank order together account for more than half of the column. Except for the urban agriculture, which is very limited, Mekelle’s small share is explicable. Mekelle is busy taking more agricultural land and extensively encroaching into the land cover for its ‘concrete jungle’ scheme rather than for agronomy or environmental stewardship. Zonal level environment and related research has been most focused on Southern, Southeastern, Eastern, and Central. Forest, drought, water storage, soil erosion, and soil and biodiversity conservation have taken the lion’s share.

The health column in the chart has a unique story to tell. Mekelle is a study site that has taken about a quarter of the share. There is little doubt that the location of Ayder referral and research hospital

in Mekelle explains the situation. The samples for health research are taken from Mekelle and its environs. That makes Mekelle the most researched on health matters. However, viewed from a different perspective Mekelle zone level studies could also be considered as Tigray level studies in view of the fact that the status of Ayder Hospital as a referral hospital which draws patients from all over Tigray, even beyond.

Temporal changes in the focus of research study sites are useful indicators of how much research has been probing into the various manifestations, in spatial context, of problems and issues that need solutions. Fig. 8 represents the changes in focus on different study areas with the march of time. The stacked Column chart shows only proportions of study areas by an interval of five years. In the first decade Tigray level studies had dominance although Central and Eastern zones were also significantly spotlighted. Throughout the entire period Southeastern zone has had a low but fluctuating share. The overshadowing effect of Mekelle City may have had its effect on drawing research attention to it. It has been considered as the outskirts of the oversized Capital. Southern zone was almost invisible to research in the first decade but burst into attention in the second decade and beyond. Research in Tigray seems to have taken more time, into the second decade, not only to familiarize itself with Western Tigray but also to get used to the great physical distance from the centers of scholarship and the relatively inhospitable climatic conditions. The share of Mekelle appeared significantly in the last decade attributed to health research.

2.1.5. Number of authors per publication

Authorship and co-authorship ranged from sole authors to 20 co-authors. The article authored by 20 co-authors was on HIV-care

which was published in BMJ Global Health in 2017. Of the total research output listed in this book 15 percent is sole-authored; 16 percent by two co-authors; 21 percent by three co-authors (the Mode and the Median, See Fig.9); and 16 percent by four co-authors (the Mean). A third of research output is authored by five to 10 co-authors; but those co-authored by greater than 10 are only three percent. The stacked column chart in Fig.9 depicts the distribution of the number of authors per publication by subject area categories. Comparison can be made by the total value for each authorship and co-authorship and by proportion of subject matter categories. The Mode (three co-authors) is overwhelmingly a phenomena in health, agriculture, and environment publications. The same goes for the Mean number of authors per publication (four). More than half of the sole-authorship is taken by social, economy, history, and geology in that rank order.

Project-based donor funded research in which the membership or participants in the groups may be large, multiple co-authorship would be the logical outcome. Environmental and health research and to a certain extent in agriculture multiple co-authorship is typical if not a rule. In Fig 9 shows that co-authorship above ten is most common in these particular fields of research. Another perspective is to view the number of authors per publication in a time dimension. The stacked proportion column chart in Fig. 10 represents the change in the proportion of the number of authors per publication in the different time segments. A closer look at the proportion columns in Fig. 10 reveals that there has been a change from the prevalence of smaller number of authors per publication in the earliest years to drastic increase in the final years of the period. This could hint a paradigmatic shift in the way research is done. There is an increasing tendency to do team work than the individual efforts that characterized earlier research. Obviously, ‘two heads tend to be better than one’.

Fig. 9 Number of authors/publication by subject area category (Tigray 1996-2021)

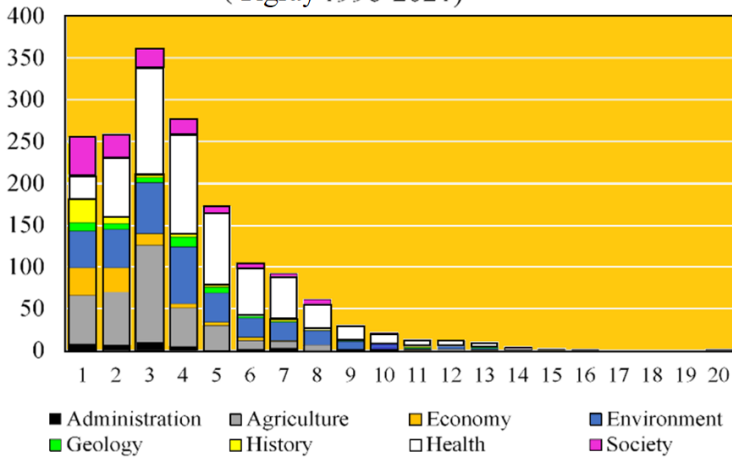
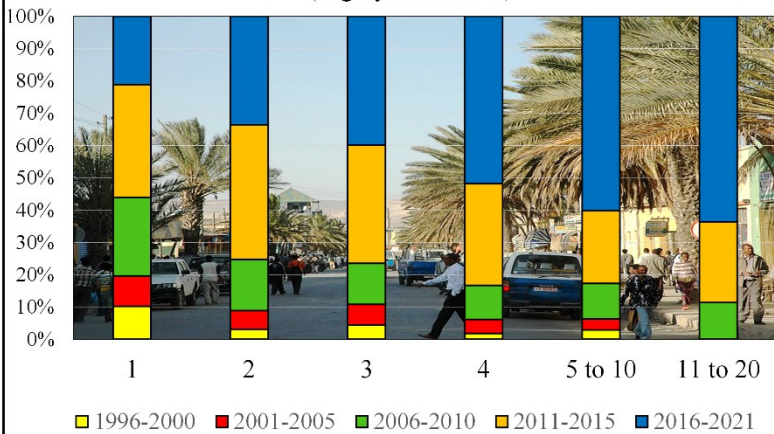


Fig.10 Number of authors/publication by year interval (Tigray 1996-2021)



2.1.6. Publication frequency in particular journals

Publications are assessed in terms of how frequently they were published in particular journals. A total of 1532 journal articles are identified published in 680 journals (See Annex I). This is on average 2.25 articles per journal. In view of the mean distribution there has been a huge tendency to spread-out articles in numerous journals rather than patronizing a limited number of journals. Deviating from the general pattern are 11 journals which published more than 10 articles each from Tigray. Fig. 11 shows journals that have published more than 10 articles on health (6 counts), environment (3 counts), and agriculture (2 counts). The highest frequency is observed in the health journals of PloS One (70 counts) and BMC Research Notes (53 counts). A local journal hosted by Mekelle University, named ‘Momona’ published a total of 23 articles on environment and agriculture in Tigray. It is clear from Fig. 11 that the BMC series journals have been significantly patronized by health research in Tigray.

How importance or ranking of these journals is measured by the “Impact Factor (IF)” depends on citation counts. IF is computed from the citation counts of the articles in the journal. ILOVEPHD.com has compiled a ranked list of the top 100 journals in terms IF. Only PloS One appears in this list as 30th with Impact Factor of 3.2. The fact that 70 articles from Tigray out of the total 75 published in PloS One journal originate from health research deserves a ‘thumbs up’. Reputability of journals is desirable in the academia; but higher acceptability rate of manuscripts is preferred.

Fig.11 Publication Frequency in Journals (10+)	
Health	
PLoS One	70
BMC Research Notes	53
BMC Pregnancy and Childbirth	26
BMC Public Health	21
BMC Infectious Diseases	12
BMC Pediatrics	11
Environment	
Land Degradation and Development	13
Journal of Arid Environments	11
Momona Ethiopian Journal of Science	11
Agriculture	
Momona Ethiopian Journal of Science	12
Livestock Research for Rural Development	11

2.2. Citation analysis

In this last section of the bibliographic analysis the quality of articles and the reputability of the journals in which the articles are published is measured and analyzed using a proxy indicator: citation count. It is not possible in this analysis to determine the Impact Factor of journals only from the citation counts of articles that are written on Tigray. The quality of a journal is judged from citation counts of articles that originate from all parts of the world covered by the journals' catchment areas. Such data is not available for the analysis in this book. The Impact Factor of the articles is measured using citation counts as provided by Scholar Google; while for the journals in which the articles are published international rankings are referred to.

The total number of journal articles is 1532, whereas those for which at least one citation count is reported by the end of 2021 are 1415. The range of citation counts is between one and 585. The sum of the citation counts is 48, 513 and the average per article is 34. There is a huge variation from the mean. Half of the articles with citations reported have below 20 citations. Those articles with citation counts 100 and over are 95. This is only 6.7 percent of the total number of articles with citation counts reported; whereas the sum of the citation counts is 15,948 making up a third of the of the total. The three subject area categories (agriculture, environment, and health) account for 87 percent of the articles with citations 100 and over. The colossal subject area categories must have been literally devouring one another by way of inter- and intra-citation. A more detailed description of the citation count data is tabulated in Fig. 12 for agriculture, environment, and health.

Fig. 12 Citation counts of publications in Agriculture, Environment, and Health

	Agriculture	Environment	Health
Total number of articles	315	352	620
Articles with citation counts	295	332	578
Sum of citation counts	9011	15453	17496
Average citation counts per article	31	47	30
Number of articles 100+ citation counts	14	43	26
Sum of citation counts (100+)	2169	7666	4167
Average citation counts per article	155	178	160

Relevant question should be raised at this point whether citation count is the only factor of journal reputability or the number of years since publication also has significant contribution. For the top 95 articles, which have got citation counts 100 and over simple correlation was computed. The resulting coefficient of 0.285 shows a positive, but very weak linear relationship. Hence, impact

or importance of the article is by and large certified by the total number of citation. The effect of time cannot be ruled out though because important but recent publications are more likely to be cited less than those that are several years old. A visual inspection of the pair of data set showed that the highest citation counts belonged to articles that were around two decades old. For example 585: 19 years, 501: 22 years, 322: 23 years, and 290: 21 years. The details- the names of lead/first authors, title of the article, and the names of the journals- are tabulated for articles having citation counts 100 and over in agriculture, environment, and health. (See Annex II).

Impact factor (IF) is a measure of the frequency with which the average article in a journal has been cited in a particular year. It is used to measure the importance or rank of a journal by calculating the times its articles are cited. To get the IF score data the name of each journal, in which articles with 100+ citation counts are published, is searched on google.com. The list of available IF scores for each journal is displayed as Annex III. In addition ranking for some journals is also available on Google search which is shown in Fig.13.

The significance of a particular Impact Factor (IF) is not the same in all disciplines. In some disciplines even IF 2.0 could be considered high. In the list in Annex III, 'The Lancet' a medical journal has the highest IF score of 79.32; followed by BMJ: 30.89, Resources, Conservation, and Recycling: 10.204. The rest have range between 8.0 to below zero: 13 are IF 5-8, 17 are IF 3-5, and 11 are 2-3. In terms of ranking in Fig.13, The Lancet stands second out of 169 journals in the field. The ranks of journals such as 'Waste Management', 'Science of The Total Environment', 'Energy Economics', 'Catena' and 'Journal of Environmental

Management' are significant. To check if citation count of articles on Tigray are positive correlated with journal IF simple correlation coefficient was computed. The result is 0.11 showing no relations.

Fig. 13 List of journals for which ranking is provided

Journal name	Rank	Field of research
The Lancet	2 /169	General and Internal Medicine
Journal of Arid Environments	96/166	Ecology
Journal of Hydrology	11/136	Civil Engineering
Soil and Tillage Research	6/37	Social Sciences
Waste Management	29/274	Environmental Sciences
Forest Ecology and Management	7/67	Forestry
Soil and Tillage Research	6 /37	Soil Science
Science of The Total Environment	25/274	Environmental Sciences
Agricultural Water Management	12/91	Agronomy
Energy Economics	12/376	Economics
Preventive Veterinary Medicine	27/146	Veterinary Sciences
Catena	22/199	Geosciences, Multidisciplinary
Journal of Environmental management	34/274	Environmental Sciences

Conclusion

What happened in the quarter of a century in Tigray is literally a “research explosion”. There is little wonder to it though. A Tigray teeming with researchers and practitioners has been at the top of the wish list of all Tigrayans. From the names of authors and co-authors it can be discerned that there has been a worldwide participation of scholars: from Europe to Japan and from Africa to India. This must have boosted the quality of the research in the respective fields. In spite of the need for it enthusiasm is not the best guide for action. It tends to lead to spontaneity, short-lived attention, and intermittence. The great deal of annual fluctuation in

the total volume and the subject specific research output hints that the motive force for conducting research, by and large, has been donor-driven individual or group initiative. Of course, a lot is done in the application sphere in health, agriculture, and the environment in terms of helping the improvement of the lives of the people of Tigray.

Most of the research and publications emanated from the four universities of Tigray. This indicates that most of the research is done as part of the academic requirement for graduation. Externally funded research also abounded; but its relatively short project term helps little in linking significantly to the development needs of Tigray. As revealed by the high level of reputability of the journals, in which many of the articles are published, it can be concluded that research can play a significant role in the high-tech future development of Tigray. For best effect research in Tigray must be synergetic in the sense that strong coordination must prevail not only between disciplines but also with decision makers.

References

Abbink J. 1990 Ethiopian Society and History: A Bibliography of Ethiopian Studies 1957-1990. African Studies Centre Leiden, The Netherlands.

Calame J 2005 Post-war Reconstruction: Concerns, Models and Approaches. Macro Center Working Paper 20.

Carpenter CR et al 2014 Using publication metrics to highlight academic productivity and research impact. *Academic Emergency Medicine*, Vol. 21, No. 10, pp. 1160-72.

Carter, J and Barker N. 2004 Bibliography: ABC for book collectors. OKP and BL.

- Donthu N, S Kumar, D Mukherjee, N Pandey, W MarcLim 2021 How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, Vol. 133, pp. 285-296
- Fayomi OSI, IP Okokpuije, U Mfon 2018 The Role of Research in Attaining Sustainable Development Goals. *IOP Conference Series: Materials Science and Engineering* 413: 012002.
- Kenneth DB 2005 Typology Construction, Methods and Issues. *Encyclopedia of Social Measurement*, pp. 889-898.
- Kloos H, ZZ Ahmed 1991 Health, disease, medicine and famine in Ethiopia: a bibliography.
- Padrós-Cuxart R, C Riera-Quintero, F March-Mir 2016 Bibliometrics: a Publication Analysis Tool. *BIR@ ECIR*, pp. 44-53.
- Pritchard, A 1969 Statistical Bibliography or Bibliometrics? *Journal of Documentation*, Vol. 25, No. 4, pp. 348–349.
- Rousseau, R 2014 Library Science: Forgotten Founder of Bibliometrics. *Nature*, 510: 7504.
- Sushma G 1992 The national bibliography of Ethiopia: Current status. *The International Information and Library Review*, Vol. 24, Issue 1, pp. 45-56.
- Vucovich, LA, JB Baker, JT Smith 2008 *Journal of the Medical Library Association*, Vol. 96, No. 1, pp. 63–66.
- Wallin, JA 2005 *Bibliometric Methods: Pitfalls and Possibilities. Basic and Clinical Pharmacology and Toxicology*, Vol., 97, pp. 261–275.

PART II

Bibliography

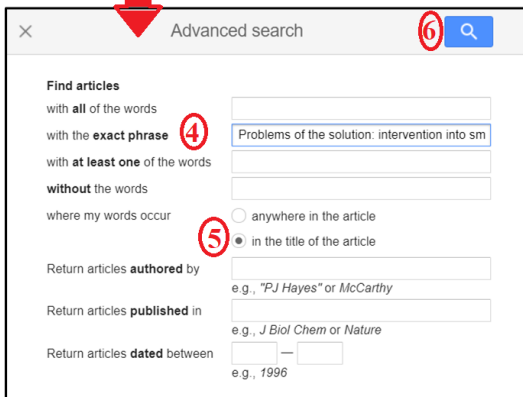
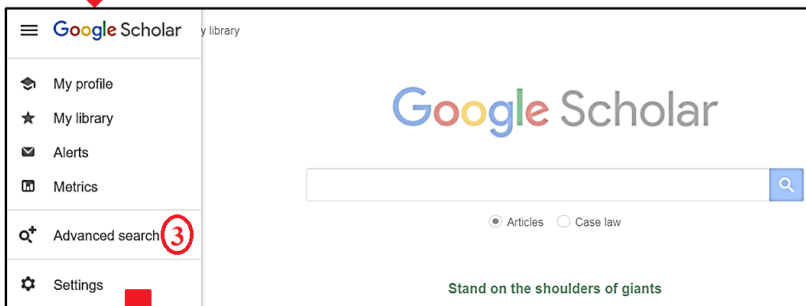
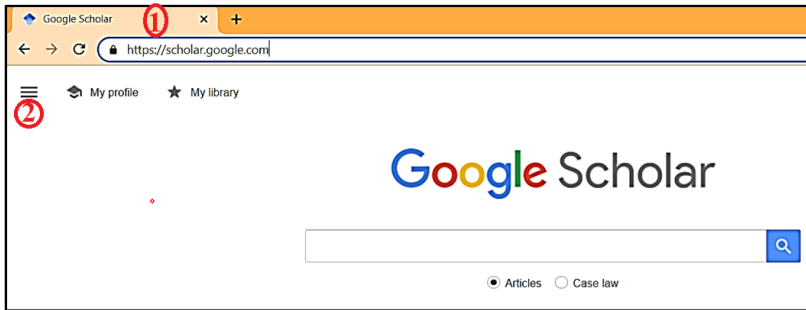
User guide to the bibliography

Full text copies or abstracts can freely be accessed on the World Wide Web for most of the citations in this bibliography. Quick and direct access to the publications can be ensured using the academic search engine: Scholar Google. In the search bars of the Scholar Google you don't need to enter author name or the source (journal, book, thesis, etc.). The full title of the article or book or thesis should be selected from the citation in the bibliography, copied and pasted in the bar "with the **exact phrase**" as it is shown in the images below. While copying and pasting the title make sure that no spelling error exists. The bar "with the **exact phrase**" does not allow spelling errors, wrong capitalization, and misplaced words. Then select the circle "in the title of the article" under "where my words occur". Last step is to click the blue-circle search button on the top-right corner of the dialogue box.

When the research result appears just click on any part of it to get to the article or book or thesis. The search results may be only one with or without permission on the right hand side column. Click the permission links for full text copies if interested. At the base of the search result other versions of the article may be available. To access the versions click the "all versions" link. It is possible that many of them may be read only and others could be freely downloadable. You can go for the subscription options if you need to download publications with passwords to access full-text copies.

Note:

The bibliography is listed by alphabetical order of first-listed or lead authors. For the search by title, first the publication must be located by author name.



Problems of the solution: intervention into small-scale irrigation for drought proofing in the Mekele Plateau of northern Ethiopia

Y Aberra - Geographical journal, 2004 - Wiley Online Library

The Mekele Plateau, located in the semi-arid northern highland region of Ethiopia, is a drought-prone, highly degraded area. It has long been neglected by policymakers and thus recurring famine, widespread poverty, armed conflicts and mass outmigration have contributed to the near collapse of the farming systems and the livelihoods of the population. Traditional stream diversion irrigation has been practised in this area for several centuries.

The systems of water management in particular may be considered inappropriate owing to ...

☆ Save 📄 Cite Cited by 54 Related articles All 6 versions

THE GEOGRAPHICAL JOURNAL
Royal Geographical Society
Volume 170, Issue 3
September 2004
Pages 226-237

Problems of the solution: intervention into small-scale irrigation for drought proofing in the Mekele Plateau of northern Ethiopia

Yohannes Aberra

First published: 16 September 2004 | <https://doi.org/10.1111/j.0016-7398.2004.00122.x> | Citations: 22

[Read the full text >](#) PDF TOOLS SHARE

Abstract

The Mekele Plateau, located in the semi-arid northern highland region of Ethiopia, is a drought-prone, highly degraded area. It has long been neglected by policymakers and thus recurring famine, widespread poverty, armed conflicts and mass outmigration have contributed to the near collapse of the farming systems and the livelihoods of the population. Traditional stream diversion irrigation has been practised in this area for several centuries. The systems of water management in particular may be considered inappropriate owing to ...

VIRTUAL ISSUE
Read the 2020 Conference Virtual Issue on *Borders, borderlands, and bordering*

Note:

The article used for the demonstration above does not have a permission link for free access to full-text. This implies that only abstract is available. Wherever a permission link is available it appears like this:

Spatial distribution of rock fragments in cultivated soils in northern Ethiopia as affected by lateral and vertical displacement processes

Jan Nyssen, J Poesen, J Moeyersons, E Lavrysen ... - Geomorphology, 2002 - Elsevier

Although, in semi-arid environments, rock fragments at the soil surface and within the topsoil play an important role in desertification control, little is known about their spatial distribution. Therefore, this study analyses spatial patterns of rock fragment cover along catenas, and the vertical variations in volumetric rock fragment content in soil profiles in the highlands of Tigray, northern Ethiopia. Natural and anthropogenic processes inducing these patterns are assessed. Volumetric rock fragment content (RV) was analysed in 10 soil pits. All rock ...

☆ Save 📄 Cite Cited by 65 Related articles All 14 versions

[PDF] africamuseum.be

ELSEVIER
Geomorphology 43 (2002) 1–16
www.elsevier.com/locate/geomorph

GEOMORPHOLOGY

Spatial distribution of rock fragments in cultivated soils in northern Ethiopia as affected by lateral and vertical displacement processes

Jan Nyssen ^{a,*}, Jean Poesen ^a, Jan Moeyersons ^b, Els Lavrysen ^a, Mitiku Haile ^c, Jozef Deckers ^d

Administration

Asefa NG, L Ingale, A Shumey, H Yang 2015 Prevalence and factors associated with road traffic crash among taxi drivers in Mekelle town, northern Ethiopia, 2014: a cross sectional study. *PLoS One*, Vol. 10, No. 3: 0118675.

Berhanu G, J Pender, S Ehui 2003 Land tenure and land management in the highlands of Northern Ethiopia. *Ethiopian Journal of Economics*, Vol. 8, No. 2, pp. 46–63.

Dokken T 2015 Allocation of land tenure rights in Tigray: How large is the gender bias? *Land Economics*, Vol. 91, No. 1, 106-125.

Fenta AA, H Yasuda, N Haregeweyn, AS Belay, Z Hadush, MA Gebremedhin, G Mekonnen 2017 The dynamics of urban expansion and land use/land cover changes using remote sensing and spatial metrics: the case of Mekelle City of northern Ethiopia. *International Journal of Remote Sensing*, Vol. 38, Issue 14, pp. 4107-4129.

Fisseha A 2020 Local level decentralization in Ethiopia: Case study of Tigray regional state. *Law and Development Review*, Vol. 13, No. 1, pp. 95-126.

Fisseha S, M Berhanu 2018 Decentralization as an Institutional System, Prospects and Retrospect: Case of Four Weredas of Tigray. *Journal of Public Administration and Governance*, Vol. 8, No. 2, pp. 256-285.

Gerezihar K, M Tilahun 2014 Impacts of parcel-based second level landholding certificates on soil conservation investment in Tigray, Northern Ethiopia. *Journal of Land and Rural Studies*, Vol. 2, Issue 2, pp. 249-260.

Hagos F, S Holden 2006 Tenure security, resource poverty, public programs, and household plot-level conservation investments in the

highlands of northern Ethiopia. *Agricultural Economics*, Vol. 34, Issue 2, pp. 183-196.

Haile M, W Witten, K Abraha, S Fissaha, A Kebede, G Kassa, G Reda 2005 Land Registration in Tigray, Northern Ethiopia. Research Report 2, Department for International Development (DFID).

Hailu, KG 2011 Challenges of good governance in local government: the case of SaesieTsaedamba woreda, Tigray region, Ethiopia. *International Journal of Research in Commerce, Economics and Management*, Vol. 2, Issue 3, pp. 11-23.

Hassen A, A Godesso, L Abebe, E Girma 2011 Risky driving behaviors for road traffic accident among drivers in Mekele city, Northern Ethiopia. *BMC Research Notes*, Vol. 4, Article No. 535.

Holden ST, H Ghebru 2016 Land rental market legal restrictions in Northern Ethiopia. *Land Use Policy*, Vol. 55, pp. 212-221.

Holden ST, H Ghebru 2013 Welfare impacts of land certification in Tigray, Ethiopia. *Land Tenure Reform in Asia and Africa*, pp. 137-161.

Holden ST, K Deininger, H Ghebru 2007 Impact of land certification on land rental market participation in Tigray region, Northern Ethiopia. Paper presented at the Nordic Development Economics Conference in Copenhagen June, 18-19, 2007.

Holden ST, M Tilahun 2018 The importance of Ostrom's Design Principles: Youth group performance in northern Ethiopia. *World Development*, Vol. 104, pp. 10-30.

Kahsay K, S Berhe, M Alemayehu 2016 Utilization of youth friendly services and associated factors in Mekelle town, Tigray, Northern Ethiopia. *International Journal of Therapeutic Applications*, Vol. 33, pp. 49-59.

Kahsay TG 2013 Cadastral System of Rural Landholding and Certification: Initial Impacts on Land Conflicts and Gender in Tigray. MSc. Thesis, Mekelle University.

Meaza H, D Tsegaye, J Nyssen 2016 Allocation of degraded hillsides to landless farmers and improved livelihoods in Tigray, Ethiopia. *Norsk Geografisk Tidsskrift (Norwegian Journal of Geography)*, Vol. 70, Issue 1, pp. 1-12.

Mezgebe D 2015 Decentralized governance under centralized party rule in Ethiopia: The Tigray experience. *Regional and Federal Studies*, Vol. 25, Issue 5: Decentralization, Democracy, and Development in Africa, pp. 473-490.

Milas S, JA Latif 2000 The political economy of complex emergency and recovery in northern Ethiopia. *Disasters*, Vol. 24, Issue 4, pp. 363-379.

Negash T, S Oniki, M Berhe 2020 Dependence Level of Rural Landless Households on Allocated Communal Land: Evidences from Kiltie Awlaelo and Atsbi Wenberta Districts, Tigray Region Northern Ethiopia. *Journal of Land and Rural Studies*, Vol. 8, No. 1, pp. 57–76.

Radae RB, S Sekhon 2017 Taxpayers' moral and compliance behavior in Ethiopia: A study of Tigray state. *International Journal of Research in Finance and Marketing*, Vol. 7 Issue 4, pp. 109~123.

Siyum BA, B Kassa, B Sisay, MA Gebremedhin 2015 Farm Land Conflict and its Socio-Economic Consequences in Tahtay Qoraro, Tigray, Ethiopia. *International Journal of African and Asian Studies*, Vol. 9, pp. 44-55.

Teka K, A Van Rompaey, J Poesen 2013 Assessing the role of policies on land use change and agricultural development since 1960s in northern Ethiopia. *Land Use Policy*, Vol. 30, Issue 1, pp. 944-951.

Tesfay H 2011 Rural land dispute settlement mechanisms in Tigray: the case of Humera. Masters Thesis, Jesuit Historical Institute in Africa (JHIA).

Tesfay T, M Haile, AA Gugusa, B Kassa 2019 Urban Leadership and Governance Practices and Challenges in the Regional State of Tigray. *Journal of Citizenship and Morality*, Vol. 2, No. 2, pp. 54-77.

Tsa-edu KG 2013 Impacts of Parcel-Based Second Level Landholding Certificates on Tenure Security, Investment and Land Productivity: In Tigray, Northern Ethiopia. MSc. Thesis, Mekelle University.

Van der Veen A, T Gebrehiwot 2011 Effect of policy interventions on food security in Tigray, Northern Ethiopia. *Ecology and Society*, Vol. 16, No. 1: 18.

Weldearegay SK, MM Tefera, ST Feleke 2021 Impact of urban expansion to peri-urban smallholder farmers' poverty in Tigray, North Ethiopia. *Heliyon*, Vol. 7, Issue 6: 07303

Woldu AB, AA Desta, TW Woldearegay 2020 Magnitude and determinants of road traffic accidents in Northern Ethiopia: a cross-sectional study. *BMJ Open* 2020, 10.

Yami M, C Vogl, M Hauser 2011 Informal institutions as mechanisms to address challenges in communal grazing land management in Tigray, Ethiopia. *International Journal of Sustainable Development and World Ecology*, Vol. 18, Issue 1, pp. 78-87.

Agriculture

Abay F, A Bjørnstad, M Smale 2009 Measuring on farm diversity and determinants of barley diversity in Tigray, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 1, No. 2, pp. 44-66.

Abay F, A Waters-Bayer, Å Bjørnstad 2008 Farmers' seed management and innovation in varietal selection: implications for barley breeding in Tigray, Northern Ethiopia. *AMBIO: A Journal of the Human Environment* Vol. 37, No. 4, pp. 312-320.

Abay F, W de Boef, Å Bjørnstad 2011 Network analysis of barley seed flows in Tigray, Ethiopia: supporting the design of strategies that contribute to on-farm management of plant genetic resources. *Plant Genetic Resources: Characterization and Utilization*, pp. 1–11.

Abebe R, M Tatek, B Megersa, D Sheferaw 2011 Prevalence of small ruminant ectoparasites and associated risk factors in selected districts of Tigray Region, Ethiopia. *Global Veterinaria*, Vol. 7, No. 5, pp. 433-437.

Abebe T, G Woldeab, W Dawit 2012 Analysis of pathogen virulence of wheat stem rust and cultivar reaction to virulent races in Tigray, Ethiopia. *African Journal of Plant Science*, Vol.6, No. 9, pp. 244-250.

Abebe T, G Woldeab, W Dawit 2012 Distribution and physiologic races of wheat rust in Tigrai, Ethiopia. *Journal of Plant Pathology and Microbiology*, Vol. 3, No. 6: 1000142.

Abebe T, G Woldeab, W Dawit 2012 Distribution and physiologic races of wheat stem rust in Tigray, Ethiopia. *Journal of Plant Pathology and Microbiology*, Vol. 3, Issue 6, 1000142.

Abebe T, H Beyene, Y Nega 2013 Distribution and economic importance of broomrape (*orobanche crenata*) in food legumes

production of south tigray, Ethiopia. ESci Journal of Crop Production, Vol. 2, No. 3, pp. 101-106.

Abebe T, M Mehari, M Legesse 2015 Field response of wheat genotypes to septoria tritici blotch in Tigray, Ethiopia. Journal of Natural Sciences Research, Vol 5, No 1, pp. 146-152.

Abebe T, T Birhane, Y Nega, A Workneh 2014 The prevalence and importance of faba bean diseases with special consideration to the newly emerging faba bean gall in Tigray, Ethiopia. Discourse Journal of Agriculture and Food Sciences, Vol. 2, No. 2, pp. 33-38.

Abebe T, Y Nega, M Mehari, A Mesele, A Workineh, H Beyene 2015 Genotype by environment interaction of some faba bean genotypes under diverse broomrape environments of Tigray, Ethiopia. Journal of Plant Breeding and Crop Science, Vol. 7, No. 3, pp. 79-86.

Abebe W 2007 Determinants of adoption of improved box hive in Atsbi Wemberta District of Eastern Zone, Tigray Region. MSc. Thesis, Haramaya University.

Abebe W, R Puskur 2011 Beekeeping sub sector challenges and constraints in Atsbi Wemberta District of eastern zone, Tigray Region, Ethiopia. Journal of Agricultural Extension and Rural Development, Vol. 3, Issue 1, pp. 8-12.

Abebe W, R Puskur, RJ Karippai 2008 Adopting an improved box hive in the Atsbi Wenberta District of Eastern Tigray Zone, Tigray Region: Determinants and financial benefits. IPMS Working Paper No.10, International Livestock Research Institute.

Abera D 2012 The role of indigenous knowledge and water harvesting in sustainable agricultural systems in Tigray, Ethiopia. MSc.Thesis, University of Saskatchewan, Canada.

Abraha B, M Gezahegn, J Yousuf 2020 Adoption of artificial insemination service for cattle crossbreeding by smallholder farmers in Laelay-Maichew district, Tigray, Ethiopia. *Journal of Development and Agricultural Economics*, Vol. 12, No. 2, pp. 104-112.

Abraha H, G Hadish, B Aligaz, G Eyas, K Workelule 2018 Antimicrobial resistance profile of *Staphylococcus aureus* isolated from raw cow milk and fresh fruit juice in Mekelle, Tigray, Ethiopia. *Journal of Veterinary Medicine and Animal Health*, Vol. 10, No. 4, pp. 106-113.

Abraha MT, H Shimelis, T Solomon, A Hailu 2019 Genotype-by-environment interaction and selection of elite wheat genotypes under variable rainfall conditions in northern Ethiopia. *Journal of Crop Improvement*, Vol.33, Issue 6, pp. 797-813.

Abraham H, M Urge, G Animut 2015 Effects of Supplementation with air dried leaves of African wild olive (*Olea africana*), Red thorn (*Acacia lahai*) and their mixtures on performance of Tigray highland sheep fed grass hay. *Global Journal of Agricultural Research*, Vol. 1, No.1, pp. 1-9.

Abraham H, S Gizaw, M Urge 2017 Begait goat production systems and breeding practices in Western Tigray, North Ethiopia. *Open Journal of Animal Sciences*, Vol.07 No.02, Article ID: 75753.

Abraham H, S Gizaw, M Urge 2017 Milk production performance of Begait goat under semi intensive and extensive management in Western Tigray, North Ethiopia. *Livestock Research for Rural Development*, Vol. 29, Article No. 240.

Abraham H, S Gizaw, M Urge 2018 Identification of breeding objectives for Begait goat in western Tigray, North Ethiopia. *Tropical Animal Health and Production*, Vol. 50, No. 8, pp. 1887–1892.

Abraham H, S Gizaw, M Urge 2019 Growth and reproductive performances of Begait goat under semi intensive and extensive management in western Tigray, north Ethiopia. *Livestock Research for Rural Development*, Vol. 31, Article No. 32.

Abrha BK 2015 Factors affecting agricultural production in Tigray region, northern Ethiopia. PhD Thesis, University of South Africa, RSA.

Admasu D, DN Reddy, KN Mekonnen 2016 Spectrophotometric determination of Cu (II) in soil and vegetable samples collected from Abraha Atsbeha, Tigray, Ethiopia using heterocyclic thiosemicarbazone. *SpringerPlus* Vol. 5, Article No. 1169.

Afera B, D Hussien, K Amsalu 2014 Seroprevalence of Peste des petits ruminants in goats of southern parts of Tigray region. *Global Veterinaria*, Vol. 12, No. 4, pp. 512-516.

Aklilu HA, HMJ Udo, CJM Almekinders, AJ Van der Zijpp 2008 How resource poor households value and access poultry: Village poultry keeping in Tigray, Ethiopia. *Agricultural Systems*, Vol. 96, Issues 1–3, pp. 175-183.

Alem AT, GT Yayneshet, AH Aklilu 2014 Socio-economic characteristics of poultry production in lowland and midland agro-ecological zones of central Tigray, Ethiopia. *International Journal of Livestock Production*, Vol. 5, Issue 4, pp. 71-80.

Alemu AE, M Maertens, J Deckers, H Bauer, E Mathijs 2016 Impact of supply chain coordination on honey farmers' income in Tigray, Northern Ethiopia. *Agricultural and Food Economics*, Vol. 4, Article No. 9.

Alemu AE, B Kassa, G Yihdego 2011 Determinants of vegetable channel selection in rural Tigray, Northern Ethiopia. *International Journal of Research in Commerce and Management*, Vol. No. 2, Issue No. 9, pp.15-20.

Alemu M, Z Asfaw, Z Woldu, BA Fenta, B Medvecky 2016 Cowpea (*Vigna unguiculata* (L.) Walp.)(Fabaceae) landrace diversity in northern Ethiopia. *International Journal of Biodiversity and Conservation*, Vol. 8, Issue 11, pp. 297-309.

Amabye TG 2015 Evaluation of phytochemical, chemical composition, antioxidant and antimicrobial screening parameters of *Rhamnus prinoides* (Gesho) available in the market of Mekelle, Tigray, Ethiopia. *Natural Products Chemistry and Research*, Vol. 4, Issue 1: 1000198.

Amare B, F Abay, Y Tsehaye 2014 Evaluation of sweet potato (*Ipomea batata* L.) varieties for total storage root yield in south and south east zones of Tigray, Ethiopia. *American Journal of Trade and Policy*, Vol.1, No. 2, pp. 74-78.

Annys S, S Van Passel, J Dessenin, T Ghebreyohannes, E Adgo, J Nyssen 2021 Small-scale irrigation expansion along the dam-regulated Tekeze River in northern Ethiopia. *International Journal of Water Resources Development*, Vol. 37, Issue 5, pp. 819-840.

Araya A , I Kisekka, A Girma, KM Hadgu, FN Tegebu, AN Kassa, HR Ferreira-Filho, NE Beltrão, A Afewerk, B Abadi, Y Tsehaye, LG Martorano, AZ Abraha 2017 The challenges and opportunities for wheat production under future climate in Northern Ethiopia. *The Journal of Agricultural Science*, Vol. 155, Issue 3, pp. 379-393.

Araya A, L Stroosnijder 2010 Effects of tied ridges and mulch on barley (*Hordeum vulgare*) rainwater use efficiency and production in Northern Ethiopia. *Agricultural Water Management*, Vol. 97, Issue 6, pp. 841-847.

Araya A, L Stroosnijder 2011 Assessing drought risk and irrigation need in northern Ethiopia. *Agricultural and Forest Meteorology*, Vol. 151, Issue 4, pp. 425-436.

Araya A, L Stroosnijder, S Habtu, SD Keesstra, M Berhe, KM Hadgu 2012 Risk assessment by sowing date for barley (*Hordeum vulgare*) in northern Ethiopia. *Agricultural and Forest Meteorology*, Vol. 154–155, pp. 30-37.

Araya A, PVV Prasad, PH Gowda, A Afewerk, B Abadi, AJ Foster 2019 Modeling irrigation and nitrogen management of wheat in northern Ethiopia. *Agricultural Water Management*, Vol. 216, pp. 264-27.

Araya A, S Habtu, M Haile, F Sisay, T Dejene 2011 Determination of local barley (*Hordeum vulgare*) crop coefficient and comparative assessment of water productivity for crops grown under the present pond water in Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 3, No. 1, pp. 65-79.

Araya A, SD Keesstra, L Stroosnijder 2010 A new agro-climatic classification for crop suitability zoning in northern semi-arid Ethiopia. *Agricultural and Forest Meteorology*, Vol. 150, Issues 7–8, pp. 1057-1064.

Araya T, WM Cornelis, J Nyssen B Govaerts, H Bauer, T Gebreegziabher, T Oicha, D Raes, KD Sayre, M Haile, J Deckers 2011 Effects of conservation agriculture on runoff, soil loss and crop yield under rainfed conditions in Tigray, Northern Ethiopia. *Soil Use and Management*, Vol. 27, Issue 3, pp. 404-414.

Arefaine A, D Adhanom, N Tekeste 2020 Response of Teff (*Eragrostis tef* (Zucc) Trotter) to Seeding Rate and Methods of Sowing on Yield and Yield Attributes in a Subhumid Environment, Northern Ethiopia. *International Journal of Agronomy*, Vol. 2020, Article ID 1516790.

Arkebe BN 2009 Assessment of hides and skins marketing in Tigray Region: the case of Atsbi Wemberta Wereda, Eastern Tigray. MA Thesis, Addis Ababa University.

Asaminew TG, A Araya, G Atkilt 2017 Modeling the potential impact of climate change on cotton (*Gossypium hirsutum*) production in northeastern semi-arid Afar and Western Tigray Regions of Ethiopia. *Journal of Earth Science and Climate Change*, Vol. 8, Issue 3: 1000390.

Asayehegn K 2012 Irrigation versus rain-fed agriculture: Driving for households' income disparity, a study from Central Tigray, Ethiopia. *International Journal of Agricultural Sciences*, Vol. 2, No. 1, pp. 67-74.

Asefa S 2011 Analysis of technical efficiency of crop producing smallholder farmers in Tigray, Ethiopia. MPRA Paper No. 40461, Munich Personal RePEc Archive.

Ashebir D, M Pasquini, W Bihon 2007 Urban agriculture in Mekelle, Tigray state, Ethiopia: Principal characteristics, opportunities and constraints for further research and development. *Cities*, Vol. 24, Issue 3, pp. 218-228.

Ashebir D, T Deckers, J Nyssen, W Bihon, A Tsegay, H Tekie, J Poesen, M Haile, F Wondumagegnehu, D Raes, M Behailu, J Deckers 2010 Growing apple (*Malus domestica*) under tropical mountain climate conditions in northern Ethiopia. *Experimental Agriculture*, Vol. 46, Issue 1, pp. 53–65.

Ashebir G, A Birhanu, T Gugsu 2016 Status of artificial insemination in Tigray Regional State, “Constraints and acceptability under field condition”. *Journal of Dairy, Veterinary and Animal Research*, Vol. 3 Issue 3: 00078.

Ashenafi H, YH Tolossa, M Yebegaeshet 2013 Impact of sheep and goats ectoparasites on the tanning industry in Tigray region, Ethiopia. *Ethiopian Veterinary Journal*, Vol. 17, No. 2, pp. 63-76.

Assefa A, H Tesfay 2013 Major causes of organ condemnation and economic loss in cattle slaughtered at Adigrat municipal abattoir, northern Ethiopia. *Veterinary World*, Vol. 6, No. 10, pp. 734-738.

Assefa AG, SH Mesgina, YW Abrha 2015 Effect of inorganic and organic fertilizers on the growth and yield of garlic crop (*Allium sativum* L.) in Northern Ethiopia. *Journal of Agricultural Science*, Vol. 7, No. 4, pp. 80-86.

Assefa AG, SH Mesgina, YW Abrha 2015 Response of onion (*Allium cepa* L.) growth and yield to different combinations of N, P, S, Zn fertilizers and compost in northern Ethiopia. *International Journal of Science and Research*, Vol. 4, Issue 2, pp. 985-989.

Atsbaha AW 2008 Analysis of the role of cooperatives in agricultural input and output marketing in southern zone of Tigray, Ethiopia. MSc Thesis, Mekelle University.

Awol N, S Kiros, Y Tsegaye, M Ali, B Hadush 2014 Study on mange mite of camel in Raya-Azebo district, northern Ethiopia. *Veterinary Research Forum*, Vol. 5, No. 1, pp. 61-64.

Baisa GA 2009 Commercialization of Smallholder Farming: Determinants and Welfare Outcomes: a Cross-sectional study in Enderta District, Tigray, Ethiopia. Thesis Master of Science, The University of Agder, Kristiansand, Norway.

Balehegn M, EA Eniang, A Hassen 2012 Estimation of browse biomass of *Ficus thonningii*, an indigenous multipurpose fodder tree in northern Ethiopia. *African Journal of Range and Forage Science*, Vol. 29, No.1, pp. 25-30.

Baraki F, M Berhe 2019 Evaluating performance of sesame (*Sesamum indicum* L.) genotypes in different growing seasons in northern Ethiopia. *International Journal of Agronomy*, Vol. 2019, Article ID 7804621.

Baraki F, Y Tsehaye, F Abay 2014 AMMI Analysis of Genotypex Environment Interaction and Stability of Sesame Genotypes in Northern Ethiopia. *Asian Journal of Plant Science* 13 (4-8): 178-183.

Baraki F, Z Gebregergis, Y Belay, M Berhe, H Zibelo 2020 Genotype x environment interaction and yield stability analysis of mung bean (*Vigna radiata* (L.) Wilczek) genotypes in Northern Ethiopia. *Cogent Food and Agriculture*, Vol. 6, Issue 1, Article: 1729581.

Begna D 2014 Occurrences and distributions of honeybee (*Apis mellifera* Jemenetica) varroa mite (*Varroa destructor*) in Tigray Region, Ethiopia. *Journal of Fisheries and Livestock Production*, Vol. 2, Issue 3: 1000126.

Bekele Y, N Tadesse, B Konka 2012 Preliminary study on the impact of water quality and irrigation practices on soil salinity and crop production, Gergera Watershed, Atsbi-Wonberta, Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 4, No. 1, pp. 29-46.

Belay F, A Gebreslasie, H Meresa 2017 Agronomic performance evaluation of cowpea [*Vigna unguiculata* (L.) Walp] varieties in Abergelle District, Northern Ethiopia. *Journal of Plant Breeding and Crop Science*, Vol. 9, No. 8, pp. 139-143.

Belay F, B Abate, Y Tsehaye 2019 Genetic diversity studies for morphological traits of hot pepper (*Capsicum annum* L.) genotypes in Central Zone of Tigray Region, Northern Ethiopia. *African Journal of Agricultural Research*, Vol. 14, No. 33, pp. 1674-1684.

Belay F, H Meresa 2017 Performance evaluation of sorghum [*Sorghum bicolor* (L.) Moench] hybrids in the moisture stress conditions of Abergelle District, Northern Ethiopia. *Journal of Cereals and Oilseeds*, Vol. 8, No. 4, pp. 26-32.

Belay S, M Resom, H Yemane, H Amare 2018 Production performance evaluation of koekoek chicken under farmer management practice in Tigray region, northern Ethiopia. *International Journal of Livestock Production*, Vol. 9, No. pp. 232-237.

Bello WB 2012 Influence of gypsum application on wheat (*Triticum aestivum*) yield and components on saline and alkaline soils of Tigray region, Ethiopia. *Greener Journal of Agricultural Sciences*, Vol. 2, No. 7, pp. 316-322.

Berhane G, LO Eik 2006 Effect of vetch (*Vicia sativa*) hay supplementation to Begait and Abergelle goats in northern Ethiopia: II. Reproduction and growth rate. *Small Ruminant Research*, Vol. 64, Issue 3, pp. 233-240.

Berhane G, LO Eik, A Tolera 2006 Chemical composition and in vitro gas production of vetch (*Vicia sativa*) and some browse and grass species in northern Ethiopia. *African Journal of Range & Forage Science*, Vol. 23, Issue 1, pp. 69-75.

Berhane H 2009 The impact of agricultural policies on smallholder innovation capacities: the case of household level irrigation development in two communities of Kilte Awlaelo Woreda, Tigray Regional State, Ethiopia. MSc. Wageningen University

Berhane MG 2010 Socio-economic analysis of market oriented beekeeping in Atsbi Wemberta district of Eastern zone, Tigray Region. MA Thesis, Mekelle University.

Berhe G 2009 Abattoir survey on cattle hydatidosis in Tigray Region of Ethiopia. *Tropical Animal Health and Production*, Vol. 41, No. 7, pp. 1347-1352.

Berhe G, G Tadesse, H Kiros, N Abebe 2010 Concurrent infection of hydatidosis and fasciolosis in cattle slaughtered at Mekelle

municipal abattoir, Tigray Region. *Ethiopian Veterinary Journal*, Vol. 14, No. 2, pp. 39-49.

Berhe G, K Belihu, Y Asfaw 2007 Seroepidemiological investigation of bovine brucellosis in the extensive cattle production system of Tigray region of Ethiopia. *International Journal of Applied Research in Veterinary Medicine*, Vol. 5, No. 2, pp. 65-71.

Berhe HM, FB Marie 2020 Evaluation of Blended Fertilizer (NPSZnB) Rates on grain yield, nutrient uptake and economic feasibility of maize (*Zea mays* L.) in Kolla-Temben, Central zone of Tigray, Ethiopia. *Research Square*.

Berhe K, G Weldeclassie, J Bettridge, RM Christley, RD Abdi 2017 Small ruminant pasteurellosis in Tigray region, Ethiopia: marked serotype diversity may affect vaccine efficacy. *Epidemiology and Infection*, Vol. 145, Issue 7, pp. 1326-1338.

Berhe T, G Girmay, A Kidanemariam 2020 Validation of blended NPSB fertilizer rates on yield, yield components of Teff [*Eragrostis tef* (Zuccagni) Trotter] at vertisols of Hatsebo, Central Tigray, Ethiopia. *Journal of Soil Science and Environmental Management*, Vol. 11, No. 2, pp. 75-86.

Berhe WG 2017 Relationship and prediction of body weight from morphometric traits in Maefur goat population in Tigray, Northern Ethiopia. *Journal of Biometrics and Biostatistics*, Vol. 8, Issue 5: 1000370.

Berhe Y 2014 The impact of row planting of teff crop on rural household income: A case of Tahtay Maychew Wereda, Tigray, Ethiopia. Thesis, Mekelle University.

Beyene A, D Gibbon, M Haile 2001 Understanding diversity in farming practices in Tigray, Ethiopia. *Managing Africa's Soils Series No. 24*.

Beyene A, D Gibbon, M Haile 2006 Heterogeneity in land resources and diversity in farming practices in Tigray, Ethiopia. *Agricultural Systems*, Vol. 88, Issue 1, pp. 61-74.

Bezabih, TG 2013 Productivity of Wheat and Faba Bean under Intercropping System: Effect of Seed Rates and Varieties of Wheat Intercrop with Faba Bean on Performance of Component Crops at Elala, Ethiopia. LAMBERT.

Birhane A 2013 Effect of planting methods on yield and yield components of Rice (*Oryza sativa* L.) varieties in Tahtay Koraro Wereda, Northern Ethiopia. *International Journal of Technology Enhancements and Emerging Engineering Research*, Vol. 1, Issue 5.

Bishu KG 2014 Risk management and the potential of cattle insurance in Tigray, Northern Ethiopia. PhD Thesis, University College Cork. Ireland.

Bishu KG, S O'Reilly, E Lahiff, B Steiner 2018 Cattle farmers' perceptions of risk and risk management strategies: evidence from Northern Ethiopia. *Journal of Risk Research*, Vol. 21, Issue 5, pp. 579-598.

Brhane G, CS Wortmann, M Mamo, H. Gebrekidan, A Belay 2006 Micro-basin tillage for grain sorghum production in semiarid areas of northern Ethiopia. *Agronomy Journal*, Vol. 98, Issue 1, pp. 124-128.

Brhane G, F Belay, T Gebreselassie, D Desta 2019 Enhancing sorghum yield through demonstration of improved sorghum varieties in Tanqa-Abergelle Wereda, Central Zone of Tigray, Ethiopia. *Journal of Agricultural Extension and Rural Development*, Vol. 9, Issue 4, pp. 11-16.

Brhane G, Y Mammo, G Negusse 2017 Sources of information and information seeking behavior of smallholder farmers of Tanqa Abergelle Wereda, central zone of Tigray, Ethiopia. *Journal of*

Agricultural Extension and Rural Development, Vol. 9, Issue 4, pp. 47-52.

Brhane H, T Mamo, K Teka 2017 Optimum potassium fertilization level for growth, yield and nutrient uptake of wheat (*Triticum aestivum*) in Vertisols of Northern Ethiopia. *Cogent Food and Agriculture*, Vol. 3, Issue 1, Article: 1347022

Brhane H, T Mamo, K Teka 2017 Potassium fertilization and its level on wheat (*Triticum aestivum*) yield in shallow depth soils of Northern Ethiopia. *Journal of Fertilizers and Pesticides*, Vol. 8, Issue 2: 1000182.

Chernet S, D Belew, F Abay 2014 Genetic diversity studies for quantitative traits of tomato (*Solanum lycopersicon* L.) genotypes in Western Tigray, Northern Ethiopia. *Journal of Plant Breeding and Crop Science*, Vol. 6, No. 9, pp. 105-113.

Chernet, S, Belew D, Abay F 2013 Genetic variability and association of characters in tomato (*Solanum lycopersicon* L.) genotypes in northern Ethiopia. *International Journal of Agricultural Research*, Vol. 8, No. 2, pp. 67-76.

Chernet, S, Zibelo H. 2014 Evaluation of Tomato varieties for fruit yield and yield components in western lowland of Tigray, Northern Ethiopia. *International Journal of Agricultural Research*, Vol. 9, No.5, pp. 259-264.

Chung B 2016 Impact of irrigation extension on malaria transmission in Simret, Tigray, Ethiopia. *The Korean Journal of Parasitology*, Vol. 54, No. 4, pp. 399–405.

Corral-Nuñez G, D Opazo-Salazar, G GebreSamuel, P Tittonell, A Gebretsadik, Y Gebremeskel, G Tesfay, CL van Beek 2014 Soil organic matter in Northern Ethiopia, current level and predicted trend: a study case of two villages in Tigray. *Soil Use and Management*, Vol. 30, Issue 4, pp. 487-495.

Dargie S, L Wogi, S Kidanu 2020 Nitrogen use efficiency, yield and yield traits of wheat response to slow-releasing N fertilizer under balanced fertilization in Vertisols and Cambisols of Tigray, Ethiopia. *Cogent Environmental Science*, Vol. 6, Issue 1, Article: 1778996.

Degu A, S Melaku, G Berhane 2009 Supplementation of isonitrogenous oil seed cakes in cactus (*Opuntia ficus-indica*)–tef straw (*Eragrostis tef*) based feeding of Tigray Highland sheep. *Animal Feed Science and Technology*, Vol. 148, Issues 2–4, pp. 214-226.

Desta D, H Hagos, S Belay, S Gizaw, G Legese 2013 Analysis of goat value chains in Tanqua Abergelle district, Tigray, Ethiopia. Addis Ababa: ICARDA.

Desta Y, M Haile, G Gebresamuel, M Sibhatleab 2020 Potential, quality and quantity assessment of sesame plant residue in dry land vertisols of Tigray, Ethiopia; Approach for sustainability of dry-land farming. *Heliyon*, Vol. 6, Issue 10: 05234.

Di Falco S, JP Chavas, M Smale 2007 Farmer management of production risk on degraded lands: the role of wheat variety diversity in the Tigray region, Ethiopia. *Agricultural Economics*, Vol. 36, Issue 2, pp. 147-156.

Ebrahim A, A Hailemichael 2012 Sheep and goat production and utilization in different agro-ecological zones in Tigray, Ethiopia. *Livestock Research for Rural Development*. Vol. 24, Article No. 16.

Edwards S, A Asmelash, H Araya, TB Gebre-Egziabher 2007 Impact of compost use on crop yields in Tigray, Ethiopia, 2000-2006 inclusive. *Environment and Development*, Series 10, Third World Network, Malaysia.

Edwards S, T Gebre-Egziabher, H Araya 2010 Successes and challenges in ecological agriculture: Experiences from Tigray,

Ethiopia. Tigray Project, Climate Change and Food Systems Resilience in Sub-Saharan Africa, pp. 231-294.

Embaye TG, GH Kahsay, N Abadi, MM Kebede, DT Dessie 2020 Evaluation of water harvesting structures on agricultural productivity: the case of Tigray Region, Ethiopia. Sustainable Water Resources Management, Vol. 6, Article No. 78.

Ersado L, G Amacher, J Alwang 2004 Productivity and land enhancing technologies in northern Ethiopia: Health, public investments, and sequential adoption. American Journal of Agricultural Economics, Vol. 86, Issue 2, pp. 321-331.

Esilaba AO, F Reda, JK Ransom, W Bayu, G Woldewahid and B Zemichael 2000 Integrated nutrient management strategies for soil fertility improvement and Striga control on Northern Ethiopia. African Crop Science Journal, Vol. 8. No. 4, pp. 403-410.

Feleke FB, M Berhe, G Gebru, D Hoag 2016 Determinants of adaptation choices to climate change by sheep and goat farmers in Northern Ethiopia: the case of Southern and Central Tigray, Ethiopia. SpringerPlus, Vol. 5, Article No. 1692.

Fitiwy I, A Gebretsadkan, KM Ayimut 2015 Evaluation of botanicals for onion thrips, Thrips tabaci Lindeman,(Thysanoptera: Thripidae) control at Gum Selassa, South Tigray, Ethiopia. Momona Ethiopian Journal of Science, Vol. 7, No.1, pp. 32-45.

Gebre GG, DM Zegeye 2014 Challenges of farmers' innovativeness in central zone, Tigray, Ethiopia. International Journal of Agricultural Policy and Research, Vol. 2, No. 5, pp. 215-223.

Gebreegiabher K, T Tadesse 2014 Risk perception and management in smallholder dairy farming in Tigray, Northern Ethiopia. Journal of Risk Research, Vol. 17, Issue 3, pp. 367-381.

Gebreegziabher Z, A J Oskam, T Woldehanna 2004 Technical efficiency of peasant farmers in northern Ethiopia: a stochastic frontier approach. Proceedings fo the Second International Conference on the Ethiopian Economy, Addis Ababa, 3-5 June 2004, pp. 103-123.

Gebregergis Z, D Assefa, I Fitwy 2018 Sesame sowing date and insecticide application frequency to control sesame webworm *Antigastra catalaunalis* (Duponchel) in Humera, Northern Ethiopia. *Agriculture and Food Security*, Vol. 7, Article No. 39.

Gebregergs G, F Mekbib 2020 Estimation of genetic variability, heritability, and genetic advance in advanced lines for grain yield and yield components of sorghum [*Sorghum bicolor* (L.) Moench] at Humera, Western Tigray, Ethiopia. *Cogent Food and Agriculture*, Vol. 6, Issue 1, Article: 1764181.

Gebregziabher G, RE Namara, S Holden 2012 Technical efficiency of irrigated and rain-fed smallholder agriculture in Tigray, Ethiopia: A comparative stochastic frontier production function analysis. *Quarterly Journal of International Agriculture*, Vol. 51, Issue 3, pp. 203-226.

Gebregziabher G, S Holden 2011 Does irrigation enhance and food deficits discourage fertilizer adoption in a risky environment? Evidence from Tigray, Ethiopia. *Journal of Development and Agricultural Economics*, Vol. 3, No. 10, pp. 514-528.

Gebrehiwot NT, KA Mesfin, J Nyssen 2015 Small-scale irrigation: the driver for promoting agricultural production and food security (the case of Tigray Regional State, Northern Ethiopia. *Irrigation and Drainage Systems Engineering*, Vol. 4, Issue 2.

Gebrekidan H, A Hailu, A Kassahun, I Rohoušová, C Maia, DTalmi-Frank, A Warburg, G Baneth 2014 Theileria infection in

domestic ruminants in northern Ethiopia. *Veterinary Parasitology*, Vol. 200, Issues 1–2, pp. 31-38.

Gebrekiros G, A Araya, T Yemane 2016 Modeling impact of climate change and variability on sorghum production in southern zone of Tigray, Ethiopia. *Journal of Earth Science and Climate Change*, Vol. 7, No. 1, pp. 1-10.

Gebremariam T, S Belay 2016 Livestock feed resources utilization practices in Tanqua-Abergelle district of Tigray, Northern Ethiopia. *Tropical Animal Health and Production*, Vol. 48, No. 6, pp. 1183–1190.

Gebremariam T, S Belay 2021 Chemical Composition and Digestibility of Major Feed Resources in Tanqua-Abergelle District of Central Tigray, Northern Ethiopia. *The Scientific World Journal*, Vol. 2021, Article ID 5234831.

Gebremedhin B, J Pender, G Tesfay 2004 Collective action for grazing land management in crop–livestock mixed systems in the highlands of northern Ethiopia. *Agricultural Systems*, Vol. 82, Issue 3, pp. 273-290.

Gebremedhin G, G Tadesse, E Kebede 2013 Physiochemical characteristics of honey obtained from traditional and modern hive production systems in Tigray region, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 5, No. 1, pp. 115-128.

Gebremedhin GH, B Haileselassie, D Berhe, T Belay 2015 Effect of biochar on yield and yield components of wheat and post-harvest soil properties in Tigray, Ethiopia. *Journal of Fertilizers and Pesticides*, Vol. 6, No. 2: 1000158.

Gebremedhin K, T Gebregergs, T Tsigab, A Teklehaymanot 2019 Evaluation of *Sesbania macrantha* genotypes as animal feed at lowland and Midland areas: the case of north western Tigray,

Ethiopia. *International Journal of Agriculture and Biosciences*, Vol. 8, No. 4, pp. 205-209.

Gebremedhin T 2015 Effect of drip and surface irrigation methods on yield and water use efficiency of onion (*Allium cepa* L.) under semi-arid condition of Northern Ethiopia. *Journal of Biology, Agriculture and Healthcare*, Vol.5, No.14, pp. 88-94.

Gebremedhin W, M Firew, B Tesfye 2014 Stability analysis of food barley genotypes in Northern Ethiopia. *African Crop Science Journal*, Vol. 22, No. 2, pp. 145 – 153.

Gebremedhn H, A Estifanos 2013 On farm evaluation of Kenyan Top bar hive (KTBH) for honey production in Tigray Region, Northern Ethiopia. *Livestock Research for Rural Development*. Vol. 25, Article 86.

Gebremedhn H, Z Tesfay, G Murutse, A Estifanos 2013 Seasonal honeybee forage availability, swarming, absconding and honey harvesting in Debrekidan and Begasheka watersheds of Tigray, Northern Ethiopia. *Livestock Research for Rural Development*. Vol. 25, Article No. 61.

Gebremedhn MB, W Tessema, GG Gebre, KT Mawcha, MK Assefa 2019 Value chain analysis of sesame (*Sesamum indicum* L.) in Humera district, Tigray, Ethiopia. *Cogent Food and Agriculture*, Vol. 5, Issue 1, 1705741.

Gebremeskel B, S Kalayou 2009 Prevalence, viability and fertility study of bovine cystic echinococcosis in Mekelle city, Northern Ethiopia. *Revue de Médecine Vétérinaire*, Vol. 160, No. 2, pp. 92-97.

Gebremeskel G, TG Gebremicael, H Hagos, T Gebremedhin, M Kifle 2018 Farmers' perception towards the challenges and determinant factors in the adoption of drip irrigation in the semi-arid

areas of Tigray, Ethiopia. *Sustainable Water Resources Management*, Vol. 4, pp. 527–537.

Gebremeskel G, TG Gebremicael, M Kifle, E Meresa, T Gebremedhin, A Girmay 2018 Salinization pattern and its spatial distribution in the irrigated agriculture of Northern Ethiopia: An integrated approach of quantitative and spatial analysis. *Agricultural Water Management*, Vol. 206, pp. 147-157.

Gebremeskel Y, B Tamir, D Begna 2015 Honeybee production trend, potential and constraints in Eastern Zone of Tigray, Ethiopia. *Agriculture and Biology Journal of North America*, Vol. 6, No. 1, pp. 22-29.

Gebremichael B, B Gebremedhin 2014 Adoption of improved box hive technology: Analysis of smallholder farmers in Northern Ethiopia. *International Journal of Agricultural Economics and Extension*. Vol. 2, No. 2, pp. 77-82.

Gebremichael B, B Gebremedhin 2014 Perceptions of smallholder farmers on improved box hive technology and its profitability in northern Ethiopia. *Journal of Agricultural Extension and Rural Development*, Vol. 6, Issue 12, pp. 393-402.

Gebresamuel G, D Opazo-Salazar, G Corral-Núñez, C van Beek, E Elias, CC Okolo 2021 Nutrient balance of farming systems in Tigray, northern Ethiopia. *Journal of Soil Science and Plant Nutrition*, Vol. 21, pp. 315–328.

Gebresamuel G, H Abrha, H Hagos, E Elias, M Haile 2021 Empirical modeling of the impact of climate change on altitudinal shift of major cereal crops in South Tigray, Northern Ethiopia. *Journal of Crop Improvement*, Vol. 36, Issue 2, pp. 169-192.

Gebresilassie A, S Yared, E Aklilu, OD Kirstein, A Moncaz, H Tekie, M Balkew, A Warburg, A Hailu, T Gebre-Michael 2015 Host choice of *Phlebotomus orientalis* (Diptera: Psychodidae) in animal

baited experiments: a field study in Tahtay Adiyabo district, northern Ethiopia. *Parasites and Vectors*, Vol. 8, Article No. 190.

Gebresilassie L, A Bekele 2015 Factors determining allocation of land for improved wheat variety by smallholder farmers of northern Ethiopia. *Journal of Development and Agricultural Economics*, Vol. 7, No. 3, pp. 105-112.

Gebresilassie W, A Bekele, G Belay 2004 Microhabitat choice and diet of rodents in Maynugus irrigation field, northern Ethiopia. *African Journal of Ecology*, Vol. 42, Issue 4, pp. 315-321.

Gebresilassie W, A Bekele, G Belay, M Balakrishnan 2006 Home range and reproduction of rodents in Maynugus irrigation field, northern Ethiopia. *SINET: Ethiopian Journal of Science*, Vol. 29, No. 1, pp. 57–62.

Gebretsadik G, K Kebede 2011 Feed utilization, digestibility and carcass parameters of Tigray highland sheep fed urea treated wheat straw supplemented with mixtures of wheat bran and noug seed cake, in Southern Tigray, Ethiopia. *Livestock Research for Rural Development*, Vol. 23, No. 9.

Gebretsadik H, M Haile, CF Yamoah 2009 Tillage frequency, soil compaction and N-fertilizer rate effects on yield of teff (*Eragrostis tef* (zucc) Trotter) in central zone of Tigray, Northern Ethiopia. *Momona Ethiopian journal of Science*, Vol. 1, No. 1, pp. 82–94.

Gebrewahid TT, BH Abera, HT Menghistu 2012 Prevalence and etiology of subclinical mastitis in small ruminants of Tigray regional State, north Ethiopia. *Veterinary World*, 2012, *Veterinary World*, Vol. 5, No. 2, pp. 103-109.

Gebreyowhens W, Haftu A, Yemane H, G Gebreyohannes 2016 Improving Dairy Production Through Biotechnology Assisted Crossbred Heifer Production in Tigray Ethiopia. *Journal of Natural Sciences Research*, Vol. 6, No. 3, pp.100-106.

Gebreyowhens W, Y Tesfay 2016 Morphological characterization of indigenous highland sheep population of Tigray, Northern Ethiopia. *Journal of Natural Sciences Research*, Vol.6, No.1, pp. 96-104.

Gebre H, A Hailemariam, T Belay 2011 Genotype by interaction and grain yield stability of early maturing bread wheat (*Triticum aestivum* L.) genotypes in the drought prone areas of Tigray region, northern Ethiopia. *Ethiopian Journal of Applied Sciences and Technology*, Vol. 2, No. 1, pp. 51-57.

Gebre H, F Abay 2013 Evaluation of bread wheat genotypes for their adaptability in wheat growing areas of Tigray Region, Northern Ethiopia. *Journal of Biodiversity and Endangered Species*, Vol. 1, Issue 2: 1000104.

Gebre T, S Yigrem, S Banerjee 2017 Some morphometrical, production and reproduction traits of Begait cattle reared in Tigray region of Ethiopia. *Wayamba Journal of Animal Science*, 2017, pp.1571-1585.

Gelaw AM, BR Singh, R Lal 2014 Soil organic carbon and total nitrogen stocks under different land uses in a semi-arid watershed in Tigray, Northern Ethiopia. *Agriculture, Ecosystems and Environment*, Vol. 188, pp. 256-263.

Gelaw AM, BR Singh, R Lal 2015 Organic carbon and nitrogen associated with soil aggregates and particle sizes under different land uses in Tigray, Northern Ethiopia. *Land Degradation and Development*, Vol. 26, Issue7, Special Issue: Environmental conservation for food production and sustainable livelihood in tropical Africa, pp. 690-700.

Gelaw AM, BR Singh, R Lal 2015 Soil quality indices for evaluating smallholder agricultural land uses in northern Ethiopia. *Sustainability*, Vol. 7, pp. 2322-2337.

- Genzebu D, M Hailemariam, K Belihu 2012 Morphometric characteristics and livestock keeper perceptions of “Arado” cattle breed in Northern Tigray, Ethiopia. *Livestock Research for Rural Development*, Vol. 24, Article No. 6.
- Getacher T, A Mesfin, G Gebre-Egziabher 2013 Adoption and impacts of an irrigation technology: Evidence from household level data in Tigray, Northern Ethiopia. *African Journal of Agricultural Research*, Vol. 8, No. 38, pp. 4766-4772.
- Gidey A, S Mulugeta, A Fromsa 2012 Prevalence of bee lice *Braula coeca* (Diptera: Braulidae) and other perceived constraints to honey bee production in Wukro Woreda, Tigray Region Ethiopia. *Global Veterinaria* Vol. 8, No. 6, pp. 631-635.
- Gidey E, O Dikinya, R Sebego, E Segosebe, A Zenebe 2018 Analysis of the long-term agricultural drought onset, cessation, duration, frequency, severity and spatial extent using Vegetation Health Index (VHI) in Raya and its environs, Northern Ethiopia. *Environmental Systems Research*, Vol. 7, Article No. 13.
- Girma H 2019 Estimation of technical efficiency of dairy farms in central zone of Tigray National Regional State. *Heliyon*, Vol. 5, Issue 3: 01322.
- Godifey G 2015 Epidemiology of honey bee disease and pests in selected zones of Tigray region, northern Ethiopia. MSc Thesis, Bahir Dar University.
- Grum B, D Assefa, R Hessel, K Woldearegay, A Kessler, C Ritsema, V Geissen 2017 Effect of In Situ Water Harvesting Techniques on Soil and Nutrient Losses in Semi-Arid Northern Ethiopia. *Land Degradation and Development*, Vol. 28, Issue 3.
- Guyassa E, AJ Raj 2013 Assessment of biodiversity in cropland agroforestry and its role in livelihood development in dryland areas:

A case study from Tigray region, Ethiopia. *Journal of Agricultural Technology*, Vol. 9, Issue 4, pp. 829-844.

Hadgu KM 2008 Temporal and spatial changes in land use patterns and biodiversity in relation to farm productivity at multiple scales in Tigray, Ethiopia. PhD Thesis Wageningen University, The Netherlands.

Hadgu KM, L Kooistra, WAH Rossing, AHC van Bruggen 2009 Assessing the effect of *Faidherbia albida* based land use systems on barley yield at field and regional scale in the highlands of Tigray, Northern Ethiopia. *Food Security*, Vol. 1, pp. 337–350.

Hadush H 2014 Adoption and impact of micro irrigation on household income: The case of Eastern Tigray. MSc. Thesis, Mekelle University.

Hadush M 2017 Exploring Farmers' seasonal and Full Year Adoption of Stall Feeding of Livestock in Tigray Region, Ethiopia. *Economics of Agriculture*, Vol. 64, Issue 3, pp. 919-944.

Hadush M 2017 Implication of Animal Feed and Water Scarcity on Labor Allocation, Food Production and Per Capita Food Consumption in Tigray Region, Ethiopia. *Journal of Economic Development*, Vol. 42, No. 4, pp. 59-93.

Hadush M 2018 Impact of improved animal feeding practice on milk production, consumption and animal market participation in Tigray, Ethiopia. *Problems of Agricultural Economics*, Vol. 2, No. 355, pp. 107-133.

Hadush M 2018 The economic implication of animal feed scarcity on farm intensification, food production and consumption: empirical evidence from Tigray, Ethiopia. Doctoral Thesis, Norwegian University of Life Sciences.

Hadush M 2021 Does it pay to switch from free grazing to stall feeding? Impact of stall feeding practice on household welfare in Tigray Ethiopia. *Agricultural and Food Economics*, Vol. 9, Article No. 4.

Hadush M, ST Holden, M Tilahun 2019 Does population pressure induce farm intensification? Empirical evidence from Tigray Region, Ethiopia. *Agricultural Economics*, Vol. 50, Issue 3, pp. 259-277.

Haftom H, A Haftu, K Goitom, H Meseret 2019 Agroclimatic zonation of Tigray region of Ethiopia based on aridity index and traditional agro-climatic zones. *Journal of Agrometeorology*, Vol. 21, Issue 2, pp. 176–181.

Haftu B, A Asresie, M Haylom 2014 Assessment on major health constraints of livestock development in eastern zone of tigray: The case of “gantaafeshum woreda” northern Ethiopia. *Journal of Veterinary Science Technology*, Vol. 5, Issue 2: 1000174.

Haftu K, D Daniel, B Gebru, G Tsegay, A Guash, G Guesh, Z Mulualem, G Gebrekiros 2015 Analysis of honey bee production opportunities and challenges in central Zone of Tigray, Northern Ethiopia. *International Journal of Scientific and Research Publications*, Vol. 5, Issue 4.

Haftu R, H Taddele, G Gugsu, S Kalayou 2012 Prevalence, bacterial causes, and antimicrobial susceptibility profile of mastitis isolates from cows in large-scale dairy farms of Northern Ethiopia. *Tropical Animal Health and Production*, Vol. 44, No. 7, pp. 1765–1771.

Hagos BG 2016 Impact of agricultural technology adoption of small holder farmers on wheat yield: Empirical evidence from Southern Tigray State of Ethiopia. *Journal of Agricultural Extension and Rural Development*, Vol. 8, Issue 10, pp. 211-223.

Hagos BG, M Hadush 2017 Does improved wheat seed adoption benefit farmers? Empirical evidence from Southern Tigray, Ethiopia. *Journal of Agriculture and Crops*, Vol. 3, Issue 1, pp. 1-11.

Hagos EY 2005 Development and management of irrigated lands in Tigray, Ethiopia. PhD Thesis, Wageningen University, The Netherlands.

Hagos H, E Ndemo, J Yosuf 2018 Factors affecting adoption of upland rice in Tselemti district, northern Ethiopia. *Agriculture and Food Security*, Vol. 7, Article No. 59.

Haile M, F Abay, A Waters-Bayer 2001 Joining forces to discover and celebrate local innovation in land husbandry in Tigray, Ethiopia.. In 6: pp. 58-73, Reij C, A Waters-Bayer (eds.) *Farmer Innovation in Africa: A source of Inspiration for Agricultural Development*,

Haileselesie TH, B G/selasie 2012 The effect of salinity (NaCl) on germination of selected grass pea (*Lathyrus sativus* L.) landraces of Tigray. *Asian Journal of Agricultural Sciences*, Vol. 4, Issue 2, pp. 96-101.

Haileselesie TH, G Teferii 2012 The effect of salinity stress on germination of chickpea (*Cicer arietinum* L.) land race of Tigray. *Current Research Journal of Biological Sciences*, Vol. 4, No. 5, pp. 578-583.

Haileselassie B, D Habte, M Haileselassie, G Gebremeskel 2014 Effects of mineral nitrogen and phosphorus fertilizers on yield and nutrient utilization of bread wheat (*Triticum aestivum*) on the sandy soils of Hawzen District, Northern Ethiopia. *Agriculture, Forestry and Fisheries*, Vol. 3, Issue 3, pp. 189-198.

Haileselassie M, S Kalayou, M Kyule, M Asfaha, K Belihu 2011 Effect of *Brucella* infection on reproduction conditions of female breeding cattle and its public health significance in Western Tigray,

northern Ethiopia. *Veterinary Medicine International*, Vol. 2011, Article ID 354943.

Haileselassie M, S Teklay 2014 Suitability of locally available substrates for oyster mushrooms cultivation in Mekelle City, Tigray, Ethiopia. *Sky Journal of Food Science*, *Sky Journal of Food Science*, Vol. 3, No. 5, pp. 47-51.

Hailu B, B Gebrekidan, S Raju, A Birhanu, G Tadesse 2015 Effects of gonadotropin releasing hormone analogue in enhancements of pregnancy in repeat breeding dairy cows in and around Mekelle, Tigray, Ethiopia. *Animal and Veterinary Sciences*, Vol.3, No. 1, pp. 12-17.

Hailu BK, BK Abrha, KA Weldegiorgis 2014 Adoption and impact of agricultural technologies on farm income: Evidence from Southern Tigray, Northern Ethiopia. *International Journal of Food and Agricultural Economics*, Vol. 2 No. 4, pp. 91-106.

Hailu G, K Manjureb, KM Aymut 2015 Crop commercialization and smallholder farmers livelihood in Tigray region, Ethiopia. *Journal of Development and Agricultural Economics*, Vol. 7, No. 9, pp. 314-322.

Halefom M 2013 Management practice and constraints of sheep production in southern, south eastern and eastern zones of Tigray, northern Ethiopia. *World Journal of Animal Science Research*, Vol. 1, No. 1, pp. 1-17.

Harfe M 2017 Response of bread wheat (*Triticum aestivum* L.) varieties to N and P fertilizer rates in Oflla district, Southern Tigray, Ethiopia. *African Journal of Agricultural Research*, Vol. 12, No. 19, pp. 1646-1660.

Hiben MG, T-A G Ambaye 2014 Spate irrigation in Tigray: the challenges and suggested ways to overcome them. In: Paper 9, pp.137-148. Erkossa T, F Hagos, N Lefore (eds.): Flood-based

Farming for Food Security and Adaption to Climate Change in Ethiopia: Potential and Challenges.

Jaleta M, B Gebremedhin 2012 Price co-integration analyses of food crop markets: The case of wheat and teff commodities in Northern Ethiopia. *African Journal of Agricultural Research*, Vol. 7, No. 25, pp. 3643-3652.

Kahsay T, G Negash, Y Hagos, B Hadush 2015 Pre-slaughter, slaughter and post-slaughter defects of skins and hides at the Sheba Tannery and Leather Industry, Tigray region, northern Ethiopia. *Onderstepoort Journal of Veterinary Research* Vol. 82, No. 1, Article No. 931.

Kahsay Y, D Belew, F Abay 2013 Effect of intra-row spacing on yield and quality of some onion varieties (*Allium cepa* L.) at Aksum, Northern Ethiopia. *African Journal of Plant Science*, Vol.7, No. 12, pp. 613-622.

Kahsay Y, F Abay, D Belew 2013 Intra row spacing effect on shelf life of onion varieties (*Allium cepa* L.) at Aksum, Northern Ethiopia. *Journal of Plant Breeding and Crop Science*, Vol. 4, No. 6, pp. 127-136.

Kalayou S, M Haileselassie, G Gebre-Egziabher, T Tiku'e, S Sahle, H Taddele, M Ghezue 2012 In-vitro antimicrobial activity screening of some ethnoveterinary medicinal plants traditionally used against mastitis, wound and gastrointestinal tract complication in Tigray Region, Ethiopia. *Asian Pacific Journal of Tropical Biomedicine*, Vol. 2, Issue 7, pp. 516-522.

Kalayu AA, DA Woldetsadik, Y Woldeamanuel, Shu-Hua Wang, WA Gebreyes, T Teferi 2020 Burden and antimicrobial resistance of *S. aureus* in dairy farms in Mekelle, Northern Ethiopia. *BMC Veterinary Research*, Vol. 16, Article No. 20.

Kebede H, E Fikru, K Haile, H Hadush 2016 Assessment of Microbial Quality of Irrigated Cabbage with Wastewater in Laelay Maychew and Tahtay Maychew Woredas of Aksum, Tigray, North Ethiopia. *Journal of Microbiology and Virology*, Vol. 6, No. 3, pp. 42–48.

Kebede T, B Afera, H Taddele, A Bsrat 2014 Assessment of bacteriological quality of sold meat in the butcher shops of Adigrat, Tigray, Ethiopia. *Applied Journal of Hygiene*, Vol. 3, Issue 3, pp. 38-44.

Kidanemariam A, H Gebrekidan, T Mamo, K Kibret 2012 Impact of altitude and land use type on some physical and chemical properties of acidic soils in Tsegede Highlands, Northern Ethiopia. *Open Journal of Soil Science*, Vol. 2, pp. 223-233.

Kidanemariam A, H Gebrekidan, T Mamo, KT Fantaye 2013 Wheat crop response to liming materials and N and P fertilizers in acidic soils of Tsegede highlands, northern Ethiopia. *Forestry and Fisheries*, Vol. 2, No. 3, pp. 126-135.

Kidus T, T Areya, W Tesfay 2020 Proportional Enactment of Tomato (*Solanum Lycopersicum* L. Mill) Varieties under Greenhouse Production Systems of Tigray, Biotechnology Center, Ethiopia. *International Journal of Research in Agriculture and Forestry*, Vol. 7, Issue 6, pp. 1-11.

Kifle T, B Tekeste, A Abadi 2015 Determinants of the choice of marketing channel among small-scale honey producers in Tigray Region of Ethiopia. *Journal of Business Management and Social Sciences Research*, Vol. 4, No. 4, pp. 295-305.

Kifleyohannes T, E Kebede, Y Hagos, K Weldu, MG Michael 2015 Prevalence of paramphistomosis in ruminants in Ashenge, Tigray Ethiopia. *Acta Parasitologica*, Vol. 6, Issue 2, pp. 83-86.

Kindeya YB, S Chermet, H Zibelo, A Tuemay, M Kassie, A Abraha, A Weldu 2020 Performance Evaluation and Shelf Life of Onion Varieties in Western Tigray, Ethiopia. *Journal of Experimental Agriculture International*, Vol. 42, Issue 9, pp. 38-47.

Kindeya YB, WN Golla, AA Kebede, FB Sibhatu 2018 Survey and identification of major sesame diseases in low land areas of western zone of Tigray, Ethiopia. *Journal of Biomaterials*, Vol. 2, No.2. pp. 58-64.

Kinfe H, T Yiergalem, R Alem, W Redae, Y Desalegn, G Welegerima 2017 Yield performance and adaptability of finger millet landrace in North Western Tigray, Ethiopia. *World News of Natural Sciences*, Vol. 15, pp. 98-111.

Kiros S, N Awol, Y Tsegaye, B Hadush 2014 Hard ticks of camel in Southern zone of Tigray, Northern Ethiopia. *Journal of Parasitology and Vector Biology*, Vol. 6, No. 10, pp. 151-155.

Kraaijvanger R, A Veldkamp 2015 The importance of local factors and management in determining wheat yield variability in on-farm experimentation in Tigray, northern Ethiopia. *Agriculture, Ecosystems and Environment*, Vol. 214, pp. 1-9.

Kraaijvanger R, CJM Almekinders, A Veldkamp 2016 Identifying crop productivity constraints and opportunities using focus group discussions: A case study with farmers from Tigray. *NJAS-Wageningen Journal of Life Sciences*, Vol. 78, pp. 139-151.

Kraaijvanger R, T Veldkamp 2015 Grain productivity, fertilizer response and nutrient balance of farming systems in Tigray, Ethiopia: A multi-perspective view in relation to soil fertility degradation. *Land Degradation and Development*, Vol. 26, Issue 7, Special Issue: Environmental conservation for food production and sustainable livelihood in tropical Africa, pp. 701-710.

Kraaijvanger R, T Veldkamp, C Almekinders 2016 Considering change: evaluating four years of participatory experimentation with farmers in Tigray (Ethiopia) highlighting both functional and human–social aspects. *Agricultural Systems*, Vol. 147, pp. 38-50.

Lanckriet S, A Frankl, G Mesfin, K Descheemaeker, J Nyssen 2015 Gully cut-and-fill cycles as related to agro-management: a historical curve number simulation in the Tigray Highlands. *Earth Surface Processes and Landforms*, Vol. 40, Issue 6, pp. 796-808.

Lemlem A, Y Tesfay 2010 Performance of exotic and indigenous poultry breeds managed by smallholder farmers in northern Ethiopia. *Livestock Research for Rural Development*, Vol. 22, Article No. 133.

Lemma M 2007 *The Agricultural Knowledge System in Tigray, Ethiopia: Recent History and Actual Effectiveness*. Margraf Publishers.

Libsekal H, T Gebre-Egziabher, A Mezgebu, E Yazew 2015 Developments in the design and construction of modern spate systems in Tigray, Ethiopia. *Civil and Environmental Research*, Vol.7, No.3, pp. 108-113.

Mahmud J 2008 *Analysis of the role of cooperatives in agricultural input out put marketing in Eastern Zone, Tigray Region*. MSc thesis, Mekelle University.

Markos S, B Belay, T Dessie 2014 Incubation and Brooding Practices of Local Chicken Producers in Ethiopia: The Case of Western Zone of Tigray. *Journal of Biology, Agriculture and Healthcare*, Vol. 4, No. 25, pp. 114-126.

Markos S, B Belay, T Dessie 2014 *Marketing and price determinant factors of village chicken products: The case of western zone of*

Tigray. *Journal of Biology, Agriculture and Healthcare*, Vol. 4, No. 25. pp. 152-161.

Markos S, B Belay, T Dessie 2014 Village Chicken Production Constraints and Opportunities in Western Zone of Tigray, Northern Ethiopia. *Journal of Biology, Agriculture and Healthcare*, Vol. 4, No. 27. pp. 232-245.

Markos S, B Belay, T Dessie 2015 On farm performance evaluation of three local chicken ecotypes in Western Zone of Tigray, Northern Ethiopia, Performance improvement. *Journal of Biology, Agriculture and Healthcare*, Vol. 5, No.7. pp. 158-169.

Markos S, B Belay, T Dessie 2016 Village chicken breeding practices, objectives and farmers' trait preferences in western zone of Tigray, Northern Ethiopia. *E3 Journal of Agricultural Research and Development*, Vol. 6, No. 1, pp. 1-11.

McCarty JL, CSR Neigh, ML Carroll, MR Wooten 2017 Extracting smallholder cropped area in Tigray, Ethiopia with wall-to-wall sub-meter WorldView and moderate resolution Landsat 8 imagery. *Remote Sensing of Environment*, Vol. 202, pp. 142-151.

Meaza H, A Frankl, B Demissie, J Poesen, A Zenebe, G Gebresamuel, TG Asfaha, S Annys, VV Eetvelde, M Jacob, J Deckers, D Raes, J Nyssen 2019 Water balance components of the potential agricultural grabens along the Rift Valley in northern Ethiopia. *Journal of Hydrology: Regional Studies*, Vol. 24: 100616.

Mebrahtu Y, A Woldemichael, S Habtu 2018 Response of onion (*Allium cepa* L.) to deficit irrigation under different furrow irrigation water management techniques in Raya Valley, Northern Ethiopia. *African Journal of Plant Science*, Vol.12, No. 5, pp. 105-113.

Mehari M, M Tesfay, H Yirga, A Mesele, T Abebe, A Workineh, B Amare 2015 GGE biplot analysis of genotype-by-environment interaction and grain yield stability of bread wheat genotypes in

South Tigray, Ethiopia. *Communications in Biometry and Crop Science*, Vol. 10, No. 1, pp. 17–26.

Mehari M, S Alamerew, B Lakew, H Yirga, M Tesfay 2014 Parametric stability analysis of malt barley genotypes for grain yield in Tigray, Ethiopia. *World Journal of Agricultural Sciences*, Vol. 10, No. 5, pp. 210-215.

Meheretu Y, V Sluydts, K Welegerima, H Bauer, M Teferi, G Yirga, L Mulungu, M Haile, J Nyssen, J Deckers, R Makundi, H Leirs 2014 Rodent abundance, stone bund density and its effects on crop damage in the Tigray highlands, Ethiopia. *Crop Protection*, Vol. 55, Issue: January, pp.61-67.

Mekonnen T, S Meseret 2020 Characterization of Begait cattle using morphometric and qualitative traits in Western Zone of Tigray, Ethiopia. *International Journal of Livestock Production*, Vol.11, No. 1, pp. 21-33.

Mekonnin AB, CR Harlow, G Gidey, D Tadesse, G Desta, T Gugsu, SC Riley 2015 Assessment of reproductive performance and problems in crossbred (Holstein Friesian X Zebu) dairy cattle in and around Mekelle, Tigray, Ethiopia. *Animal and Veterinary Sciences*, Vol. 3, Issue 3, pp. 94-101.

Mekonnen B 2014 Selection of barley varieties for their yield potential at low Rain Fall Area based on both quantitative and qualitative characters North West Tigray, Shire, Ethiopia. *International Journal of Plant Breeding and Genetics*, Vol. 8, Issue 4, pp. 205-213.

Melaku S, T Aregawi, L Nigatu 2010 Chemical composition in vitro dry matter digestibility and in sacco degradability of selected browse species used as animal feeds under semi-arid conditions in Northern Ethiopia. *Agroforestry Systems*, Vol. 80, pp. 173–184.

Meles AK, MM Abang 2008 Farmers' knowledge of crop diseases and control strategies in the Regional State of Tigray, northern Ethiopia: implications for farmer–researcher collaboration in disease management. *Agriculture and Human Values*, Vol. 25, Article No. 433.

Meles B, W Mohammed, Y Tsehaye 2017 Genetic variability, correlation and path analysis of yield and grain quality traits in bread wheat (*Triticum aestivum* L.) genotypes at Axum, Northern Ethiopia. *Journal of Plant Breeding and Crop Science*, Vol. 9, No. 10, pp. 175-185.

Meles K, G Nigussie, T Belay, K Manjur 2009 Seed system impact on farmers' income and crop biodiversity in the drylands of southern Tigray. *Drylands Coordination Group (DCG) Report No. 54*.

Mengistu BM, AA Azbite, HK Bitsue 2019 Prevalence of Small Ruminants Fasciolosis in Mekelle, Tigray Regional State, Northern Ethiopia. *Journal of Agriculture and Ecology Research International*, Vol. 20, Issue 1, pp.1-8.

Mesele A, W Mohammed, T Dessalegn 2016 Estimation of heritability and genetic advance of yield and yield related traits in bread wheat (*Triticum aestivum* L.) genotypes at Ofla District, Northern Ethiopia. *International Journal of Plant Breeding and Genetics*, Vol. 10, Issue 1, pp. 31-37.

Mesfin S, G Gebresamuel, A Zenebe, M Haile 2021 Nutrient balances in smallholder farms in northern Ethiopia. *Soil Use and Management*, Vol. 37, Issue 3, pp. 468-478.

Mesfin S, G Gebresamuel, M Haile, A Zenebe, G Desta 2020 Mineral fertilizer demand for optimum biological nitrogen fixation and yield potentials of legumes in Northern Ethiopia. *Sustainability*, Vol. 12, No. 16: 6449.

Mezgebe G, S Gizaw, M Urge, A Chavhan 2017 Begait cattle production systems and production performances in northern Ethiopia. *International Journal of Life Sciences*, Vol. 5, No. 4, pp. 506-516.

Mezgebo GK, DG Mekonena, KT Gebrezgiabher 2021 Do Smallholder farmers ensure Resource use efficiency in developing countries? Technical Efficiency of Sesame Production in Western Tigray, Ethiopia. *Heliyon*, Vol. 7, Issue 6: 07315.

Mintesinot B, H Verplancke, E Van Ranst H Mitiku 2004 Examining traditional irrigation methods, irrigation scheduling and alternate furrows irrigation on vertisols in northern Ethiopia. *Agricultural Water Management*, Vol. 64, Issue 1, pp.17-27.

Misgina NA 2016 Effect of phosphorus and potassium fertilizer rates on yield and yield component of potato (*Solanum Tubersum* L.) at K/Awlaelo, Tigray, Ethiopia. *Food Science and Quality Management*, Vol. 48, pp. 60-69.

Misgina NA, F Kebede, E Abereha 2016 Effect of potassium on tuber yield and yield component of potato (*Solanium Tubersum*) on loamy soils of Atsbi-Wenberta, Tigray, Ethiopia. *Journal of Biology, Agriculture and Healthcare*, Vol. 6, No. 3, pp. 49-56.

Murut G-E, H Tsehaye, F Abay 2014 Agronomic performance of some haricot bean varieties (*haseolus vulgaris* L.) with and without phosphorus fertilizer under irrigated and rain fed conditions in the Tigray and Afar regional states, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 6, No. 2, pp. 95-109.

Nata T, K Bheemalingeswara 2010 Prospects and constraints of household irrigation practices, Hayelom Watershed, Tigray, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 2, pp. 87-109.

Negasi W, B Bogale, M Chanie 2012 Helminth parasites in small ruminants: prevalence, species composition and associated risk factors in and Around Mekelle Town, Northern Ethiopia. *European Journal of Biological Sciences*, Vol. 4, No. 3, pp. 91-95.

Neigh CSR, ML Carroll, MR Wooten, JL McCarty, BF Powell, GJ Husak, M Enenkel, CR Hain 2018 Smallholder crop area mapped with wall-to-wall WorldView sub-meter panchromatic image texture: A test case for Tigray, Ethiopia. *Remote Sensing of Environment*, Vol. 212, pp. 8-20.

Niguse A, A Aleme 2015 Modeling the impact of climate change on production of Sesame in Western zone of Tigray, Northern Ethiopia. *Journal of Climatology and Weather Forecasting*, Vol. 3:3.

Nigussie K, PA Subramanian, G Mebrahtu 2012 Physicochemical analysis of Tigray honey: An attempt to determine major quality markers of honey. *Bulletin of the Chemical Society of Ethiopia*, 26(1), 127-133.

Nyssen J, J Naudts, K De Geyndt, M Haile, J Poesen, J Moeyersons, J Deckers 2008 Soils and land use in the Tigray highlands (Northern Ethiopia). *Land Degradation and Development*, Vol. 19, Issue3, pp. 257-274.

Nyssen J, J Poesen, J Moeyersons, E Lavrysen, M.Haile, J.Deckers 2002 Spatial distribution of rock fragments in cultivated soils in northern Ethiopia as affected by lateral and vertical displacement processes. *Geomorphology*, Vol. 43, Issues 1–2, pp. 1-16.

Oates N, A Hisberg, JR Ros, H Solomon, E Ludi, S Marlet, JY Jamin 2020 The Implications of state intervention for self-governed irrigation schemes: Insights from Tigray, Ethiopia. *Irrigation and Drainage*, Vol. 69, Issue S1, Special Issue: Innovations in irrigation systems in Africa, pp. 88-99.

O'Reilly S, KG Bishu, E Lahiff, M Gebregziabher 2018 Drivers of farmers' cattle insurance decisions: evidence from smallholders in northern Ethiopia. *Agrekon*, Vol. 57, No. 1.

Pender J, B Gebremedhin 2008 Determinants of agricultural and land management practices and impacts on crop production and household income in the highlands of Tigray, Ethiopia. *Journal of African Economies*, Vol. 17, Issue 3, pp. 395–450.

Pender J, B Gebremedhin 2011 Impacts of Policies and Technologies in Dryland Agriculture: Evidence from Northern Ethiopia. Chapter 24, pp. 389-416, in SC Rao and J Ryan (eds.) *Challenges and Strategies of Dryland Agriculture*.

Rabia AH, RR Afifi, AM Gelaw, S Bianchi, H Figueredo, T Lan-Huong, AA Lopez, SD Mandala, E Matta, M Ronchi, HS Woldegiorgis, AK Tine, MS Youssef, MG Gutierrez, MM Yusuf, V Alessandro 2013 Soil mapping and classification: a case study in the Tigray Region, Ethiopia. *Journal of Agriculture and Environment for International Development*, Vol. 107, Issue 1, pp. 73-99.

Reda F, A Dierick, JAC Verkleij 2010 Virulence study of *Striga hermonthica* populations from Tigray region (Northern Ethiopia). *World Journal of Agricultural Sciences*, Vol. 6, No. 6, pp. 676-682.

Reda F, JAC Verkleij, WHO Ernst 2005 Intercropping for the Improvement of Sorghum Yield, Soil Fertility and *Striga* Control in the Subsistence Agriculture Region of Tigray (Northern Ethiopia). *Journal of Agronomy and Crop Science*, Vol. 191, Issue 1, pp. 10-19.

Reda F, JAC Verkleij, WHO Ernst 2005 Relay Cropping of Sorghum and Legume Shrubs for Crop Yield Improvement and *Striga* Control in the Subsistence Agriculture Region of Tigray (Northern Ethiopia). *Journal of Agronomy and Crop Science*, Vol.191, Issue 1, pp. 20-26.

Reda M, H Taddele, B Afera, A Bsrat 2014 Bacteriological quality assessment of milk in dairy farms, cafeterias and wholesalers in Adigrat, Tigray, Ethiopia. *European Journal of Biological Sciences* Vol. 6, No. 4, pp. 88-94.

Redda A, F Abay 2015 Agronomic performance of integrated use of organic and inorganic fertilizers on rice (*Oryza sativa* L.) in Tselemti district of north-western Tigray, Ethiopia. *Journal of Environment and Earth Science*. Vol. 5, No.9, pp. 30-41.

Romha G, G Ameni, G Berhe, G Mamo 2013 Epidemiology of mycobacterial infections in cattle in two districts of Western Tigray Zone, northern Ethiopia. *African Journal of Microbiology Research*, Vol. 7, Issue 31, pp. 4031-4038.

Seifu W, E Elias, G Gebresamuel 2020 The effects of land use and landscape position on soil physicochemical properties in a semiarid watershed, northern Ethiopia. *Applied and Environmental Soil Science*, Vol. 2020, Article ID 8816248.

Shabtai IA, M Shenker, WL Edeto, A Warburg, M. Ben-Hur 2014 Effects of land use on structure and hydraulic properties of Vertisols containing a sodic horizon in northern Ethiopia. *Soil and Tillage Research*, Vol. 136, pp.19-27.

Sibhatu B, H Berhe, G Gebrekorkos, K Abera 2016 Determination of planting spacing for improved yield and yield components of Dekoko (*Pisum sativum* var. *abyssinicum*) at Raya Valley, Northern Ethiopia. *African Journal of Plant Science*, Vol. 10, Issue 8, pp. 157-161

Siyoum Z, M Yesuf 2013 Searching and evaluating of cost effective management options of garlic white rot (*Sclerotium cepivorum* Berk) in Tigray, northern Ethiopia. *Journal of Plant Pathology and Microbiology*, Vol.4, No.7: 189.

Tadesse A 2014 Production and reproduction performance of rural poultry in lowland and midland agro-ecological zones of central Tigray, Northern Ethiopia. *African Journal of Agricultural Research*, Vol. 9, No. 49, pp. 3531-3539.

Tadesse A, E Hadgu, B Mekbib, R Abebe, S Mekuria 2011 Mechanically transmitted bovine trypanosomosis in Tselemt y woreda, Western Tigray, Northern Ethiopia. *Agricultural Journal*, Vol. 6, Issue 1, pp. 10–13.

Tadesse A, T Gebremariam 2010 Application of linear body measurements for live body weight estimation of highland sheep in Tigray region, North-Ethiopia. *Journal of the Drylands*, Vol. 3, No. 2, pp. 203-207.

Tadesse A, Y Tesfay 2013 Flock dynamics and composition of rural chickens in lowland and midland agro-ecological zones of central Tigray North Ethiopia. *Livestock Research for Rural Development*, Vol. 25, Article No. 126.

Tedros T 2014 Contribution of Small Holders' Irrigation to Households Income and Food Security: A Case Study of Gum-selasa and Shilena Irrigation Schemes, Hintalowejerat, South-Eastern Zone of Tigray. Thesis. Mekelle: Mekelle University.

Teferi TA, GB Weldemichael, GK Wakeyo, TT Mindaye 2018 Fungicidal management of the newly emerging faba bean disease “gall”(Olpidium viciae Kusano) in Tigray, Ethiopia. *Crop protection*, Vol. 107, Issue: May, pp. 19-25.

Teferi TA, ML Wubshet 2015 Prevalence and intensity of economically important fungal diseases of sorghum in South Tigray, Ethiopia. *Journal of Plant Sciences*, Vol. 3, No. 2, pp. 92-98.

Teferi TA, ZS Gebreslassie 2015 Occurrence and intensity of wheat Septoria tritici blotch and host response in Tigray, Ethiopia. *Crop Protection*, Vol. Issue: February, pp. 67-71.

Tegebu FN, E Mathijs, J Deckers, M Haile, J Nyssen, E Tollens 2012 Rural livestock asset portfolio in northern Ethiopia: a microeconomic analysis of choice and accumulation. *Tropical Animal Health and Production*, Vol. 44, No. 1, pp. 133–144.

Teka AM, SK Lee 2019 The impact of agricultural package programs on farm productivity in Tigray-Ethiopia: Panel data estimation. *Cogent Economics and Finance*, Vol. 7, Issue 1, Article: 1631987.

Teka K, A Van Rompaey, J Poesen 2010 Land suitability assessment for different irrigation methods in Korir Watershed, Northern Ethiopia. *Journal of the Drylands*, Vol. 3, No. 2, pp. 214-219.

Teka K, A Van Rompaey, J Poesen, Y Welday, J Deckers 2012 Impact of climate change on small-holder farming: A case of Eastern Tigray, Northern Ethiopia. *African Crop Science Journal*, Vol. 20, Issue Supplement, s2, pp. 337-347.

Teka K, M Haftu 2012 Land suitability characterization for crop and fruit production in Midlands of Tigray, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 4, No. 1, pp. 64-76.

Teklay A 2011 Seasonal availability of common bee flora in relation to land use and colony performance in Gergera Watershed Atsbi Wemberta District, Eastern Zone of Tigray, Ethiopia. MSc. Thesis, Hawassa University.

Teklay A 2015 Traditional medicinal plants for ethnoveterinary medicine used in Kilte Awulaelo district, Tigray region, Northern Ethiopia. *Advancement in Medicinal Plant Research*, Vol. 3, Issue 4, pp. 137-150.

Tekle G 2015 Growth, yield and quality of onion (*Allium cepa* L.) as influenced by intra-row spacing and nitrogen fertilizer levels in central zone of Tigray, Northern Ethiopia. Thesis, Haramaya University.

Tekle G, F Belay, S Chernet 2020 Effect of different planting time on seed yield and quality of onion (*Allium cepa* L.) in Tigray region, northern Ethiopia. *International Journal of Agriculture and Biosciences*, Vol. 9, No.5, pp. 216-220.

Tekle T, A Tesfay, T Kifleyohannes 2013 Smallholder pig production and its constraints in Mekelle and southern zone of Tigray region, north Ethiopia. *Livestock Research for Rural Development*, Vol. 25, Article No. 184.

Teklit GA 2015 Chemical composition and nutritional value of the most widely used mushrooms cultivated in Mekelle Tigray Ethiopia. *Journal of Nutrition and Food Sciences*, Vol. 5, Issue 5: 1000408.

Teklu T, T Tesfay, T Nirayo, B Hailu, S Wayu, T Atspha 2015 Epidemiological status of contagious bovine pleuro pneumonia in Southern Zone of Tigray Regions, Northern Ethiopia. *Animal and Veterinary Sciences*, Vol.3, No. 1, pp. 32-36.

Teklu T, T Tolosa, G Tuli, B Beyene, B Hailu 2013 Sero-prevalence and risk factors study of brucellosis in small ruminants in Southern Zone of Tigray Region, Northern Ethiopia. *Tropical Animal Health and Production*, Vol. 45, No. 8, pp. 1809–1815.

Tekulu K, T Tadele, T Berhe, W Gebrehiwot, G Kahsu, S Mebrahtom, G Aregawi 2019 Evaluation of NPSZnB fertilizer levels on yield and yield component of maize (*Zea mays* L.) at Laelay Adiyabo and Medebay Zana districts, Western Tigray, Ethiopia. *Journal of Cereals and Oilseeds*, Vol. 10, No. 2, pp. 54-63.

Tesfahunegn GB 2012 Effect of tillage and fertilizer practices on sorghum production in Abergelle area, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 4, No. 2, pp. 52-69.

Tesfahunegn GB 2014 Soil quality assessment strategies for evaluating soil degradation in Northern Ethiopia. *Applied and Environmental Soil Science*, Vol. 2014, Article ID 646502.

Tesfahunegn GB 2015 Short-term effects of tillage practices on soil properties under Tef [*Eragrostis tef* (Zucc. Trotter)] crop in northern Ethiopia. *Agricultural Water Management*, Vol. 148, pp. 241-249.

Tesfahunegn GB, L Tamene, PLG Vlek 2011 Catchment-scale spatial variability of soil properties and implications on site-specific soil management in northern Ethiopia. *Soil and Tillage Research*, Vol. 117, pp. 124-139.

Tesfahunegn GB, L Tamene, PLG Vlek 2011 Evaluation of soil quality identified by local farmers in Mai-Negus catchment, northern Ethiopia. *Geoderma*, Vol.163, Issues 3–4, pp. 209-218.

Tesfahunegn GB, L Tamene, PLG Vlek 2016 Assessing soil properties and landforms in the Mai-Negus Catchment, Northern Ethiopia. *Pedosphere*, Vol. 26, Issue 5, pp. 745-759.

Tesfahunegn GB, L Tamene, PLG Vlek, K Mekonnen 2016 Assessing Farmers' Knowledge of Weed Species, Crop Type and Soil Management Practices in Relation to Soil Quality Status in Mai-Negus Catchment, Northern Ethiopia. *Land degradation and Development*, Vol. 27, Issue2, pp. 120-133.

Tesfahunegn GB, TA Gebru 2020 Variation in soil properties under different cropping and other land-use systems in Dura catchment, Northern Ethiopia. *PloS One*, Vol. 15, No. 2: 0222476.

Tesfahunegn GB, TA Gebru 2021 Climate change effects on agricultural production: insights for adaptation strategy from the context of smallholder farmers in Dura catchment, northern Ethiopia. *GeoJournal*, Vol. 86, pp. 417–430.

Tesfay G, R Ruben, J Pender, A Kuyvenhoven 2005 Resource use efficiency on own and sharecropped plots in Northern Ethiopia: determinants and implications for sustainability. Chapter 7, pp.181-202, in *Sustainable Poverty Reduction in Less-Favoured Areas: Problems, Options, and Strategies*. CAB International.

Tesfay MG 2020 Does fertilizer adoption enhance smallholders' commercialization? An endogenous switching regression model from northern Ethiopia. *Agriculture and Food Security*, Vol. 9, Article No. 3.

Tesfay T, A Welearegay, B Dufera, B Deribachew, D Duany 2012 Microbial Quality of Fresh Lettuce Irrigated with Untreated Waste Water around Aksum University, Central Zone of Tigray Region. *European Journal of Business and Management*, Vol.7, No.21, pp.119-122.

Tesfay T, G Gebresamuel 2016 Agronomic and economic evaluations of compound fertilizer applications under different planting methods and seed rates of tef [*Eragrostis tef* (Zucc.) Trotter] in Northern Ethiopia. *Journal of the Drylands*, Vol. 6, No. 1, pp. 409-422.

Tesfay Y, A Gebrelibanos, D Woldemariam, H Tilahun 2016 Feed resources availability, utilization and marketing in central and eastern Tigray, northern Ethiopia. LIVES Working Paper II, International Livestock research Institute.

Tesfaye G, M Haile, B Gebremedhin, J Pender, E Yazew 2000 Small-scale irrigation in Tigray: Management and institutional considerations. Jabbar MA, J Pender, SK Ehui (eds.) *Policies for sustainable land management in the highlands of Ethiopia*. Summary of papers and proceedings of a seminar held at the International Livestock Research Institute, Addis Ababa, Ethiopia, 22–23 May 2000. *Socio-economics and Policy Research Working Paper 30*, pp.27-30.

Tesfaye S, Y Hagos, A Teklu, G Gugsu, B Gebrekidan 2015 Ovine lung worm infection and associated risk factors in and around Wukro, Eastern Tigray, Ethiopia. *European Journal of Biological Sciences*, Vol. 7, No. 3, pp. 120-124.

Teshome W 2003 Irrigation practices, state intervention and farmers' life-worlds in drought-prone Tigray, Ethiopia. Dissertation, Wageningen University.

Tewelde AG 2019 Evaluating the Economic Water Productivity underfull and deficit irrigation; the case of sesame crop (*Sesumum indicum* L.) in woreda Kafta-Humera, Tigray-Ethiopia. *Water Science*, Vol. 33, Issue 1, pp. 75-83.

Tomass Z, E Imam, T Kifleyohannes, Y Tekle, K Weldu 2013 Prevalence of gastrointestinal parasites and *Cryptosporidium* species in extensively managed pigs in Mekelle and urban areas of southern zone of Tigray region, Northern Ethiopia. *Veterinary World*, Vol. 6, No. 7, pp. 433-439.

Tsegay A, D Raes, S Geerts, E Vanuytrecht, B Abrha, J Deckers, H Bauer, K Gebrehiwot 2012 Unravelling crop water productivity of tef (*Eragrostis Tef* (Zucc.) Trotter) through AquaCrop in northern Ethiopia. *Experimental Agriculture*, Vol. 48, Issue 2, pp. 222–237.

Tsegay A, E Vanuytrecht, B Abrha, J Deckers, K Gebrehiwot 2015 Sowing and irrigation strategies for improving rainfed tef (*Eragrostis tef* (Zucc.) Trotter) production in the water scarce Tigray region, Ethiopia. *Agricultural Water Management*. Vol. 150, pp. 81-91.

Tsehaye Y, T Berg, B Tsegaye, T Tanto 2006 Farmers' management of finger millet (*Eleusine coracana* L.) diversity in Tigray, Ethiopia and implications for on-farm conservation. *Biodiversity and Conservation*, Vol. 15, pp. 4289–4308.

Tsehaye Y, Z Abera, A Kebede, B Ghebremichael 2009 A dynamic sorghum (*Sorghum bicolor* (L.) Moench) diversity management in situ and livelihood resilience in South and Central Tigray Region, Ethiopia. *Ethiopian Journal of Science*, Vol. 1, No. 2, pp. 67-94.

Van de Wauw J, G Baert, J Moeyersons, J Nyssen, K De Geyndt, N Taha, A Zenebe, J Poesen, J Deckers 2008 Soil–landscape

relationships in the basalt-dominated highlands of Tigray, Ethiopia. *Catena*, Vol. 75, Issue 1, pp. 117-127.

Welay GM, DG Tedla, GG Teklu, SK Weldearegay, MB Shibeshi, HH Kidane, B B Gebreziabher, TH Abraha 2018 A preliminary survey of major diseases of ruminants and management practices in Western Tigray province, northern Ethiopia. *BMC Veterinary Research*, Vol. 14, Article No. 293.

Weldeabzgi GG 2021 Performance Evaluation of Organizational Arrangement in Irrigation Water Management at Serenta Irrigation Scheme, Northern Ethiopia. *Irrigation and Drainage Systems Engineering*, Vol. 10, No. 6.

Weldearegay SK, M Mulugeta 2021 Urban Expansion and Its Effect on Agricultural Technology Adoption of Smallholder Peri-Urban Farmers in Tigray Region. *Caraka Tani Journal of Sustainable Agriculture*, Vol. 36, No. 2, pp. 365-378.

Weldegebriall B 2015 Assessment of major reproductive problems of dairy cattle in selected sites of central Zone of Tigray Region, northern Ethiopia. MSc Thesis, Mekelle, University.

Weldegebriel H 2015 The determinants of technical efficiency of farmers in Teff, Maize and Sorghum production: empirical evidence from Central Zone of Tigray Region. *Ethiopian Journal of Economics*, Vol. 23, Issue 2, pp. 1-36.

Weldegebriel R, T Araya, YG Egziabher 2018 Effect of NPK and blended fertilizer application on nutrient uptake and use efficiency of selected sorghum (*Sorghum bicolor* (L.) Moench) varieties under rain-fed condition in Sheraro District, northern Ethiopia. *Momona Ethiopian Journal of Science (MEJS)*, Vol. 10, No. 1, pp. 140-156.

Weldemariam B, D Gebremichael 2015 Identification and determination of chemical composition of some potential browses as livestock fodder in the Central and North Western Zones of Tigray,

Ethiopia. *Livestock Research for Rural Development*, Vol. 27, Article No. 75.

Weldeslassie TA 2012 Conservation Agriculture-based resource saving technology for land resilience in northern Ethiopia. PhD Thesis, Ghent University. Faculty of Bioscience Engineering.

Weldeyohannes AA 2014 Silkworm Production and Constraints in Eastern Tigray, Northern Ethiopia. *International Journal of Innovation and Scientific Research*, Vol. 10, No. 2, pp. 517-521.

Weldu Y, M Haile, K Habtegebriel 2012 Effect of zinc and phosphorus fertilizers application on yield and yield components of faba bean (*Vicia faba* L.) grown in calcareous cambisol of semi-arid northern Ethiopia. *Journal of Soil Science and Environmental Management*, Vol. 3, No. 12, pp. 320-326.

Welu G 2015 Challenges and opportunities of seed multiplication in Eastern Tigray Ethiopia. *International Journal of Horticulture and Plant Breeding Sciences*, Vol. 1, No. 1, pp. 1 -19.

Werde H, B Afera 2014 Prevalence of ixodid ticks on bovine of Werieleke Wereda, Tigray. *Acta Parasitologica Globalis*, Vol. 5, Issue 2, pp. 146-150.

Workalemahu A 2009 The Effect of indigenous root-nodulating bacteria on nodulation and growth of Faba bean (*Vicia Faba*) in the low-input agricultural systems of Tigray Highlands, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 1, No. 2, pp. 30-43.

Wubeneh N 2003 Farm-level adoption of new sorghum technologies in Tigray Region, Ethiopia. MSc. Thesis, Purdue University, USA.

Wubeneh NG, JH Sanders 2006 Farm-level adoption of sorghum technologies in Tigray, Ethiopia. *Agricultural Systems*, Vol. 91, Issues 1–2, pp. 122-134.

Yacob HT, H Ataklty, B Kumsa 2008 Major ectoparasites of cattle in and around Mekelle, northern Ethiopia. *Entomological Research*, Vol. 38, Issue2, pp. 126-130.

Yayneshet T, LO Eik, SR Moe 2008 Feeding *Acacia etbaica* and *Dichrostachys cinerea* fruits to smallholder goats in northern Ethiopia improves their performance during the dry season. *Livestock Science*, Vol. 119, Issues 1–3, pp. 31-34.

Yigzaw N, J Mburu, C Ackello-Ogutu, C Whitney, E Luedeling 2019 Stochastic impact evaluation of an irrigation development intervention in Northern Ethiopia. *Science of the Total Environment*, Vol. 685, pp. 1209-1220.

Yihdego AG, AA Gebru, MT Gelaye 2015 The impact of small-scale irrigation on income of rural farm households: Evidence from Ahferom Woreda in Tigray, Ethiopia. *International Journal of Business and Economics Research*, Vol. 4, No. 4, pp. 217-228.

Yirdaw M, Y Tesfay 2014 Feed utilization, digestibility and carcass parameters of Tigray highland sheep fed wheat straw supplemented with mixtures of wheat bran and cotton seed cake, in Tigray, Ethiopia. *ABC Research Alert*, Vol. 2, No. 1.

Yirga G, K Ftwi 2010 Beekeeping for rural development: its potentiality and constraints in eastern Tigray, northern Ethiopia. *Agricultural Journal*, Vol. 5 No. 3, pp. 201-204.

Yirga G, B Koru, D Kidane, A Mebrahatu 2012 Assessment of beekeeping practices in Asgede Tsimbla district, Northern Ethiopia: Absconding, bee forage and bee pests. *African Journal of Agricultural Research*, Vol. 7(1), pp. 1-5.

Yirga G, M Teferi 2010 Participatory technology and constraints assessment to improve the livelihood of beekeepers in Tigray Region, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 1, pp. 76-92.

Yirga G, M Teferi, G Brhane, S Amare 2012 Plants used in ethnoveterinary practices in Medebay-Zana district, northern Ethiopia. *Journal of Medicinal Plants Research*, Vol. 6, No. 3, pp. 433-438.

Yirga G, M Teferi, G Gidey, S Zerabruk 2012 An ethnoveterinary survey of medicinal plants used to treat livestock diseases in Seharti-Samre district, Northern Ethiopia. *African Journal of Plant Science*, Vol. 6, No. 3, pp. 113-119.

Yirga H, D Tsegay 2013 Characterization of dekokko (*Pisum sativum* var. *abyssinicum*) accessions by qualitative traits in the highlands of Southern Tigray, Ethiopia. *African Journal of Plant Science*, , Vol.7, No. 10, pp. 482-487.

Yohannes DF, CJ Ritsema, Y Eyasu, H Solomon, JC van Dam, J Froebrich, HP Ritzema, A. Meressaa 2019 A participatory and practical irrigation scheduling in semiarid areas: the case of Gumselassa irrigation scheme in Northern Ethiopia. *Agricultural Water Management*, Vol. 218, pp. 102-114.

Yonas M, F Ashenafi, D Kidane, K Welegerima 2020 Stored-grain losses and management practices among smallholder cereal farmers in Northern Ethiopia. *International Journal of Pest Management*, Vol. 68, Issue 1, pp. 59-68.

Yonas M, K Welegerima, S Deckers, D Raes, R Makundi, H Leirs 2010 Farmers' perspectives of rodent damage and management from the highlands of Tigray, Northern Ethiopia. *Crop Protection*, Vol. 29, Issue 6, pp. 532-539.

Zemichael B, N Dechassa 2018 Effect of mineral fertilizer, farmyard manure, and compost on yield of bread wheat and selected soil chemical properties in Enderta District, Tigray Regional State, Northern Ethiopia. *East African Journal of Sciences*, Vol. 12, No. 1, pp. 29-40.

Zemichael B, N Dechassa, F Abay 2017 Yield and nutrient use efficiency of bread wheat (*Triticum Aestivum* L.) as influenced by time and rate of nitrogen application in Enderta, Tigray, Northern Ethiopia. *Open Agriculture*, Vol. 2, pp. 611–624.

Zerabruk G, G Romha, T Rufael 2014 Sero-epidemiological investigation of foot and mouth disease in cattle managed under extensive husbandry system in Tigray, northern Ethiopia. *Global Veterinaria*, Vol. 13, No. 1, pp. 112-116.

Zeweld W, GV Huylenbroeck, A Hidgot, MG Chandrakanth, S Speelman 2015 Adoption of small-scale irrigation and its livelihood impacts in Northern Ethiopia. *Irrigation and Drainage*, Vol. 64, Issue 5, pp. 655-668.

Economy

Abadi N, A Techane, T Girmay, D Maxwell, B Vaitla 2018 The impact of remittances on house hold food security: A micro perspective from Tigray, Ethiopia. *World Institute for Development Economics Research (UNU-WIDER) Working Papers*, United Nations University.

Abay HH, FG Tessema, AH Gebreegziabher 2014 External factors affecting the growth of micro and small enterprises (MSEs) in Ethiopia: a case study in Shire Indasselassie Town, Tigray. *European Journal of Business and Management*, Vol.6, No.34, pp. 134-145.

Abay K, K Hirvonen 2017 Does market access mitigate the impact of seasonality on child growth? Panel data evidence from northern

Ethiopia. *The Journal of Development Studies*, *The Journal of Development Studies*, Vol. 53, Issue 9, pp. 1414-1429.

Abebe A 2009 Market chain analysis of honey production in Atsbi Wemberta District, eastern zone of Tigray national regional state. MSc. Thesis, Haramaya University.

Abraha NH 2007 An economic analysis of farmers' risk attitudes and farm households' responses to rainfall risk in Tigray Northern Ethiopia. Ph.D. Thesis, Wageningen University, The Netherlands.

Abrehe S, A Girma, AG Nigusse 2021 Potential ecotourism site suitability evaluation for sustainable natural resource management in Kafta Sheraro National Park (KSNP), north-western Tigray, Ethiopia. *Journal of Ecotourism*, Vol. 20, Issue 4, pp. 341-370.

Admassu NA 2016 The Impact of Capital Structure Choice on Firms' Financial Performance: Evidence from Manufacturing PLCs in Tigray Region, Ethiopia. *Research Journal of Finance and Accounting*, Vol. 7, No. 15.

Afera N 2015 Determinants of Poverty in Rural Tigray: Ethiopia Evidence from Rural Households of Gulomekeda Wereda. *Journal of Poverty, Investment and Development*, Vol.10, pp. 95-102.

Ager A, A Strang, B Abebe 2005 Conceptualizing community development in war-affected populations: illustrations from Tigray. *Community Development Journal*, Vol. 40, Issue 2, pp. 158–168.

Alemu AE, H Azadi 2018 Fish value chain and its impact on rural households' income: Lessons learned from Northern Ethiopia. *Sustainability*, Vol. 10, No. 10: 3759.

Alemu AE, J Adesina 2015 Effects of cooperatives and contracts on rural income and production in the dairy supply chains: Evidence from Northern Ethiopia. *African Journal of Agricultural and Resource Economics*, Vol. 10, No. 4, pp. 312-327.

Araya GB 2020 Impact of Ethiopia's productive safety net program on manure use by rural households: Evidence from Tigray, Northern Ethiopia. *Agricultural Economics*, Vol. 51, Issue 5, pp. 725-742.

Arethun T, BP Bhatta 2012 Contribution of rural roads to access to and participation in markets: Theory and results from northern Ethiopia. *Journal of Transportation Technologies*, 2, 165-17.

Asegede M, A Bisrat, Y Hagos, G Gugsu 2015 Livestock market value chain assessment in selected sites of Tigray, North Ethiopia: challenges and opportunities for enhancing animal product export. *Global Veterinaria*, Vol. 14, No. 1, pp. 48-55.

Aseyehgn K, C Yirga, S Rajan 2012 Effect of small-scale irrigation on the income of rural farm households: The case of Laelay Maichew District, Central Tigray, Ethiopia. *The Journal of Agricultural Sciences*, Vol. 7, No. 1, pp. 43-57.

Asfaw GW, DG Gebreslassie 2016 Heritage interpretation and presentation practices in Tigray, Northern Ethiopia: cases from the Wukro tourism cluster. *Journal of Tourism, Culture and Territorial Development*, Vol. 7, No. 14, pp. 128-155.

Asfaw YA 2016 Growth determinants of manufacturing micro-and small enterprises in Ethiopia: An empirical study of Tigray Province. *Enterprise Development and Microfinance*, Vol. 27, Issue 4, pp. 273-297.

Ashenafi A 2010 Analysis of grain marketing in southern zone of Tigray Region, Ethiopia. MA Thesis, Mekelle University.

Asmelash AG, S Kumar 2019 The structural relationship between tourist satisfaction and sustainable heritage tourism in Tigray, Ethiopia. *Heliyon*, Vol. 5, Issue 3: 01335.

Asmelash AG, S Kumar 2020 Tourist satisfaction-loyalty Nexus in Tigray, Ethiopia: Implication for sustainable tourism development. *Cogent Business and Management*, Vol.7, Issue 1, Article: 1836750.

Azadi H, F De Rudder, K Vlassenroot, F Nega, J Nyssen 2017 Targeting international food aid programmes: The case of productive safety net programme in Tigray, Ethiopia. *Sustainability*, Vol. 9, No. 10: 1716.

Babulo B, B Muys, F Nega, E Tollens, J Nyssen, J Deckers, E Mathijs 2009 The economic contribution of forest resource use to rural livelihoods in Tigray, Northern Ethiopia. *Forest Policy and Economics*, Vol. 11, Issue 2, pp. 109-117.

Berhane G, C Gardebhoek 2011 Does microfinance reduce rural poverty? Evidence based on household panel data from northern Ethiopia. *American Journal of Agricultural Economics*, Vol. 93, Issue 1, pp. 43-55.

Berhane G, C Gardebhoek, HAJ Moll 2009 Risk-matching behavior in microcredit group formation: evidence from northern Ethiopia. *Agricultural Economics*, Vol. 40, Issue 4, pp. 409-419.

Birhanu H, R Fikru, M Said, W Kidane, T Gebrehiwot, A Hagos, T Alemu, T Dawit, D Berkvens, BM Goddeeris, P Büscher 2015 Epidemiology of *Trypanosoma evansi* and *Trypanosoma vivax* in domestic animals from selected districts of Tigray and Afar regions, Northern Ethiopia. *Parasites and Vectors*, Vol. 8, Article No. 212.

Cannon B 2009 Investment Opportunities in Mekelle, Tigray State, Ethiopia. MCI and VCC Working Paper Series on Investment in the Millennium Cities, 10/2009.

Debela BL, GE Shively, ST Holden 2021 Implications of food-for-work programs for consumption and production diversity: Evidence from the Tigray Region of Ethiopia. *Agricultural and Food Economics*, Vol. 9, Article No. 28.

Desta M, G Haddis, S Ataklt 2006 Female-Headed Households and Livelihood Intervention in Four Selected Weredas in Tigray, Ethiopia. Drylands Coordination Group, DCG Report No. 44.

Dirar SA, T Berhanu, D Getachew, H Azadi 2017 Financial product development and members' voluntary saving behavior in saving and credit cooperatives in Tigray: A case study in Endamohoni Woreda. Cogent Economics and Finance, Vol. 5, Issue 1, Article: 1279864.

Enquebaher K 2009 The financial and production impact of bovine dermatophilosis in southern part of Tigrai, northern Ethiopia. Ethiopian Veterinary Journal, Vol. 13, No.1, pp. 69-79.

Eze E, A Girma, AA Zenebe, G Zenebe 2020 Feasible crop insurance indexes for drought risk management in Northern Ethiopia. International Journal of Disaster Risk Reduction, Vol. 47: 101544.

Gebregziabher D 2010 Market chain analysis of poultry: The case of Alamata and Atsbi-Wonberta Woredas of Tigray region. M.Sc. Thesis, Haramaya University.

Gebregziabher G, RE Namara, S Holden 2009 Poverty reduction with irrigation investment: An empirical case study from Tigray, Ethiopia. Agricultural Water Management, Vol. 96, Issue 12, pp. 1837-1843.

Gebregziabher G, ST Holden 2011 Distress rentals and the land rental market as a safety net: contract choice evidence from Tigray, Ethiopia. Agricultural Economics, Vol. 42, Issues1, pp. 45-60.

Gebrehiwot NT, H Azadi, F Taheri, SV Passel 2018 How participation in vegetables market affects livelihoods: empirical evidence from Northern Ethiopia. Journal of International Food and Agribusiness Marketing, Vol. 30, Issue 2, pp. 107-131.

Gebrelibanos TB 2009 The Ethiopian Salt Trading System in the 20th Century: A View from Mäqäla, Northern Ethiopia. In: Vol. I, pp.185-201, Proceedings of the 16th International Conference of Ethiopian Studies, Svein Ege, Harald Aspen, Birhanu Teferra and Shiferaw Bekele (eds.), Trondheim

Gebremedhin B, SM Swinton 2001 Reconciling food-for-work project feasibility with food aid targeting in Tigray, Ethiopia. Food policy, Vol. 26, Issue 1, pp. 85-95.

Gebremichael A 2009 Role of women in value-chain systems of vegetables and spices in Atsbi Wemberta Woreda, Eastern Zone of Tigray. MSc. Mekelle University and University College of Cork, Ireland.

Gebremichael GB, AI Singh 2019 Customers' expectations and perceptions of service quality dimensions: A study of the hotel industry in selected cities of Tigray Region, Ethiopia. African Journal of Hospitality, Tourism and Leisure, Vol. 8, No. 5.

Gebresilassie YH 2013 Graduation Determinants of Productive Safety Net Program Beneficiary Households: A Logistic Analysis, Tigray-Ethiopia. European Journal of Business and Economics, Vol. 8, No. 4, pp.20-25.

Gebresilassie YH 2014 The Economic Impact of Productive Safety Net Program on Poverty: Evidence from Household Survey Data, Tigray National Regional State, Ethiopia. International Journal of Economic Behavior, Vol. 4, No. 1, pp. 127-137.

Gebreslassie MG, H Berhea, H Sibhato, SA Gebremeskela, A Baraki, M Gebreeyesus, K Hailuf, B Assefab, M Ambaye, M Yirga, T Tadesse, M Ataklty, M Gidey, H Hagos, H Abraha 2020 The State of Manufacturing Infrastructure and Business Environment in Tigray: Challenges and Recommended Policies. Branna Journal of Engineering and Technology, Vol. 2, No. 2, pp. 113–134.

Gebru GH 2009 Financing preferences of micro and small enterprise owners in Tigray: does POH hold? *Journal of Small Business and Enterprise Development*, Vol. 16, No. 2, pp. 322-334.

Gebu KM, M Leung, C Rammelt, A Zoomers, G van Westen 2019 Vegetable business and smallholders' food security: empirical findings from Northern Ethiopia. *Sustainability*, Vol. 11, No. 3: 743.

Gebu M, ST Holden, M Tilahun 2019 Tenants' land access in the rental market: evidence from northern Ethiopia. *Agricultural Economics*, Vol. 50, Issue 3, pp. 291-302.

G-Egziabher K, E Mathijs, JA Deckers, K Gebrehiwot, H Bauer, M Maertens 2013 The economic impact of a new rural extension approach in northern Ethiopia. *Bio-economics Working Paper Series, Working Paper 2013/2, Division of Bio-economics Department of Earth and Environmental Sciences University of Leuven, Belgium.*

Gessesse A 2009 Analysis of fruit and vegetable market chains in Alamata, Southern Zone of Tigray: The case of onion, tomato and papaya. Thesis, Haramaya University.

Gidey Y, K Sharma 2017 Tourists satisfaction in tourist destination (A study of Tigray-Ethiopia). *International Journal of Research in Finance and Marketing*, Vol. 7 Issue 4, pp. 138~151.

Hadush M 2018 Economic Implication of Grazing and Water Resource Scarcity on Households' Welfare and Food Security in Tigrai, Ethiopia. *Agricultural and Resource Economics Review*, Vol. 48, Issue 1, pp. 170-198.

Hadush M 2019 Economic Implication of Grazing and Water Resource Scarcity on Households' Welfare and Food Security in Tigrai, Ethiopia. *Agricultural and Resource Economics Review*, Vol. 48 Issue 1, pp. 170–198.

Hailai A 2010 Can Microfinance help to Reduce Poverty? With Reference to Tigray, Ethiopia. MSc Thesis, Mekelle University.

Haile A 2003 The Impact of Microfinance in Ethiopia: The Case of DECSI in Ganta-Afeshum Woreda of Eastern Tigray. Masters Thesis, Addis Ababa University.

Hirvonen K, A Wolle 2019 Consumption, production, market access and affordability of nutritious foods in the Tigray Region of Ethiopia. Alive and Thrive, International Food Policy Research Institute.

Howard P, E Smith 2006 Leaving two thirds out of development: Female headed households and common property resources in the highlands of Tigray, Ethiopia. Full Report, Erin Smith, Wageningen University, The Netherlands.

Kidane GG, MH Berhe 2017 Socio-economic impacts of tourism in Axum town, Tigray regional state, Ethiopia. Journal of Tourism and Hospitality Management, Vol. 5, No. 1, pp. 1-24.

Kidanu E 2010 Analysis of butter supply chain: the case of Atsbi-Wenberta and Alamata Woredas, Tigray, Ethiopia. MSC. Thesis, Haramaya University.

Kruseman G, R Ruben, G Tesfay 2006 Village stratification for policy analysis: multiple development domains in the Ethiopian highlands of Tigray. In: J Pender, F Place, S Ehui (eds.) Strategies for Sustainable Land Management in the East African Highlands, Chapter 4 (pp. 81-106).

Kumar A, E Kebede, E Kassaye 2010 Evaluation of quality of beef produced and sold in parts of Tigray Region of Ethiopia. Tropical Animal Health and Production, Vol. 42, No. 3, pp. 445–449.

Lakew TB, Meniga M, Gebru A 2014 A Study on Financial Performance of Multipurpose Cooperative Unions of Tigray Region,

Ethiopia. *International Journal of Current Research*, Vol. 6, No. 11, pp. 9810-9815.

Maxwell D, J Coates, B Vaitla 2013 How do different indicators of household food security compare? Empirical evidence from Tigray. Feinstein International Center, Tufts University, USA.

Mebrahtu A, G Temesgen 2014 Analysis of Smokeless Industry on Poverty and Improving Community Participation: Evidences from Three Clusters of Tigray, Ethiopia. *International Journal of Science and Research*, Vol. 3 Issue 5, pp. 819-828.

Mekuria W, E Veldkamp, M Tilahun, R Olschewski 2011 Economic valuation of land restoration: The case of exclosures established on communal grazing lands in Tigray, Ethiopia. *Land Degradation and Development*, Vol. 22, Issue 3, pp. 334-344.

Meresa M 2019 The Effect of Strategic Management Practices on the institutional Performance; the case of Dedebit credit and saving institution in Eastern Tigray. *SocioEconomic Challenges*, Vol. 3, Issue 3, pp. 80-97.

Meresa M, H Kidanemariam 2019 Factors Determining the Success of Small and Medium Enterprises in Tigray region: the Case of selected town Hintalo Wejerat Wereda. *SocioEconomic Challenges*, Vol. 3, No. 1, pp. 72-89.

Mirach H 2010 Credit Management: A Case Study of Wegagen Bank Share Company in Tigray Region. Thesis, Mekelle University.

Mulatu M, RD Prasad 2018 A study on factors affecting success of women entrepreneurs in Tigray region, Ethiopia. A case study of Adigrat town entrepreneurs. *American Journal of Economics and Business Management*, Vol.1, No.1, pp.10-19.

Nega F 2008 Poverty, asset accumulation, household livelihood and interaction with local institutions in northern Ethiopia. Leuven

Catholic University, Faculty of Bio-Engineering Sciences.
Dissertations of Agriculture, Doctoral thesis no. 816. Leuven.

Nega F, S Marysse, E Tollens, E Mathijs 2009 Diversification, income inequality and social capital in Northern Ethiopia. Mekelle University/University of Antwerp/ KU Leuven.

Nega F, E Mathijs, J Deckers, M Haile, J Nyssen, E Tollens 2010 Rural poverty dynamics and impact of intervention programs upon chronic and transitory poverty in Northern Ethiopia. *African Development Review*, Vol. 22, Issue 1, pp. 92-114.

Rammelt CF, M Leung, K M Gebru 2018 The exclusive nature of inclusive productive employment in the rural areas of northern Ethiopia. *Work, Employment and Society*, Vol. 32, No. 6, pp. 1044–1060.

Sebhatu KT 2012 The Impact of Savings and Credit Cooperatives in Ofla Wereda Tigray Region of Ethiopia. *European Journal of Business and Management*, Vol 4, No. 3, pp. 78-90.

Sebhatu KT 2012 Determinants of saving Behaviour of cooperative members survey evidence from Tigray region, Ethiopia. *Journal of Research in Economics and International Finance*, Vol. 1, No. 5, pp. 150-158.

Sebhatu KT 2012 Management of savings and credit cooperatives from the perspective of outreach and sustainability: Evidence from Southern Tigray of Ethiopia. *Research Journal of Finance and Accounting*, Vol 2, No 7-8, pp.10-23.

Sebhatu KT, TW Gezahegn, T Berhanu, M Maertense, SV Pasself, M D’Haese 2021 Exploring variability across cooperatives: economic performance of agricultural cooperatives in northern Ethiopia. *International Food and Agribusiness Management Review*, Vol. 24, Issue 3, pp. 397-419.

Segers K, D Joost, S Hagberg, P Develtere, M Haile, JA Deckers 2009 “Be Like Bees”- The politics of mobilizing farmers for development in Tigray, Ethiopia. AEGIS European Conference on African studies, 2009/06/04-2009/06/07, Leipzig, Germany.

Segers K, J Dessein, P Develtere, S Hagberg, G Haylemariam, M Haile, J Deckers 2010 The role of farmers and informal institutions in microcredit programs in Tigray, northern Ethiopia. Perspectives on Global Development and Technology, Vol. 9, pp. 3-4.

Segers K, J Dessein, J Nyssen, M Haile, J Deckers 2008 Developers and farmers intertwining interventions: the case of rainwater harvesting and food-for-work in Degua Temben, Tigray, Ethiopia. International Journal of Agricultural Sustainability, Vol. 6, No. 3, pp. 173-82.

Segers K, J Dessein, S Hagberg, Y Teklebirhan, M Haile, J Deckers 2010 Unravelling the dynamics of access to farmland in Tigray, Ethiopia: The 'emerging land market' revisited. Land Use Policy, Vol. 27, Issue 4, pp. 1018-1026.

Sibhato H, MG Gebreslassie, B Assefa, T Tadesse, M Yirga, H Berhe, SA Gebremeskel, A Baraki, M Ambaye, M Gidey, H Hagos, H Abraha, M Ataklt 2020 Regional Linkages and Competitiveness of Manufacturing Sector in Tigray: Challenges and Opportunities. Branna Journal of Engineering and Technology, Vol. 2, No.2, pp. 135-152.

Simachew A 2014 Human resource development practices and challenges in public sector: Evidence from selected regional public bureaus in Tigray Regional State, Ethiopia. MA Thesis, Mekelle University.

Teame T, H Zebib, T Meresa 2018 Observations on the biology of Nile tilapia, *Oreochromis niloticus* L., in Tekeze Reservoir, Northern

Ethiopia. *International Journal of Fisheries and Aquaculture*, Vol. 10, No. 7, pp. 86-94.

Tefera H, A Gebremichael, N Abera 2013 Growth determinants of micro and small enterprises: evidence from Northern Ethiopia. *Journal of Economics and Sustainable Development*, Vol. 4, No.9, pp.25-30.

Tegebu FN, EH Seid 2017 Quantifying the road influence zone on socio-economic developments in rural Tigray, Ethiopia. *African Development Review*, Vol. 29, Issue 4, pp. 601-614.

Tesfamariam SK 2012 Saving behaviour and determinants of saving mobilization by rural financial co-operators in Tigray Region, Ethiopia. *Journal of Agribusiness and Rural Development*, Vol. 4, Issue 26, pp. 129-146.

Tesfay G 2000 Rock art around the Zalanbesa area in the eastern zone of Tigray (Ethiopia). *Annales d'Éthiopie*, Vol. 16, pp. 89-92.

Tesfay GB 2009 Econometric analyses of microfinance credit group formation, contractual risks and welfare impacts in northern Ethiopia. Wageningen University Dissertations.

Tesfay S, M Teferi 2017 Assessment of fish post-harvest losses in Tekeze dam and Lake Hashenge fishery associations: northern Ethiopia. *Agriculture and Food Security*, Vol. 6, Article No. 4.

Tilahun M, R Olschewski, C Kleinn, K Gebrehiwot 2007 Economic analysis of closing degraded *Boswellia papyrifera* dry forest from human interventions—a study from Tigray, Northern Ethiopia. *Forest Policy and Economics*, Vol. 9, Issue 8, pp. 996-1005.

Tirfe AG 2014 Financial performance of rural saving and credit cooperatives in Tigray, Ethiopia. *Research Journal of Finance and Accounting*, Vol.5, No.17, pp. 63-74.

Tirfe AG, T Kassahun 2014 Entrepreneurial Orientation as Growth Predictor of Small Enterprises Evidence from Tigray Regional State of Ethiopia. *Developing Country Studies*, Vol. 4, No.11, pp.133-143.

Urkato S 2012 Microfinance Impact on Poor Rural Women Household-Level Employment: Bargaining Models Approach (The DESCII Case: Tigray State, Northern Ethiopia). *American Journal of Entrepreneurship*, Vol. 5, No. 2, pp. 8-35.

Woldehanna T 2000 Economic analysis and policy implications of farm and off-farm employment: A case study in the Tigray region of Northern Ethiopia. PhD Thesis, Wageningen University, The Netherlands.

Woldehanna T 2002 Rural farm/non-farm income linkages in northern Ethiopia. Chapter 5 in: *Promoting farm/non-farm linkages for rural development*. pp. 121-144.

Woldehanna T, A Oskam 2001 Income diversification and entry barriers: evidence from the Tigray region of northern Ethiopia. *Food Policy*, Vol. 26, Issue 4, pp. 351-365.

Wubet GG, G Mmopelwa 2020 Performance of Micro and Small Enterprisers in Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 12, No.1, pp. 103-122.

Yemane BG 2011 Community based ecotourism in Tigray: The case of Aksum. t Masters Thesis, Addis Ababa University.

Yesuf AM, BJ Singh 2019 Analysis of the determinants of poverty in Tigray and Afar national regional state, Ethiopia. *Asian Journal of Multidimensional Research*, Vol. 8, Issue 2, pp. 19-36.

Yihdego Y, HS Salem, B Ayongaba, Z Veljkovic 2019 Mining sector challenges in developing countries, Tigray, Ethiopia and inspirational success stories from Australia. *International Journal of Mining and Mineral Engineering*, Vol. 9, No. 4, pp. 321-367.

Young J 1997 Development and change in post-revolutionary Tigray. *The Journal of Modern African Studies*, Vol. 35, Issue 1, pp. 81-99.

Zerai B, Z Gebreegziabher 2011 Effect of Non-farm Income on Household Food Security in Eastern Tigray, Ethiopia: An Entitlement Approach. *Food Science and Quality Management*, Vol. 1, No.10, pp. 1-23.

Environment

Abadi N, K Gebrehiwot, A Techane, H Nerea 2017 Links between biogas technology adoption and health status of households in rural Tigray, Northern Ethiopia. *Energy Policy*, Vol. 101, Issue: February, pp. 284-292.

Abay A, E Birhane, T Tadesse, KM Hadgu 2015 Moringa stenopetala tree species improved selected soil properties and socio-economic benefits in Tigray, Northern Ethiopia. *Science, Technology and Arts Research Journal*, Vol. 4, No. 2, pp. 68-78.

Abay GY, H Bauer, K Gebrihiwot, J Deckers 2011 Peri-urban spotted hyena (*Crocuta crocuta*) in Northern Ethiopia: diet, economic impact, and abundance. *European Journal of Wildlife Research*, Vol. 57, pp. 759–765.

Aberra Y 2004 Problems of the solution: intervention into small-scale irrigation for drought proofing in the Mekele Plateau of northern Ethiopia. *The Geographical journal*, Vol. 170, Issue3, pp. 226-237.

Abesha GA 2014 Herbaceous vegetation restoration potential and soil physical condition in a mountain grazing land of Eastern Tigray, Ethiopia. *Journal of Agriculture and Environment for International Development*, Vol. 108, Issue 1, pp. 81-106.

Abraha AZ 2009 Assessment of spatial and temporal variability of river discharge, , sediment yield and sediment-fixed nutrient export in Geba River catchment, Northern Ethiopia. Doctoral Dissertation, Faculty of Sciences Katholieke Universiteit Leuven, Belgium.

Abraham S, G Miruts, A Shumye 2015 Magnitude of chronic energy deficiency and its associated factors among women of reproductive age in the Kunama population, Tigray, Ethiopia, in 2014. BMC Nutrition, Vol. 1, Article No. 12.

Abreha T 2000 The Tehesh efficient biomass stove, Tigray, Ethiopia. Boiling Point, No. 44, pp. 34-35.

Abrha M G, S Simhadri 2015 Local climate trends and farmers' perceptions in Southern Tigray, Northern Ethiopia. American Journal of Environmental Sciences, Vol. 11, No. 4, pp. 262-277.

Adhanom GA 2014 Farmers' perception and Adaptation Mechanisms of Climate Change in Offla Woreda of Tigray Regional State. Thesis, St. Mary University, Addis Ababa.

Aerts R, E November, M Behailu, J Deckers, M Hermy, B Muys 2003 Forest rehabilitation: one approach to water conservation in Central Tigray. Ethiopian Journal of Water Science and Technology, Vol. 6, pp. 34-37.

Aerts R, F Lerouge, E November, L Lens, M Hermy, B Muys 2008 Land rehabilitation and the conservation of birds in a degraded Afromontane landscape in northern Ethiopia. Biodiversity and Conservation, Vol. 17, pp.53–69.

Aerts R, K Van Overtveld, M Haile, M Hermy, J Deckers B Muys 2006 Species composition and diversity of small Afromontane forest fragments in northern Ethiopia. Plant Ecology, Vol. 187, pp. 127–142.

Aerts R, W Maes, E November, M Behailu, J Poesen J Deckers, M Hermy, B Muys 2006 Surface runoff and seed trapping efficiency of shrubs in a regenerating semiarid woodland in northern Ethiopia. *Catena*, Vol. 65, Issue 1, pp. 61-70.

Ajemu KF, AA Desta, AA Berhe, AG Woldegebriel, NM Bezabih 2020 Latrine Ownership and Its Determinants in Rural Villages of Tigray, Northern Ethiopia: Community-Based Cross-Sectional Study. *Journal of Environmental and Public Health*, Vol. 2020, Article ID 2123652.

Alemayehu F, N Taha, J Nyssen, A Girma, A Zenebe, M Behailu, S Deckers J Poesen 2009 The impacts of watershed management on land use and land cover dynamics in Eastern Tigray (Ethiopia). *Resources, Conservation and Recycling*, Vol. 53, Issue 4, pp. 192-198.

Alemayehu T, A Leis, A Eisenhauer, M Dietzel 2011 Multi-proxy approach (2H/H, 18O/16O, 13C/12C and 87Sr/86Sr) for the evolution of carbonate-rich groundwater in basalt dominated aquifer of Axum area, northern Ethiopia. *Chemie der Erde (chemistry of the earth)*, Vol. 71, pp. 177–187.

Alemayehu T, A Leis, M Dietzel 2020 Environmental isotope and hydrochemical characteristics of groundwater in central portion of Mekelle sedimentary outlier, northern Ethiopia. *Journal of African Earth Sciences*, Vol. 171: 103953.

Alemayehu T, G Mebrahtu, A Hadera, DN Bekele 2019 Assessment of the impact of landfill leachate on groundwater and surrounding surface water: a case study of Mekelle city, Northern Ethiopia. *Sustainable Water Resources Management*, Vol. 5, pp.1641–1649.

Alemu DT, DM Nyariki, KO Farah 2000 Changing land-use systems and socio-economic roles of vegetation in semi-arid Africa: The case

of the Afar and Tigray of Ethiopia. *Journal of Social Sciences*, Vol. 4, Issue 2-3, pp. 199-206.

Amacher GS, L Ersado, WF Hyde, A Osorio 2004 Tree planting in Tigray, Ethiopia: the importance of human disease and water microdams. *Agroforestry Systems*, Vol. 60, pp. 211–225.

Ambaye TG 2016 Residues analysis of organochlorine pesticides in fish, sediment and water samples from Tekeze Dam, Tigray, Ethiopia. *Journal of Environmental and Analytical Toxicology*, Vol. 6: 342.

Annys S, T Ghebreyohannes, J Nyssen 2020 Impact of hydropower dam operation and management on downstream hydrogeomorphology in semi-arid environments (Tekeze, Northern Ethiopia). *Water*, Vol. 12, No. 8: 2237.

Araya T, A Gebremedhin, F Baudron, M Hailemariam, E Birhane, J Nyssen, B Govaerts, W Cornelis 2021 Influence of 9 years of permanent raised beds and contour furrowing on soil health in conservation agriculture based systems in Tigray region, Ethiopia. *Land Degradation and Development*, Vol. 32, Issue 3, pp. 1525-1539.

Areaya H, M Yonas, TH Haileselesie 2013 Community composition and abundance of residential birds in selected church forests, Tigray Region, Northern Ethiopia. *Scientific Research and Essays*, Vol. 8, No. 22, pp. 1038-1047.

Aredehey G, A Mezgebu, A Girma 2020 The effects of land use land cover change on hydrological flow in Giba catchment, Tigray, Ethiopia. *Cogent Environmental Science*, Vol. 6, Issue 1, pp. 1785780.

Arega T , T Tadesse 2017 Household willingness to pay for green electricity in urban and peri-urban Tigray, northern Ethiopia:

Determinants and welfare effects. *Energy Policy*, Vol. 100, Issue: January, pp. 292-300.

Asayehegn K 2012 Negative impact of small-scale irrigation schemes: A case study of Central Tigray regional state, Ethiopia. *Agricultural Research and Reviews*, Vol. 1 No. 3, pp. 80–85.

Asefa DT, G Oba, RB Weladji, E. Colman 2003 An assessment of restoration of biodiversity in degraded high mountain grazing lands in northern Ethiopia. *Land Degradation in Africa*, Vol. 14, Special Issue: Issue1, pp. 25-38.

Asfaha TG, A Frankl, M Haile, A Zenebe, J Nyssen 2015 Determinants of peak discharge in steep mountain catchments—Case of the Rift Valley escarpment of Northern Ethiopia. *Journal of Hydrology*, Vol. 529, Part 3, pp.1725-1739.

Asfaha TG, A Frankl, M Haile, J Nyssen 2016 Catchment rehabilitation and hydro-geomorphic characteristics of mountain streams in the Western Rift Valley escarpment of Northern Ethiopia. *Land Degradation and Development*, Vol. 27, Issue1, pp. 26-34.

Asgedom AG, MB Desta, YW Gebremedhin 2012 Bioaccumulation of heavy metals in fishes of Hashenge Lake, Tigray, Northern Highlands of Ethiopia. *American Journal of Chemistry*, Vol. 2, Issue 6, pp. 326-334.

Asheber SA 2010 Mitigating drought: policy impact evaluation: a case of Tigray region, Ethiopia. MSc. Thesis, International Institute for Geo-Information Science and Earth Observation, The Netherlands.

Ashebir Y, H Rai Sharma, K Alemu, G Kebede 2013 Latrine use among rural households in northern Ethiopia: a case study in Hawzien district, Tigray. *International Journal of Environmental Studies*, Vol. 70, Issue 4, pp. 629-636.

Asres HG 2013 Effect of exclosure on environment and its socio economic contributions to local people: in the case study of halla exclosure, Tigray, Ethiopia. MSc. Thesis, Norwegian University of Life Science.

Atsbha T, A Estifanos, S Wayu, T Tesfay, A Baraki 2015 Rehabilitation of degraded pasture land through application of urea and slurry: The Case of Ayba Pasture Land, Southern Tigray, Ethiopia. *Livestock Research for Rural Development*, Vol. 27, Article No. 186.

Atsbha T, AB Desta, T Zewdu 2019 Carbon sequestration potential of natural vegetation under grazing influence in Southern Tigray, Ethiopia: implication for climate change mitigation. *Heliyon*, Vol. 5, Issue 8: 02329.

Atsbha T, AB Desta, T Zewdu 2019 Woody species diversity, population structure, and regeneration status in the Gra-Kahsu natural vegetation, southern Tigray of Ethiopia. *Heliyon*, Vol. 5, Issue 1: 01120.

Aynew T, M GebreEgziabher, S Kebede, S Mamo 2013 Integrated assessment of hydrogeology and water quality for groundwater-based irrigation development in the Raya Valley, northern Ethiopia. *Water International*, Vol.38, Issue 4: Sustainable Groundwater Development for Improved Livelihoods in Sub-Saharan Africa, Part 1, pp. 480-492.

Aynekulu E, M Denich, D Tsegaye 2009 Regeneration Response of *Juniperus procera* and *Olea europaea* subsp *cuspidata* to Exclosure in a Dry Afromontane Forest in Northern Ethiopia. *Mountain Research and Development*, Vol. 29, No. 2, pp. 143-152.

Aynekulu E, R Aerts, P Moonen, M Denich, K Gebrehiwot, T-G Vågen, W Mekuria, HJ Boehmer 2012 Altitudinal variation and conservation priorities of vegetation along the Great Rift Valley

escarpment, northern Ethiopia. *Biodiversity and Conservation*, Vol. 21, pp. 2691–2707.

Aynekulu E, W Wubneh, E Birhane, N Begashaw 2006 Monitoring and evaluating land use/land cover change using Participatory Geographic Information System (PGIS) tools: A case study of Begasheka Watershed, Tigray, Ethiopia. *The Electronic Journal on Information Systems in Developing Countries*, Vol. 25, No. 3, pp. 1-10.

Bairu A, N Tadesse, S Amare 2013 Use of geographic information system and water quality index to assess suitability of groundwater quality for drinking purposes in Hewane areas, Tigray, Northern Ethiopia. *Ethiopian Journal of Environmental Studies and Management*, Vol. 6, No. 2, pp. 110-123.

Balana BB, B Muys, N Haregeweyn, K Descheemaeker, J Deckers, J Poesen, J Nyssen, E Mathijs 2012 Cost-benefit analysis of soil and water conservation measure: The case of exclosures in northern Ethiopia. *Forest Policy and Economics*, Vol. 15, pp. 27-36.

Balana BB, E Mathijs, B Muys 2010 Assessing the sustainability of forest management: An application of multi-criteria decision analysis to community forests in northern Ethiopia. *Journal of Environmental Management*, Vol. 91, pp. 1294-1304.

Balehegn M, M Haile, C Fu, W Liang 2019 Ecosystem-based adaptation in Tigray, Northern Ethiopia: a systematic review of interventions, impacts, and challenges. Filho W L (ed.), *Handbook of Climate Change Resilience*.

Belachew AB, MB Abrha, ZA Gebrezgi, DY Tekle 2018 Availability and utilization of sanitation facilities in Enderta district, Tigray, Ethiopia. *Journal of Preventive Medicine and Hygiene*, Vol. 59, No. 3: E219–E225.

Belay KT, A Van Rompaey, J Poesen, S Van Bruyssel, J Deckers, K Amare 2015 Spatial analysis of land cover changes in Eastern Tigray (Ethiopia) from 1965 to 2007: are there signs of a forest transition? *Land Degradation and Development*, Special Issue: Environmental conservation for food production and sustainable livelihood in tropical Africa, Vol. 26, Issue7, pp. 680-689.

Belay L, E Birhane, A Zenebe, A Weldu, SN Chiemela, N Solomon 2020 Effects of stone mining on woody plant species diversity and selected soil properties in northern Ethiopia. *Environmental Systems Research*, Vol. 9, Article No. 12.

Berhane A, G Hadgu, W Worku, B Abrha 2020 Trends in extreme temperature and rainfall indices in the semi-arid areas of Western Tigray, Ethiopia. *Environmental Systems Research*, Vol. 9, Article No. 3.

Berhane G , T Gebreyohannes, K Martens, K Walraevens 2016 Overview of micro-dam reservoirs (MDR) in Tigray (northern Ethiopia): Challenges and benefits. *Journal of African Earth Sciences*, Vol. 123, pp 210-.222.

Berhane G, K Martens, N Al Farrah, K Walraevens 2013 Water leakage investigation of micro-dam reservoirs in Mesozoic sedimentary sequences in Northern Ethiopia. *Journal of African Earth Sciences*, Vol. 79, pp. 98-110.

Berhane G, K Walraevens 2013 Geological and geotechnical constraints for urban planning and natural environment protection: a case study from Mekelle City, Northern Ethiopia. *Environmental Earth Sciences*, Vol. 69, pp. 783–798.

Berhane G, M Kebede, N Alfarah, E Hagos, B Grum, A Gidaye, T Abera 2020 Landslide susceptibility zonation mapping using GIS-based frequency ratio model with multi-class spatial data-sets in the

Adwa-Adigrat mountain chains, northern Ethiopia. *Journal of African Earth Sciences*, Vol. 164: 103795.

Berhe AA 2011 Coping with Drought for Food Security in Tigray, Ethiopia. PhD Dissertation, Wageningen University, The Netherlands.

Berhe DH, A Anjulo, A Abdelkadir, S Edwards 2013 Evaluation of the effect of *Ficus thonningii* (blume) on soil physicochemical properties in Ahferom district of Tigray, Ethiopia. *Journal of Soil Science and Environmental Management*, Vol. 4, No. 2, pp. 35-45.

Berhe DH, AA Tanga 2013 Nutritional evaluation of *Ficus thonningii* Blume leaves as ruminant livestock feed in the Ahferom district of Tigray, Ethiopia. *African Journal of Range and Forage Science*, Vol. 30, Issue 3, 149-154.

Betemariam EA 2011 Forest diversity in fragmented landscapes of northern Ethiopia and implications for conservation. Dissertation, Rheinische Friedrich-Wilhelms-Universität Bonn.

Beyene AN 2015 Precipitation and temperature trend analysis in Mekelle city, Northern Ethiopia, the Case of Illala Meteorological Station. *Journal of Environment and Earth Science*, Vol. 5, No.19, pp. 46-52.

Beyene H, T Tessema 2015 Distribution, Abundance and Socio-Economic Impacts of *Parthenium* (*Parthenium hysterophorus*) in Southern Zone of Tigray, Ethiopia. *Journal of Poverty, Investment and Development*, Vol.19, pp. 22-29.

Beyene HD 2015 Quality analysis of potable water in Dowhan, Erobb Wereda, Tigray, Ethiopia. *Chemistry and Materials Research*, Vol. 7 No. 3, pp. 93-99.

Beyene HD, GB Berhe 2015 The level of heavy metals in potable water in Dowhan, Erob Wereda, Tigray, Ethiopia. *Journal of Natural Sciences Research*, Vol. 5, No. 3, pp. 190-194.

Birhane E , T Mengistu, Y Seyoum, N Hagazid, L Putzele, MM Rannesta, H Kassa 2017 Exclosures as forest and landscape restoration tools: lessons from Tigray Region, Ethiopia. *International Forestry Review*, Vol. 19, S: 4, pp. 37-50.

Birhane E 2002 Actual and potential contributions of enclosures to enhance biodiversity in drylands of eastern Tigray, with particular emphasis on woody plants. FAO, AGRIS, Ethiopian Agricultural Research Organization, Addis Abeba (Ethiopia)); Swedish University of Agricultural Sciences, Uppsala (Sweden).

Birhane E, D Teketay, P Barklund 2006 Actual and potential contribution of exclosures to enhance biodiversity of woody species in the drylands of Eastern Tigray. *Journal of the Drylands*, Vol. 1, No. 2, pp. 134-147.

Birhane E, D Teketay, P Barklund 2007 Enclosures to enhance woody species diversity in the dry lands of eastern Tigray, Ethiopia. *East African Journal of Sciences*, Vol. 1, Issue 2, pp. 136-147.

Birhane E, H Ashfare, AA Fenta, H Hishe, MA Gebremedhin, H G/wahed, N Solomon 2019 Land use land cover changes along topographic gradients in Hugumburda national forest priority area, Northern Ethiopia. *Remote Sensing Applications: Society and Environment*, Vol. 13, pp. 61-68.

Birhane E, K Aregawi, K Giday 2017 Changes in arbuscular mycorrhiza fungi spore density and root colonization of woody plants in response to exclosure age and slope position in the highlands of Tigray, Northern Ethiopia. *Journal of Arid Environments*, Vol. 142, pp. 1-10.

Birhane E, KF Gebretsadik, G Taye, E Aynekulu, MM Rannestad, L Norgrove 2020 Effects of Forest Composition and disturbance on arbuscular mycorrhizae spore density, arbuscular mycorrhizae root colonization and soil carbon stocks in a dry afro-montane forest in Northern Ethiopia. *Diversity*, Vol. 12, No. 4: 133.

Birhane E, KM Gebremedihin, T Tadesse, M Hailemariam, N Solomon 2017 Exclosures restored the density and root colonization of arbuscular mycorrhizal fungi in Tigray, Northern Ethiopia. *Ecological Processes*, Vol. 6, Article No. 33.

Birhane E, KT Asgedom, T Tadesse, H Hishe, H Abrha, F Noulèkoun 2020 Vulnerability of baobab (*Adansonia digitata* L.) to human disturbances and climate change in western Tigray, Ethiopia: Conservation concerns and priorities. *Global Ecology and Conservation*, Vol. 22: 00943.

Birhane E, N Fatumah, K Gidey, A Zenebe, S Mohammed 2018 Vegetation cover density and disturbance affected arbuscular mycorrhiza fungi spore density and root colonization in a dry Afro-montane forest, northern Ethiopia. *Journal of Forestry Research*, Vol. 29, pp. 675–686.

Birhane E, R Teklay, K Gebrehiwet, N Solomon, T Tadesse 2019 Maintaining *Acacia polyacantha* trees in farmlands enhances soil fertility and income of farmers in North Western Tigray, Northern Ethiopia. *Agroforestry Systems*, Vol. 93, pp. 2135–2149.

Birhane E, TW Kuyper, FJ Sterck, F Bongers 2010 Arbuscular mycorrhizal associations in *Boswellia papyrifera* (frankincense-tree) dominated dry deciduous woodlands of Northern Ethiopia. *Forest Ecology and Management*, Vol. 260, Issue 12, pp. 2160-2169.

Brhane G, K Mekonen 2009 Estimating soil loss using Universal Soil Loss Equation (USLE) for soil conservation planning at

Medego watershed, Northern Ethiopia. *Journal of American Science*, Vol. 5, Issue 1, pp. 58-69.

Brhane GK 2018 Characterization of hydro chemistry and groundwater quality evaluation for drinking purpose in Adigrat area, Tigray, northern Ethiopia. *Water Science*, Vol. 32, Issue 2, pp. 213-229.

Brutsch MO 1997 The beles or cactus pear (*Opuntia ficus-indica*) in Tigray, Ethiopia. *Journal of the Professional Association for Cactus Development*, Vol 2, pp. 130-141.

Busch R, J Hardt, N Nir, B Schütt 2021 Modeling Gully Erosion Susceptibility to Evaluate Human Impact on a Local Landscape System in Tigray, Ethiopia. *Remote Sensing*, Vol. 13, No. 10.

Collett RM 2011 Assessment of a Food for Work Program and the Drought Survival Needs of Ethiopian Communities in the Northern Tigray Region. MSc Thesis, Texas A and M University, USA.

Conway D 2000 Some aspects of climate variability in the north east Ethiopian Highlands-Wollo and Tigray. *SINET: Ethiopian Journal of Science*, Vol. 23, No. 2, pp.139-161.

Corbeels M, A Shiferaw, M Haile 2000 Farmers' knowledge of soil fertility and local management strategies in Tigray, Ethiopia. *Managing Africa's Soils Series No. 10*.

Debesay N, L Ingale, A Gebresilassie, H Assefa, D Yemane 2010 Latrine Utilization and Associated Factors in the Rural Communities of Gulomekada District, Tigray Region, North Ethiopia, 2013: A Community Based Cross-Sectional Study. *Journal of Community Medicine and Health Education*, Vol. 5, Issue 2: 1000338.

Degefa MY 2010 How informal institutions strengthen sustainable management of common pool resources in Tigray, Ethiopia? PhD

Thesis, University of Natural Resources and Applied Life Sciences, Austria.

Dejenie T, SAJ Declerck, T Asmelash, S Risch, J Mergeay, Tom De Bie, L De Meester 2012 Cladoceran community composition in tropical semi-arid highland reservoirs in Tigray (Northern Ethiopia): A metacommunity perspective applied to young reservoirs. *Limnologia*, Vol. 42, Issue 2, pp. 137-143.

Dejenie T, T Asmelash, L De Meester, A Mulugeta, A Gebrekidan, S Risch, A Pals, K Van der Gucht, W Vyverman, J Nyssen, J Deckers, S Declerck 2008 Limnological and ecological characteristics of tropical highland reservoirs in Tigray, Northern Ethiopia. *Hydrobiologia*, Vol. 610, pp. 193–209.

Demissie B , P Billi, A Frankl, M Haile, J Nyssen 2017 Excess river sedimentation at bridges in the Raya Graben (Northern Ethiopia). *Land Degradation and Development*, Vol. 28, Issue 3, pp. 946-958.

Demissie B, A Amsalu, Z Tesfamariam, J Nyssen, H Meaza, TG Asfaha, A Zenebe, C Gregoretti, V Van Eetvelde 2021 Landscape Changes in the Semi-closed Raya Agricultural Graben Floor of Northern Ethiopia. *Earth Systems and Environment*, 2021, October, pp. 1-16.

Deribe R 2008 Institutional analysis of water management on communal irrigation systems in Ethiopia: the case of Atsbi Wemberta, Tigray Region and Ada'a Woreda, Oromiya Region. Thesis, Addis Ababa University.

Descheemaeker K , J Poesen, L Borselli, J Nyssen, D Raes, M Haile, B Muys, J Deckers 2008 Runoff curve numbers for steep hillslopes with natural vegetation in semi-arid tropical highlands, northern Ethiopia. *Hydrological Processes*, Vol. 22, Issue 20, pp. 4097-4105.

Descheemaeker K, B Muys, J Nyssen, J Poesen, D Raesa, M Haile, J Deckers 2006 Litter production and organic matter accumulation in

exclosures of the Tigray highlands, Ethiopia. *Forest Ecology and Management*, Vol. 233, Issue 1, pp. 21-35.

Descheemaeker K, B Muys, J Nyssen, W Sauwens, M Haile, J Poesen, D Raes, J Deckers 2009 Humus form development during forest restoration in exclosures of the Tigray highlands, Northern Ethiopia. *Restoration Ecology*, Vol. 17, Issue 2, pp. 280-289.

Descheemaeker K, D Raes, J Nyssen, J Poesen, M Haile J Deckers 2009 Changes in water flows and water productivity upon vegetation regeneration on degraded hillslopes in northern Ethiopia: a water balance modelling exercise. *The Rangeland Journal*, Vol. 31, No. 2, pp. 237-24.

Descheemaeker K, J Nyssen, J Poesen, D Raes, M Haile, B Muys, S Deckers 2006 Runoff on slopes with restoring vegetation: a case study from the Tigray highlands, Ethiopia. *Journal of Hydrology*, Vol. 331, Issues 1–2, pp. 219-241.

Descheemaeker K, J Nyssen, J Poesen, M Haile, B Muys, D Raes, J Moeyersons, J Deckers 2006 Soil and water conservation through forest restoration in exclosures of the Tigray highlands. *Journal of the Drylands*, Vol. 1, 2, pp. 118-133.

Descheemaeker K, J Nyssen, J Rossi, J Poesen, M Haile, D Raes, B Muys, J Moeyersons, S Deckers 2006 Sediment deposition and pedogenesis in exclosures in the Tigray Highlands, Ethiopia. *Geoderma*, Vol. 132, Issues 3–4, pp. 291-314.

Desta MB, MM Weldemariam 2013 Distribution of Trace Metals in two commercially important fish species (*Tilapia zilli* and *Oreochromis niloticus*) sediment and water from lake Gudbahri, Eastern Tigray of Northern Ethiopia. *International Journal of Scientific and Research Publications*, Vol. 3, Issue 9, pp.1-7.

Dragan M, E Feoli, M Ferneti, W Zerihun 2003 Application of a spatial decision support system (SDSS) to reduce soil erosion in

northern Ethiopia. *Environmental Modelling and Software*, Vol. 18, Issue 10, pp. 861-868.

Dramis F, M Umer, G Calderoni, M Haile 2003 Holocene climate phases from buried soils in Tigray (northern Ethiopia): comparison with lake level fluctuations in the Main Ethiopian Rift. *Quaternary Research*, Vol. 60, Issue 3.

E Souza SAD 2014 Saneamento com base na compostagem: uma abordagem para confrontar a crise sanitária na Universidade de Mekelle, Tigray, Etiópia. Universidade Federal Rural Do Rio De Janeiro. *TRANS Compost-based Sanitation: An Approach to Confront the Sanitary Crisis at the University of Mekelle, Tigray, Ethiopia*. Federal Rural University of Rio De Janeiro.

Ebato M, B Van Koppen 2005 Gender relations and management of multiple water use system in Adidaero Watershed, Tigray region in Northern Ethiopia. *International Research Workshop on 'Gender and Collective Action*, 17-21 October 2005, Chiang Mai, Thailand.

Estifanos S, A Degefa 2012 Assessing the effect of cement dust emission on the physicochemical nature of soil around Messebo area, Tigray, North Ethiopia. *International Journal of Economic and Environmental Geology*, Vol. 3, No. 2, pp. 12-20.

Etefa G, A Frankl, S Lanckriet, D Biadgilgn Z Gebreyohannes, Z Amanuel, J Poesen, J Nyssen 2018 Changes in land use/cover mapped over 80 years in the Highlands of Northern Ethiopia. *Journal of Geographical Sciences*, Vol. 28, pp. 1538–1563.

Etsay H, T Negash, M Aregay 2019 Factors that influence the implementation of sustainable land management practices by rural households in Tigray region, Ethiopia. *Ecological Processes*, Vol. 8, Article No. 14.

Eyasu G, M Tolera, M Negash 2020 Woody species composition, structure, and diversity of home garden agroforestry systems in

southern Tigray, Northern Ethiopia. *Heliyon*, Vol. 6, Issue 12: 05500.

Ezra M, GE Kiros 2000 Household vulnerability to food crisis and mortality in the drought-prone areas of northern Ethiopia. *Journal of Biosocial Science*, Vol. 32, Issue 3, pp. 395 – 409.

Fenta AA, H Yasuda, K Shimizu, N Haregeweyn, K Woldearegay 2017 Quantitative analysis and implications of drainage morphometry of the Agula watershed in the semi-arid northern Ethiopia. *Applied Water Science*, Vol. 7, pp. 3825–3840.

Fenta AA, A Kifle, T Gebreyohannes, G Hailu 2015 Spatial analysis of groundwater potential using remote sensing and GIS-based multi-criteria evaluation in Raya Valley, northern Ethiopia. *Hydrogeology Journal*, Vol. 23, pp. 195–206.

Fenta AA, H Yasuda, K Shimizu, N Haregeweyn 2017 Response of streamflow to climate variability and changes in human activities in the semiarid highlands of northern Ethiopia. *Regional Environmental Change*, Vol. 17, pp. 1229–1240.

Fenta AA, H Yasuda, K Shimizu, N Haregeweyn, A Negussie 2016 Dynamics of soil erosion as influenced by watershed management practices: a case study of the Agula watershed in the semi-arid highlands of northern Ethiopia. *Environmental Management*, Vol. 58, No. 5, pp. 889–905.

Fenta AA, H Yasuda, N Haregeweyn, AS Belay, Z Hadush, MA Gebremedhin, G Mekonnen 2017 The dynamics of urban expansion and land use/land cover changes using remote sensing and spatial metrics: the case of Mekelle City of northern Ethiopia. *International Journal of Remote Sensing*, Vol. 38, No. 14, pp. 4107-4129.

Feoli E, LG Vuerich, W Zerihun 2002 Evaluation of environmental degradation in northern Ethiopia using GIS to integrate vegetation,

geomorphological, erosion and socio-economic factors. *Agriculture, Ecosystems and Environment*, Vol. 91, Issues 1–3, pp. 313-325.

Feoli E, LG Vuerich, Z Woldu 2002 Processes of environmental degradation and opportunities for rehabilitation in Adwa, Northern Ethiopia. *Landscape Ecology*, Vol. 17, pp. 315–325.

Frankl A , J Deckers, L Moulaert, AV Damme, M Haile, J Poesen, J Nyssen 2016 Integrated solutions for combating gully erosion in areas prone to soil piping: innovations from the drylands of Northern Ethiopia. *Land Degradation and Development*, Vol. 27, Issue 8, Special Issue: Desertification: History, Causes and Options for its Control, pp. 1797-1804.

Frankl A, J Nyssen, M De Dapper, M Haile, P Billi, RN Munro, J Deckers, J Poesen 2011 Linking long-term gully and river channel dynamics to environmental change using repeat photography (Northern Ethiopia). *Geomorphology*, Vol.129, Issues 3–4, pp. 238-251.

Frankl A, J Poesen, J Deckers, M Haile, J Nyssen 2012 Gully head retreat rates in the semi-arid highlands of Northern Ethiopia. *Geomorphology*, Vol. 173–174, pp. 185-195. Demissie B, D Teklemariam, M Haile, H Meaza, J Nyssen, P Billi, W Abera, M Gebrehiwot, R Haug, V V Eetvelde 2021 Flood hazard in a semi-closed basin in northern Ethiopia: Impact and resilience. *Geo: Geography and Environment*, Vol. 8, Issue 2.

Frankl A, J Poesen, M Haile, J Deckers, J Nyssen 2013 Quantifying long-term changes in gully networks and volumes in dryland environments: The case of Northern Ethiopia. *Geomorphology*, Vol. 201, pp. 254-263.

Gaddada S, SPK Kodicherla 2016 Wind energy potential and cost estimation of wind energy conversion systems (WECSs) for

electricity generation in the eight selected locations of Tigray region, Ethiopia. *Renewables: Wind, Water, and Solar*, Vol. 3, Article No. 10.

Gebre AB, E Birhane, G Gebresamuel, KM Hadgu, L Norgrove 2019 Woody species diversity and carbon stock under different land use types at Gergera watershed in eastern Tigray, Ethiopia. *Agroforestry Systems*, Vol. 93, pp. 1191–1203.

Gebre T, I Ahmad, MA Dar, E Gadissa, AH Teka, AT Tolosa, ES Brhane 2018 Mapping of groundwater potential zones using remote sensing and geographic information system: a case study of parts of Tigray, Ethiopia. *Environmental Geosciences*, Vol. 25, No. 4, pp. 133–140.

Gebre T, T Kibru, S Tesfaye, G Taye 2015 Analysis of watershed attributes for water resources management using GIS: The case of Chelekot micro-watershed, Tigray, Ethiopia. *Journal of Geographic Information System*, Vol. 07 No. 2, Article ID: 55674.

Gebreegziabher T, J Nyssen, B Govaerts, F Getnet, M Behailu, M Haile, J Deckers 2009 Contour furrows for in situ soil and water conservation, Tigray, Northern Ethiopia. *Soil and Tillage Research*, Vol. 103, pp. 257–264.

Gebreegziabher Z 2001 Determinants of household energy consumption in rural Tigray. MSc. Thesis, Harmaya University.

Gebreegziabher Z 2009 Experiences of the People-Based Soil and Water Conservation (Swc) Program in Tigray: Processes, Technology Packages and Approach. In: pp. 37-49, Hagos F, M Kassie, T Woldegiorgis, Y Mohammednur, Z Gebreegziabher (eds.) *Proceedings of Collaborative National Workshop on Sustainable Land Management Research and Institutionalization of Future Collaborative Research*, Mekelle, Ethiopia, 8-9 August 2008.

- Gebreegiabher Z, A Mekonen, M Kassie, G Köhlin 2010 Household tree planting in Tigray, northern Ethiopia: tree species, purposes, and determinants. Working Papers in Economics 432, University of Gothenburg, Sweden.
- Gebreegiabher Z, A Mekonen, M Kassie, G Köhlin 2012 Urban energy transition and technology adoption: The case of Tigray, northern Ethiopia. *Energy Economics*, Vol. 34, Issue 2, pp. 410-418.
- Gebreegiabher Z, A Mekonen, M Kassie, G Köhlin 2020 Household Tree Planting in Tigray, Northern Ethiopia: Tree Species, Purposes, and Tenure Security. *Land Use Policy*, Vol. 96: 104635.
- Gebreegiabher Z, G Girmay 2009 Household Tree Planting in Tigray: Tree Species, Purposes and Determinants. In: pp. 235-249, Hagos F, M Kassie, T Woldegiorgis, Y Mohammednur, Z Gebreegiabher (eds.) *Proceedings of Collaborative National Workshop on Sustainable Land Management Research and Institutionalization of Future Collaborative Research*, Mekelle, Ethiopia, 8-9 August 2008.
- Gebreegiabher Z, GC Van Kooten, DP Van Soest 2017 Technological innovation and dispersion: Environmental benefits and the adoption of improved biomass cookstoves in Tigray, northern Ethiopia. *Energy Economics*, Vol. 67, Issue: September, pp. 337-345.
- Gebregergs T, K Teka, G Taye, E Gidey, O Dikinya 2021 Impacts of phased-out land restoration programs on vegetation cover change in Eastern Tigray, Ethiopia. *Environmental Systems Research*, Vol. 10, Article No. 27.
- Gebregergs T, K Teka, G Taye, E Gidey, O Dikinya 2021 Status and challenges of integrated watershed management practices after-project phased-out in Eastern Tigray, Ethiopia. *Modeling Earth Systems and Environment*, Vol. 8, pp. 1253–1259.

- Gebregergs T, ZK Tessema, N Solomon, E Birhane 2019 Carbon sequestration and soil restoration potential of grazing lands under exclosure management in a semi-arid environment of northern Ethiopia. *Ecology and Evolution*, Vol. 9, Issue 11, pp. 6468-6479.
- Gebregewergs B, M Hadush 2017 Does climate change affect price of vegetables: Evidence from Tigray, Northern most Ethiopia. *Economics of Agriculture*, Vol. 64, No. 4, pp. 1335–1354.
- Gebregiorgis G 2015 Engendering energy in Ethiopia: The role of solar energy in improving rural womens socio-economic conditions in Tigray Region. *International Journal of Sociology and Anthropology*, Vol. 7, No. 1, pp. 8–20.
- Gebregziabher D , A Soltani, O Hofstad 2017 Equity in the distribution of values of outputs from exclosures in Tigray, Ethiopia. *Journal of Arid Environments*, Vol. 146, pp. 75-85.
- Gebregziabher D, A Soltani 2019 Exclosures in people's minds: Perceptions and attitudes in the Tigray region, Ethiopia. *Forest Policy and Economics*, Vol. 101, pp. 1-14.
- Gebrehiwot AB, N Tadesse, E Jigar 2011 Application of water quality index to assess suitability of groundwater quality for drinking purposes in Hantebet watershed, Tigray, Northern Ethiopia. *ISABB Journal of Food and Agricultural Sciences*, Vol. 1, Issue 1, pp. 22-30.
- Gebrehiwot K 2003 Ecology and management of *Boswellia papyrifera* (Del.) Hochst. dry forests in Tigray, Northern Ethiopia. Cuvillier Verlag, Germany.
- Gebrehiwot K, B Muys, M Haile, R Mitloehner 2005 The use of plant water relations to characterize tree species and sites in the drylands of northern Ethiopia. *Journal of Arid Environments*, Vol. 60, Issue 4, pp. 581-592.

Gebrehiwot K, B Muys, M Haile, R. Mitloehner 2002 *Boswellia papyrifera* (Del.) Hochst: a tropical key species in northern Ethiopia. Conference on International Agricultural Research for Development, Witzenhausen, October 9-11.

Gebrehiwot M 2006 An assessment of challenges of sustainable rural water supply: The case of Ofla Woreda in Tigray Region. MA Thesis, RLDS, Addis Ababa University.

Gebrehiwot T 2014 The effect of enclosures in rehabilitating degraded vegetation: a case of Enderta district, Northern Ethiopia. *Forest Research*, Vol.3, No. 4, Article No. 1000128.

Gebrehiwot T, A van der Veen 2013 Assessing the evidence of climate variability in the northern part of Ethiopia. *Journal of Development and Agricultural Economics*, Vol. 5, No. 3, pp. 104-119.

Gebrehiwot T, A van der Veen 2013 Climate change vulnerability in Ethiopia: disaggregation of Tigray Region. *Journal of Eastern African Studies*, Vol. 7, Issue 4, pp. 607-629.

Gebrekidan A, Y Weldegebriel, A Hadera, B Van-der-Bruggen 2013 Toxicological assessment of heavy metals accumulated in vegetables and fruits grown in Ginfel river near Sheba Tannery, Tigray, Northern Ethiopia. *Ecotoxicology and Environmental Safety*, Vol. 95, pp. 171–178.

Gebrelibanos T, M Assen 2015 Land use/land cover dynamics and their driving forces in the Hirmi watershed and its adjacent agro-ecosystem, highlands of Northern Ethiopia. *Journal of Land Use Science*, Vol. 10, No. 1, pp. 81–94.

Gebremariam M, F Kebede 2010 Land use change effect on soil carbon stock, above ground biomass, aggregate stability and soil Crust: A case from Tahtay Adyabo, North Western Tigray Northern Ethiopia. *Journal of the Drylands*, Vol. 3, No. 2, pp. 220-225.

Gebremedhin B 1998 The economics of soil conservation investments in the Tigray region of Ethiopia. PhD Dissertation, Michigan State University.

Gebremedhin B 2002 Collective action for grazing land management in mixed crop-livestock systems in the highlands of northern Ethiopia. International Livestock Research Working Paper No. 42.

Gebremedhin B 2002 Nature and determinants of collective action for woodlot management in northern Ethiopia. International Livestock Research Working Paper No. 40.

Gebremedhin B, J Pender, G Tesfay 2003 Community natural resource management: the case of woodlots in northern Ethiopia. *Environment and Development Economics*, Vol. 8, Issue 1, pp. 129-148.

Gebremedhin B, J Pender, SK Ehui, M Haile (eds.) 2003 Policies for sustainable land management in the highlands of Tigray, northern Ethiopia: Summary of papers and proceedings of a workshop held in Mekelle, Ethiopia, 28-29, March 2002.

Gebremedhin B, S Swinton 2002 Sustainable management of private and communal lands in northern Ethiopia. Department of Agricultural Economics Michigan State University, Staff Paper 01-09.

Gebremedhin B, SM Swinton 2003 Investment in soil conservation in northern Ethiopia: the role of land tenure security and public programs. *Agricultural Economics*, Vol. 29, Issue 1, pp. 69-84.

Gebremedhin B, SM Swinton, Y Tilahun 1999 Effects of stone terraces on crop yields and farm profitability: Results of on-farm research in Tigray, northern Ethiopia. *Journal of Soil and Water Conservation*, Vol. 54, No. 3, pp. 568-573.

Gebremedhin G, D Tetemke, M Gebremedhin, G Kahsay, H Zelalem, H Syum, H Gerensea 2018 Factors associated with latrine utilization among model and non-model families in Laelai Maichew Woreda, Aksum, Tigray, Ethiopia: comparative community based study. *BMC Research Notes*, Vol. 11, Article No. 586.

Gebremedhin MA, GH Kahsay, HG Fanta 2018 Assessment of spatial distribution of aridity indices in Raya valley, northern Ethiopia. *Applied Water Science*, Vol. 8, Article No. 217.

Gebremedhin T 1997 *Boswellia papyrifera* (Del.) hochst. from Western Tigray: opportunities, constraints and seed germination responses. MSc, Swedish University of Agricultural Sciences, Skinnskatteberg (Sweden).

Gebremedhn DM 2018 “They Think I Know Everything”: The Politics and Ethics of Environmental Restoration in Tigray, Ethiopia. MA Thesis, International Institute of Social Studies, The Netherlands.

Gebremedihin KM, E Birhane, T Tadesse, H Gbrewahid 2018 Restoration of degraded drylands through exclosures enhancing woody species diversity and soil nutrients in the highlands of Tigray, Northern Ethiopia. *Nature Conservation Research*, Vol. 3, No. 1, pp. 1–20.

Gebremeskel G, A Kebede 2018 Estimating the effect of climate change on water resources: Integrated use of climate and hydrological models in the Werii watershed of the Tekeze river basin, Northern Ethiopia. *Agriculture and Natural Resources*, Vol. 52, Issue 2, pp. 195-207.

Gebremeskel G, TG Gebremicael, A Girmay 2018 Economic and environmental rehabilitation through soil and water conservation, the case of Tigray in northern Ethiopia. *Journal of Arid Environments*, Vol. 151, pp. 113-124.

Gebremeskel K, K Teka, E Birhane, E Negash 2019 The role of integrated watershed management on soil-health in northern Ethiopia. *Acta Agriculturae Scandinavica, Section B—Soil and Plant Science*, Vol. 69, Issue 8, pp. 667-673.

Gebrenichael D, J Nyssen, J Poesen, J Deckers, M Haile, G Govers, J Moeyersons 2005 Effectiveness of stone bunds in controlling soil erosion on cropland in the Tigray Highlands, northern Ethiopia. *Soil Use and Management*, Vol. 21, Issue 3, pp. 287-297.

Gebresamuel G, B Molla, K Teka, E Negash, M Haile, CC Okolo 2020 Changes in soil organic carbon stock and nutrient status after conversion of pasture land to cultivated land in semi-arid areas of northern Ethiopia. *Archives of Agronomy and Soil Science*, Vol. 68, Issue 1, pp. 44-60.

Gebresamuel G, BR Singh, Ø Dick 2010 Land-use changes and their impacts on soil degradation and surface runoff of two catchments of Northern Ethiopia. *Acta Agriculturae Scandinavica, Section B—Soil and Plant Science*, Vol. 60, Issue 3, pp. 211-226.

Gebresamuel N, T Gebre-Mariam 2011 Comparative Physico-Chemical Characterization of the Mucilages of Two Cactus Pears (*Opuntia Spp.*) Obtained from Mekelle, Northern Ethiopia. *Journal of Biomaterials and Nanobiotechnology*, Vol.3 No.1, Article ID: 17004.

Gebresilasie KG, GG Berhe, AH Tesfay, SE Gebre 2021 Assessment of Some Physicochemical Parameters and Heavy Metals in Hand-Dug Well Water Samples of Kafta Humera Woreda, Tigray, Ethiopia. *International Journal of Analytical Chemistry*, Vol. 2021, Article ID 8867507.

Gebretsadik G, G Animut, F Tegegne 2013 Assessment of the potential of cactus pear (*Opuntia ficus indica*) as livestock feed in

Northern Ethiopia. Livestock Research for Rural Development, Vol. 25, Article No. 26.

Gebrewahid Y, S Abrehe, E Meresa, G Eyasu, K Abay, G Gebreab, K Kidanemariam, G Adissu, G Abreha, G Darcha 2020 Current and future predicting potential areas of *Oxytenanthera abyssinica* (A. Richard) using MaxEnt model under climate change in Northern Ethiopia. Ecological Processes, Vol. 9, Article No. 6.

Gebrewahid Y, TB Gebre-Egziabhier, K Teka, E Birhane 2018 Carbon stock potential of scattered trees on farmland along an altitudinal gradient in Tigray, Northern Ethiopia. Ecological Processes, Vol. 7, Article No. 40.

Gebreyohannes F, A Gebrekidan, A Hedera, S Estifanos 2015 Investigations of physico-chemical parameters and its pollution implications of Elala River, Mekelle, Tigray, Ethiopia. Momona Ethiopian Journal of Science, Vol. 7, No. 2, pp. 240-257.

Gebreyohannes T, F De Smedt, K Walraevens, S Gebresilassie, A Hussien, M Hagos, K Amare, J Deckers, K Gebrehiwot 2017 Regional groundwater flow modeling of the Geba basin, northern Ethiopia. Hydrogeology Journal, Vol. 25, pp. 639–655.

Gebreyohannes T, F De Smedt, K Walraevens, S Gebresilassie, A Hussien, M Hagos, K Amare, J Deckers, K Gebrehiwot 2013 Application of a spatially distributed water balance model for assessing surface water and groundwater resources in the Geba basin, Tigray, Ethiopia. Journal of Hydrology, Vol. 499, 30 pp. 110-123.

Gebru BM, SW Wang, SJ Kim, WK Lee 2019 Socio-ecological niche and factors affecting agroforestry practice adoption in different agroecologies of southern Tigray, Ethiopia. Sustainability, Vol. 11, No. 13: 3729.

Gebru BM, WK Lee, A Khamzina, S Lee, E Negash 2019 Hydrological response of dry afro-montane forest to changes in land use and land cover in northern Ethiopia. *Remote Sensing*, Vol. 11, No. 16.

Gebru BM, WK Lee, A Khamzina, SW Wang, S Cha, C Song, M Lamchin 2021 Spatiotemporal multi-index analysis of desertification in dry Afro-montane forests of northern Ethiopia. *Environment, Development and Sustainability*, Vol. 23, pp. 423–450.

Gebru GW, HE Ichoku, PO Phil-Eze 2020 Determinants of smallholder farmers' adoption of adaptation strategies to climate change in Eastern Tigray National Regional State of Ethiopia. *Heliyon*, Vol. 6, Issue 7: 04356.

Gebru KM 2006 Farmers' perception and determinants of land management practices in Ofla Wereda, Southern Tigray, Ethiopia. MSc. Thesis, Haramaya University.

Gebru T, Z Eshetu, Y Huang, T Woldemariam, N Strong, M Umer, M DiBlasi, VJ Terwilliger 2009 Holocene palaeovegetation of the Tigray Plateau in northern Ethiopia from charcoal and stable organic carbon isotopic analyses of gully sediments. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 282, Issues 1–4, pp. 67-80.

Gebru TA, GB Tesfahunegn 2019 Chloride mass balance for estimation of groundwater recharge in a semi-arid catchment of northern Ethiopia. *Hydrogeology Journal*, Vol. 27, pp. 363–378.

Gebru TA, GB Tesfahunegn 2020 GIS based water balance components estimation in northern Ethiopia catchment. *Soil and Tillage Research*, Vol. 197: 104514.

Gebru TA, GK Brhane, YG Gebremedhin 2021 Contributions of water harvesting technologies intervention in arid and semi-arid regions of Ethiopia, in ensuring households' food security, Tigray in focus. *Journal of Arid Environments*, Vol. 185: 104373.

Gedif B, L Hadish, S Addisu, KV Suryabhadgavan 2014 Drought risk assessment using remote sensing and GIS: the case of southern zone, Tigray region, Ethiopia. *Journal of Natural Sciences Research*, Vol. 4, No. 23, pp. 87-94.

Gerretsadikan A, MK Sharma 2011 Modelling and forecasting of rainfall data of Mekele for Tigray region (Ethiopia). *Statistics and Applications*, Vol. 9, No. 1-2, pp. 31-53.

Gezahegn TW, G Gebregiorgis, T Gebrehiwet, K Tesfamariam 2018 Adoption of renewable energy technologies in rural Tigray, Ethiopia: An analysis of the impact of cooperatives. *Energy Policy*, Vol. 114, Issue: March, pp. 108-113.

Ghebretakle TB 2015 Industrial pollution control and management in Ethiopia: a case study on Almeda textile factory and Sheba leather industry in Tigray Regional State. PhD Dissertation, University of Warwick School of Law.

Giday K, B Humnessa, B Muys, F Taheri, H Azadie 2018 Effects of livestock grazing on key vegetation attributes of a remnant forest reserve: The case of Desa'a Forest in northern Ethiopia. *Global Ecology and Conservation*, Vol. 14: 00395.

Giday K, G Eshete, P Barklund, W Aertsen, B Muys 2013 Wood biomass functions for *Acacia abyssinica* trees and shrubs and implications for provision of ecosystem services in a community managed enclosure in Tigray, Ethiopia. *Journal of Arid Environments*, Vol. 94, pp. 80-86.

Gidey A 2018 Geospatial distribution modeling and determining suitability of groundwater quality for irrigation purpose using geospatial methods and water quality index (WQI) in Northern Ethiopia. *Applied Water Science*, Vol. 8, Article No. 82.

Gidey E, O Dikinya, R Sebego, E Segosebe, A Zenebe 2017 Cellular automata and Markov Chain (CA_Markov) model-based predictions

of future land use and land cover scenarios (2015–2033) in Raya, northern Ethiopia. *Modeling Earth Systems and Environment*, Vol. 3, pp. 1245–1262.

Gidey E, O Dikinya, R Sebege, E Segosebe, A Zenebe 2018 Modeling the spatio-temporal meteorological drought characteristics using the standardized precipitation index (SPI) in Raya and its environs, Northern Ethiopia. *Earth Systems and Environment*, Vol. 2, No. 2, pp. 281–292.

Gidey E, O Dikinya, R Sebege, E Segosebe, A Zenebe 2018 Using Drought indices to model the statistical relationships between meteorological and agricultural drought in Raya and its environs, Northern Ethiopia. *Earth Systems and Environment*, Vol. 2, No. 2, pp. 265–279.

Gidey Y, H Bauer 2010 Prey of peri-urban spotted hyena (*Crocuta crocuta*) in southeastern Tigray, northern Ethiopia. *Asian Journal of Agricultural Sciences*, Vol. 2 No.4, pp. 124-127.

Girmay E, T Ayenew, S Kebede, M Alene, S Wohnlich, F Wisotzky 2015 Conceptual groundwater flow model of the Mekelle Paleozoic–Mesozoic sedimentary outlier and surroundings (northern Ethiopia) using environmental isotopes and dissolved ions. *Hydrogeology Journal* Vol. 23, pp. 649–672.

Girmay G, BR Singh 2012 Changes in soil organic carbon stocks and soil quality: land-use system effects in northern Ethiopia. *Acta Agriculturae Scandinavica, Section B—Soil and Plant Science*, Vol. 62, Issue 6, pp. 519-530.

Girmay G, BR Singh, J Nyssen, T Borrosen 2009 Runoff and sediment-associated nutrient losses under different land uses in Tigray, Northern Ethiopia. *Journal of hydrology*, Vol. 376, Issues 1–2, pp. 70-80.

Girmay G, H Mitiku, BR Singh 2009 Agronomic and economic performance of reservoir sediment for rehabilitating degraded soils in Northern Ethiopia. *Nutrient Cycling in Agroecosystems*, Vol. 84, pp. 23–38.

Girmay G, J Nyssen, J Poesen, H Bauer, R Merckx, M Haile, J Deckers 2012 Land reclamation using reservoir sediments in Tigray, northern Ethiopia. *Soil Use and Management*, Vol. 28, Issue 1, pp. 113-119.

Girmay H, S Tewolde-Berhan, H Hishe, Z Asfaw, M Ruelle, A Power 2020 Use and management of tamarind (*Tamarindus indica* L., Fabaceae) local morphotypes by communities in Tigray, Northern Ethiopia. *Forests, Trees and Livelihoods*, Vol. 29, Issue 2, pp. 81-98.

Girmay M, T Bekele, S Demissew, E Lulekal 2020 Ecological and floristic study of Hirmi woodland vegetation in Tigray Region, Northern Ethiopia. *Ecological Processes*, Vol. 9, Article No. 53.

Girmay T, D Dati 2020 Population size, group and age structure of geladas (*Theropithecus gelada*) in escarpments of Eastern Tigray, Ethiopia: implication for conservation. *Journal of Ecology and Environment*, Vol. 44, Article No. 20.

Girmay T, Z Teshome, T Tesfamichael 2020 Bird diversity and community composition in Kafta Sheraro national park, Tigray, northern Ethiopia. *International Journal of Zoology*, Vol. 2020, Article ID 5016804.

Gremberghe I van, K Van der Gucht, P Vanormelingen, T Asmelash, T Dejenie, S D'hondt, S Declerck, L De Meester, W Vyverman 2011 Genetic diversity of *Microcystis* blooms (Cyanobacteria) in recently constructed reservoirs in Tigray (Northern Ethiopia) assessed by rDNA ITS. *Aquatic Ecology*, Vol. 45, pp. 289–306.

Grum B, K Woldearegay, R Hessel, JEM Baartman, M Abdulkadir, E Yazew, A Kessler, CJ Ritsema, V Geissen 2017 Assessing the effect of water harvesting techniques on event-based hydrological responses and sediment yield at a catchment scale in northern Ethiopia using the Limburg Soil Erosion Model (LISEM). *Catena*, Vol. 159, Issue: December, pp. 20-34.

Grum B, D Assefa, R Hessel, K Woldearegay, CJ Ritsema, B Aregawi, V Geissen 2017 Improving on-site water availability by combining in-situ water harvesting techniques in semi-arid Northern Ethiopia. *Agricultural Water Management*, Vol. 193, pp. 153-162.

Guyassa E, A Frankl, A Zenebe, J Poesen, J Nyssen 2018 Gully and soil and water conservation structure densities in semi-arid northern Ethiopia over the last 80 years. *Earth Surface Processes and Landforms*, Vol. 43, Issue 9, pp. 1848-1859.

Hachooftwe EM 2012 Local ecological knowledge of trees on farms, constraints and opportunities for further integration in Tigray Region, northern Ethiopia: A case study of smallholder farmers in Abreha Wa-Atsbeha and Adi gudom. MSc thesis in Agroforestry. Gwynedd, UK: Bangor University.

Hadgu G, K Tesfaye, G Mamo, B Kassa 2013 Trend and variability of rainfall in Tigray, northern Ethiopia: analysis of meteorological data and farmers' perception. *Academia Journal of Agricultural Research*, Vol.1 No.6, pp. 88-100.

Hadgu G, K Tesfaye, G Mamo, B Kassa 2014 Analysis of Farmers' Perception and Adaptation Methods to Climate Variability/Change in Tigray Region, Northern Ethiopia. *Research Journal of Agricultural and Environmental Sciences*, Vol 1, Issue 1, pp. 15-25.

Hadgu G, K Tesfaye, G Mamo, K Belay 2015 Farmers climate change adaptation options and their determinants in Tigray Region,

Northern Ethiopia. African Journal of Agricultural Research, Vol. 10, No. 9, pp. 956-64.

Hadgu KM, WAH Rossing, L Kooistra, AHC van Bruggen 2009 Spatial variation in biodiversity, soil degradation and productivity in agricultural landscapes in the highlands of Tigray, northern Ethiopia. Food Security, Vol. 1, pp. 83–97.

Haftom H, T Girmay, B Emiru, A Haftu, H Meseret 2019 Impact of farm enclosure on woody species abundance and carbon stock in Tigray, Northern Ethiopia. Cogent Environmental Science, Vol. 5, Issue 1, Article: 1656444.

Hagos EY, B Schultz, H Depeweg 2016 Reservoir Operation in View of Effective Utilization of Limited Water in Semi-Arid Areas The Case of Gumsalasa Earthen Dam Irrigation Scheme in Tigray, Ethiopia. Irrigation and Drainage, Vol. 65, Issue 3, pp. 294-307.

Hagos F 2003 Poverty, institutions, peasant behavior and conservation investment in northern Ethiopia. Doctoral Theses, Agricultural University of Norway

Hagos F, J Pender, N Gebreselassie 1999 Land degradation in the highlands of Tigray and strategies for sustainable land management. ILRI, Socioeconomic and Policy Research Working Paper 25.

Hagos F, J Pender, N Gebreselassie 2002 Land degradation and strategies for sustainable land management in the Ethiopian highlands: Tigray region. International Livestock Research Institute, Working Paper No. 25.

Hagos G, W Sisay, Z Alem, G Niguse, A Mekonen 2016 Participation on traditional gold mining and its impact on natural resources, the case of Asgede Tsimbla, Tigray, Northern Ethiopia. Journal of Earth Sciences and Geotechnical Engineering, Vol. 6, No.1, pp. 89-97.

Haile M, K Gebrehiwot 2001 Local initiatives for planning sustainable natural resources management in Tigray, Northern Ethiopia. *Ethiopian Journal of Natural Resources*, Vol. 3, pp. 303–326.

Haile M, T Belay, HG Zimmerman 2002 Current and potential use of cactus in Tigray, Northern Ethiopia. *Acta Horticulturae*, 581, 75–86.

Haile T, S Atsbaha 2014 Electrical resistivity tomography, VES and magnetic surveys for dam site characterization, Wukro, Northern Ethiopia. *Journal of African Earth Sciences*, Vol. 97, Issue: September, pp. 67–77.

Hailemariam M, E Birhane, G Gebresamuel, A Gebrekiros, Y Desta, A Alemayehu, H Muruts, T Araya, L Norgrove 2018 Arbuscular mycorrhiza effects on *Faidherbia albida* (Del.) A. Chev. growth under varying soil water and phosphorus levels in Northern Ethiopia. *Agroforestry Systems*, Vol. 92, pp. 485–498.

Halefom A, A Teshome 2019 Modelling and mapping of erosion potentiality watersheds using AHP and GIS technique: a case study of Alamata Watershed, South Tigray, Ethiopia. *Modeling Earth Systems and Environment*, Vol. 5, pp. 819–831.

Haregeweyn N, A Berhe, A Tsunekawa, M Tsubo, D T Meshesha 2012 Integrated watershed management as an effective approach to curb land degradation: a case study of the Enabered watershed in northern Ethiopia. *Environmental Management*, Vol. 50, No. 6, pp. 1219–1233.

Haregeweyn N, J Poesen, G Verstraeten, G Govers, J de Vente, J Nyssen, J Deckers, J Moeyersons 2013 Assessing the performance of a spatially distributed soil erosion and sediment delivery model (WATEM/SEDEM) in Northern Ethiopia. *Land Degradation and Development*, Vol. 24, Issue2, pp.188–204.

Haregeweyn N, J Poesen, J Deckers, J Nyssen, M Haile, G Govers, G Verstraeten, J Moeyersons 2008 Sediment-bound nutrient export from micro-dam catchments in Northern Ethiopia. *Land Degradation and Development*, Vol.19, Issue 2, pp.136-152.

Haregeweyn N, J Poesen, J Nyssen, G Govers, G Verstraeten, J Vente, J Deckers, J Moeyersons, M Haile 2008 Sediment yield variability in Northern Ethiopia: A quantitative analysis of its controlling factors. *Catena*, Vol. 75, Issue 1, pp. 65-76.

Haregeweyn N, J Poesen, J Nyssen, G Verstraeten, J Vente, G Govers, S Deckers, J Moeyersons 2005 Specific sediment yield in Tigray-Northern Ethiopia: assessment and semi-quantitative modelling. *Geomorphology*, Vol. 69, Issues 1–4, pp. 315-331.

Haregeweyn N, J Poesen, J Nyssen, J De Wit, M Haile, G Govers, S Deckers 2006 Reservoirs in Tigray (Northern Ethiopia): characteristics and sediment deposition problems. *Land Degradation and Development*, 17: 211–230.

Hengsdijk H, GW Meijerink, ME Mosugu 2005 Modeling the effect of three soil and water conservation practices in Tigray, Ethiopia. *Agriculture, Ecosystems and Environment*, Vol.105, Issues 1–2, pp. 29-40.

Hishe H, K Giday, J Van Orshoven, B Muys, F Taheri, H Azadi, L Feng, O Zamani, M Mirzaei, F Witlox 2021 Analysis of land use land cover dynamics and driving factors in Desa'a forest in Northern Ethiopia. *Land Use Policy*, Vol. 101: 105039.

Hishe S, J Lyimo, W Bewket 2017 Effects of soil and water conservation on vegetation cover: a remote sensing based study in the Middle Suluh River Basin, northern Ethiopia. *Environmental Systems Research*, Vol. 6, Article No. 26.

Hishe S, J Lyimo, W Bewket 2017 Soil and water conservation effects on soil properties in the Middle Silluh Valley, northern

Ethiopia. *International Soil and Water Conservation Research*, Vol. 5, Issue 3, pp. 231-240.

Hishe S, W Bewket, J Nyssen, J Lyimo 2020 Analysing past land use land cover change and CA-Markov-based future modelling in the Middle Suluh Valley, Northern Ethiopia. *Geocarto International*, Vol. 35, Issue 3, pp. 225-255.

Kahsay GH, T Gebreyohannes, MA Gebremedhin, A Gebrekirstos, E Birhane, H Gebrewahid, L Welegebriel 2019 Spatial groundwater recharge estimation in Raya basin, Northern Ethiopia: an approach using GIS based water balance model. *Sustainable Water Resources Management*, Vol. 5, No. 2, pp. 961-975.

Kahsay HT, DD Guta, BS Birhanu, TG Gidey 2019 Farmers' perceptions of climate change trends and adaptation strategies in semiarid highlands of Eastern Tigray, Northern Ethiopia. *Advances in Meteorology*, Vol. 2019, Article ID 3849210.

Kassa H, K Gebrehiwet C Yamoah 2010 *Balanites aegyptiaca*, a potential tree for parkland agroforestry systems with sorghum in Northern Ethiopia. *Journal of Soil Science and Environmental Management*, Vol. 1, No. 6, pp. 107-114.

Kathryn AB, M Coltorti, MC DiBlasi, F Dramis, R Fattovich 2000 The Environmental History of Tigray (Northern Ethiopia) in the Middle and Late Holocene: A Preliminary Outline. *African Archaeological Review*, Vol. 17, pp. 65–86.

Kelebe HE 2018 Returns, setbacks, and future prospects of bio-energy promotion in northern Ethiopia: the case of family-sized biogas energy. *Energy, Sustainability and Society*, Vol. 8, Article No. 30. Kelebe HE, A Olorunnisola 2016 Biogas as an alternative energy source and a waste management strategy in Northern Ethiopia. *Biofuels*, Vol. 7, No. 5, 479-487.

Kelebe HE, KM Ayimut, GH Berhe, K Hintsu 2017 Determinants for adoption decision of small scale biogas technology by rural households in Tigray, Ethiopia. *Energy Economics*, Vol. 66, Issue: August, pp. 272-278.

Kibru T, R Hussein, E Birhane, J Haggar, N Solomon 2021 Farmers' perception and reasons for practicing farmer managed natural regeneration in Tigray, Ethiopia. *Agroforestry Systems*, Vol. 95, pp. 1327–1342.

Kidanemariam S, H Goitom, Y Desta 2021 Coupled application of R and WetSpa models for assessment of climate change impact on streamflow of Werie Catchment, Tigray, Ethiopia. *Journal of Water and Climate Change*, Vol. 12, No. 3, pp. 916–936.

Kide GT 2014 Smallholder farmers' adaptation strategies to climate change in Ethiopia: Evidence from Adwa Woreda of Tigray region. Thesis. Mekelle University.

Kinfe G 2009 Household water supply infrastructure accessibility in Mekelle city, Tigray region. Master's thesis, Ethiopian Civil Service University.

Kiros G, A Shetty, L Nandagiri 2016 Analysis of variability and trends in rainfall over northern Ethiopia. *Arabian Journal of Geosciences*, Vol. 9, Article No. 451.

Koda K, G Girmay, T Berihu, F Nagumo 2019 Reservoir conservation in a micro-watershed in Tigray, Ethiopian Highlands. *Sustainability*, Vol. 11, No. 7: 2038.

Kumar KSP, S Gaddada 2015 Statistical scrutiny of Weibull parameters for wind energy potential appraisal in the area of northern Ethiopia. *Renewables: Wind, Water, and Solar*, Vol. 2, Article No. 14.

Kumasi TC, K Asenso-Okyere 2011 Responding to land degradation in the highlands of Tigray, Northern Ethiopia. IFPRI Discussion Paper 01142, International Food Policy Research Institute (IFPRI).

Lanz TJ 1996 Environmental degradation and social conflict in the Northern Highlands of Ethiopia: the case of Tigray and Wollo Provinces. *Africa Today*, Vol. 43, No. 2, pp. 157-182.

Machado MJ, A Pérez-González, G Benito 1998 Paleoenvironmental changes during the last 4000 yr in the Tigray, northern Ethiopia. *Quaternary Research*, Vol. 49, Issue 3, pp. 312–321.

Mahmud AM, MB Kahsay, A Hailesilasie, FY Hagos, P Gebray, HK Kelele, K Gebrehiwot, H Bauer, S Deckers, J De Baerdemaeker, Johan Driesen 2014 Solar energy resource assessment of the Geba catchment, Northern Ethiopia. *Energy Procedia*, Vol. 57, 2014, pp. 1266-1274.

Manaye A, M Negash, M Alebachew 2019 Effect of degraded land rehabilitation on carbon stocks and biodiversity in semi-arid region of Northern Ethiopia. *Forest Science and Technology*, Vol.15, Issue 2, pp. 70-79.

Marshall MH, HF Lamb, SJ Davies, MJ Leng, Z Kubsad, M Umere, C Bryant 2009 Climatic change in northern Ethiopia during the past 17,000 years: a diatom and stable isotope record from Lake Ashenge. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 279, Issues 1–2, pp. 114-127.

Meaza H, M Ali, Z Tesfamariam, N Abebe 2017 Impacts of artisanal gold mining systems on soil and woody vegetation in the semi-arid environment of northern Ethiopia. *Singapore Journal of Tropical Geography*, Vol. 38, Issue 3, pp. 386-401.

Mebrahtu G, S Zerabruk 2011 Concentration and health implication of heavy metals in drinking water from urban areas of Tigray region,

Northern Ethiopia. Momona Ethiopian Journal of Science, Vol. 3, No. 1, pp. 105-121.

Mekonen K, GB Tesfahunegn 2011 Impact assessment of soil and water conservation measures at Medego watershed in Tigray, northern Ethiopia. Maejo International Journal of Science and Technology, Vol. 5, Iss. 3, pp. 312-330.

Mekuria W, E Aynekulu 2013 Exclosure land management for restoration of the soils in degraded communal grazing lands in northern Ethiopia. Land Degradation and Development, Vol. 24, Issue6, pp. 528-538.

Mekuria W, E Veldkamp 2012 Restoration of native vegetation following exclosure establishment on communal grazing lands in Tigray, Ethiopia. Applied Vegetation Science, Vol. 15, Issue1, pp. 71-83.

Mekuria W, E Veldkamp, M Haile, J Nyssen, B Muys, K Gebrehiwot 2007 Effectiveness of exclosures to restore degraded soils as a result of overgrazing in Tigray, Ethiopia. Journal of Arid Environments, Vol. 69, Issue 2, pp. 270-284.

Mekuria W, E Veldkamp, MD Corre, M Haile 2011 Restoration of ecosystem carbon stocks following exclosure establishment in communal grazing lands in Tigray, Ethiopia. Soil Science Society of America Journal, Vol. 75, Issue 1, pp. 246-256.

Mekuria W, M Yami 2013 Changes in woody species composition following establishing exclosures on grazing lands in the lowlands of Northern Ethiopia. African Journal of Environmental Science and Technology, Vol. 7, No. 1, pp. 30-40.

Menghistu HT, TT Mersha, AZ Abraha 2018 Farmers' perception of drought and its socioeconomic impact: the case of Tigray and Afar regions of Ethiopia. Journal of Applied Animal Research, Vol. 46, Issue 1, pp. 1023-1031.

Mengistu DK 2011 Farmers' perception and knowledge on climate change and their coping strategies to the related hazards: case study from Adiha, central Tigray, Ethiopia. *Agricultural Sciences*, Vol. 2, No.2, pp. 138-145.

Meresa E, G Taye 2019 Estimation of groundwater recharge using GIS-based WetSpass model for Birki watershed, the eastern zone of Tigray, Northern Ethiopia. *Sustainable Water Resources Management*, Vol. 5, pp. 1555–1566.

Mesfin S, G Taye, M Hailemariam 2018 Effects of integrated soil and water conservation measures on soil aggregate stability, soil organic matter and soil organic carbon stock of smallholder farmlands in semi-arid Northern Ethiopia. *Carbon Management*, Vol. 9, No. 2, pp. 155-164.

Mesfin S, G Taye, Y Desta, B Sibhatu, H Muruts, M Mohammedbrhan 2018 Short-term effects of bench terraces on selected soil physical and chemical properties: landscape improvement for hillside farming in semi-arid areas of northern Ethiopia. *Environmental Earth Sciences*, Vol. 77, No. 11, pp. 1-4.

Mezgebe K, A Gebrekidan, A Hadera, Y Weldegebriel 2015 Assessment of physico-chemical parameters of tsaeda agam river in Mekelle city, Tigray, Ethiopia. *Bulletin of the Chemical Society of Ethiopia*, 29(3), 377-385.

Mezgebo GK, TN Gebrezgiabher, MA Gebreyesus, KT Gebrezgiabher, LG Weldegiwergis, HG Hailu 2021 Impact of community-based enclosure to smallholder farmers' livelihood and their willingness to pay: empirical evidences from Tigray, Ethiopia. *Environment, Development and Sustainability*, Vol. 24, pp. 2598–2615.

Michael YG, A Waters-Bayer 2007 Trees are our backbone: integrating environment and local development in Tigray region of Ethiopia. Issue Paper No. 145, Irish Aid.

Moeyersons J, J Nyssen, J Poesen, J Deckers, M Haile 2006 Age and backfill/overflow stratigraphy of two tufa dams, Tigray Highlands, Ethiopia: Evidence for Late Pleistocene and Holocene wet conditions. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 230, Issues 1–2, pp. 165–181.

Mohammedshum AA, Gebresilassie MA, Rulindaa CM, Kahsaya GH, Tesfay MS 2014 Application of Geographic Information System and Remotesensing in Effective Solid Waste Disposal Sites Selection in Wukro Town, Tigray, Ethiopia. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Vol. 40-2, pp. 115-119.

Mokria M, A Gebrekirstos, E Aynekulu, A Bräuning 2015 Tree dieback affects climate change mitigation potential of a dry afro-montane forest in northern Ethiopia. *Forest Ecology and Management*, Vol. 344, Issue: May, pp. 73-83.

Morrissey JW 2012 Contextualizing links between migration and environmental change in northern Ethiopia. Chapter 5 in: K. Hastrup and KF Olwig (eds) *Climate Change and Human Mobility: Challenges to the Social Sciences* 110.

Munro RN, J Deckers, AT Grove, H Mitiku 2008 Soil landscapes, land cover change and erosion features of the Central Plateau region of Tigray, Ethiopia: Photo-monitoring with an interval of 30 years. *Catena*, Vol. 110, Issue 1, pp. 55-64.

Munro RN, T Woldegerima, B Hailu, A Zenebe, Z Gebremedhin, A Hailemichael, J Nyssen 2019 A History of Soil and Water Conservation in Tigray. *Geo-trekking in Ethiopia's Tropical Mountains*, pp. 477-493.

Nasir J, E Assefa, T Zeleke, E Gidey 2021 Meteorological Drought in Northwestern Escarpment of Ethiopian Rift Valley: detection seasonal and spatial trends. *Environmental Systems Research*, Vol. 10, Article No. 16.

Nasir J, E Assefa, T Zeleke, E Gidey 2021 Modeling seasonal and annual climate variability trends and their characteristics in northwestern Escarpment of Ethiopian Rift Valley. *Modeling Earth Systems and Environment*, 2021: 1-15.

Nedaw D 2010 Water Balance and Groundwater Quality of Koraro Area, Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 2, pp. 110-127.

Nedaw D, K Walraevens 2009 The positive effect of micro-dams for groundwater enhancement: a case study around Tsinkanet and Rubafeleg area, Tigray, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 1, No. 1, pp. 59–73.

Negash E, G Gebresamuel, TAG Embaye, A Zenebe 2019 The effect of climate and land-cover changes on runoff response in Guguf spate systems, northern Ethiopia. *Irrigation and Drainage*, Vol. 68, Issue 3, pp. 399-408.

Negusse T, E Yazew, N Tadesse 2013 Quantification of the impact of integrated soil and water conservation measures on groundwater availability in Mendae Catchment, Abraha We-Atsebaha, eastern Tigray, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 5, No. 2, pp. 117-136.

Negussie A, R Aerts, K Gebrehiwot, B Muys 2008 Seedling mortality causes recruitment limitation of *Boswellia papyrifera* in northern Ethiopia. *Journal of Arid Environments*, Vol. 72, Issue 4, pp. 378-383.

Niguse A, A Aleme 2015 Agro Climatic Characterization of the Western Zone of Tigray Region, Humera. *Journal of Environment and Earth Science*, Vol. 5, No.17, pp. 24-29.

Nigusse AG, OG Adhanom 2019 Flood hazard and flood risk vulnerability mapping using geo-spatial and MCDA around Adigrat, Tigray region, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 11, No. 1, pp. 90-107.

Nigusse AG, UG Adhaneom, GH Kahsay, AM Abrha, DN Gebre, AG Weldearegay 2020 GIS application for urban domestic wastewater treatment site selection in the Northern Ethiopia, Tigray Regional State: a case study in Mekelle City. *Arabian Journal of Geosciences*, Vol. 13, Article No. 311.

Nir N, D Knitter, J Hardt, B Schütt 2021 Human movement and gully erosion: Investigating feedback mechanisms using Frequency Ratio and Least Cost Path analysis in Tigray, Ethiopia. *PloS One*, Vol. 16, No. 2: 0245248.

Noulekoun F , E Birhane, S Chude, A Zenebe 2017 Characterization of *Faidherbia albida* (Del.) A. Chev. population in agroforestry parklands in the highlands of Northern Ethiopia: impact of conservation environmental factors and human disturbances. *Agroforestry Systems*, Vol. 91, pp.123–135.

Nyssen J , J Poesen, D Gebremichael, K Vancampenhout, M D'aes, G Yihdego, G Govers, H Leirs, J Moeyersons, J Naudts, N Haregeweyn, M Haile, J Deckers 2007 Interdisciplinary on-site evaluation of stone bunds to control soil erosion on cropland in Northern Ethiopia. *Soil and Tillage Research*, Vol. 94, Issue 1, pp.151-163.

Nyssen J 1997 Soil Erosion in the Tigray Highlands (Ethiopia): II. Soil Loss Estimation. *Geo-Eco-Trop*, Vol. 21, No. 1-4, pp. 27-49.

- Nyssen J 1997 Vegetation and soil erosion in Dega Tembien (Tigray, Ethiopia). *Bulletin du Jardin botanique National de Belgique*, Vol. 66, No. 1-2, pp. 39-62.
- Nyssen J 1998 Soil and water conservation under changing socio-economic conditions in the Tembien Highlands (Tigray, Ethiopia). *Bulletin de la Société Géographique de Liège, TRANS: Bulletin of the Geographic Society of Liege*, 35: 5-17.
- Nyssen J, J Poesen, M Veyret-Picot, J Moeyersons, M.Haile, J Deckers, J Dewit, J Naudts, K Teka, G Govers 2006 Assessment of gully erosion rates through interviews and measurements: a case study from Northern Ethiopia. *Earth Surface: Processes and Landforms*, Vol. 31, Issue2, pp. 167-185.
- Nyssen J, B Govaerts, T Araya, WM Cornelis H Bauer, M Haile, K Sayre, J Deckers 2011 The use of the marasha ard plough for conservation agriculture in Northern Ethiopia. *Agronomy for Sustainable Development*, Vol. 31, pp. 287–297.
- Nyssen J, J Moeyersons, J Deckers, M Haile, J Poesen 2000 Vertic movements and the development of stone covers and gullies, Tigray Highlands, Ethiopia. *Zeitschrift für Geomorphologie*, Vol. 44 Issue 2, pp. 145-164.
- Nyssen J, J Moeyersons, J Poesen, J Deckers, M Haile 2003 The environmental significance of the remobilisation of ancient mass movements in the Atbara–Tekeze headwaters, Northern Ethiopia. *Geomorphology*, Vol. 49, Issues 3–4, pp. 303-322.
- Nyssen J, J Poesen, K Descheemaeker, N Haregeweyn, M Haile, J Moeyersons, A Frankl, G Govers, N Munro, J Deckers 2008 Effects of region-wide soil and water conservation in semi-arid areas: the case of northern Ethiopia. *Zeitschrift für Geomorphologie*, Vol. 52, Issue 3, pp. 291-315.

Nyssen J, J Poesen, M Haile, J Moeyersons, J Deckers, H Hurni 2009 Effects of land use and land cover on sheet and rill erosion rates in the Tigray highlands, Ethiopia. *Zeitschrift für Geomorphologie, TRANS: Journal of Geomorphology*, Vol. 53, No. 2, pp. 171–197.

Nyssen J, M Haile, J Moeyersons, J Poesen, J Deckers 2000 Soil and water conservation in Tigray (Northern Ethiopia): the traditional dagat technique and its integration with introduced techniques. *Land Degradation and Development*, Vol. 11, Issue 3, pp. 199-208.

Nyssen J, M Haile, J Naudts, N Munro, J Poesen, J Moeyersons, A Frankl, J Deckers, R Pankhurst 2009 Desertification? Northern Ethiopia re-photographed after 140 years. *Science of The Total Environment*, Vol. 407, Issue 8, pp. 2749-2755.

Nyssen J, M Haile, J Poesen, J Deckers, J Moeyersons 2001 Removal of rock fragments and its effect on soil loss and crop yield, Tigray, Ethiopia. *Soil Use and Management*, Vol.17, Issue 3, pp. 179-187.

Nyssen J, M Veyret-Picot, J Poesen, J Moeyersons, M Haile, J Deckers, G Govers 2004 The effectiveness of loose rock check dams for gully control in Tigray, northern Ethiopia. *Soil Use and Management*, Vol. 20, Issue 1, pp. 55-64.

Nyssen J, N Haregeweyn, K Descheemaeker, D Gebremichael, K Vancampenhout, J Poesen, M Haile, J Moeyersons, W Buytaert, J Naudts, J Deckers, G Govers 2006 Comment on “Modelling the effect of soil and water conservation practices in Tigray, Ethiopia” [*Agric. Ecosyst. Environ.* 105 (2005) 29–40]. *Agriculture, Ecosystems and Environment*, Vol. 114, Issues, 2–4, pp. 407-411.

Nyssen J, N Munro, M Haile, J Poesen, K Descheemaeker, N Haregeweyn, J Moeyersons, G Govers, J Deckers 2007 Understanding the environmental changes in Tigray: a photographic

record over 30 years. Tigray Livelihood Papers No. 3, VLIR–Mekelle University IUC Programme, Zala-Daget Project.

Ododo MM 2019 Physico-chemicals and heavy metals analysis of drinking water of Aksum University, Tigray region, Ethiopia. *Journal of Physical and Chemical Sciences*, Vol. 7, Issue 1.

Ogawa R, M Hirata, BG Gebremedhin, S Uchida, T Sakai, K Koda, K Takenaka 2019 Impact of differences in land management on natural vegetation in semi-dry areas: The case study of the Adi Zaboy watershed in the Kilite Awlaelo district, eastern Tigray, Ethiopia. *Environments*, Vol. 6, Issue 1.

Oniki S, M Berhe, T Negash 2020 Role of Social Norms in Natural Resource Management: The Case of the Communal Land Distribution Program in Northern Ethiopia. *Land*, Vol. 9, No. 2: 35.

Opolot E , T Araya, J Nyssen, B Al-Barri, K Verbist, WM Cornelis 2016 Evaluating in Situ Water and Soil Conservation Practices with a Fully Coupled, Surface/Subsurface Process-Based Hydrological Model in Tigray, Ethiopia- Land Degradation and Development, Vol. 27, Issue 8, Special Issue: Desertification: History, Causes and Options for its Control, pp. 1840-1852.

Pender J, B Gebremedhin 2006 Land management, crop production, and household income in the highlands of Tigray, Northern Ethiopia: An econometric analysis. In: J Pender, F Place, S Ehui (eds.) Chapter 5, pp. 107-139. *Strategies for Sustainable Land Management in the East African Highlands*.

Pender J, B Gebremedhin, M Haile 2002 Livelihood strategies and land management practices in the highlands of Tigray. FPRI EPTD Workshop Summary Paper, International Food Policy Research Institute.

Pender J, P Jaggera, B Gebremedhin 2000 Agricultural change and land management in the highlands of Tigray: Causes and

implications. In: pp. 24-26, Working Paper No. 30, International Livestock Research Institute Policies for sustainable land management in the highlands of Ethiopia. Summary of papers and proceedings of a seminar held at the International Livestock Research Institute, Addis Ababa, Ethiopia, 22–23 May 2000.

Pietsch D, MJ Machado 2012 Colluvial deposits– proxies for climate change and cultural chronology. A case study from Tigray, Ethiopia. *Zeitschrift für Geomorphologie, Supplementary Issues*, Vol. 58 Supplementary Issue1, pp. 119-136.

Rabia AH 2012 GIS spatial modeling for land degradation assessment in Tigray, Ethiopia. pp. 161-166. 8th International Soil Science Congress on "Land Degradation and Challenges in Sustainable Soil Management", Çeşme -Izmir, Turkey. 2012.

Reddy TB, MA Gebreselassie 2011 Analyses of land cover changes and major driving forces assessment in middle highland Tigray, Ethiopia: the case of areas around Laelay-Koraro. *Journal of Biodiversity and Environmental Sciences*, Vol. 1, No. 6, pp. 22-29.

Reubens B, J Poesen, J Nyssen, Y Leduc, AZ Abraha, S Tewoldeberhan, H Bauer, K Gebrehiwot, J Deckers, B Muys 2009 Establishment and management of woody seedlings in gullies in a semi-arid environment (Tigray, Ethiopia). *Plant and Soil*, Vol. 324, pp. 131–156.

Reubens B, M Heyn, K Gebrehiwot, M Hermy, B. Muys 2007 Persistent soil seed banks for natural rehabilitation of dry tropical forests in northern Ethiopia. *Tropicultura*, Vol. 25, No. 4, pp. 204-214.

Shiferaw H, A Gebremedhin, T Gebretsadkan, A Zenebe 2018 Modelling hydrological response under climate change scenarios using SWAT model: the case of Ilala watershed, Northern Ethiopia. *Modeling Earth Systems and Environment*, Vol. 4, pp. 437–449.

Shimelse S, T Bekele, S Nemomissa 2017 Effect of Exclosure Age on Carbon Sequestration Potential of Restorations in Tigray Region, N. Ethiopia. American Journal of Biological and Environmental Statistics, Vol. 3, Issue 4, pp. 65-80.

Solomon N , E Birhane, T Tadesse, AC Treydte, K Meles 2017 Carbon stocks and sequestration potential of dry forests under community management in Tigray, Ethiopia. Ecological Processes, Vol. 6, Article No. 20.

Solomon N, AC Segnon, E Birhane 2019 Ecosystem service values changes in response to land-use/land-cover dynamics in dry afro-montane forest in northern Ethiopia. International Journal of Environmental Research and Public Health, Vol.16, No. 23: 4653.

Solomon N, H Hishe, T Annang, O Pabi, IK Asante, E Birhane 2018 Forest cover change, key drivers and community perception in Wujig Mahgo Waren forest of northern Ethiopia. Land, 7, No. 1: 32.

Solomon N, O Pabi, T Annang, IK Asante, E Birhane 2018 The effects of land cover change on carbon stock dynamics in a dry Afromontane forest in northern Ethiopia. Carbon Balance and Management, Vol. 13, Article No. 14.

Tadesse N 2006 Surface waters potential of the Hantebet basin, Tigray, northern Ethiopia. CIGR Journal, Agricultural Engineering International: Vol. VIII.

Tadesse N, A Bairu, K Bheemalingeswara, T G/yohannes 2011 Suitability of groundwater quality for irrigation with reference to hand dug wells, Hantebet Catchment, Tigray, Northern Ethiopia. Momona Ethiopian Journal of Science, Vol. 3, Issue 2.

Tadesse N, D Nedaw, K Woldearegay, T Gebreyohannes, F Van Steenberg 2015 Groundwater management for irrigation in the Raya and Kobo Valleys, Northern Ethiopia. International Journal of Earth Sciences and Engineering, Vol. 8, No. 3, pp. 36-46.

Tadesse N, K Bheemalingeswara, A Berhane 2009 Groundwater suitability for irrigation: a case study from Debre Kidane Watershed, Eastern Tigray, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 1, No. 1, pp. 36– 58.

Tadesse N, S Tadios, M Tesfaye 2010 The water balance of may nugus catchment, Tigray, Northern Ethiopia. *International Journal of Earth Sciences and Engineering*, Vol. 3, No. 5, pp. 609-625.

Tadesse T, A Ruijs, F Hagos 2008 Household waste disposal in Mekelle city, Northern Ethiopia. *Waste Management*, Vol. 28, Issue 10, pp. 2003-2012.

Tahir M, E Imam, T Hussain 2013 Evaluation of land use/land cover changes in Mekelle City, Ethiopia using Remote Sensing and GIS. *Computational Ecology and Software*, Vol. 3, Issue 1, pp. 9-16.

Tamba Y, J Wafula, C Whitney, E Luedeling, N Yigzaw, A Negussie, C Muchiri, Y Gebru, K Shepherd, E Aynekulu 2021 Stochastic simulation of restoration outcomes for a dry afro-montane forest landscape in northern Ethiopia. *Forest Policy and Economics*, Vol. 125, Issue: April, 102403.

Tamene L, A Abegaz, E Aynekulu, K Woldearegay, PLG Vlek 2011 Estimating sediment yield risk of reservoirs in northern Ethiopia using expert knowledge and semi-quantitative approaches. *Lakes and Reservoirs: Science, Policy, and Management for Sustainable Use*, Vol.16, Issue 4, pp. 293-305.

Tamene L, PLG Vlek 2007 Assessing the potential of changing land use for reducing soil erosion and sediment yield of catchments: a case study in the highlands of northern Ethiopia. *Soil Use and Management*, Vol. 23, Issue 1, pp. 82-91.

Tamene L, QB Le, PLG Vlek 2014 A landscape planning and management tool for land and water resources management: an

example application in northern Ethiopia. *Water Resource Management*, Vol. 28, pp. 407–424.

Tamene L, SJ Park, R Dikau, PLG Vlek 2006 Analysis of factors determining sediment yield variability in the highlands of northern Ethiopia. *Geomorphology*, Vol. 76, Issues 1–2, pp. 76-91.

Tamene L, SJ Park, R Dikau, PLG Vlek 2006 Reservoir siltation in the semi-arid highlands of northern Ethiopia: sediment yield–catchment area relationship and a semi-quantitative approach for predicting sediment yield. *Earth Surface: Processes and Landforms*, Vol. 31, Issue 11, pp. 1364-1383.

Tamene L, Z Adimassu, E Aynekulu, T Yaekob 2017 Estimating landscape susceptibility to soil erosion using a GIS-based approach in Northern Ethiopia. *International Soil and Water Conservation Research*, Vol. 5, Issue 3, pp. 221-230.

Taye G, J Poesen, BV Wesemael, M Vanmaercke, D Teka, J Deckers 2013 Effects of land use, slope gradient, and soil and water conservation structures on runoff and soil loss in semi-arid Northern Ethiopia. *Physical Geography*, Vol. 34, Issue 3, pp. 236-259.

Tefera AS, JO Ayoade, NJ Bello 2019 Comparative analyses of SPI and SPEI as drought assessment tools in Tigray Region, Northern Ethiopia. *SN Applied Sciences*, Vol. 1, Article No. 1265.

Tefera AS, JO Ayoade, NJ Bello 2019 Drought occurrence pattern in Tigray Region, northern Ethiopia. *Journal of Applied Sciences and Environmental Management*, Vol. 23, No. 7, 1341-1348.

Tefera AS, JO Ayoade, NJ Bello 2020 Analyses of the relationship between drought occurrences and their causal factors in Tigray Region, Northern Ethiopia. *Tellus A: Dynamic Meteorology and Oceanography*, Vol. 72, - Issue 1, pp.1-18.

Teka D 2014 Multi-scale analysis of surface runoff and water-harvesting dams in a semi-arid region: a case study in Tigray (Ethiopia).

Teka D, B Van Wesemael, V Vanacker, J Poesen, V Hallet, G Taye, J Deckers, N Haregeweyn 2013 Evaluating the performance of reservoirs in semi-arid catchments of Tigray: Tradeoff between water harvesting and soil and water conservation. *Catena*, Vol. 110, Issue: November, pp. 146-154.

Teka K, M Haftu, M Ostwald, C Cederberg 2020 Can integrated watershed management reduce soil erosion and improve livelihoods? A study from northern Ethiopia. *International Soil and Water Conservation Research*, Vol. 8, Issue 3, pp. 266-276.

Teklebirhan A, N Dessie, G Tesfamichael 2012 Groundwater recharge, evapotranspiration and surface runoff estimation using WetSpas modeling method in Illala Catchment, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 4, No.2, pp. 96-110.

Temesgen F, B Warkineh 2020 Woody species structure and regeneration status in kafta sheraro national park dry forest, Tigray region, Ethiopia. *International Journal of Forestry Research*, Vol. 2020, Article ID 4597456.

Terwilliger VJ, Z Eshetu, Y Huang, M Alexandre, M Umer, T Gebru 2011 Local variation in climate and land use during the time of the major kingdoms of the Tigray Plateau in Ethiopia and Eritrea. *Catena*, Vol. 85, Issue 2, pp. 130-143.

Tesfahunegn GB, L Tamene, PLG Vlek 2014 Soil erosion prediction using Morgan-Morgan-Finney model in a GIS environment in Northern Ethiopia catchment. *Applied and Environmental Soil Science*, Vol. 2014, Article ID 468751.

Tesfahunegn GB, PLG Vlek, L Tamene 2012 Management strategies for reducing soil degradation through modeling in a GIS environment in northern Ethiopia catchment. *Nutrient Cycling in Agroecosystems*, Vol. 92, pp. 255–272.

Tesfahunegn GB, TA Gebru 2020 Smallholder farmers' level of understanding on the impacts of climate change on water resources in northern Ethiopia catchment. *GeoJournal*, Vol. 87, pp. 565–583.

Tesfay G 2006 Agriculture, resource management and institutions: A socioeconomic analysis of households in Tigray, Ethiopia. PhD Thesis, Wageningen University.

Tesfaye S , E Birhane, T Leijnse, SEATM van der Zee 2017 Climatic controls of ecohydrological responses in the highlands of northern Ethiopia. *Science of the Total Environment*, Vol. 609, pp. 77-91.

Tesfaye S, G Taye, E Birhane, SE van der Zee 2021 Spatiotemporal variability of ecosystem water use efficiency in northern Ethiopia during 1982–2014. *Journal of Hydrology*, Vol. 603, Part A: 126863

Tesfaye S, G Taye, E Birhane, Sjoerd EATM van der Zee 2019 Observed and model simulated twenty-first century hydro-climatic change of Northern Ethiopia. *Journal of Hydrology: Regional Studies*, Vol. 22: 100595.

Tetemke BA, E Birhane, MM Rannestad, T Eid 2019 Allometric models for predicting above ground biomass of trees in the dry Afromontane forests of Northern Ethiopia. *Forests*, Vol. 10, No. 12: 1114.

Tilahun M, B Muys, E Mathijs, C Kleinn, R Olschewskie, K Gebrehiwot 2011 Frankincense yield assessment and modeling in closed and grazed papyrifera woodlands of Tigray, Northern Ethiopia. *Journal of Arid Environments*, Vol. 75, Issue 8, pp. 695-702.

Tilahun M, L Vranken, B Muys, J Deckers, K Gebregziabher, K Gebrehiwot, H Bauer, E Mathijs 2015 Rural households' demand for frankincense forest conservation in Tigray, Ethiopia: a contingent valuation analysis. *Land Degradation and Development*, Vol. 26, Issue 7, Special Issue: Environmental conservation for food production and sustainable livelihood in tropical Africa, pp. 642-653.

Tilahun Y, K Esser, M Haile 1999 Impacts of conservation bunds on crop yields in Degua Tembien, northern Ethiopia (1999). *Proceedings of the Annual Conference of the Crop Science Society of Ethiopia*, Addis Abeba (Ethiopia), 26-27 Feb 1997. pp. 86-102.

Tsehaye W, A Mohammed 2018 Determinants of electric baking stove adoption in Urban Tigray, Ethiopia. *SMART Journal of Business Management Studies*, Vol. 14, Issue 1, pp. 49-57.

Ubuy MH, K Gebrehiwot, AJ Raj 2014 Biomass estimation of exclosure in the Debrekidan watershed, Tigray region, northern Ethiopia. *International Journal of Agriculture and Forestry*, Vol. 4, No. 2, pp. 88-93.

Ubuy MH, T Eid, OM Bollandssås 2018 Variation in wood basic density within and between tree species and site conditions of exclosures in Tigray, northern Ethiopia. *Trees*, Vol. 32, pp. 967–983.

Ubuy MH, T Eid, OM Bollandssås, E Birhane 2018 Aboveground biomass models for trees and shrubs of exclosures in the drylands of Tigray, northern Ethiopia. *Journal of Arid Environments*, Vol. 156, pp. 9-18.

Vagen TG, Y Tilahun, KB Esser 1999 Effects of stone terracing on available phosphorus and yields on highly eroded slopes in Tigray, Ethiopia. *Journal of Sustainable Agriculture*, Vol. 15, Issue 1, pp. 61-74.

Vanmaercke M, A Zenebe, J Poesen, J Nyssen, G Verstraeten, J Deckers 2010 Sediment dynamics and the role of flash floods in sediment export from medium-sized catchments: a case study from the semi-arid tropical highlands in northern Ethiopia. *Journal of Soils and Sediments*, Vol. 10, pp. 611–627.

Villani L, G Castelli, EY Hagos, E Bresci 2018 Water productivity analysis of sand dams irrigation farming in northern Ethiopia. *Journal of Agriculture and Environment for International Development*, Vol. 112, Issue 1, pp. 139-160.

Walraevens K, I Vandecasteele, K Martens, J Nyssen, J Moeyersons, T Gebreyohannes 2009 Groundwater recharge and flow in a small mountain catchment in northern Ethiopia. *Hydrological Sciences Journal*, Vol. 54, Issue 4, pp. 739-753.

Walraevens K, TG Tewelde, K Amare, A Hussein, G Berhane, R Baert, S Ronsse, S Kebede, L Van Hulle, J Deckers, K Martens, M Van Camp 2015 Water balance components for sustainability assessment of groundwater-dependent agriculture: example of the Mendae Plain (Tigray, Ethiopia). *Land Degradation and Development*, Special Issue: Environmental conservation for food production and sustainable livelihood in tropical Africa, Vol. 26, Issue 7, pp. 725-736.

Wegasie MO, K Klanderud, Ø Totland, K Eldegard 2021 Ontogenetic niche shifts in a locally endangered tree species (*Olea europaea* subsp. *cuspidata*) in a disturbed forest in Northern Ethiopia: Implications for conservation. *PloS one*, Vol. 16, No. 9: 0256843.

Weldearegay SK, DG Tedla 2018 Impact of climate variability on household food availability in Tigray, Ethiopia. *Agriculture and Food Security*, Vol. 7, Article No. 6.

Weldemariam MM 2013 Physico-chemical analysis of Gudbahri river water of Wukro, Eastern Tigray, Ethiopia. *International Journal of Scientific and Research Publications*, Vol. 3, Issue 11.

Weldemariam MM AW Kahsay 2014 Heavy Metal (Pb, Cd, Zn, Cu, Cr and Fe) Content in Almeda Textile Industry Sludge, Northern Tigray, Ethiopia. *International Journal of Scientific and Research Publications*, Vol. 4, Issue 1, pp. 390-392.

Woldearegay K, F Van Steenberg 2015 Shallow groundwater irrigation in Tigray, Northern Ethiopia: Practices and issues. *Engineering Geology for Society and Territory*, Vol. 3, pp. 505-509.

Woldearegay K, F van Steenberg, MA Perez, B Grum, M van Beusekom 2015 Water harvesting from roads: climate resilience in Tigray, Ethiopia. *IRF Examiner*, Vol. 12, pp. 1-7.

Woldemichael LK, T Bekele, S Nemomissa 2010 Vegetation composition in Hugumbirda-Gratkhassu national forest priority area, South Tigray. *Momona Ethiopian Journal of Science*, Vol. 2, No. 2, pp. 27-48.

Woldu G, N Solomon, H Hishe, H Gebrewahid MA Gebremedhin, E Birhane 2020 Topographic variables to determine the diversity of woody species in the enclosure of Northern Ethiopia. *Heliyon*, Vol. 6, Issue 1: 03121.

Yami M, K Gebrehiwot, M Stein, W Mekuria 2006 Impact of area enclosures on density, diversity, and population structure of woody species: the case of May Ba'ati-Douga Tembien, Tigray, Ethiopia. *Ethiopian Journal of Natural Resources*, Vol. 8, No. 1, pp. 100-110.

Yami M, K Gebrehiwot, M Stein, W Mekuria 2007 Impact of Area Enclosures on Density and Diversity of Large Wild Mammals: The Case of May Ba ti, Douga Tembien District, Central Tigray, Ethiopia. *East African Journal of Sciences*, Vol. 1, No. 1, pp. 55-68.

Yami M, W Mekuria, M Hauser 2013 The effectiveness of village bylaws in sustainable management of community-managed exclosures in Northern Ethiopia. *Sustainability Science*, Vol. 8, pp. 73-86.

Yayneshet T, LO Eik, SR Moe 2009 Seasonal variations in the chemical composition and dry matter degradability of exclosure forages in the semi-arid region of northern Ethiopia. *Animal Feed Science and Technology*, Vol. 148, Issue 1, pp. 12-33.

Yayneshet T, LO Eik, SR Moe 2009 The effects of exclosures in restoring degraded semi-arid vegetation in communal grazing lands in northern Ethiopia. *Journal of Arid Environments*, Vol. 73, Issues 4–5, pp. 542-549.

Yenehun A , K Walraevens, O Batelaan 2017 Spatial and temporal variability of groundwater recharge in Geba basin, Northern Ethiopia. *Journal of African Earth Sciences*, Vol. 134, pp. 198-212.

Yirga G, E Imam, HH De Iongh, H Leirs, S Kiros, TG Yohannes, M Teferi, H Bauer 2014 Local spotted hyena abundance and community tolerance of depredation in human-dominated landscapes in Northern Ethiopia. *Mammalian Biology*, Vol. 79, pp. 325–330.

Yirga G, H Bauer 2010 Livestock depredation of the spotted hyena (*Crocuta crocuta*) in Southern Tigray, Northern Ethiopia. *International Journal of Ecology and Environmental Sciences*, Vol. 36, No. 1, pp. 67-73.

Yirga G, H Leirs, HH De Iongh, T Asmelash, K Gebrehiwot, J Deckers, H Bauer 2015 Spotted hyena (*Crocuta crocuta*) concentrate around urban waste dumps across Tigray, northern Ethiopia. *Wildlife Research*, Vol. 42, No. 7, pp. 563-569. , Vol. 42, No. 7, pp. 563-569.

Yirga G, HH De Iongh, H Leirs, K Gebrihiwot, J Deckers, H Bauer 2012 Adaptability of large carnivores to changing anthropogenic

food sources: diet change of spotted hyena (*Crocuta crocuta*) during Christian fasting period in northern Ethiopia. *Journal of Animal Ecology*, Vol. 81, No. 5, pp. 1052-1055.

Yirga G, W Ersino, HH De Iongh, H Leirs, K Gebrehiwot, J Deckers, H Bauer 2013 Spotted hyena (*Crocuta crocuta*) coexisting at high density with people in Wukro district, northern Ethiopia. *Mammalian Biology*, Vol. 78, Issue 3, pp. 193-197.

Yohannes M, M Haile 2010 The potential of in situ rain water harvesting for water resources conservation on malaria transmission in Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 2, pp. 49-63.

Zenebe GB, A Hussien, A Girmay, G Hailu 2020 Spatial analysis of groundwater vulnerability to contamination and human activity impact using a modified DRASTIC model in Elalla-Aynalem Catchment, Northern Ethiopia. *Sustainable Water Resources Management*, Vol. 6, Article No. 51.

Zeratsion BT 2019 Urban forest change detection in Endayesus area, Tigray, Ethiopia. *Cogent Food & Agriculture*, Vol.5, Issue 1, Article: 1641254.

Zeweld W, G Van Huylenbroeck, G Tesfay, H Azadi, S Speelman 2020 Sustainable agricultural practices, environmental risk mitigation and livelihood improvements: Empirical evidence from Northern Ethiopia. *Land Use policy*, Vol.95: 103799.

Geology

Alene M, R Ruffini, R Sacchi 2000 Geochemistry and geotectonic setting of Neoproterozoic rocks from northern Ethiopia (Arabian-Nubian Shield). *Gondwana Research*, Vol. 3, Issue 3, pp. 333-347.

Alene M 1998 Tectonomagmatic evolution of the Neoproterozoic rocks of the Mai Kenetal–Negash area, Tigrai, northern Ethiopia. Ph. D. Dissertation, University of Turin, Italy.

Alene M, L Secco, A Dal Negro, R Sacchi 2000 Crystal chemistry of clinopyroxene in Neoproterozoic metavolcanic rocks of Tigrai, northern Ethiopia. *Italian Journal of Geosciences*, Vol. 119, Issue 3, pp. 581–586.

Asrat A 2002 The rock-hewn churches of Tigrai, Northern Ethiopia: A geological perspective. *Geoarchaeology: An International Journal*, Vol. 17, Issue 7, pp. 649–663.

Asrat A, G Gleizes, P Barbey, D Ayalew 2003 Magma emplacement and mafic–felsic magma hybridization: structural evidence from the Pan-African Negash pluton, Northern Ethiopia. *Journal of Structural Geology*, Vol. 25, Issue 9, pp. 1451–1469.

Asrat A, P Barbey, JN Ludden, L Reisberg, G Gleizes, D Ayalew 2004 Petrology and isotope geochemistry of the Pan-African Negash Pluton, Northern Ethiopia: Mafic–Felsic magma interactions during the construction of Shallow-level Calc-alkaline Plutons. *Journal of Petrology*, Vol. 45, Issue 6, pp. 1147–1179.

Asrat A 1997 Geology and geochemistry of the Negash Pluton and their metallogenic significance, central Tigrai. MSc. Thesis, Addis Ababa University.

Avigad D, RJ Stern, M Beyth, N Miller, MO McWilliams 2007 Detrital zircon U–Pb geochronology of Cryogenian diamictites and Lower Paleozoic sandstone in Ethiopia (Tigrai): age constraints on Neoproterozoic glaciation and crustal evolution of the southern Arabian–Nubian Shield. *Precambrian Research*, Vol. 154, Issues 1–2, pp. 88–106.

Berakhi O, L Brancaccio, G Calderoni, M Coltorti, F Dramise, MM Umer 1998 The Mai Maikden sedimentary sequence: a reference

point for the environmental evolution of the Highlands of Northern Ethiopia. *Geomorphology*, Vol. 23, Issues 2–4, pp. 127-138.

Berhane G 2010 Engineering geological soil and rock characterization in the Mekelle town, Northern Ethiopia: implications to engineering practice. *Momona Ethiopian Journal of Science*, Vol. 2, No. 2, pp. 64-86.

Berhane G, K Walraevens 2013 Geological challenges in constructing the proposed Geba dam site, northern Ethiopia. *Bulletin of Engineering Geology and the Environment*, Vol. 72, pp. 339–352.

Bheemalingeswara K, N Tadesse 2009 Petrographic and geochemical study of low grade metamorphic rocks around Negash with reference to base metal mineralization and groundwater quality, Tigray Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 1, No. 2, pp. 106-132.

Bosellini A, A Russo, PL Fantozzi, G Assefa, T Solomon 1997 The Mesozoic succession of the Mekele outlier (Tigre province, Ethiopia). *Memorie di scienze geologiche*, Vol. 49, pp. 95-116.

Bussert R 2014 Depositional environments during the Late Palaeozoic ice age (LPIA) in northern Ethiopia, NE Africa. *Journal of African Earth Sciences*, Vol. 99, Part 2, Issue: November, pp. 386-407.

Bussert R, E Schrank 2007 Palynological evidence for a latest Carboniferous-Early Permian glaciation in Northern Ethiopia. *Journal of African Earth Sciences*, Vol. 49, Issues 4–5, pp. 201-210.

Bussert R 2010 Exhumed erosional landforms of the Late Palaeozoic glaciation in northern Ethiopia: Indicators of ice-flow direction, palaeolandscape and regional ice dynamics. *Gondwana Research*, Vol. 18, Issues 2–3, pp. 356-369.

Coltorti M, F Dramis, CD Ollier 2007 Planation surfaces in northern Ethiopia. *Geomorphology*, Vol. 89, Issues 3–4, pp. 287-296.

Coltorti M, P Pieruccini, O Berakhi, F Dramis, A Asrat 2009 The Geomorphological Map of Mt. Amba Aradam Southern Slope (Tigray, Ethiopia). *Journal of Maps*, Vol. 5, Issue 1, pp. 56-65.

Gebreyohannes T, F De Smedt, M Hagos, S Gebresilassie, K Amare, K Kabeto, A Hussein, J Nyssen, H Bauer, J Moeyersons, J Deckers, M Haile, N Taha 2010 Large-scale geological mapping of the Geba basin, northern Ethiopia. Tigray Livelihood Paper No. 9, Mekelle University.

Gebre Y, AA Elueze, K Amare, FWN Dongmo 2019 Compositional characteristics and genetic affinity of the ferricrete deposit in Adi Kokeb district, northwestern Tigray, Ethiopia. *Applied Earth Science: Transactions of the Institutions of Mining and Metallurgy*, Vol. 128, Issue 4, pp. 146-157.

Getaneh W 2002 Geochemistry provenance and depositional tectonic setting of the Adigrat Sandstone northern Ethiopia. *Journal of African Earth Sciences*, Vol. 35, Issue 2, pp. 185-198.

Gidey T, M Hagos, B Konka, A Gebremicale 2020 Genesis and characteristics of lateritic iron deposit in Mai-Kuhli area, western Tigray, northern Ethiopia. *Journal of African Earth Sciences*. Vol. 172: 104005.

Hagos M, C Koeberl, K Kabeto, F Koller 2010 Geochemical Characteristics of the Alkaline Basalts and The Phonolite-Trachyte Plugs of the Axum Area, Northern Ethiopia. *Austrian Journal of Earth Sciences*, Vol. 103, No. 2, pp. 153-170.

Hiluf H, A Asrat, 2021 Petrogenesis of basaltic and associated rhyolitic rocks of the Alaje Formation from the Aiba area in Tigray, Northern Ethiopia. *Journal of African Earth Sciences*, Vol. 173: 104057.

Kidane T 2014 Paleomagnetic dating of the Enticho sandstone at negash locality (Tigray Region, northern Ethiopia): implication for quaternary remagnetization. *SINET: Ethiopian Journal of Science*, Vol. 37, No. 1, pp. 31–42.

Kiessling W, DK Pandey, M Schemm-Gregory, H Mewis, M Aberhan 2011 Marine benthic invertebrates from the Upper Jurassic of northern Ethiopia and their biogeographic affinities. *Journal of African Earth Sciences*, Vol. 59, Issues 2–3, pp.195-214.

Kuster D, SB Dwivedi, K Kabeto, K Mehari 2003 Chalcophile element depletion in mafic sills of the Mekelle basin, Tigray: a guide to Ni-Cu-PGE exploration in the Ethiopian flood basalt province. *Health and Environmental Research Online*, 2003, pp. 603-606.

Marini A, MT Melis 1998 Fotointerpretazione e telerilevamento per l'interpretazione geomorfologica e di land-use delle regioni di Axum e Adua (Tigray-Etiopia nord-orientale). *TRANS: Photointerpretation and remote sensing for the geomorphological and land-use interpretation of the regions of Axum and Adua (Tigray-north-eastern Ethiopia)*. University of Cagliari, Contribution to Conference Proceedings 4.1.

Martire L, P Clari, G Pavia 1998 Stratigraphic analysis of the Upper Jurassic (Oxfordian-Kimmeridgian) Antalo limestone in the Mekele outlier (Tigray, Northern Ethiopia): preliminary data. *Mémoires du Muséum national d'histoire naturelle*, Vol. 179, pp. 131-144.

Mebrahtu G, A Abay, G Hailu, M Hagos 2020 Electrical resistivity imaging and engineering geological investigation of Gereb Segen dam, northern Ethiopia. *Bulletin of Engineering Geology and the Environment*, Vol. 79, pp. 83–95.

Miller NR, M Alene, R Sacchi, RJ Stern, A Conti, A Kröner, G Zuppi 2003 Significance of the Tambien Group (Tigray, N. Ethiopia)

for snowball Earth events in the Arabian–Nubian shield. *Precambrian Research*, Vol. 121, pp. 263–283.

Miller NR, D Avigad, RJ Stern, M Beyth 2011 The Tambien Group, Northern Ethiopia (Tigre). *Geological Society, London, Memoirs*, Vol. 36. pp. 263–276.

Miller NR, RJ Stern, D Avigad, M Beyth, B Schilman 2009 Cryogenian slate-carbonate sequences of the Tambien Group, Northern Ethiopia (I): Pre-“Sturtian” chemostratigraphy and regional correlations. *Precambrian Research*, Vol. 170, Issues 3–4, pp. 129–156.

Moeyersons J, M Van Den Eeckhaut, J Nyssen, T Gebreyohannes, J Van de Wauw, J Hofmeister, J Poesen, J Deckers, H Mitiku 2008 Mass movement mapping for geomorphological understanding and sustainable development: Tigray, Ethiopia. *Catena*, Vol. 75, Issue 1, pp. 45-54.

Resom A, A Asrat, M Kinfè, K Ngusse, K Gebrehiwot, H Mesfn, B Fantahun, B Jobrie, MB Shibeshi, W Girmay, M Molla 2021 Geochemistry of the Adwa–Yeha felsic plugs and domes, Tigray–Northern Ethiopia: Implications to their petrogenesis and tectonic setting. *Journal of African Earth Sciences*, Vol. 174: 104075.

Sacchi R, M Alene, M Barbieri, A Conti 2007 On the Palaeozoic Tillite of the Adigrat Group (Tigray, Ethiopia). *Periodico di Mineralogia*, Vol. 76, No. 2-3, pp. 241-251.

Sembroni A , P Molin, F Dramis, B Abebe 2017 Geology of the Tekeze river basin (northern Ethiopia). *Journal of Maps*, Vol. 13, No. 2, pp. 621-631

Sembroni A , P Molin, F Dramis, C Faccenna, B Abebe 2017 Erosion-tectonics feedbacks in shaping the landscape: An example from the Mekele Outlier (Tigray, Ethiopia). *Journal of African Earth Sciences*, Vol. 129, Issue: May, pp. 870-886.

Sifeta K, BP Roser, JI Kimura 2005 Geochemistry, provenance, and tectonic setting of Neoproterozoic metavolcanic and metasedimentary units, Werri area, Northern Ethiopia. *Journal of African Earth Sciences*, Vol. 41, Issue 3, pp. 212-234.

Tadesse T, K Suzuki, M Hoshino 1997 Chemical Th–U total Pb isochron age of zircon from the Mareb Granite in northern Ethiopia, 1995. *The Journal of Earth and Planetary Sciences*, Nagoya University, Vol. 44, pp. 21-27.

Tadesse T, M Hoshino, K Suzuki, S Iizumi 2000 SmNd, RbSr and ThUPb zircon ages of syn-and post-tectonic granitoids from the Axum area of northern Ethiopia. *Journal of African Earth Sciences*, Vol. 30, Issue 2, pp. 313-327.

Tadesse T, M Hoshino, Y Sawada 1999 Geochemistry of low-grade metavolcanic rocks from the Pan-African of the Axum area, northern Ethiopia. *Precambrian Research*, Vol. 96, Issues 1–2, pp. 101-124.

Tadesse T 1996 Structure across a possible intra-oceanic suture zone in the low-grade Pan-African rocks of northern Ethiopia. *Journal of African Earth Sciences*, Vol. 23, Issue 3, pp. 375-381.

Tadesse A A 1998 Geochemistry of Neoproterozoic granitoids from the Axum area, northern Ethiopia. *Journal of African Earth Sciences*. *Journal of African Earth Sciences*. Vol. 27, No. 3-4, pp. 437-460.

Teka K, J Nyssen, N Teha, M Haile, J Deckers 2015 Soil, land use and landform relationship in the Precambrian lowlands of northern Ethiopia. *Catena*, Issue: August, pp. 84-91.

Worash G, R Valera 2002 Rare earth element geochemistry of the Antalo Supersequence in the Mekele Outlier (Tigray region, northern Ethiopia). *Chemical Geology*, Vol. 182, Issues 2–4, pp. 395-407.

Yihdego Y, HS Salem, BG Kafui, Z Veljkovic 2018 Economic geology value of oil shale deposits: Ethiopia (Tigray) and Jordan. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, Vol. 40, Issue 17, pp. 2079-2096.

Health

Abay GK, BH Abraha 2020 Trends of Mycobacterium tuberculosis and rifampicin resistance in Adigrat General Hospital, Eastern zone of Tigray, North Ethiopia. *Tropical Diseases, Travel Medicine and Vaccines*, Vol. 6, Article No. 14.

Abay S, A Addissie, G Davey, B Farsides, T Addissie 2016 Rapid ethical assessment on informed consent content and procedure in Hintalo-Wajirat, northern Ethiopia: a qualitative study. *PloS One*, Vol. 11, No. 6: 0157056.

Abayu H, Z Birhanu, A Nega, A Kidanemariam 2015 Prevalence and associated factors of unintended pregnancy in Welkaite Woreda, Tigray and North Ethiopia cross sectional study by 2012. *Journal of Pregnancy and Child Health*, Vol. 2, Issue 2, 1000137.

Abbasi I, S Aramin, A Hailu, W Shiferaw, A Kassahun, S Belay, C Jaffe, A Warburg 2013 Evaluation of PCR procedures for detecting and quantifying *Leishmania donovani* DNA in large numbers of dried human blood samples from a visceral leishmaniasis focus in Northern Ethiopia. *BMC Infectious Diseases* Vol. 13, Article No. 153.

Abbay AG, AT Mulatu, H Azadi 2018 Community knowledge, perceived beliefs and associated factors of mental distress: a case study from Northern Ethiopia. *International Journal of Environmental Research and Public Health*, Vol.15, No. 11: 2423.

Abdelwahab R, H Yang, HG Teka 2017 A quality improvement study of the emergency centre triage in a tertiary teaching hospital in northern Ethiopia. *African Journal of Emergency Medicine*, Vol. 7, Issue 4, pp. 160-166.

Abdulkader M, I van Aken, S Niguse, H Hailekiros, M Spigt 2019 Treatment outcomes and their trend among tuberculosis patients treated at peripheral health settings of Northern Ethiopia between 2009 and 2014: registry-based retrospective analysis. *BMC Research Notes*, Vol. 12, Article No, 786.

Abdurhman N 2010 Ethnobotanical Study of Medicinal Plants Used by Local People in Ofla Wereda, Southern Zone of Tigray Region, Ethiopia. Thesis, Addis Ababa University.

Abebayehu T, M Kibrom 2010 Study on ectoparasitic defects of processed skins at Sheba Tannery, Tigray, Northern Ethiopia. *Tropical Animal Health and Production*, Vol. 42, No. 8, pp. 1719–1722.

Abebe AM, GW Fitie, DA Jember, MM Reda, GE Wake 2020 Teenage pregnancy and its adverse obstetric and perinatal outcomes at Lemlem Karl Hospital, Tigray, Ethiopia, 2018. *BioMed Research International*, Vol. 2020, Article ID 3124847.

Abebe HT, MT Adhana, MW Gebremichael, KE Gezae, AA Gebreselassie 2021 Magnitude, trends and determinants of skilled delivery from Kilite-Awlaelo Health Demographic Surveillance System, Northern Ethiopia, 2009-2017. *Plos One*, Vol. 16, No. 9: 0254146.

Abebe M, A Hailelule, B Abrha, A Nigus, M Birhanu, H Adane, T Genene, G Getachew, G Merga, A Haftay 2014 Antibiogram of *Escherichia coli* strains isolated from food of bovine origin in selected Woredas of Tigray, Ethiopia. *African Journal of Bacteriology Research*, Vol. 6, Issue 3, pp. 17-22.

Abebe N, B Erko, G Medhin, N Berhe 2014 Clinico-epidemiological study of Schistosomiasis mansoni in Waja-Timuga, District of Alamata, northern Ethiopia. *Parasites and Vectors*, Vol. 7, Article No. 158.

Abera GB, SM Abebe, AG Werku 2020 Demand for Cervical Cancer Screening in Tigray Region of Ethiopia in 2018: A Community-Based Cross-Sectional Study. *International Journal of Women's Health*, 12: 795–804.

Abera GG, YK Alemayehu, J Herrin 2017 Public-on-private dual practice among physicians in public hospitals of Tigray National Regional State, North Ethiopia: perspectives of physicians, patients and managers. *BMC Health Services Research*, Vol. 17, Article No. 713.

Abera SF, EJ Kantelhardt, AM Bezabih, AA Gebru, G Ejeta, J Lauvai, A Wienke, V Scherbaum 2019 Nutrition-specific and sensitive drivers of poor child nutrition in Kilde Awlaelo-Health and Demographic Surveillance Site, Tigray, Northern Ethiopia: implications for public health nutrition in resource-poor settings. *Global Health Action*, Vol. 12, Issue 1: 1556572.

Abera SF, EJ Kantelhardt, AM Bezabih, M Tsadik, J Lauvai, G Ejeta, A Wienke, J Frank, V Scherbaum 2020 What factors are associated with maternal undernutrition in eastern zone of Tigray, Ethiopia? Evidence for nutritional well-being of lactating mothers. *BMC Public Health*, Vol. 20, Article No. 1214.

Aberhe W, T Mariye, D Bahrey, K Zereabruk, A Hailay, G Mebrahtom, K Gemechu, B Medhin 2020 Prevalence and factors associated with uncontrolled hypertension among adult hypertensive patients on follow-up at Northern Ethiopia, 2019: cross-sectional study. *Pan African Medical Journal*, Vol. 36: 187.

Abiyot T, M Kassa, G Buruh, K Kidanu 2014 Awareness of obstetric danger signs and its associated factors among pregnant women in public health institutions, Mekelle City, Tigray, Ethiopia 2014. *Extensive Journal of Applied Sciences*, Vol. 3, No. 1, pp. 31-38.

Aboye W, T Berhe, T Birhane, H Gerensea 2018 Prevalence and associated factors of low birth weight in Axum town, Tigray, North Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 684.

Abraha A, A Myléus, P Byass, A Kahsay, J Kinsman 2019 Social determinants of under-5 child health: A qualitative study in Wolkayit Woreda, Tigray Region, Ethiopia. *PloS One*, Vol. 14, No. 6: 0218101.

Abraha D, G Welu, M Berwo, M Gebretsadik, T Tsegay, G Gebreheat, H Gebremariam 2019 Knowledge of and Utilization of Emergency Contraceptive and Its Associated Factors among Women Seeking Induced Abortion in Public Hospitals, Eastern Tigray, Ethiopia, 2017: A Cross-Sectional Study. *BioMed Research International*, Vol. 2019, Article ID 7209274.

Abraha HE, Z Gessesse, T Gebrecherkos, Y Kebede, AW Woldegiorgis, MH Tequare, AL Welderufael, D Zenebe, AG Gebremariam, TC Dawit, DW Gebremedhin, TR de Wit, D Wolday 2021 Clinical features and risk factors associated with morbidity and mortality among patients with COVID-19 in northern Ethiopia. *International Journal of Infectious Diseases*, Vol. 105, pp. 776-783.

Abraha TH, AS Teferra, AA Gelagay 2017 Postpartum modern contraceptive use in northern Ethiopia: prevalence and associated factors. *Epidemiology and Health*, Vol. 39: 2017012.

Abraha TH, BB Gebrezgiabher, BG Aregawi, DS Belay, LT Tikue, EB Reda 2019 Factors associated with compliance with the recommended frequency of postnatal care services in four rural

districts of Tigray region, north Ethiopia. *Korean Journal of Family Medicine*, Vol. 40, No. 5, pp. 329–334.

Abraha TH, BB Gebrezgiabher, BG Aregawi, DS Belay, LT Tikue, GM Welay 2018 Predictors of postpartum contraceptive use in rural Tigray region, northern Ethiopia: a multilevel analysis. *BMC Public Health*, Vol. 18, Article No. 1017.

Abraha TH, HS Belay, GM Welay 2018 Intentions on contraception use and its associated factors among postpartum women in Aksum town, Tigray region, northern Ethiopia: a community-based study. *Reproductive Health*, Vol. 15, Article No. 188.

Abrha S, E Tadesse, TM Atey, F Molla, W Melkam, B Masresha, S Gashaw, A Wondimu 2018 Availability and affordability of priority life-saving medicines for under-five children in health facilities of Tigray region, northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 18, Article No. 464.

Accorsi S, G-Ab Barnabas, P Farese, V Padovese, M Terranova, V Racalbuto, A Morrone 2009 Skin disorders and disease profile of poverty: analysis of medical records in Tigray, northern Ethiopia, 2005–2007. *Transactions of The Royal Society of Tropical Medicine and Hygiene*, Vol. 103, Issue 5, pp. 469–475.

Adane K, M Spigt, S Ferede, T Asmelash, M Abebe, G-J Dinant 2016 Half of pulmonary tuberculosis cases were left undiagnosed in prisons of the Tigray region of Ethiopia: implications for tuberculosis control. *PloS One*, Vol. 11, No. 2: 0149453.

Adem N, KK Berhe, Y Tesfay 2017 Awareness and associated factors towards neonatal danger signs among mothers attending public health institutions of Mekelle City, Tigray, Ethiopia, 2015. *Journal of Child and Adolescent Behavior*, Vol. 5, No. 6: 365.

Adera A, T Belete, A Gebru, A Hagos, W Gebregziabher 2015 Assessment of the role of men in family planning utilization at Edaga-Hamuse town, Tigray, North Ethiopia. *American Journal of Nursing Science*, Vol. 4, No. 4, pp. 174-181.

Adhanom G, D Gebreegziabiher, Y Weldu, AG Wasihun, T Araya, H Legese, BS Lopes, M Saravanan 2019 Species, risk factors, and antimicrobial susceptibility profiles of bacterial isolates from HIV-infected patients suspected to have pneumonia in Mekelle zone, Tigray, Northern Ethiopia. *BioMed Research International*, Vol.2019, Article ID 8768439.

Adhena G, HD Hidru 2020 Knowledge, attitude, and practice of high-risk age groups to Coronavirus Disease-19 prevention and control in Korem District, Tigray, Ethiopia: cross-sectional study. *Infection and Drug Resistance*, Vol. 13, pp. 3801–3809.

Adhena T, A Haftu, B Gebreegziabher 2017 Assessment of magnitude and associated factors of adverse birth outcomes among deliveries at Suhul Hospital Shire Tigray, Ethiopia from September, 2015 to February, 2016. *Biomedical Journal of Scientific and Technical Research*, Vol. 1, No. 7, pp. 2045-2052.

Adish AA, SA Esrey, TW Gyorkos, T Johns 1999 Risk factors for iron deficiency anaemia in preschool children in northern Ethiopia. *Public Health Nutrition*, Vol. 2 , Issue 3, pp. 243-252.

Agzie M, S Niguse, E Tsegay, G Kahsay, MA Mahmud 2019 Bacterial contaminants of stored blood and blood components ready for transfusion at blood banks in Mekelle, Northern Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 169.

Ajemu KF, AA Desta, AA Berhe, AG Woldegebriel, NM Bezabih, D Negash, AD Wuneh, TW Woldearegay 2021 Magnitude, components and predictors of metabolic syndrome in Northern

Ethiopia: Evidences from regional NCDs STEPS survey, 2016. *PloS one*, Vol. 16, No. 6: 0253317.

Alema HB, SA Hailemariam, KH Misgina, MGn Weldu, YS Gebregergis, GK Mekonen, KA Gebremedhin 2019 Health care seeking delay among pulmonary tuberculosis patients in North West zone of Tigray region, North Ethiopia. *BMC Infectious Diseases*, Vol. 19, Article No. 309.

Alema HB, WA Yalew, MB Beyene, MG Woldu 2015 HIV positive status disclosure and associated factors among HIV positive adults in Axum health facilities, Tigray, Northern Ethiopia. *Science Journal of Public Health*, Vol. 3, No. 1, pp. 61-66.

Alema NM, G Semagn, S Melesse, EM Araya, H Gebremedhin, DG Demsie, SW Asgedom, E Weldekidan 2020 Patterns and determinants of prescribed drug use among pregnant women in Adigrat general hospital, northern Ethiopia: a cross-sectional study. *BMC Pregnancy and Childbirth*, Vol. 20, pp. 624.

Alemayeh H, H Assefa, Y Adama 2014 Prevalence and factors associated with post natal care utilization in Abi-Adi Town, Tigray, Ethiopia: a cross sectional study. *International Journal of Pharmaceutical and Biological Sciences Fundamentals*, Vol. 8, Issue 1, pp. 23-35.

Alemayehu M, A Aregay, A Kalayu, H Yebyo 2014 HIV disclosure to sexual partner and associated factors among women attending ART clinic at Mekelle hospital, Northern Ethiopia. *BMC Public Health*, Vol. 14, Article No. 746.

Alemayehu M, A Kalayu, A Desta, H Gebremichael, T Hagos, H Yebyo 2015 Rural women are more likely to use long acting contraceptive in Tigray region, Northern Ethiopia: a comparative community-based cross sectional study. *BMC Women's Health*, Vol. 15, Article No. 71.

Alemayehu M, F Tinsae, K Hailelassie, O Seid, G Gebregziabher, H Yebyo 2015 Undernutrition status and associated factors in under-5 children, in Tigray, Northern Ethiopia. *Nutrition*, Vol. 31, Issues 7–8, pp. 964-970.

Alemayehu M, H Yebyo, AA Medhanyie, A Bayray, M Fantahun, GK Goba 2017 Determinants of repeated abortion among women of reproductive age attending health facilities in Northern Ethiopia: a case–control study. *BMC Public Health*, Vol. 17, Article No. 188.

Alemayehu M, K Abreha, H Yebyo, K Zemichael, H Gebremichael 2014 Factors associated with timely initiation and exclusive breast feeding among mothers of Axum town, Northern Ethiopia. *Science Journal of Public Health*, Vol. 2, No. 5, pp. 394-401.

Alemayehu M, T Belachew, T Tilahun 2012 Factors associated with utilization of long acting and permanent contraceptive methods among married women of reproductive age in Mekelle town, Tigray region, north Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 12, Article No. 6.

Alemayehu S, B Afera, K Kidanu, T Belete 2020 Management outcome of burn injury and associated factors among hospitalized children at Ayder Referral Hospital, Tigray, Ethiopia. *International Journal of Pediatrics*, Vol. 2020, Article ID 9136256.

Alemayehu S, K Kidanu, T Kahsay, M Kassa 2019 Risk factors of acute respiratory infections among under five children attending public hospitals in southern Tigray, Ethiopia, 2016/2017. *BMC Pediatrics*, Vol. 19, Article No. 380.

Alemayehu T, TA Ghebreyesus, KH Witten, A Bosman, A Teklehaimanot 1998 Community-based malaria control programme in Tigray Region, Northern Ethiopia: results of a mortality survey of rural under-five children. *Ethiopian Journal of Health Development*, Vol. 35, No. 3.

Alemayehu T, Y Ye-Ebiyo, TA Ghebreyesus, KH Witten, A Bosman, A Teklehaimanot 1998 Malaria, schistosomiasis, and intestinal helminths in relation to microdams in Tigray, northern Ethiopia. *Parassitologia*, Vol. 40, No. 3, pp. 259-267.

Alemseged G, S Niguse, H Hailekiros, M Abdulkadir, M Saravanan, T Asmelash 2015 Isolation and anti-microbial susceptibility pattern of group B Streptococcus among pregnant women attending antenatal clinics in Ayder Referral Hospital and Mekelle Health Center, Mekelle, Northern Ethiopia. *BMC Research Notes*, Vol. 8, Article No. 518.

Alemu M, H Bedemo, G Bugssa, S Bayissa, K Tedla 2015 Epidemiology of intestinal parasite infections among kindergarten children in Mekelle Town, Northern Ethiopia. *International Journal of Pharma Sciences and Research*, Vol 6, No 11, pp. 1392-1396.

Alemu M, D Tadesse, T Hailu, W Mulu, A Derby, T Hailu, B Abera 2017 Performance of laboratory professionals working on malaria microscopy in Tigray, North Ethiopia. *Journal of Parasitology Research*, Vol. 2017, Article ID 9064917.

Ali M, T Asefaw, H Beyene, P Byass, M Shishay, MS Hasibu, FK Pedersen 2001 A community-based study of childhood morbidity in Tigray, northern Ethiopia. *Ethiopian Journal of Health Development*, Vol. 15, No. 3, pp. 165-172.

Amabye TG, AM Bezabh, F Mekonen 2016 Phytochemical and antimicrobial potentials leaves extract of Eucalyptus Globulus oil from Maichew Tigray Ethiopia. *International Journal of Complementary and Alternative Medicine*, Vol. 2, No. 3: 00056.

Amabye TG, TM Shalkh 2015 Phytochemical screening and evaluation of antibacterial activity of *Ruta graveolens* L.-A medicinal plant grown around Mekelle, Tigray, Ethiopia. *Natural Products Chemistry and Research*, Vol. 3, Issue 6: 1000195.

Amacher GS, L Ersado, DL Grebner, WF Hyde 2004 Disease, microdams and natural resources in Tigray, Ethiopia: impacts on productivity and labour supplies. *The Journal of Development Studies*, Vol. 40, Issue 6, pp. 122-145.

Amare SA 2013 The impact of Ethiopian Health Services Extension Program on maternal and child health outcomes: the case of Tigray Region. Thesis, Georgia State University, USA.

Ambaye TG 2015 Knowledge of iodine deficiency disorders and intake of iodized salt in residents of Mekelle Tigray, Ethiopia. *Journal of Food Science and Nutrition Therapy*, Vol. 1, No. 1, pp. 2-7.

Araya EM, HA Gebrezgabiher, GH Tekulu, NM Alema, D Getnet, HT Gebru, BA Adamu 2020 Medication Non-Adherence and Associated Factors Among Diabetic Patients Visiting General Hospitals in the Eastern Zone of Tigray, Northern Ethiopia. *Patient Prefer Adherence*, Vol. 14, pp. 2071–2083

Araya GD, HL Reda, AG Tesema 2015 Utilization of long lasting insecticidal nets among household in malarious areas of Raya Alamata District, Tigray, Ethiopia. *Science Journal Public Health*, Vol. 3, Issue 2, pp. 216-221.

Araya S, B Abera, M Giday 2015 Study of plants traditionally used in public and animal health management in Seharti Samre District, Southern Tigray, Ethiopia. *Journal of Ethnobiology and Ethnomedicine*, Vol. 11, Article No. 22

Aregawi G, N Assefa, F Mesfin, F Tekulu, T Adhena, M Mulugeta, G Gebreayezgi 2019 Preterm births and associated factors among mothers who gave birth in Axum and Adwa Town public hospitals, Northern Ethiopia, 2018. *BMC Research Notes*, Vol. 12, Article No. 640.

Aregawi HG, TG Gebrehiwot, YG Abebe, KG Meles 2017 Determinants of defaulting from completion of child immunization

in Laelay Adiabo District, Tigray Region, Northern Ethiopia: A case-control study. *PLoS One*, Vol. 12, No. 9: 0185533.

Aregay A, M Alemayehu, H Assefa, W Terefe 2014 Factors associated with maternal health care services in Enderta District, Tigray, Northern Ethiopia: A cross sectional study. *American Journal of Nursing Science*, Vol. 3, No. 6, pp. 117-125.

Asefa GG, TG Gebrewahid, H Nuguse, MW Gebremichael, M Birhane, K Zereabruk, TM Zemicheal, A Hailay, WA Abrha, SA Hadera, AG Hailu, BH Beyene, EA Dagnazgi, FG Tekulu, FT Welay 2020 Determinants of Neonatal Jaundice among Neonates Admitted to Neonatal Intensive Care Unit in Public General Hospitals of Central Zone, Tigray, Northern Ethiopia, 2019: a Case-Control Study. *BioMed Research International*, Vol. 2020, Article ID 4743974.

Asefaw T, M Wolde, A Edao, A Tsegaye, G Teklu, F Tesfay, G Gebremariam 2020 Assessment of liver and renal function tests among gasoline exposed gas station workers in Mekelle city, Tigray region, Northern Ethiopia. *PloS One*, Vol. 15, No. 10: 0239716.

Asfaha KF, FA Tesfamichael, GK Fisseha, KH Misgina, MG Weldu, NB Welehaweria, YS Gebregiorgis 2018 Determinants of childhood diarrhea in Medebay Zana District, Northwest Tigray, Ethiopia: a community based unmatched case-control study. *BMC Pediatrics*, Vol. 18, Article No. 120.

Asfaw A, D Ali, T Eticha, A Alemayehu, M Alemayehu, F Kindeya 2015 CD4 cell count trends after commencement of antiretroviral therapy among HIV-infected patients in Tigray, Northern Ethiopia: a retrospective cross-sectional study. *PloS One*, Vol. 10, No. 3: 0122583.

Asfaw ST, L Giotom 2000 Malnutrition and enteric parasitoses among under-five children in Aynalem Village, Tigray. *Ethiopian Journal of Health Development*, Vol. 14, No. 1, pp. 67-76.

Asgedom SW, D Tesfaye, YL Nirayo, TM Atey 2018 Time to death and risk factors among tuberculosis patients in Northern Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 696.

Asresu TT, D Hailu, B Girmay, MW Abrha, HG Weldearegay 2019 Mothers' utilization and associated factors in preconception care in northern Ethiopia: A community based cross sectional study. *BMC Pregnancy and Childbirth*, Vol.19, Article No. 347.

Assefa A, T Dejenie, Z Tomass 2013 Infection prevalence of *Schistosoma mansoni* and associated risk factors among schoolchildren in suburbs of Mekelle city, Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 5, No.1, pp. 174-188.

Assefa M, A Kumie 2014 Assessment of factors influencing hygiene behaviour among school children in Mereb-Leke District, Northern Ethiopia: a cross-sectional study. *BMC Public Health*, Vol. 14, Article No. 1000.

Assefa NE, H Berhe, F Girma, K Berhe, YZ Berhe, G Gebreheat, WM Werid, A Berhe, HB Rufae, G Welu 2018 Risk factors of premature rupture of membranes in public hospitals at Mekele city, Tigray, a case control study. *BMC Pregnancy and Childbirth*, Vol. 18, Article No. 386.

Assen A, F Molla, A Wondimu, S Abrha, W Melkam, E Tadesse, Z Yilma, T Eticha, H Abrha, BD Workneh 2016 Late presentation for diagnosis of HIV infection among HIV positive patients in South Tigray Zone, Ethiopia. *BMC Public Health*, Vol. 16, Article No. 558.

Atsbaha AH, TA Dejen, R Belodu, K Getachew, M Saravanan, AG Wasihun 2016 Sero-prevalence and associated risk factors for

hepatitis C virus infection among voluntary counseling testing and anti retroviral treatment clinic attendants in Adwa hospital, northern Ethiopia. *BMC Research Notes*, Vol. 9, Article No. 121.

Atsebeha KG, DH Chercos 2018 High antiretroviral therapy service delivery satisfaction and its' associated factors at Midre-genet hospital; Northwest Tigray, Ethiopia. *BMC Health Services Research*, Vol. 18, Article No. 223.

Ayalew E, Y Seid, A Agalu 2014 Knowledge, attitude and practice of patient medication counseling among drug dispensers in Mekele town, Northern Ethiopia. *International Research Journal of Pharmacy and Pharmacology*, Vol. 4, No, 2, pp. 28-34.

Ayele BG, TG Gebregzabher, TT Hailu, BA Assefa 2018 Determinants of teenage pregnancy in Degua Tembien District, Tigray, Northern Ethiopia: A community-based case-control study. *PloS One*, Vol. 13, No. 7: 0200898.

Ayele E, G Gebreayezgi, T Mariye, D Bahrey, G Aregawi, G Kidanemariam 2020 Prevalence of Undernutrition and Associated Factors among Pregnant Women in a Public General Hospital, Tigray, Northern Ethiopia: Cross-Sectional Study Design. *Journal of Nutrition and Metabolism*, Vol. 2020, Article ID 2736536.

Bahrey D, G Gebremedhn, T Mariye, A Girmay, W Aberhe, A Hika, G Teklay, H Tasew, T Zeru, H Gerensea, GT Demoz 2019 Prevalence and associated factors of chronic kidney disease among adult hypertensive patients in Tigray teaching hospitals: a cross-sectional study. *BMC Research Notes*, Vol. 12, Article No. 562.

Bane A, T Seboxa, G Mesfin, A Ali, Y Tsegaye, M W/Tensae, S G/Selassie, T Haile 2012 An outbreak of veno-occlusive liver disease in northern Ethiopia, clinical findings. *Ethiopian Medical Journal*, Vol. 50, Suppl. 2, pp. 9-16.

Bang KS, SM Chae, I Lee, J Yu, J Kim 2018 Effects of a community outreach program for maternal health and family planning in Tigray, Ethiopia. *Asian Nursing Research*, Vol. 12, Issue 3, pp. 223-230.

Baraki Z, F Girmay, K Kidanu, H Gerensea, D Gezehgne, H Teklay 2017 A cross sectional study on nursing process implementation and associated factors among nurses working in selected hospitals of Central and Northwest zones, Tigray Region, Ethiopia. *BMC Nursing*, Vol. 16, Article No. 54.

Baraki Z, F Wendem, H Gerensea, H Teklay 2019 Husbands involvement in birth preparedness and complication readiness in Axum town, Tigray region, Ethiopia, 2017. *BMC Pregnancy and Childbirth*, Vol. 19, Article No. 180.

Baraki Z, M Abay, L Tsegay, H Gerensea, A Kebede, H Teklay 2018 Medication administration error and contributing factors among pediatric inpatient in public hospitals of Tigray, northern Ethiopia. *BMC Pediatrics*, Vol. 18, Article No. 321.

Barnabas GA, E Pegurri, HH Selassie, W Naamara, S Zemariam 2014 The HIV epidemic and prevention response in Tigray, Ethiopia: a synthesis at sub-national level. *BMC Public Health*, Vol. 14, Article No. 628.

Barnabas GA, A Zwi 1997 Health policy development in wartime: establishing the Baito health system in Tigray, Ethiopia. *Health Policy and Planning*, Vol. 12, Issue 1, pp. 38-49.

Bayray A 2010 Knowledge, Attitude, and Practice of Voluntary Counseling and Testing for HIV among University Students, Tigray, Northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 1, pp. 108-118.

Bayray A 2012 Assessment of male involvement in family planning use among men in south eastern zone of Tigray, Ethiopia. *Scholarly Journal of Medicine*, Vol. 2, No. 2, pp. 1-10.

Bayray A, A Luel, T Hailu, A Mulugeta 2019 Referral practices on community based management of sick young infants with Possible Serious Bacterial Infection in Tigray, Ethiopia: the caregivers' perspectives. *East African Journal Health Sciences*, Vol. 1, No. 2, pp. 128-137.

Bayray A, F Enquselassie, Z Gebreegziabher 2013 Costs of osteoporosis related fractures in hospital admitted patients, Tigray, Northern Ethiopia: a retrospective study. *Ethiopian Medical Journal*, Vol. 51, No. 3, pp. 177-186.

Bayray A, KG Meles, Y Sibhatu 2018 Magnitude and risk factors for hypertension among public servants in Tigray, Ethiopia: A cross-sectional study. *PLoS One*, Vol. 13, No. 10: 0204879.

Bayu H, Y Berhe, A Mulat, A Alemu 2016 Cervical cancer screening service uptake and associated factors among age eligible women in Mekelle Zone, Northern Ethiopia, 2015: a community based study using Health Belief Model. *PloS One*, Vol. 11, No. 3: 014990.

Bayu H, G Fisseha, A Mulat, G Yitayih, M Wolday 2015 Missed opportunities for institutional delivery and associated factors among urban resident pregnant women in South Tigray Zone, Ethiopia: a community-based follow. *Global Health Action*, Vol. 8, Issue 1: 28082.

Behailu M, M Haile 2002 Water harvesting in northern Ethiopia: Environmental, health and socio-economic impacts. *Proceedings of a MoWR/EARO/IWMI/ILRI international workshop held at ILRI, Addis Ababa, Ethiopia 2–4 December 2002* pp. 185-191.

Bekele KK, PE Ekanem, B Meberate 2019 Anatomical patterns of cleft lip and palate deformities among neonates in Mekelle, Tigray, Ethiopia; implication of environmental impact. *BMC Pediatrics*, Vol. 19, Article No. 254.

Belay G, G Teklehaymanot, G Gebremariam, K Kaleaye, H Haileslasie, G Gebremichail, B Tesfanchal, G Kahsu, B Berhe, K Tesfay, L Legesse, A Gebretsadik, M Wolde, A Tsegaye 2020 Community based reference interval of selected clinical chemistry parameters among apparently healthy Adolescents in Mekelle City, Tigray, Northern Ethiopia. *PloS One*, Vol. 15, No. 4: 0231017.

Belay H, F Alemseged, T Angesom, S Hintsu, M Abay 2017 Effect of late HIV diagnosis on HIV-related mortality among adults in general hospitals of Central Zone Tigray, northern Ethiopia: a retrospective cohort study. *HIV/AIDS- Research and Palliative Care*, Vol. 9, pp. 187–192.

Belay M, W Deressa 2008 Use of insecticide treated nets by pregnant women and associated factors in a pre-dominantly rural population in northern Ethiopia. *Tropical Medicine and International Health*, Vol. 13, Issue10, pp. 1303-1313.

Belay S, AKS Kuhlmann, LL Wall 2020 Girls' attendance at school after a menstrual hygiene intervention in northern Ethiopia. *International International Journal of Gynecology and Obstetrics*, Vol. 149, Issue 3, pp. 287-291.

Belay YB , TT Kassa, FS Teni, FT Dinkashe, AG Kassa, AG Welie 2017 Assessment of knowledge, attitude and practice of pharmacy professionals toward generic medicines, Northern Ethiopia, Mekelle: a cross sectional study. *Journal of Basic and Clinical Pharmacy*, Vol. 8, pp. 193-199.

Belay YB 2016 Job satisfaction among community pharmacy professionals in Mekelle city, Northern Ethiopia. *Advances in Medical Education and Practice*, Vol. 7. pp. 527–531.

Belayneh M, K Giday, H Lemma 2015 Treatment outcome of human immunodeficiency virus and tuberculosis co-infected patients in public hospitals of eastern and southern zone of Tigray region,

Ethiopia. *The Brazilian Journal of Infectious Diseases*, Vol. 19, Issue 1, pp. 47-51.

Belete N, A Zemene, H Hagos, A Yekoye 2018 Prevalence and factors associated with modern contraceptive discontinuation among reproductive age group women, a community based cross-sectional study in Humera town, northern Ethiopia. *BMC Women's Health*, Vol. 18, Article No. 190.

Bereka TM, AM Aweke, TE Wondie 2017 Associated factors and outcome of uterine rupture at Suhul General Hospital, Shire Town, North West Tigray, Ethiopia 2016: A case-control study. *Obstetrics and Gynecology International*, Vol. 2017, Article ID 8272786.

Berhane A, T Hailu, A Mulugeta 2019 Determinants of delayed diagnosis among pediatric cancer patients from Ayder Comprehensive Specialized Hospital, Mekelle, Northern Ethiopia. *BMC Pediatrics*, Vol. 19, Article No. 478.

Berhe A, D Yemane, A Gebresilassie, W Terefe, L Ingale 2015 Magnitude of occupational injuries and associated factors among small-scale industry workers in Mekelle city, northern Ethiopia. *Occupational Medicine and Health Affairs*, Vol. 3: 197.

Berhe A, A Bayray, Y Berhe, A Teklu, A Desta, T Araya, R Zielinski, L Roosevelt 2019 Determinants of postnatal care utilization in Tigray, Northern Ethiopia: A community based cross-sectional study. *PLoS One*, Vol. 14, No. 8: 0221161.

Berhe AA, AD Aregay, AA Abreha, AB Aregay, AW Gebretsadik, DZ Negash, EG Gebreegziabher, KG Demoz, KA Fenta, NB Mamo 2020 Knowledge, Attitude, and Practices on Water, Sanitation, and Hygiene among Rural Residents in Tigray Region, Northern Ethiopia. *Journal of Environmental and Public Health*, Vol. 2020, Article ID 5460168.

Berhe AK, AO Ilesanmi, CO Aimakhu, A Mulugeta 2020 Effect of pregnancy induced hypertension on adverse perinatal outcomes in Tigray regional state, Ethiopia: a prospective cohort study. *BMC Pregnancy and Childbirth*, Vol. 20, Article No. 7.

Berhe AK, AO Ilesanmi, CO Aimakhu, AM Bezabih 2020 Awareness of pregnancy induced hypertension among pregnant women in Tigray Regional State, Ethiopia. *The Pan African Medical Journal*, Vol. 35: 71.

Berhe AK, F Tinsae, G Gebreegziabher 2017 Knowledge and practice of immediate newborn care among health care providers in eastern zone public health facilities, Tigray, Ethiopia, 2016. *BMC Pediatrics*, Vol. 17, Article No. 157.

Berhe B, F Mardu, H Legese, A Gebrewahd, G Gebremariam, K Tesfay, G Kahsu, H Negash, G Adhanom 2019 Prevalence of anemia and associated factors among pregnant women in Adigrat General Hospital, Tigray, northern Ethiopia, 2018. *BMC Research Notes*, Vol.12, Article No. 310.

Berhe B, F Mardu, H Legese, H Negash 2019 Seasonal distribution and seven year trend of malaria in North West Tigray: 2012–2018, Ethiopia; 2019. *Tropical Diseases, Travel Medicine and Vaccines*, Vol. 5, No.1, pp. 1-7.

Berhe B, F Mardu, K Tesfay, H Legese, G Adhanom, H Haileslasie, G Gebremichail, B Tesfanchal, N Shishay, H Negash 2020 More than half prevalence of protozoan parasitic infections among diarrheic outpatients in Eastern Tigray, Ethiopia, 2019; a cross-sectional study. *Infection and Drug Resistance*, Vol. 13, pp. 27–34.

Berhe B, G Bugssa, S Bayisa, M Alemu 2018 Foodborne intestinal protozoan infection and associated factors among patients with watery diarrhea in Northern Ethiopia; a cross-sectional study. *Journal of Health, Population and Nutrition*, Vol. 37, Article No. 5.

Berhe ET, K Kiros, MG Hagos, HA Gesesew, PR Ward, TG Gebremeskel 2021 Ectopic Pregnancy in Tigray, Ethiopia: A Cross-Sectional Survey of Prevalence, Management Outcomes, and Associated Factors. *Journal of Pregnancy*, Vol. 2021, Article ID 4443117.

Berhe G, F Enqueselassie, E Hailu, W Mekonnen, T Teklu, A Gebretsadik, R Berhe, T Haile, A Aseffa 2013 Population-based prevalence survey of tuberculosis in the Tigray region of Ethiopia. *BMC Infectious Diseases*, Vol. 13, Article No. 448.

Berhe G, F Enqueselassie, A Aseffa 2012 Treatment outcome of smear-positive pulmonary tuberculosis patients in Tigray Region, Northern Ethiopia. *BMC Public Health*, Vol. 12, Article No. 537.

Berhe G, AG Wasihun, E Kassaye, K Gebreselasie 2020 Milk-borne bacterial health hazards in milk produced for commercial purpose in Tigray, northern Ethiopia. *BMC Public Health*, Vol. 20, Article No. 894.

Berhe H, A Mihret, G Yitayih 2016 Prevalence of diarrhea and associated factors among children under-five years of age in Enderta woreda, tigray, northern ethiopia, 2014. *International Journal of Therapeutic Applications*, Vol. 31, 32-37.

Berhe H, B Mekonnen, A Bayray, H Berhe 2013 Determinants of breast feeding practices among mothers attending public health facilities, Mekelle, northern Ethiopia; a cross sectional study. *International Journal Pharmaceutical Sciences and Research*, Vol. 4, No. 2, pp. 650-660.

Berhe H, H Berhe, A Bayray, H Godifay, G Gigar, G Beedemariam 2017 Status of caring, respectful and compassionate health care practice in Tigray regional state: patients' perspective. *International Journal of Caring Sciences*, Vol. 10, Issue 3, pp. 1119-1128.

Berhe H, A Bayray 2013 Prevalence of depression and associated factors among people living with HIV/AIDS in Tigray, North Ethiopia: a cross sectional hospital based study. *International Journal of Pharmaceutical Sciences and Research*, Vol. 4, Issue 2, pp. 765-775.

Berhe K, B Fseha, G Gebremariam, H Teame, N Etsay, G Welu, T Tsegay 2019 Risk factors of anemia among pregnant women attending antenatal care in health facilities of Eastern Zone of Tigray, Ethiopia, case-control study, 2017/18. *Pan African Medical Journal*, Vol. 34: 121.

Berhe K, G Gebremariam 2020 Magnitude and associated factors of undernutrition (underweight and stunting) among school adolescent girls in Hawzen Woreda (District), Tigray regional state, Northern Ethiopia: Cross-sectional study. *BMC Research Notes*, Vol. 13, Article No. 59.

Berhe K, O Seid, Y Gebremariam, A Berhe, N Etsay 2019 Risk factors of stunting (chronic undernutrition) of children aged 6 to 24 months in Mekelle City, Tigray Region, North Ethiopia: An unmatched case-control study. *Plos One*, Vol. 14, No. 6: 0217736.

Berhe M, A Bsrat, H Taddele, E Gadissa, Y Hagos, Y Tekle, A Abera 2018 Knowledge attitude and practice towards visceral leishmaniasis among residents and health professionals in Welkait district, western Tigray, Ethiopia. *Journal of Tropical Diseases*, Vol. 6, Issue 1: 1000257.

Berhe N, D Tegabu, M Alemayehu 2013 Effect of nutritional factors on adherence to antiretroviral therapy among HIV-infected adults: a case control study in Northern Ethiopia. *BMC Infectious Diseases*, Vol. 13, Article No. 233.

Berhe T, H Gebreyesus, H Desta 2019 Determinants of preterm birth among mothers delivered in Central Zone Hospitals, Tigray, Northern Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 266.

Berhe T, H Gemechu, A De Waal 2005 War and HIV prevalence: evidence from Tigray, Ethiopia. *African Security Review*, Vol. 14, Issue 3, pp. 107-114.

Berhe Y, H Gidey, LL Wall 2015 Uterine rupture in Mekelle, northern Ethiopia, between 2009 and 2013. *International Journal of Gynecology and Obstetrics*, Vol. 130, Issue 2, pp. 153-156.

Berhe YZ, AG Kebedom, L Gebregziabher, NE Assefa, LZ Berhe, SA Mohammednur, T Wellay, G Berihu, AT Welearegay, M Mitiku, HG Teka 2020 Risk Factors of Birth Asphyxia Among Neonates Born in Public Hospitals of Tigray, Northern Ethiopia. *Pediatric Health, Medicine and Therapeutics*, Vol. 11, pp. 13–20.

Berihu BA, AL Welderufael, Y Berhe, T Magana, A Mulugeta, S Asfaw, K Gebreselassie 2019 Maternal risk factors associated with neural tube defects in Tigray regional state of Ethiopia. *Brain and Development*, Vol. 41, Issue 1, pp. 11-18.

Berihu BA, AL Welderufael, Y Berhe, T Magana, A Mulugeta, S Asfaw, K Gebreselassie 2018 High burden of neural tube defects in Tigray, Northern Ethiopia: Hospital-based study. *PLoS One*, Vol. 13, No.11: 0206212.

Berihu H, T Wubayehu, T Teklu, T Zeru, H Gerensea 2020 Practice on pressure ulcer prevention among nurses in selected public hospitals, Tigray, Ethiopia. *BMC Research Notes*, Vol. 13, Article No. 207.

Beyene SA, L Weldegerima, FG Tela, O Seid, AT Brown, AM Bezabih 2021 Barriers to utilize nutrition interventions among lactating women in rural communities of Tigray, northern Ethiopia: An exploratory study. *Plos One*, Vol. 16, No. 4: 0250696.

Birhane E, K Kidanu, M Kassa, D Gerezgiher, L Tsegay, B Weldu, G Kidane, H Gerensea 2017 Lifespan and associated factors of peripheral intravenous Cannula among infants admitted in public hospitals of Mekelle City, Tigray, Ethiopia, 2016. *BMC Nursing*, Vol. 16, Article No. 33.

Birhane K, S Hagos, M Fantahun 2015 Early discontinuation of implanon and its associated factors among women who ever used implanon in Ofla District, Tigray, Northern Ethiopia. *International Journal of Pharma Sciences and Research* Vol. 6, No. 3, pp.544-551.

Brhane M, B Hagos, M Abrha, HG Weldearegay 2019 Does short inter-pregnancy interval predict the risk of preterm birth in Northern Ethiopia? *BMC Research Notes*, Vol. 12, Article No. 405.

Bsrat A, M Berhe, E Gadissa, H Taddele, Y Tekle, Y Hagos, A Abera, M G/micael, T Alemayhu, G Gugsa, A Aseffa 2018 Serological investigation of visceral Leishmania infection in human and its associated risk factors in Welkait District, Western Tigray, Ethiopia. *Parasite Epidemiology and Control*, Vol. 3, Issue 1, pp. 13-20.

Bsrat A, N Berhe, M Balkew, M Yohannes, T Teklu, E Gadisa, G Medhin, A Abera 2015 Epidemiological study of cutaneous leishmaniasis in Saesie Tsaeda-emba district, eastern Tigray, northern Ethiopia. *Parasites and Vectors*, Vol. 8, Article No. 149.

Bucciardini R, V Fragola, T Abegaz, S Lucattini, A Halifom, E Tadesse, M Berhe, K Pugliese, L Fucili, M Di Gregorio, M Mirral, P De Castro, R Terlizzi, P Tatarelli, A Binelli, T Zegeye, M Campagnoli, S Vella, L Abraham, H Godefay 2017 Predictors of attrition from care at 2 years in a prospective cohort of HIV-infected adults in Tigray, Ethiopia. *BMJ Global Health*, Vol. 2, Issue 3.

Bucciardini R, V Fragola, T Abegaz, S Lucattini, A Halifom, E Tadesse, M Berhe, K Pugliese, A Binelli, P De Castro, R Terlizzi, L Fucili, M Di Gregorio 2015 Retention in care of adult HIV patients initiating antiretroviral therapy in Tigray, Ethiopia: a prospective observational cohort study. *PloS One*, Vol. 10, No. 9: 0136117.

Bugssa G, B Dimtsu, M Alemayehu 2014 Socio demographic and maternal determinants of low birth weight at Mekelle hospital, northern Ethiopia: a cross sectional study. *American Journal of Advanced Drug Delivery*, Vol. 2, Issue 5, pp. 609-618.

Buzuneh MA, GF Abraha 2019 Antenatal Care Service Utilization and Its Associated Factors among Mothers' of under One Year Children: The Case of Welkait Woreda, Western Tigray. *Journal of Demography Africa*, Vol. 1, No.1, pp. 82-100.

Coulborn RM, TG Gebrehiwot, M Schneider, S Gerstl, C Adera, M Herrero, K Porten, M den Boer, K Ritmeijer, J Alvar, A Hassen, A Mulugeta 2018 Barriers to access to visceral leishmaniasis diagnosis and care among seasonal mobile workers in Western Tigray, Northern Ethiopia: A qualitative study. *PLoS Neglected Tropical Diseases*, Vol. 12, No. 11: 0006778.

Darge A, AG Kahsay, H Hailekiros, S Niguse, M Abdulkader 2019 Bacterial contamination and antimicrobial susceptibility patterns of intensive care units medical equipment and inanimate surfaces at Ayder Comprehensive Specialized Hospital, Mekelle, Northern Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 621.

De Bellocq JG, J Těšíková, Y Meheretu, D Čížková, A Bryjová, H Leirs, J Bryja 2016 Complete genome characterization and phylogenetic position of Tigray hantavirus from the Ethiopian white-footed mouse, *Stenocephalemys albipes*. *Infection, Genetics and Evolution*, Vol. 45, pp. 242-245.

Debela SA, J Wu, X Chen, Y Zhang 2020 Stock status, urban public perception, and health risk assessment of obsolete pesticide in Northern Ethiopia. *Environmental Science and Pollution Research*, Vol. 27, pp. 25837–25847.

Dejenie T, B Petros 2009 Irrigation practices and intestinal helminth infections in southern and central zones of Tigray. *Ethiopian Journal of Health Development*, Vol. 23, No. 1, pp. 48-56.

Dejenie T, M Yohannes, T Assmelash 2011 Characterization of mosquito breeding sites in and in the vicinity of Tigray microdams. *Ethiopian Journal of Health Sciences*, Vol. 21, No.1, pp. 57-66.

Dejenie T, T Asmelash 2010 Schistosomiasis mansoni among school children of different water source users in Tigray, northern Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 1, pp. 49-60.

Demeke B, F Molla, A Assen, W Melkam, S Abrha, B Masresha, T Asefa 2015 Evaluation of drugs utilization pattern using WHO prescribing indicators in Ayder referral hospital, Northern Ethiopia. *International Journal of Pharma Sciences and Research*, Vol. 6, No.2, pp. 343-347.

Demissie T, J Haider, HN Tibebe, B Haile 2000 Impact evaluation of EPI-PLUS and WIBS approaches in controlling vitamin A deficiency in Tigray and Harari regions, Ethiopia. *The Ethiopian Journal of Health Development*, Vol. 14, No. 3: 853.

Desalegn BB, C Lambert, S Riedel, T Negese, HK Biesalski 2018 Ethiopian orthodox fasting and lactating mothers: Longitudinal study on dietary pattern and nutritional status in rural Tigray, Ethiopia. *International Journal of Environmental Research and Public Health*, Vol. 15, No. 8: 1767.

Desalegn BB, C Lambert, S Riedel, T Negese, HK Biesalski 2019 Feeding practices and undernutrition in 6–23-month-old children of

Orthodox Christian mothers in rural Tigray, Ethiopia: longitudinal study. *Nutrients*, Vol. 11, No. 1: 138.

Dessalegn M, M Tsadik, H Lemma 2015 Predictors of lost to follow up to antiretroviral therapy in primary public hospital of Wukro, Tigray, Ethiopia: a case control study. *Journal of AIDS and HIV Research*, Vol. 7, Issue 1, pp. 1-9.

Desta AA, KM Kidane, YW Bahta, KF Ajemu, AG Woldegebriel, AA Berhe, NM Bezabih, AB Woldu, TW Woldearegay 2020 Determinants of immunological recovery following HAART among severely immunosuppressed patients at enrolment to care in Northern Ethiopia: a retrospective study. *BMJ Open*, Vol.10, Issue 8.

Desta AA, TW Woldearegay, AA Berhe, N Futwi 2019 Immunological recovery, failure and factors associated with CD-4 T-cells progression over time, among adolescents and adults living with HIV on Antiretroviral Therapy in Northern Ethiopia: A retrospective cross sectional study. *PLoS One*, Vol. 14, No 12: 0226293.

Desta AA, TW Woldearegay, E Gebremeskel, M Alemayehu, T Getachew, G Gebregzabiher, KD Ghebremedhin, D Zgita, AB Aregawi, G Redae 2021 Impacts of COVID-19 on essential health services in Tigray, Northern Ethiopia: A pre-post study. *Plos One*, Vol. 16, No. 8: 0256330.

Desta AA, TW Woldearegay, N Futwi, GT Gebrehiwot, GG Gebru, AA Berhe, H Godefay 2020 HIV virological non-suppression and factors associated with non-suppression among adolescents and adults on antiretroviral therapy in northern Ethiopia: a retrospective study. *BMC Infectious Diseases*, Vol. 20, Article No. 4.

Desta H, T Berhe, S Hintsu 2018 Assessment of patients' satisfaction and associated factors among outpatients received mental health services at public hospitals of Mekelle Town, northern Ethiopia.

International Journal of Mental Health Systems, Vol. 12, Article No. 38.

Desta ML, M Saravanan, H Hilekiros, AG Kahsay, NF Mohamed, AA Gezahegn, BS Lopes 2019 HIV prevalence and risk factors in infants born to HIV positive mothers, measured by dried blood spot real-time PCR assay in Tigray, Northern Ethiopia. BMC Pediatrics, Vol. 19, Article No. 257.

Ebuy H, H Yebyo, M Alemayehu 2015 Level of adherence and predictors of adherence to the Option B+ PMTCT programme in Tigray, northern Ethiopia. International Journal of Infectious Diseases, Vol. 33, pp. 123-129.

Ebuy Y, M Alemayehu, M Mitiku, GK Goba 2017 Determinants of severe anemia among laboring mothers in Mekelle city public hospitals, Tigray region, Ethiopia. PLoS One, Vol. 12, No. 11: 0186724.

Ekanem PE, ACK Nyaga, N Tsegay, H Ebuy, EA Imbusi, R Ekanem, N Peter 2021 Determinants of Cerebral Palsy in Pediatric Patients in Northern Ethiopia: A Hospital-Based Study. Neurology Research International, Vol. 2021, Article ID 9993912.

Etanaa NB, KM Benwu, HG Gebremedhin, HB Desta 2020 The effect of simulation-based training in non-physician anesthetists in Tigray region, Ethiopia. BMC Research Notes, Vol. 13, No. 197.

Eticha T, A Teklu, D Ali, G Solomon, A Alemayehu 2015 Factors associated with medication adherence among patients with schizophrenia in Mekelle, Northern Ethiopia. PLoS One, 10, No. 3: 0120560.

Eticha T, F Kidane 2014 The prevalence of and factors associated with current smoking among college of health sciences students, Mekelle University in northern Ethiopia. PLoS One, Vol. 9, No. 10: 111033.

Fesseha G, M Alemayehu, B Etana, K Hailelassie, A Zemene 2014 Perceived quality of antenatal care service by pregnant women in public and private health facilities in Northern Ethiopia. *American Journal of Health Research*, Vol. 2, No. 4, pp. 146-151.

Fisseha G, G Miruts, M Tekie, A W/Michael, D Yemane, T Gereziher 2015 Predictors of timing of first antenatal care booking at public health centers in Mekelle city, Northern Ethiopia. *Journal of Gynecology and Obstetrics*, Vol. 3, No. 3, pp. 55-60.

Fisseha G, Y Berhane, A Worku 2019 Quality of intrapartum and newborn care in Tigray, Northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 19, Article No. 37.

Fisseha G, Y Berhane, A Worku, W Terefe 2017 Distance from health facility and mothers' perception of quality related to skilled delivery service utilization in northern Ethiopia. *International Journal of Women's Health*, Vol. 9, pp. 749–756.

Fisseha G, Y Berhane, A Worku, W Terefe 2017 Quality of the delivery services in health facilities in Northern Ethiopia. *BMC Health Services Research*, Vol. 17, Article No. 187.

Fseha B 2017 Glycemic control and it's associated factors in type 2 diabetic patients in Suhul Hospital, Northwest Tigray, Ethiopia. *Journal of Diabetes and Metabolism*, Vol. 8, Issue 3, 1000729.

Fseha B 2019 Assessment of mothers level of satisfaction with antenatal care services provided at Alganesh Health Center Shire, North West Tigray, Ethiopia. *Biomedical Journal of Scientific and Technical Research*, Vol. 16, Issue 1, pp. 11798-11802.

Ftwi M, GG Gebretsadik, H Berhe, M Haftu, G Gebremariam, YB Tesfau 2020 Coverage of completion of four ANC visits based on recommended time schedule in Northern Ethiopia: A community-based cross-sectional study design. *PloS One*, Vol. 15, No. 8: 0236965..

Gebeyehu B, E Kebede, T Kifleyohannes, N Abebe, N Kumar 2018 Prevalence of calf coccidiosis in Mekelle, northern Ethiopia. *Ethiopian Veterinary Journal*, Vol. 22 No. 2. pp.1-13.

Gebre A, A Mulugeta 2015 Prevalence of anemia and associated factors among pregnant women in North Western zone of Tigray, Northern Ethiopia: a cross-sectional study. *Journal of Nutrition and Metabolism*, Vol. 2015, Article ID 165430.

Gebre A, A Mulugeta, B Etana 2015 Assessment of Factors Associated with adherence to iron-folic acid supplementation among urban and rural pregnant women in North Western Zone of Tigray, Ethiopia: comparative Study. *International Journal of Nutrition and Food Sciences*, Vol. 4, Issue 2, pp. 161-168.

Gebre AK, A Haylay 2018 Sociodemographic, clinical variables, and quality of life in patients with epilepsy in Mekelle City, Northern Ethiopia. *Behavioural Neurology*, Vol. 2018, Article ID 7593573.

Gebre G, N Birhan, K Gebreslasie 2016 Prevalence and factors associated with unmet need for family planning among the currently married reproductive age women in Shire-Enda-Slassie, Northern West of Tigray, Ethiopia 2015: a community based cross-sectional study. *Pan African Medical Journal*, Vol. 23:195.

Gebrecherkos K, B Gebremariam, A Gebeyehu, H Siyum, G Kahsay, M Abay 2018 Unmet need for modern contraception and associated factors among reproductive age group women in Eritrean refugee camps, Tigray, North Ethiopia: a cross-sectional study. *BMC Research Notes*, Vol.11, Article No. 851.

Gebre-Egziabher D, AA Medhanyie, M Alemayehu, FH Tesfay 2017 Prevalence and predictors of implanon utilization among women of reproductive age group in Tigray Region, Northern Ethiopia. *Reproductive Health*, Vol. 14, Article No. 62.

Gebreegziabher M, NG Asefa, S Berhe 2016 Factors affecting the practices of cervical cancer screening among female nurses at public health institutions in Mekelle town, Northern Ethiopia, 2014: A Cross-Sectional Study. *Journal of Cancer Research*, Vol. 2016, Article ID 4743075.

Gebreegziabher TL, DF Berhe, GB Gutema, BN Kabtyimer 2012 Drug utilization pattern and potential teratogenesis risk among pregnant women; the case of Ayder referral hospital, Tigray-Ethiopia. *International Journal Pharmaceutical Sciences and Research*, Vol. 3, No. 5, pp. 1371-1378.

Gebreegziabher D, K Adane, M.Abebe 2017 A survey on undiagnosed active pulmonary tuberculosis among pregnant mothers in Mekelle and surrounding districts in Tigray, Ethiopia. *International Journal of Mycobacteriology*, Vol. 6, Issue 1, pp. 43–46.

Gebreegziabher G, T Belachew, K Mehari, D Tamiru 2021 Magnitude and associated factors of metabolic syndrome among adult urban dwellers of Northern Ethiopia. *Diabetes Metabolic Syndrome Obesity: Targets and Therapy*, Vol. 14, pp. 589–600.

Gebreegziabher G, T Belachew, K Mehari, D Tamiru 2021 Prevalence of dyslipidemia and associated risk factors among adult residents of Mekelle City, Northern Ethiopia. *PloS One*, Vol. 16, No. 2: 0243103.

Gebreegziabher G, B Etana, D Niggusie 2014 Determinants of anemia among children aged 6–59 months living in Kilde Awulaelo Woreda, northern Ethiopia. *Anemia*, Vol. 2014, Article ID 245870.

Gebreegziabher Y, A Haftu, S Weldemariam, H Gebrehiwet 2017 The prevalence and risk factors for low birth weight among term newborns in Adwa General Hospital, Northern Ethiopia. *Obstetrics and Gynecology International*, Vol. 2017, Article ID 2149156.

Gebregziabher D, E Berhanie, H Berihu, A Belstie, G Teklay 2020 The relationship between job satisfaction and turnover intention among nurses in Axum comprehensive and specialized hospital Tigray, Ethiopia. *BMC Nursing*, Vol. 19, Article No. 79.

Gebregziabher D, E Berhanie, T Birhanu, K Tesfamariam 2019 Correlates of cervical cancer screening uptake among female under graduate students of Aksum University, College of Health Sciences, Tigray, Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 520.

Gebregziabher D, H Berhe, M Kassa, E Berhanie 2019 Level of physical activity and associated factors during pregnancy among women who gave birth in Public Zonal Hospitals of Tigray. *BMC Research Notes*, Vol. 12, Article No. 454.

Gebregziabher GT, FB Hadgu, HTAbebe 2020 Prevalence and associated factors of perinatal asphyxia in neonates admitted to Ayder comprehensive specialized hospital, Northern Ethiopia: a cross-sectional study. *International Journal of Pediatrics*, Vol. 2020, Article ID 4367248.

Gebreheat G, T Tsegay, D Kiros, H Teame, N Etsay, G Welu, D Abraha 2018 Prevalence and associated factors of perinatal asphyxia among neonates in general hospitals of Tigray, Ethiopia, 2018. *BioMed Research International*, Vol. 2018, Article ID 5351010.

Gebrehiwot G, AA Medhanyie, G Gidey, K Abrha 2018 Postnatal care utilization among urban women in northern Ethiopia: cross-sectional survey. *BMC Women's Health*, Vol. 18, Article No. 78.

Gebrehiwot H, B Gebrekidan, H Berhe, K Kidanu 2013 Assessment of knowledge, attitude, and practice towards emergency contraceptives among female college students at Mekelle Town, Tigray Region, Ethiopia: A Cross Sectional Study. *International Journal Pharmaceutical Sciences and Research*, Vol. 4, No. 3, pp. 1027-1038.

Gebrehiwot H, W Gebregziabher, G Gidey 2012 Assessment of husbands' participation on birth preparedness and complication readiness in Enderta Woreda, Tigray region, Ethiopia. *Journal of Women's Health Care*, Vol. 3, Issue 1: 1000140.

Gebrehiwot M, M Kassa, H Gebrehiwot, M Sibhat 2020 Time to Relapse and Its Predictors among Children with Nephrotic Syndrome in Comprehensive Specialized Hospitals, Tigray, Ethiopia, 2019. *International Journal of Pediatrics*, Vol. 2020, Article ID 8818953.

Gebrehiwot SW, G Abera, K Tesfay, W Tilahun 2019 Short birth interval and associated factors among women of child bearing age in northern Ethiopia, 2016. *BMC Women's Health*, Vol. 19, Article No. 85.

Gebrehiwot SW, GA Azeze, CC Robles, YM Adinew 2017 Utilization of dual contraception method among reproductive age women on antiretroviral therapy in selected public hospitals of Northern Ethiopia. *Reproductive Health*, Vol. 14, Article No. 125.

Gebrehiwot T, I Goicolea, K Edin, MS Sebastian 2012 Making pragmatic choices: women's experiences of delivery care in Northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 12, Article No. 113.

Gebrehiwot T, M San Sebastian, K Edin, I Goicolea 2014 Health workers' perceptions of facilitators of and barriers to institutional delivery in Tigray, Northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 14, Article No. 137.

Gebrehiwot TG, HH Mekonen, TH Gebru, KG Kiros, B Gebresilassie, G Teklu, HT Tadese, Y Hailelassie 2020 Prevalence and Associated Factors of Early Postnatal Care Service Use Among Mothers Who Had Given Birth Within the Last 12 Months in Adigrat Town, Tigray, Northern Ethiopia, 2018. *International Journal of Women's Health*, 12: 869–879.

Gebrehiwot TG, M San Sebastian, K Edin, I Goicolea 2015 The health extension program and its association with change in utilization of selected maternal health services in Tigray region, Ethiopia: a segmented linear regression analysis. *PloS One*, Vol. 10, No. 7: 0131195.

Gebrekidan A, TA Dejene, G Kahsay, AG Wasihun 2015 Prevalence and antimicrobial susceptibility patterns of *Shigella* among acute diarrheal outpatients in Mekelle hospital, Northern Ethiopia. *BMC Research Notes*, Vol. 8, Article No. 611.

Gebrekidan MG, GB Gebremedhin, YS Gebregiorgis, AA Gezehegn, KT Weldearegay 2020 Artemether–lumefantrin treatment adherence among uncomplicated *Plasmodium falciparum* malaria patients, visiting public health facilities in AsgedeTsimbla district, Tigray, Ethiopia: a cross-sectional study. *Antimicrobial Resistance and Infection Control*, Vol. 9, Article No. 184.

Gebrekiros NH, BD Workneh, YS Gebregiorgis, KH Misgina, NB Weldehaweria, MG Weldu, HS Belay 2017 Non-prescribed antimicrobial use and associated factors among customers in drug retail outlet in Central Zone of Tigray, northern Ethiopia: a cross-sectional study. *Antimicrobial Resistance and Infection Control*, Vol. 6, Article No. 70.

Gebrekiros G, M Teweldemedhin, L Hagos, T Gebrewahid, B Gidey, H Gebreyesus 2018 Hepatitis C virus infections and associated risk factors in patients with diabetes mellitus; case control study in North West Tigray, Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 873.

Gebremariam A , H Gebremariam 2017 Contraceptive use among lactating women in Ganta-Afeshum District, Eastern Tigray, Northern Ethiopia, 2015: a cross sectional study. *BMC Pregnancy and Childbirth*, Vol. 17, Article No. 421.

Gebremariam A, A Addissie 2014 Intention to use long acting and permanent contraceptive methods and factors affecting it among married women in Adigrat town, Tigray, Northern Ethiopia. *Reproductive Health*, Vol. 11, Article No. 24.

Gebremariam A, A Addissie 2014 Knowledge and perception on long acting and permanent contraceptive methods in Adigrat town, Tigray, northern Ethiopia: a qualitative study. *International Journal of Family Medicine*, Vol. 2014, Article ID 878639.

Gebremariam G, H Legese, Y Woldu, T Araya, K Hagos, AG Wasihun 2019 Bacteriological profile, risk factors and antimicrobial susceptibility patterns of symptomatic urinary tract infection among students of Mekelle University, northern Ethiopia. *BMC Infectious Diseases*, Vol. 19, Article No. 950.

Gebremariam H, O Seid, H Assefa 2015 Assessment of nutritional status and associated factors among school going adolescents of Mekelle City, Northern Ethiopia. *International Journal of Nutrition and Food Sciences*, Vol. 4, Issue 1, pp.118-124.

Gebremariam LW, C Chiang, H Yatsuya, EH Hilawe, AB Kahsay, H Godefay, L Abraham, Y Hirakawa, H Iso, A Aoyama 2018 Non-communicable disease risk factor profile among public employees in a regional city in northern Ethiopia. *Scientific Reports*, Vol. 8, Article No. 9298.

Gebremariam LW, A Aoyama, AB Kahsay, Y Hirakawa, C Chiang, H Yatsuya, A Matsuyama 2018 Perception and practice of 'healthy'diet in relation to noncommunicable diseases among the urban and rural people in northern Ethiopia: a community-based qualitative study. *Nagoya Journal of Medical Science*, Vol. 80, No. 4, pp. 451–464.

Gebremariam SA, HS Yang 2016 Types, risk profiles, and outcomes of stroke patients in a tertiary teaching hospital in northern Ethiopia. *Neurological Science*, Vol. 3, pp. 41-47.

Gebremedhin A, S Gebremariam, F Haile, B Weldearegawi, C Decotelli 2013 Predictors of mortality among HIV infected children on anti-retroviral therapy in Mekelle Hospital, Northern Ethiopia: a retrospective cohort study. *BMC Public Health*, Vol. 13, Article No. 1047.

Gebremedhin G, F Enqueselassie, H Yifter, N Deyessa 2021 Hyperglycemic Crisis Characteristics and Outcome of Care in Adult Patients without and with a History of Diabetes in Tigray, Ethiopia: Comparative Study. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, Vol. 14, pp. 547–556.

Gebremedhin GL, P Gomathi 2014 Assessment of drug use and effect in pregnant women attending antenatal care in hospitals of Mekelle, Tigray, Ethiopia. *Journal of Drug Delivery and Therapeutics*, Vol 4, No, 6, pp. 75-82.

Gebremedhin HT, HM Mezgebo, GT Geberhiwot, TT Gebru, YA Tesfamichael, HB Ygzaw, MF Baraki, GT Woledemariam, TH Gebru, HT Tadese, GG Kindeya, T Azale 2021 Erectile dysfunction and its associated factors among the male population in Adigrat Town, Tigray Region, Ethiopia: A cross-sectional study. *PloS One*, Vol. 16, No. 3: 0242335.

Gebremedhin M, F Ambaw, E Admassu, H Berhane 2015 Maternal associated factors of low birth weight: a hospital based cross-sectional mixed study in Tigray, Northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 15, Article No. 222.

Gebremeske TG, MG Hagos, SS Kassahun, BH Gebrezgiher 2021 Magnitude and associated factors of delayed vaccination among children aged 11-23 months in, Tigray, Ethiopia, 2018. *Human*

Vaccines and Immunotherapeutics, Vol. 17, Issue 10, pp. 3831-3837.

Gebremeskel GA, NA Kasa, FM Mengistu, FT Welay, TA Hailu, MM Gebremedhin, GG Assefa 2019 Preterm Births and Associated Factors among Mothers Who Gave Birth in Axum and Adwa Town Public Hospitals, Tigray, Northern Ethiopia, 2018. BMC Research Notes, Vol. 12: 640.

Gebremeskel GG, KK Berhe, DS Belay, BH Kidanu, AI Negash, KT Gebreslasse, DB Tadesse, MM Birhanu 2019 Magnitude of metabolic syndrome and its associated factors among patients with type 2 diabetes mellitus in Ayder Comprehensive Specialized Hospital, Tigray, Ethiopia: a cross sectional study. BMC Research Notes, Vol. 12, Article No. 603.

Gebremeskel SG, TT Gebru, BG Gebrehiwot, HN Meles, BB Tafere, GW Gebreslassie, FT Welay, MB Mengesha, DA Weldegeorges 2019 Early initiation of breastfeeding and associated factors among mothers of aged less than 12 months children in rural eastern zone, Tigray, Ethiopia: cross-sectional study. BMC Research Notes, Vol. 12, Article No. 671.

Gebremeskel TG, D Gebreyowhans, HA Gesesew, PR Ward 2021 Incidence and Predictors of Severe Adverse Drug Reaction Among Patients on Antiretroviral Therapy in Tigray, Ethiopia: A Retrospective Cohort Study. HIV AIDS (Auckl.), Vol. 13, pp. 641–649.

Gebremeskel TK, TA Zeleke, A Mihret, MD Tikue 2015 Prevalence and antibiotic susceptibility pattern of Streptococcus agalactiae among pregnant women at Adigrat Zonal Hospital and Adigrat Health Center, Tigray, Ethiopia. Journal of Gynecology and Obstetrics, Vol. 3, No. 2, pp. 29-35.

Gebremichael GB, KK Berhe, BG Beyene, KB Gebrekidan 2019 Self-care practices and associated factors among adult hypertensive patients in Ayder Comprehensive Specialized Hospital, Tigray, Ethiopia, 2018. *BMC Research Notes*, Vol. 12, Article No. 489.

Gebremichael GB, KK Berhe, TM Zemichael 2019 Uncontrolled hypertension and associated factors among adult hypertensive patients in Ayder comprehensive specialized hospital, Tigray, Ethiopia, 2018. *BMC Cardiovascular Disorders*, Vol. 19, Article No. 121.

Gebremichael GB, TM Zemicheal 2020 Hypoglycemia Prevention Practice and Associated Factors among Diabetic Patients on Follow-Up at Public Hospitals of Central Zone, Tigray, Ethiopia, 2018. *International Journal of Endocrinology*, Vol. 2020, |Article ID 8743531.

Gebremichael H, F Haile, A Dessie, A Birhane, M Alemayehu, H Yebyo 2014 Acceptance of long acting contraceptive methods and associated factors among women in Mekelle city, Northern Ethiopia. *Science Journal of Public Health*, Vol. 2, No. 4, pp. 239-245.

Gebremichael M, AM Bezabih, M Tsadik 2014 Treatment outcomes and associated risk factors of severely malnourished under five children admitted to therapeutic feeding centers of Mekelle City, Northern Ethiopia. *Open Access Library Journal*, Vol. 1, pp. 446.

Gebremichael MW, A Worku, AA Medhanyie, Y Berhane 2018 Mothers' experience of disrespect and abuse during maternity care in northern Ethiopia. *Global Health Action*, Vol.11, Issue 1, Article: 1465215.

Gebremichael TG, H Haftu, T Gereziher 2019 Time to start and adherence to iron-folate supplement for pregnant women in antenatal care follow up; Northern Ethiopia. *Patient Prefer Adherence*, Vol. 13, pp. 1057–1063.

Gebremichael TG, TG Welesamuel 2020 Adherence to iron-folic acid supplement and associated factors among antenatal care attending pregnant mothers in governmental health institutions of Adwa town, Tigray, Ethiopia: cross-sectional study. *PLoS One*, Vol. 15, No. 1: 0227090.

Gebremichail G, B Tesfanchal, G Belay, G Gebremariam, G Teklehaymanot, H Haileslasie, A Gebrewahid, F Mardu, G Adhanom, B Berhe, H Teame, A Tsegaye 2020 Hematological alteration among visceral leishmaniasis patients attending in Western Tigray, Ethiopia, 2018/2019: A cross-sectional study. *Research Square*.

Gebresilassie A, A Kumei, D Yemane 2014 Standard precautions practice among health care workers in public health facilities of Mekelle special zone, Northern Ethiopia. *Journal Community Medicine and Health*, Vol. 4, Issue 3: 1000286.

Gebresilassie B, T Belete, W Tilahun, B Berhane, S Gebresilassie 2019 Timing of first antenatal care attendance and associated factors among pregnant women in public health institutions of Axum town, Tigray, Ethiopia, 2017: a mixed design study. *BMC Pregnancy and Childbirth*, Vol. 19, Article No. 340.

Gebresilassie A, OD Kirstein, S Yared, E Aklilu, A Moncaz, H Tekie, M Balkew, A Warburg, A Hailu, T Gebre-Michael 2015 Species composition of phlebotomine sand flies and bionomics of *Phlebotomus orientalis* (Diptera: Psychodidae) in an endemic focus of visceral leishmaniasis in Tahtay Adiyabo district, Northern Ethiopia. *Parasites and Vectors*, 8, Article No. 248.

Gebreslasie S, G Welu, B Berhane, B Gebresilassie, B Fseha, T Tsegay, H Negash 2020 Exploring knowledge on danger signs of common childhood illnesses and associated factors among mothers of under-five children in Central Tigray, Ethiopia: a cross-sectional study. *Germes*, Vol. 10, No. 1, pp. 9–17.

Gebretnsae H, BG Ayele, T Hadgu, E Haregot, A Gebremedhin, E Michael, M Abraha, DG Datiko, D Jerene 2020 Implementation status of household contact tuberculosis screening by health extension workers: Assessment findings from programme implementation in Tigray region, northern Ethiopia. *BMC Health Services Research*, Vol. 20, Article No. 72.

Gebretnsae H, N Mamo, T Teklemariam, K Fenta, T Gebrehiwet, A Berhe, F Gebreselasie, K Demoz 2020 Knowledge, Attitudes, and Practices about Trachoma in Rural Communities of Tigray Region, Northern Ethiopia: Implications for Prevention and Control. *Journal of Environmental and Public Health*, Vol. 2020, Article ID 3270530.

Gebretsadik T, G Mirutse, K Tadesse, W Terefe 2014 Knowledge sharing practice and its associated factors of healthcare professionals of public hospitals, Mekelle, Northern Ethiopia. *American Journal of Health Research*, Vol. 2, No. 5, pp. 241-246.

Gebretsadik Z, M Gebrehans, D Getnet, D Gebrie, T Alema, YB Belay 2017 Assessment of drug-drug interaction in Ayder comprehensive specialized hospital, Mekelle, Northern Ethiopia: a retrospective study. *BioMed Research International*, Vol. 2017, Article ID 9792363.

Gebrewahd A, G Adhanom, G Gebremichail, T Kahsay, B Berhe, Z Asfaw, S Tadesse, H Gebremedhin, H Negash, B Tesfanchal, H Haileselasie, HL Weldetinsaa 2020 Bacteriological quality and associated risk factors of drinking water in Eastern zone, Tigray, Ethiopia, 2019. *Tropical Diseases, Travel Medicine and Vaccines*, Vol. 6, Article No. 15.

Gebrewahd GT, GG Gebremeskel, DB Tadesse 2020 Intimate partner violence against reproductive age women during COVID-19 pandemic in northern Ethiopia 2020: a community-based cross-sectional study. *Reproductive Health*, Vol. 17, Article No. 152.

Gebrewahid T, G Gebrekirstos, M Teweldemedhin, H Gebreyesus, A Awala, K Tadla 2019 Intestinal parasitosis in relation to CD4 count and anemia among ART initiated patients in St. Mary Aksum general hospital, Tigray, Ethiopia. *BMC Infectious Diseases*, Vol. 19, Article No. 350.

Gebreyesus H, M Teweldemedhin, A Mamo 2019 Determinants of reproductive health services utilization among rural female adolescents in Asgede-Tsimbla district Northern Ethiopia: a community based cross-sectional study. *Reproductive Health*, Vol. 16, Article No. 4.

Gebreyesus H, T Berhe, M Teweldemedhin 2019 Birth preparedness as a precursor to reduce maternal morbidity and mortality among pregnant mothers in Medebay Zana District, Northern Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 304.

Gebreyohannis A, MH Legese, M Wolde, G Leta, G Tasew 2018 Prevalence of intestinal parasites versus knowledge, attitude and practices (KAPs) with special emphasis to *Schistosoma mansoni* among individuals who have river water contact in Addiremets town, Western Tigray, Ethiopia. *Plos One*, Vol. 13, No. 9: 0204259.

Gebrezgabher BB, Y Kebede, M Kindie, D Tetemke, M Abay, YA Gelaw 2017 Determinants to antiretroviral treatment non-adherence among adult HIV/AIDS patients in northern Ethiopia. *AIDS Research and Therapy*, Vol. 14, Article No. 16.

Gebrezgabiher G, S Kalayou, S Sahle 2013 An ethno-veterinary survey of medicinal plants in woredas of Tigray region, Northern Ethiopia. *International Journal of Biodiversity and Conservation*, Vol. 5, Issue 2, pp. 89-97.

Gebrezgi BH, MB Badi, EA Cherkose, NB Weldehaweria 2017 Factors associated with intimate partner physical violence among women attending antenatal care in Shire Endaselasie town, Tigray,

northern Ethiopia: a cross-sectional study, July 2015. *Reproductive Health*, Vol. 14, Article No. 76.

Gebrezgiabher BB, D Tetemke, T Yetum 2019 Awareness of occupational hazards and utilization of safety measures among welders in Aksum and Adwa towns, Tigray region, Ethiopia, 2013. *Journal of Environmental and Public Health*, Vol.2019, Article ID 4174085.

Gebrihet TA, KH Mesгна, YS Gebregiorgis, AB Kahsay, NB Weldehaweria, MG Weldu 2017 Awareness, treatment, and control of hypertension is low among adults in Aksum town, northern Ethiopia: a sequential quantitative-qualitative study. *PloS One*, Vol. 12, No. 5: 0176904.

Gebru AT 2014 Relationship Between Household Food Security and Nutritional Status of Children Under Five in Tigray: The Case of Kileawlaelo, Tigray, Ethiopia. MA Thesis, Indira Gandhi National Open University.

Gebru G, G Romha, A Asefa, H Hadush, M Biedemariam 2019 Risk factors and spatio-temporal patterns of human rabies exposure in Northwestern Tigray, Ethiopia. *Annals of Global Health*, 85(1): 119.

Gebru TT, YA Tesfamichael, MT Bitow, NE Assefa, GG Abady, MB Mengesha, HT Gebremedhin 2019 Stunting and associated factors among under-five children in Wukro town, Tigray region, Ethiopia: a cross sectional study. *BMC Research Notes*, Vol. 12, Article No. 504.

Gejo NG, HG Weldearegay, KT W/tinsaie, DE Mekango, ES Woldemichael, AS Buda, LH Dinsa, M Alemayehu, G Goba 2019 Exclusive breastfeeding and associated factors among HIV positive mothers in Northern Ethiopia. *PLoS One*, Vol. 14, No. 1: 0210782.

Gelaw YA, GH Senbete, AA Adane, KA Alene 2015 Determinants of late presentation to HIV/AIDS care in Southern Tigray Zone, Northern Ethiopia: an institution based case-control study. *AIDS Research and Therapy*, Vol. 12, Article No. 40.

Gerdt C, N Prata, A Gessesew 2012 An unequal burden: Risk factors for severe complications following unsafe abortion in Tigray, Ethiopia. Vol. 118, Issue S2 The health, social, and economic consequences of unsafe abortion: Papers presented at an IUSSP Seminar, Mexico, 2010, pp. S107-S112.

Gerensea H 2017 Trend and pattern of neonatal morbidity and mortality in Tigray Region, Ethiopia. *Edorium Journal of Pediatrics*, Vol. 1, pp. 1-5.

Gerensea H, A Yohannse, B Baymot, H Atsbha, K Nguse, L Gebru, S G/kel 2016 Knowledge, attitude and practice (KAP) towards iodized salt utilization in Hawelti Kebelle, Axum, Tigray, Ethiopia, 2015. *Edorium Journal of Nutrition and Dietetics*, Vol. 2016, No, 2, pp. 1-8.

Gerensea H, H Teklay 2018 Trend of hypertension morbidity and mortality in Tigray Region from 2011 to 2015, Tigray, Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 375.

Gerensea H, K Solomon, M Birhane, B G/Medhin, T H/Mariam, K Guesh, S Mekonen 2015 Quality of nursing care among in-patient of medical-surgical ward in Axum St. Marry Hospital, Tigray, Ethiopia 2015. *Enzyme Engineering*, Vol. 4, Issue 2.

Gerensea H, M Abay, H Teklay, Z Baraki, L Tsegay, T Angesom, D Siyoum, E Brhane, T Grum, S Hintsas, A Woldu, A Sied, P Malloy 2017 The impact of cancer in the Tigray Region of Ethiopia: a secondary analysis. *Journal of Cancer Science and Therapy*, Vol. 9, No. 3, pp. 389-392.

Geretasdik HG, M Jr. R Hayag 2019 Localized knowledge based system for diagnosis and treatment of pediatric pneumonia: the case of Tigray Central Zone in Ethiopia. *Information Technologist (The)*, Vol. 16 No. 1.

Gesesew H, K Berhane, ES Siraj, D Siraj, M Gebregziabher, YG Gebre, SA Gebreslassie, F Amdes, AG Tesema, A Siraj, M Aregawi, S Gezahegn, FH Tesfay 2021 The impact of war on the health system of the Tigray region in Ethiopia: an assessment. *BMJ Global Health*, Vol. 6, Issue 11.

Gesesew H, P Ward, J Karnon, R Woodman, L Mwanri 2021 Peer-led HIV care and the UNAIDS 90-90-90 treatment targets in Tigray, Ethiopia: a cluster randomised trial and economic evaluation of teach-test-link-trace model (TTLT) trial protocol. *BMJ Open*, Vol. 11, No. 6: 043943.

Gessesse Z, Z Tadesse, M Alemayehu, A Hiruye, Y Getachew, M Derbew, D Haile-Mariam, D Mammo, K Eva, H Yebyo, H Gebre-Michael 2015 Determinant factors of Visual Inspection with Acetic Acid (VIA) positive lesions among HIV positive women in Mekelle Hospital, Northern Ethiopia: A case control study. *Ethiopian Medical Journal*, 2015, Supp.2, pp.17-24.

Gessessew A 2009 Unwanted pregnancy and its impact on maternal health and utilization of health services in Tigray Region (Adigrat Hospital). *Ethiopian Medical Journal*, Vol. 47, No. 1, pp.1-8.

Gessessew A 2010 Abortion and unwanted pregnancy in Adigrat zonal hospital, Tigray, north Ethiopia. *African Journal of Reproductive Health*, Vol. 14, Issue 3, pp.183-188.

Gessessew A, A Kahsu 2009 Occupational exposure of health workers to blood and body fluids in six hospitals of Tigray region (August 1-30, 2006): magnitude and management. *Ethiopian Medical Journal*, Vol. 47, No. 3, pp. 213-219.

Gessessew A, G-Ab Barnabas, N Prata, K Weidert 2011 Task shifting and sharing in Tigray, Ethiopia, to achieve comprehensive emergency obstetric care. *International Journal of Gynecology and Obstetrics*, Vol. 113, Issue 1, pp. 28-31.

Gessessew A, M Mesfin 2003 Genitourinary and rectovaginal fistulae in Adigrat Zonal Hospital, Tigray, north Ethiopia. *Ethiopian Medical Journal*, Vol. 41, No. 2, pp. 123-130.

Gessessew A, M Mesfin 2003 Obstructed labour in adigrat zonal hospital, Tigray Region, Ethiopia. *Ethiopian Journal of Health Development*, Vol. 17, No. 3, pp. 175-180.

Gessessew A, M Mesfin 2004 Rape and related health problems in Adigrat zonal hospital, Tigray region, Ethiopia. *Ethiopian Journal of Health Development*, Vol. 18, Issue 3, pp.140-144.

Gessessew A, MM Melese 2002 Ruptured uterus-eight year retrospective analysis of causes and management outcome in Adigrat Hospital, Tigray Region, Ethiopia. *Ethiopian Journal of Health Development*, Vol. 16, No. 3, pp. 241-245.

Getachew M, M Abay, H Zelalem, T Gebremedhin, T Grum, A Bayray 2018 Magnitude and factors associated with adherence to Iron-folic acid supplementation among pregnant women in Eritrean refugee camps, northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 18, Article No. 83.

Getahun Z, Y Taffese, B Teshome, HK Biesalski, V Scherbaum 2004 Breastfeeding in Tigray and Gonder, Ethiopia, with special reference to exclusive/almost exclusive breastfeeding beyond six months. *Breastfeeding Review*, Vol. 12, Issue 3, pp. 9-16.

Gezehegn D, M Abay, D Tetemke, H Zelalem, H Teklay, Z Baraki, G Medhin 2017 Prevalence and factors associated with intestinal parasites among food handlers of food and drinking establishments

in Aksum Town, Northern Ethiopia. *BMC Public Health*, Vol. 17, Article No. 819.

Ghebreyesus TA, K H Witten, A Getachew, M Haile, M Yohannes, SW. Lindsay, P Byass 2002 Schistosome transmission, water-resource development and altitude in northern Ethiopia. *Annals of Tropical Medicine and Parasitology*, Vol. 96, Issue 5, pp.489-495.

Ghebreyesus TA, KH Witten, A Getachew, AM Yohannes, W Tesfay, M Minass, A Bosman, A Teklehaimanot 2000 The community-based malaria control programme in Tigray, northern Ethiopia. A review of programme set-up, activities, outcomes and impact. *Parassitologia*, Vol. 42, No. 3-4, pp. 255-290.

Ghebreyesus TA, KH Witten, A Getachew, K O'Neill, A Bosman, A Teklehaimanot 1999 Community-based malaria control in Tigray, northern Ethiopia. *Parassitologia*, Vol. 41, No. 1-3, pp. 367-371.

Ghebreyesus TA, M Haile, A Getachew, T Alemayehu, KH Witten, A Medhin, M Yohannes, Y Asgedom, Y Ye-ebiyo, SW Lindsay, P Byass 1998 Pilot studies on the possible effects on malaria of small-scale irrigation dams in Tigray regional state, Ethiopia. *Journal of Public Health Medicine*, Vol. 20, No. 2, pp. 238-40.

Ghebreyesus TA, M Haile, KH Witten, A Getachew 1999 Incidence of malaria among children living near dams in northern Ethiopia: community based incidence survey. *BMJ*, Vol. 319: 663.

Ghebreyesus TA, T Alemayehu, A Bosma, KH Witten, A Teklehaimanot 1996 Community participation in malaria control in Tigray region Ethiopia. *Acta Tropica*, Vol. 61, Issue 2, pp. 145-156.

Giday K, L Lenaerts, K Gebrehiwot, G Yirga, B Verbist, B Muys 2016 Ethnobotanical study of medicinal plants from degraded dry afro-montane forest in northern Ethiopia: Species, uses and conservation challenges. *Journal of Herbal Medicine*, Vol. 6, Issue 2, pp. 96-104.

Giday M 2018 Traditional knowledge of people on plants used as insect repellents and insecticides in Raya-Azebo district, Tigray region of Ethiopia. *Indian Journal of Traditional Knowledge*, Vol. 17, No. 2, pp. 336-343.

Giday M, G Ameni 2003 An ethnobotanical survey of plants of veterinary importance in two woredas of Southern Tigray, Northern Ethiopia. *SINET: Ethiopian Journal of Science*, Vol. 26, No. 2, pp. 123-136.

Gidey B, K Alemu, A Atnafu, M Kifle, Y Tefera, HR Sharma 2015 Availability of Adequate iodized salt at household level and associated factors in rural communities in Laelay Maychew District, Northern Ethiopia: a cross sectional study. *Journal of Nutrition and Health Sciences*, Vol. 2, No.1.

Gidey G, B Hailu, K Nigus, T Hailu, W G/her, H Gerensea 2017 Timing of first focused antenatal care booking and associated factors among pregnant mothers who attend antenatal care in Central Zone, Tigray, Ethiopia. *BMC Research Notes*, Vol. 10, Article No. 608.

Gidey G, A Bayray, H Gebrehiwot 2013 Patterns of maternal mortality and associated factors; a case-control study at public hospitals in Tigray region, Ethiopia, 2012. *International Journal of Biodiversity and Conservation*, Vol. 5, No. 2, pp. 89-97.

Gidey K, D Belay, BY Hailu, TD Kassa, YL Niriayo 2019 Visceral leishmaniasis treatment outcome and associated factors in northern Ethiopia. *BioMed Research International*, Vol. 2019, Article ID 3513957.

Gidey K, A Hailu, A Bayray 2018 Pattern and outcome of medical intensive care unit admissions to Ayder comprehensive specialized hospital in Tigray, Ethiopia. *Ethiopian Medical Journal*, Vol. 56 No. 1.

Gidey M, T Beyene, MA Signorini, P Bruschi, G Yirga 2015 Traditional medicinal plants used by Kunama ethnic group in Northern Ethiopia. *Journal of Medicinal Plants Research*, Vol. 9, No. 15, pp. 494-509.

Gidey MT, GB Gebretekle, ME Hogan, TG Fenta 2019 Willingness to pay for social health insurance and its determinants among public servants in Mekelle City, Northern Ethiopia: a mixed methods study. *Cost Effectiveness and Resource Allocation*, Vol. 17, Article No. 2.

Gill GV, A Tekle, A Reja, D Wile, PJ English, M Diver AJK Williams, S Tesfaye 2011 Immunological and C-peptide studies of patients with diabetes in northern Ethiopia: existence of an unusual subgroup possibly related to malnutrition. *Diabetologia*, Vol. 54, pp. 51-57.

Girma Y, A Aregay, G Biruh 2014 Infant feeding practice and associated factors among HIV positive mothers enrolled in governmental health facilities in Mekelle town, Tigray region, North Ethiopia. *Journal of HIV/AIDS and Infectious Diseases*, Vol. 2, No. 401, pp. 1-8.

Girmay W, G Gugsu, H Taddele, Y Tsegaye, N Awol, M Ahmed, A Feleke 2020 Isolation and identification of methicillin-resistant *Staphylococcus aureus* (MRSA) from milk in shire dairy farms, Tigray, Ethiopia. *Veterinary Medicine International*, Vol. 2020, Article ID 8833973.

Goba GK, H Tsegay, GB Gebregergs, M Mitiku, KA Kim, M Alemayehu 2018 A facility-based study of factors associated with perinatal mortality in Tigray, northern Ethiopia. *The International Journal of Gynecology and Obstetrics*, Vol. 141, Issue1, Themed Issue: Africa and the Middle East, pp. 113-119.

Goba GK, J George, M Alemayehu 2019 Translation, Adaptation, and Assessment of the Communication Assessment Tool in Tigray,

Northern Ethiopia. *The Journal of Graduate Medical Education*, Vol. 11, Issue 4s, pp. 141–145.

Godefay H, A Abrha, J Kinsman, A Myleus, P Byass 2014 Undertaking cause-specific mortality measurement in an unregistered population: an example from Tigray Region, Ethiopia. *Global Health Action*, Vol. 7, Issue 1, Article: 25264.

Godefay H, P Byass, J Kinsman, A Mulugeta 2015 Understanding maternal mortality from top–down and bottom–up perspectives: Case of Tigray Region, Ethiopia. *Journal of Global Health*, Vol. 5, No. 1: 010404.

Godefay H, P Byass, WJ Graham, J Kinsman, A Mulugeta 2015 Risk factors for maternal mortality in rural Tigray, northern Ethiopia: a case-control study. *PLoS One*, Vol. 10, No. 12: 0144975.

Goshu M, H Godefay, F Bihonegn, F Ayalew, D Haileselassie, A Kebede, G Temam, G Gidey 2018 Assessing the competence of midwives to provide care during labor, childbirth and the immediate postpartum period—A cross sectional study in Tigray region, Ethiopia. *PloS One*, Vol. 13, No. 10: 0206414.

Grum T, E Brhane 2018 Magnitude and factors associated with late antenatal care booking on first visit among pregnant women in public health centers in central zone of Tigray Region, Ethiopia: A cross sectional study. *PloS One*, Vol. 13, No. 12: 0207922.

Grum T, E Brhane, S Hintsu, G Kaysay 2018 Magnitude and factors associated with anemia among pregnant women attending antenatal care in public health centers in central zone of Tigray region, northern Ethiopia: a cross sectional study. *BMC Pregnancy and Childbirth*, Vol. 18, Article No. 433.

Guesh G, G Degu, M Abay, B Beyene, E Brhane, K Brhane 2018 Survival status and predictors of mortality among children with severe acute malnutrition admitted to general hospitals of Tigray,

North Ethiopia: a retrospective cohort study. *BMC Research Notes*, Vol. 11, Article No. 832.

Gufue ZH, NF Gizaw, W Ayele, YM Yifru, NA Hailu, ET Welesemayat, EW Tsegay, AH Atsbaha, HT Gebru 2020 Survival of stroke patients according to hypertension status in Northern Ethiopia: seven years retrospective cohort study. *Vascular Health and Risk Management*, Vol. 16, pp. 389–401.

Habitu T, D Areda, A Muwonge, GT Tessema, E Skjerve, T Gebrehiwot 2019 Prevalence and risk factors analysis of bovine tuberculosis in cattle raised in mixed crop-livestock farming system in Tigray region, Ethiopia. *Transboundary and Emerging Diseases*, Vol. 66, Issue 1, pp. 488-496.

Habtu E, G Gill, S Tesfaye 1999 Characteristics of insulin requiring diabetes in rural northern Ethiopia--a possible link with malnutrition? *Ethiopian Medical Journal*, Vol. 37, No. 4, pp. 263-267.

Hadera HG, H Boer, WAJM Kuiper 2007 Using the theory of planned behaviour to understand the motivation to learn about HIV/AIDS prevention among adolescents in Tigray, Ethiopia. *AIDS Care*, Vol. 19, Issue 7, pp. 895-900.

Hadgu FB, GG Sibhat, LG Gebretsadik 2019 Diabetic ketoacidosis in children and adolescents with newly diagnosed type 1 diabetes in Tigray, Ethiopia: retrospective observational study. *Pediatric Health Medicine and Therapeutics*, Vol. 10, pp. 49–55.

Hadgu FB, LGE Gebretsadik, HG Mihretu, AH Berhe 2020 Prevalence and factors associated with neonatal mortality at Ayder Comprehensive Specialized Hospital, Northern Ethiopia. A cross-sectional study. *Pediatric Health Medicine and Therapeutics* Vol. 11, pp. 29–37.

Hadgu M, HT Menghistu, A Girma, H Abrha, H Hagos 2019 Modeling the potential climate change-induced impacts on future genus *Rhipicephalus* (Acari: Ixodidae) tick distribution in semi-arid areas of Raya Azebo district, Northern Ethiopia. *Journal of Ecology and Environment*, Vol. 43, Article No. 43.

Hadgu TH, W Worku, D Tetemke, H Berhe 2013 Undernutrition among HIV positive women in Humera hospital, Tigray, Ethiopia, 2013: antiretroviral therapy alone is not enough, cross sectional study. *BMC Public Health*, Vol. 13, Article No. 943.

Hadush A, M Kassa, K Kidanu, W Tilahun 2016 - Assessment of knowledge and practice of neonatal care among post natal mothers attending in Ayder and Mekelle Hospital in Mekelle, Tigray, Ethiopia 2013. *SMU Medical Journal*, Vol 3, No 1, pp. 509-525.

Hadush B, L Eshetu, W Mengistu, M Hailesilassie 2009 Seroprevalence of contagious caprine pleuropneumonia in Kefta Humera, Alamata (Tigray) and Aba-'ala (Afar), Northern Ethiopia. *Tropical Animal Health and Production*, Vol. 41, No. 5, pp. 803–806.

Haftom M, P Petrucka, K Gemechu, H Mamo, T Tsegay, E Amare, H Kahsay, A Gebremariam 2020 Knowledge, attitudes, and practices towards covid-19 pandemic among quarantined adults in Tigray region, Ethiopia. *Infection and Drug Resistance*, Vol. 13, pp. 3727-3737.

Haftom M, PM Petrucka 2021 Determinants of Face Mask Utilization to Prevent Covid-19 Pandemic among Quarantined Adults in Tigray Region, Northern Ethiopia, 2020. *Clinical Nursing Research*, Vol. 30, Issue 7, pp. 1107-1112.

Haftu A, H Hagos, M-Ab Mehari, B G/her 2018 Pregnant women adherence level to antenatal care visit and its effect on perinatal

outcome among mothers in Tigray Public Health institutions, 2017: cohort study. *BMC Research Notes*, Vol. 11, Article No. 872.

Haftu AZ, AA Desta, NM Bezabih, AB Kahsay, KM Kidane, Y Zewdie, T W Woldearegay 2020 Incidence and factors associated with treatment failure among HIV infected adolescent and adult patients on second-line antiretroviral therapy in public hospitals of Northern Ethiopia: Multicenter retrospective study. *PloS One*, Vol. 15, No. 9: 0239191.

Haftu H, T Hailu, A Medhaniye, T G/tsadik 2018 Assessment of pattern and treatment outcome of patients admitted to pediatric intensive care unit, Ayder Referral Hospital, Tigray, Ethiopia, 2015. *BMC Research Notes*, Vol. 11, Article No. 339.

Haftu M, A Girmay, M Gebremeskel, G Aregawi, D Gebregziabher, C Robles 2019 Commonly missed nursing cares in the obstetrics and gynecologic wards of Tigray general hospitals; Northern Ethiopia. *PloS One*, Vol. 14, No. 12: 0225814.

Hagezom HM, AB Gebrehiwet, MH Goytom, EA Alemseged 2021 Prevalence of Depression and Associated Factors Among Quarantined Individuals During the COVID-19 Pandemic in Tigray Treatment and Quarantine Centers, Tigray, Ethiopia, 2020: A Cross-Sectional Study. *Infection and Drug Resistance*, Vol. 14, pp. 2113–2119.

Hagos D, AW Tadesse 2020 Prevalence and factors associated with exclusive breastfeeding among rural mothers of infants less than six months of age in Southern Nations, Nationalities, Peoples (SNNP) and Tigray regions, Ethiopia: a cross-sectional study. *International Breastfeeding Journal*, 15, Article No. 25.

Hagos EG, GG Asfaha, BA Berihu 2016 Prevalence of substance abuse among regular degree health science students in Sheba University College in Mekelle Town, Tigray-Ethiopia. *Journal of*

Neurosciences in Rural Practice, Vol. 7, No. 2, pp. 200-205.

Hagos F, F Alemseged, F Balcha, S Berhe, A Aregay 2014 Application of nursing process and its affecting factors among nurses working in mekelle zone hospitals, Northern Ethiopia. Nursing Research and Practice, Vol. 2014, Article ID 675212.

Hagos G, G Tura, G Kahsay, K Haile, T Grum, T Araya 2018 Family planning utilization and factors associated among women receiving abortion services in health facilities of central zone towns of Tigray, Northern Ethiopia: a cross sectional study. BMC Women's Health, Vol. 18, Article No. 83.

Hailay A, K Zereabruk, G Mebrahtom, W Aberhe, D Bahrey 2020 Magnitude and Its Associated Factors of Urinary Tract Infection among Adult Patients Attending Tigray Region Hospitals, Northern Ethiopia, 2019. International Journal of Microbiology, Vol. 2020, Article ID 8896990.

Haile F, D Yemane, A Gebreslassie 2014 Assessment of non-financial incentives for volunteer community health workers—the case of Wukro district, Tigray, Ethiopia. Human Resources for Health, Vol. 12, Article No. 54.

Haile F, Y Brhan 2014 Male partner involvements in PMTCT: a cross sectional study, Mekelle, Northern Ethiopia. BMC Pregnancy and Childbirth, Vol. 14, Article No. 65.

Haile M, H Lemma, Y Weldu 2017 Population movement as a risk factor for malaria infection in high-altitude villages of Tahtay–Maychew district, Tigray, northern Ethiopia: a case–control study. The American Journal of Tropical Medicine and Hygiene, Vol. 97, No. 3, pp. 726–732.

Haile T, SD Anderson 2006 Visceral leishmaniasis in northern Ethiopia. East African Medical Journal, Vol. 83, No. 7, pp. 389-392.

Haile TG, N Assefa, T Alemayehu, T Mariye, GG Geberemeskel, D Bahrey, G Mebrahtom, B Demisse, H Gebrekidan, T Getachew 2021 Determinants of Preeclampsia among Women Attending Delivery Services in Public Hospitals of Central Tigray, Northern Ethiopia: A Case-Control Study. *Journal of Pregnancy*, Vol. 2021, Article ID 4654828.

Hailemariam T, T Girmay, G Girmay 2018 Determinants of individual dietary diversity score of children less than five years old in the southern zone of Tigray, Ethiopia. *African Journal of Food, Agriculture, Nutrition and Development*, Vol.18 No. 1, pp. 13034-13051.

Hailemichael HT, GT Debelew, HB Alema, MG Weldu, KH Misgina 2020 Determinants of adverse birth outcome in Tigray region, North Ethiopia: Hospital-based case-control study. *BMC Pediatrics* Vol. 20, Article No. 10.

Haileselasie TH 2012 Traditional zootherapeutic studies in Degu'a Tembien, Northern Ethiopia. *Current Research Journal of Biological Sciences*, Vol. 4, No. 5, pp. 563-569.

Haileselassie B, A Ali 2008 Assessment of insecticide treated nets coverage for malaria control in Kafta-Humera District, Tigray: Possession versus use by high-risk groups. *The Ethiopian Journal of Health Development*, Vol. 22, No. 3, pp. 216-305.

Haileselassie M, G Redae, G Berhe, CJ Henry, MT Nickerson, B Tyler, A Mulugeta 2020 Why are animal source foods rarely consumed by 6-23 months old children in rural communities of Northern Ethiopia? A qualitative study. *PLoS One*, Vol. 15, No. 1: 0225707.

Haileslasie H, A Tsegaye, G Teklehaymanot, G Belay, G Gebremariam, G Gebremichail, B Tesfanchal, K Kaleaye, L Legesse, G Adhanom, F Mardu, A Gebrewahd, G Tesfay, A

Gebertsadik 2020 Community based hematological reference intervals among apparently healthy adolescents aged 12-17 years in Mekelle city, Tigray, northern Ethiopia: A cross sectional study. *PloS One*, Vol. 15, No. 9: 0234106.

Hailelassie K, A Mulugeta, M Girma 2013 Feeding practices, nutritional status and associated factors of lactating women in Samre Woreda, South Eastern Zone of Tigray, Ethiopia. *Nutrition Journal*, Vol. 12, Article No. 28.

Hailu D, H Berhe 2014 Knowledge about obstetric danger signs and associated factors among mothers in Tsegedie District, Tigray Region, Ethiopia 2013: community based cross-sectional Study. *Plos One*, Vol. 9, No. 2: 83459.

Hailu GG, DG Hagos, AK Hagos, AG Wasihun 2018 Virological and immunological failure of HAART and associated risk factors among adults and adolescents in the Tigray region of Northern Ethiopia. *PloS One*, Vol. 13, No. 5: 0196259.

Hailu GG, AG Wasihun 2021 Immunological and virological discordance among people living with HIV on highly active antiretroviral therapy in Tigray, Northern Ethiopia. *BMC Infectious Diseases*, Vol. 21, Article No. 561.

Hailu GS, GB Gutema, AA Asefaw, DA Hussen, MG Hadera 2011 Comparative assessment of the physicochemical and in-vitro bioavailability equivalence of co-trimoxazole tablets marketed in Tigray, Ethiopia. *International Journal of Pharmaceutical Sciences and Research*, Vol. 2, Issue 12, pp. 3210-3218.

Hailu GS, GB Gutema, HZ Hishe, YS Ali, AA Asfaw 2013 Comparative in vitro bioequivalence evaluation of different brands of amoxicillin capsules marketed in Tigray, Ethiopia. *International Journal of Pharmaceutical Sciences and Nanotechnology*, Vol. 6, Issue 1, pp. 1966-1971.

Hailu NA, T Tolessa, ZH Gufue, EW Tsegay, KB Tekola 2020 The magnitude of anemia and associated factors among adult diabetic patients in Tertiary Teaching Hospital, Northern Ethiopia, 2019, cross-sectional study. *PloS one*, Vol. 15, No. 11: 0240678.

Hailu S, F Enqueselassie, Y Berhane 2009 Health facility-based maternal death audit in Tigray, Ethiopia. *Ethiopian Journal of Health Development*, Vol. 23, No. 2, pp. 115-119.

Hailu T, H Berhe, D Hailu, H Berhe 2014 Knowledge of breast cancer and its early detection measures among female students, in Mekelle University, Tigray region, Ethiopia. *Science Journal of Clinical Medicine*, Vol. 3, No. 4, pp. 57-64.

Hailu T, K Nigus, G Gidey, B Hailu, Y Moges 2018 Assessment of partograph utilization and associated factors among obstetric care givers at public health institutions in central zone, Tigray, Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 710.

Hailu D 2000 The prevalence of camel trypanosomosis in the salt convey routes of Afar-Tigrai. Thesis, Faculty of Veterinary Medicine, Addis Abeba University.

Hintsu S, L Dube, M Abay, T Angesom, A Workicho 2017 Determinants of diabetic nephropathy in Ayder Referral Hospital, Northern Ethiopia: a case-control study. *PloS One*, Vol. 12, No. 4: 0173566.

Hizikias EB, E Aynekulu, W Mekuria, D Endale 2011 Management, use and ecology of medicinal plants in the degraded dry lands of Tigray, Northern Ethiopia. *Journal of Medicinal Plants Research*, Vol. 5, Issue 3, pp. 309-318.

Jackson R, FH Tesfay, H Godefay, TG Gebrehiwot 2016 Health extension workers' and mothers' attitudes to maternal health service utilization and acceptance in Adwa Woreda, Tigray Region, Ethiopia. *PLoS One*, Vol. 11, No. 3: 0150747.

Jemal K, M Awol 2019 Minimum dietary diversity score and associated factors among pregnant women at Alamata General Hospital, Raya Azebo Zone, Tigray Region, Ethiopia. *Journal of Nutrition and Metabolism*, Vol. 2019, Article ID 8314359.

Jigssa HA, BF Desta, HA Tilahun, J McCutcheon, P Berman 2018 Factors contributing to motivation of volunteer community health workers in Ethiopia: the case of four woredas (districts) in Oromia and Tigray regions. *Human Resources for Health*, Vol. 16, Article No. 57.

Kahsay A, A Mulugeta, O Seid 2015 Nutritional status of children (6-59 months) from food secure and food insecure households in rural communities of Saesie Tsaeda-Emba District, Tigray, North Ethiopia: comparative study. *International Journal of Nutrition and Food Sciences*, Vol. 4, Issue 1, pp. 51-65.

Kahsay AB, FE Gashe, ZG Debessai, A Tegegne, T Bezabih 2014 Risk factors of osteoporosis among adults in Ethiopia, the case of Tigray region: A case control study. *Journal of Public Health and Epidemiology*, Vol. 6, No. 2, pp. 92-100.

Kahsay G, A G/Egziabher 2010 Quality assessment of the commonly prescribed antimicrobial drug, ciprofloxacin tablets, marketed in Tigray, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 2, No. 1, pp. 93-107.

Kahsay H, M Ahmedin, B Kebede, K Gebrezihar, H Araya, D Tesfay 2020 Assessment of knowledge, attitude, and disposal practice of unused and expired pharmaceuticals in community of Adigrat City, Northern Ethiopia. *Journal of Environmental and Public Health*, Vol. 2020, Article ID 6725423.

Kahsay HB, FE Gashe, WM Ayele 2018 Risk factors for hypertensive disorders of pregnancy among mothers in Tigray

region, Ethiopia: matched case-control study. *BMC Pregnancy and Childbirth*, Vol. 18, Article No. 482.

Kahsay S, G Berhe, A Gebremariam, BI Birhane 2015 Determinants of caesarean deliveries and its major indications in Adigrat hospital, northern Ethiopia: a case control study. *Epidemiology*, Vol.5, No.3.

Kahsay ZH, AG Tesema, AN Bazzano 2019 A qualitative study of drivers of psychoactive substance use among Mekelle University students, Northern Ethiopia. *Substance Abuse Treatment, Prevention, and Policy*, Vol. 14, Article No. 11.

Kasahun GG, GT Demoz, AT Asayehegn, LG Gebrehiwot, GM Tesfay, DM Desta 2020 Evaluation of pattern of drug use in tertiary health care setting in central Tigray Using WHO prescribing indicators. *Advances in Pharmacoepidemiology and Drug Safety*, Vol. 9, Issue 1, No: 228.

Kassahun EA, LB Zeleke, AA Dessie, BG Gersa, HI Oumer, HA Derseh, MW Arage, GG Azeze 2019 Factors associated with unintended pregnancy among women attending antenatal care in Maichew Town, Northern Ethiopia, 2017. *BMC Research Notes*, Vol. 12, Article No. 381.

Kassave T, O Receveur, T Johns, MR Becklake 2001 Prevalence of vitamin A deficiency in children of 6-9 years of age in Wukro, Northern Ethiopia. *Bulletin World Health Organization*, Vol. 79, No. 5, pp. 415-22.

Kassaye E, E Kebede 2010 Epidemiological study on manage mite, lice and sheep keds of small ruminants in Tigray region, northern Ethiopia. *Ethiopian Veterinary Journal*, Vol. 14, No. 2, pp. 51-65.

Kassyou H 2008 Factors affecting antenatal care attendance in Maichew Town, Southern Tigray. Thesis, Addis Ababa University.

Kebede A, B Molla, H Gerensea 2018 Assessment of risky sexual behavior and practice among Aksum University students, Shire Campus, Shire Town, Tigray, Ethiopia, 2017. BMC Research Notes, Vol. 11, Article No. 88.

Kebede A, H Gerensea, F Amare, Y Tesfay, G Teklay 2018 The magnitude of anemia and associated factors among pregnant women attending public institutions of Shire Town, Shire, Tigray, Northern Ethiopia, 2018. BMC Research Notes, Vol. 11, Article No. 595.

Kebede W, A Hagos, Z Girma, F Lobago 2009 Echinococcosis/hydatidosis: its prevalence, economic and public health significance in Tigray region, North Ethiopia. Tropical Animal Health and Production, Vol. 41, No. 6, pp. 865–871.

Kelkay B, A Omer, Y Teferi, Y Moges 2019 Factors associated with singleton preterm birth in Shire Suhul general hospital, northern Ethiopia, 2018. Journal of Pregnancy, Vol. 2019, Article ID 4629101.

Kidane D, Z Tomass, T Dejene 2013 Community knowledge of traditional mosquito repellent plants in Kolla Temben District, Tigray, Northern Ethiopia. Scientific Research and Essays, Vol. 8, No. 24, pp. 1139-1144.

Kidane E, S Menkir, A Kebede, M Desta 2014 Prevalence of parasitic infections and their associations with anthropometric measurements of school children in selected primary schools, Wukro Town, Eastern Tigray, Ethiopia. International Journal of Current Microbiology and Applied Sciences, Vol. 3, No. 3, pp. 11-29.

Kidane G, K Abegaz, A Mulugeta, P Singh 2013 Nutritional analysis of vitamin A enriched bread from orange flesh sweet potato and locally available wheat flours at Samre Woreda, Northern Ethiopia. Current Research in Nutrition in Food Research Journal,

Vol. 1, No. 1, pp. 49-57.

Kidane G, RH Morrow 2000 Teaching mothers to provide home treatment of malaria in Tigray, Ethiopia: a randomised trial. *The Lancet*, Vol. 356, Issue 9229, pp. 550-555.

Kidane L, G Gebremedhin, T Beyene 2018 Ethnobotanical study of medicinal plants in ganta afeshum district, eastern zone of Tigray, northern Ethiopia. *Journal of Ethnobiology and Ethnomedicine*, Vol. 14, Article No. 64.

Kidane T, A Woldegebriel 2006 Prevalence of Iodine deficiency disorder in a highland district in Tigray. *Ethiopian Journal of Health Development*, Vol. 20, No. 1, pp. 58-59.

Kifleyohannes T, JJ Debenham, LJ Robertson 2021 Is Fresh Produce in Tigray, Ethiopia a Potential Transmission Vehicle for *Cryptosporidium* and *Giardia*? *Foods*, Vol. 10, No. 9.

Kifleyohannes T, LJ Robertson 2020 Preliminary insights regarding water as a transmission vehicle for *Cryptosporidium* and *Giardia* in Tigray, Ethiopia. *Food and Waterborne Parasitology*, Vol. 19: 00073.

Kinfu G, S Gebre-Selassie, N Fikrie 2012 Therapeutic efficacy of artemether-lumefantrine for the treatment of uncomplicated *Plasmodium falciparum* Malaria in Northern Ethiopia. *Malaria Research and Treatment*, Article ID 548710.

Kiros KG, GY Abyu, DS Belay, MH Goyteom 2019 Magnitude of overweight and associated factors among type 2 diabetes mellitus patients at Mekelle public hospitals, Tigray, Ethiopia: a cross-sectional study. *BMC Research Notes*, Vol. 12, No. 1: 762.

Kiros KG, MH Goyteom, YA Tesfamichael, HH Mekonen, TH Gebru, TG Gebrehiwot, YH Teka, WA Abrha, DB Tadesse 2020

Seroprevalence of Hepatitis B Virus Infection, Mother-To-Child Transmission, and Associated Risk Factors Among Delivering Mothers in Tigray Region, Northern Ethiopia: a Cross-Sectional Study. *Infectious Diseases and Therapy*, Vol. 9, pp. 901–911.

Kiros YK, BF Regassa 2017 The role of rk39 serologic test in the diagnosis of visceral leishmaniasis in a Tertiary Hospital, Northern Ethiopia. *BMC Research Notes*, Vol. 10, Article No. 169.

Kiros YK, T Teklu, F Desalegn, M Tesfay, E Klinkenberg, A Mulugeta 2014 Adherence to anti-tuberculosis treatment in Tigray, Northern Ethiopia. *Public Health Action*, Vol. 4, Supplement 3, pp. S31-S36.

Kumie A, K Zeru 2007 Sanitary conditions of food establishments in Mekelle town, Tigray, north Ethiopia. *Ethiopian Journal of Health Development*, Vol. 21, No. 1, pp. 3-11.

Lake EA, GB Abera, GA Azeze, NA Gebeyew, BW Demissie 2019 Magnitude of neonatal jaundice and its associated factor in neonatal intensive care units of Mekelle city public hospitals, Northern Ethiopia. *International Journal of Pediatrics*, Vol. 2019, Article ID 1054943.

Lampietti JA, C Poulos, ML Cropper, H Mitiku, D Whittington 1999 Gender and preferences for malaria prevention in Tigray, Ethiopia. *Policy Research Report on Gender and Development, Working Paper Series, No. 3. The World Bank Development Research Group/Poverty Reduction and Economic Management Network.*

Legese H, B Berhe, G Adhanom, T Kahsay, A Gebrewahd, G Gebremariam, F Mardu, K Tesfay, H Gebremedhin, H Negash 2021 Trend Analysis of Hepatitis B and C Among Patients Visiting Health Facility of Tigrai, Ethiopia, 2014-2019. *Research Square.*

Legese H, H Degefa, A Gebrewahd, H Gebremedhin 2020 Utilization of isoniazid prophylaxis therapy and its associated factors

among HIV positive clients taking antiretroviral therapy at Fre Semaetat primary hospital, Hawzien districts, Tigray, Northern Ethiopia. *Tropical Diseases, Travel Medicine and Vaccines*, Vol. 6, Article No. 11.

Legese H, T Kahsay, A Gebrewahd, B Berhe, B Fseha, S Tadesse, G Gebremariam, H Negash, F Mardu, K Tesfay, G Adhanom 2020 Prevalence, antimicrobial susceptibility pattern, and associated factors of Salmonella and Shigella among food handlers in Adigrat University student's cafeteria, Northern Ethiopia, 2018. *Tropical Diseases, Travel Medicine, and Vaccines*, Vol. 6, Article No. 19.

Legese H, AG Kahsay, A Kahsay, T Araya, G Adhanom, S Muthupandian, A Gebreyesus 2018 Nasal carriage, risk factors and antimicrobial susceptibility pattern of methicillin resistant Staphylococcus aureus among healthcare workers in Adigrat and Wukro hospitals, Tigray, Northern Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 250.

Legesse B, T Gedif 2014 Knowledge on breast cancer and its prevention among women household heads in Northern Ethiopia. *Open Journal of Preventive Medicine*, Vol. 4 No.1, Article ID: 42291.

Legesse L, B Erko, A Hailu 2010 Current status of intestinal Schistosomiasis and soiltransmitted helminthiasis among primary school children in Adwa Town, Northern Ethiopia. *Ethiopian Journal of Health Development*, Vol. 24, No. 3, pp. 191-197.

Lemma H, C Löfgren, M San Sebastian 2011 Adherence to a six-dose regimen of artemether-lumefantrine among uncomplicated Plasmodium falciparum patients in the Tigray Region, Ethiopia. *Malaria Journal*, Vol. 10, Article No. 349.

Lemma H, M San Sebastian, C Löfgren, G Barnabas 2011 Cost-effectiveness of three malaria treatment strategies in rural Tigray,

Ethiopia where both *Plasmodium falciparum* and *Plasmodium vivax* co-dominate. *Cost Effectiveness and Resource Allocation*, Vol. 9, Article No. 2.

Lerebo W, A Kidanu, M Tsadik 2015 Magnitude and associated factors of late booking for antenatal care in public health centers of Adigrat town, Tigray, Ethiopia. *Clinics in Mother and Child Health*, Vol. 12 No. 1: 171.

Lerebo W, S Callens, D Jackson, C Zarowsky, M Temmerman 2014 Identifying factors associated with the uptake of prevention of mother to child HIV transmission programme in Tigray region, Ethiopia: a multilevel modeling approach. *BMC Health Services Research*, Vol. 14, Article No. 181.

Leta M, MT Iffa 2019 Diagnose at admission and factors associated with management outcome of neonate in Ayder Referral Hospital, northern Ethiopia: Institutional based cross-sectional record review study. *Journal of Pediatrics and Neonatal Care*, Vol. 9: 373.

Lyons S, H Veeken, J Long 2003 Visceral leishmaniasis and HIV in Tigray, Ethiopia. *Tropical Medicine and International Health*, Vol. 8, Issue 8, pp. 733-739.

Maldey H, S Tadesse, AZ Alem, HM Hagezom, ZH Gufue 2021 Time to Euthyroidism and Its Determinants Among Thyrotoxicosis Patients on Anti-Thyroid Drug Who Attend to Medical and Ambulatory Clinics of South Tigray General Hospitals. *Therapeutics and Clinical Risk Management*, Vol. 17, pp. 1091–1101.

Mardu F, B Berhe, K Tesfay, H Negash 2019 Assessment of sanitary condition of services as implication for intestinal parasitic infections among prison inmates: institutional based cross-sectional study in eastern Tigray zonal prison, northern Ethiopia, 2018. *BMC Research Notes*, Vol. 12, Article No. 393.

Mardu F, M Yohannes, D Tadesse 2019 Prevalence of intestinal parasites and associated risk factors among inmates of Mekelle prison, Tigray Region, Northern Ethiopia, 2017. *BMC Infectious Diseases*, Vol. 19, Article No. 406.

Mardu F, H Negash, H Legese, B Berhe, K Tesfay, H Hailelasie, B Tesfanchal, G Gebremichail, G Belay, H Gebremedhin 2020 Assessment of knowledge, practice, and status of food handlers toward Salmonella, Shigella, and intestinal parasites: A cross-sectional study in Tigray prison centers, Ethiopia. *PloS One*, Vol. 15, No. 11: 0241145.

Mariye T, A Girmay, T Birhanu, H Tasew, G Teklay, Z Baraki, H Gerensea, T Teklu, G Bezabeh 2019 Adherence to insulin therapy and associated factors among patients with diabetes mellitus in public hospitals of Central Zone of Tigray, Ethiopia, 2018: a cross-sectional study. *Pan African Medical Journal*, Vol. 33: 309.

Mariye T, H Tasew, G Teklay, H Gerensea, W Daba 2018 Magnitude of diabetes self-care practice and associated factors among type two adult diabetic patients following at public Hospitals in central zone, Tigray Region, Ethiopia, 2017. *BMC Research Notes*, Vol. 11, Article No. 380.

Marrone R, P Vignally, A Rosso, D Didero, E Pizzini, F Dassoni, MC Pajno, E Maiani, G Franco, R Calcaterra, A Morrone, C Mirisola 2012 Epidemiology of skin disorders in Ethiopian children and adolescents: An analysis of records from the Italian Dermatological Centre, Mekelle, Tigray, Ethiopia, 2005 to 2009. *Pediatric Dermatology*, Vol. 29, Issue4, pp. 442-447.

Massa D, K Woldemichael, B Tsehayneh, A Tesfay 2016 Treatment outcome of severe acute malnutrition and determinants of survival in Northern Ethiopia: a prospective cohort study. *International Journal of Nutrition and Metabolism*, Vol. 8, No. 3, pp. 12-23.

Medhanyie AA, A Desta, M Alemayehu, T Gebrehiwot, TA Abraha, A Abrha, H Godefay 2017 Factors associated with contraceptive use in Tigray, North Ethiopia. *Reproductive Health*, Vol. 14, Article No. 27.

Mehari K, T Asmelash, H Hailekiros, T Wubayehu, H Godefay, T Araya, M Saravanan 2019 Prevalence and factors associated with multidrug-resistant tuberculosis (MDR-TB) among presumptive MDR-TB patients in Tigray Region, Northern Ethiopia. *Canadian Journal of Infectious Diseases and Medical Microbiology*, Vol. 2019, Article ID 2923549.

Mehari M, H Maeruf, CC Robles, S Woldemariam, T Adhena, M Mulugeta, A Haftu, H Hagose, H Kumsa 2020 Advanced maternal age pregnancy and its adverse obstetrical and perinatal outcomes in Ayder comprehensive specialized hospital, Northern Ethiopia, 2017: a comparative cross-sectional study. *BMC Pregnancy and Childbirth*, Vol. 20, Article No. 60.

Meheretu Y, Å Granberg, G Berhane, H Khalil, OW Lwande, M Mitiku, K Welegerima, JG de Bellocq, J Bryja, H Abreha, H Leirs, F Ecke, M Evander 2021 Prevalence of Orthohantavirus-Reactive Antibodies in Humans and Peri-Domestic Rodents in Northern Ethiopia. *Viruses*, Vol. 13, No. 6.

Meheretu Y, WT Stanley, EW Craig, JG de Bellocq, J Bryja, H Leirs, M Pahlmann, S Günther 2019 Tigray orthohantavirus infects two related rodent species adapted to different elevations in Ethiopia. *Vector-Borne and Zoonotic Diseases*, Vol. 19, No. 12. pp. 950-953.

Mekango DE, M Alemayehu, GB Gebregergs, AA Medhanyie, G Goba 2017 Determinants of maternal near miss among women in public hospital maternity wards in northern Ethiopia: a facility based case-control study. *PLoS One*, Vol. 12, No. 9: 0183886.

Mekbib E, A Shumey, S Ferede, F Haile 2014 Magnitude and factors associated with appropriate complementary feeding among mothers having children 6-23 months-of-age in Northern Ethiopia; a community-based cross-sectional study. *Journal of Food and Nutrition Sciences*, Vol. 2, No. 2, pp. 36-42.

Mekibib B, M Manegerew, A Tadesse, F Abuna, B Megersa, A Regassa, S Mekuria, R Abebe 2010 Prevalence of haemoparasites and associated risk factors in working donkeys in Adigudem and Kwiha districts of Tigray region, Northern Ethiopia. *Journal of Animal and Veterinary Advances*, Vol. 9, Issue 17, pp. 2249-225.

Mekonen HH, MM Birhanu, TB Mossie, HT Gebreslassie 2020 Factors associated with stroke among adult patients with hypertension in Ayder Comprehensive Specialized Hospital, Tigray, Ethiopia, 2018: A case-control study. *PloS One*, Vol. 15, No. 2: 0228650.

Mekonen HK, B Nigatu, WH Lamers 2015 Birth weight by gestational age and congenital malformations in Northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 15, Article No. 76.

Mekonen HK, Y Berhe, BA Berihu, H Teka, A Hadgu, L Gebregziabher, EH Berhe, T Magana, A Mulugeta 2021 A silent epidemic of major congenital malformations in Tigray, northern Ethiopia: hospital-based study. *Scientific Reports*, Vol. 11, Article No. 21035.

Mekonnen H, S Kalayou, M Kyule 2010 Serological survey of bovine brucellosis in barka and arado breeds (*Bos indicus*) of Western Tigray, Ethiopia. *Preventive Veterinary Medicine*, Vol. 94, Issues 1–2, pp. 28-35.

Mekuria A, T Beyene 2014 Zoonotic bacterial pathogens isolated from food of bovine in selected Woredas of Tigray, Ethiopia. *World Applied Sciences Journal*, Vol. 31, No. 11, pp. 1864-1868.

Melaku YA, B Weldearegawi, FH Tesfay, SF Abera, L Abraham, A Aregay, Y Ashebir, F Eshetu, A Haile, Y Lakew, J Kinsman 2014 Poor linkages in maternal health care services—evidence on antenatal care and institutional delivery from a community-based longitudinal study in Tigray region, Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 14, Article No. 418.

Melaku YA, EG Zeleke 2014 Contraceptive utilization and associated factors among HIV positive women on chronic follow up care in Tigray Region, Northern Ethiopia: a cross sectional study. *PloS One*, Vol. 9, No. 4: 94682.

Melaku YA, EG Zeleke, J Kinsman, AK Abraha 2014 Fertility desire among HIV-positive women in Tigray region, Ethiopia: implications for the provision of reproductive health and prevention of mother-to-child HIV transmission services. *BMC Women's Health*, Vol. 14, Article No. 137.

Melaku YA, Y Berhane, J Kinsman, HL Reda 2014 Sexual and reproductive health communication and awareness of contraceptive methods among secondary school female students, northern Ethiopia: a cross-sectional study. *BMC Public Health*, Vol. 14, Article No. 252.

Melaku YA, GA Zello, TK Gill, RJ Adams, Z Shi 2015 Prevalence and factors associated with stunting and thinness among adolescent students in Northern Ethiopia: a comparison to World Health Organization standards. *Archives of Public Health*, Vol. 73, Article No. 44.

Mengesha HG, AD Wuneh, B Weldearegawi, DL Selvakumar 2017 Low birth weight and macrosomia in Tigray, Northern Ethiopia: who are the mothers at risk? *BMC Pediatrics*, Vol.17, Article No. 144.

Mengesha HG, AD Wuneh, WT Lerebo, TH Tekle 2016 Survival of neonates and predictors of their mortality in Tigray region, Northern Ethiopia: prospective cohort study. *BMC Pregnancy and Childbirth*, Vol. 16, Article No. 202.

Mengesha HG, WT Lerebo, A Kidanemariam, G Gebrezgiabher, Y Berhane 2016 Pre-term and post-term births: predictors and implications on neonatal mortality in Northern Ethiopia. *BMC Nursing* Vol. 15, Article No. 48.

Mengesha HG, BW Sahle 2017 Cause of neonatal deaths in Northern Ethiopia: a prospective cohort study. *BMC Public Health*, Vol. 17, Article No. 62.

Mengesha MB, DA Weldegeorges, Y Hailesilassie, WM Werid, MG Weldemariam, FT Welay, SG Gebremeskel, BG Gebrehiwot, HD Hidru, H Teame, H Gebremedhin, NE Assefa 2020 Determinants of Uterine Rupture and Its Management Outcomes among Mothers Who Gave Birth at Public Hospitals of Tigray, North Ethiopia: An Unmatched Case Control Study. *Journal of Pregnancy*, Vol. 2020, Article ID 8878037.

Menghistu HT, KT Hailu, NA Shumye, YT Redda 2018 Mapping the epidemiological distribution and incidence of major zoonotic diseases in South Tigray, North Wollo and Ab'ala (Afar), Ethiopia. *PloS One*, Vol. 13, No. 12: 0209974.

Menghistu HT, TT Mersha, NA Shumuye, BM Woldie, YT Redda, B Hadush, AH Mohammed 2021 Neglected tropical zoonotic diseases in Tigray region, northern Ethiopia: Spatial distribution and trend analysis of rabies, tuberculosis, schistosomiasis, and visceral leishmaniasis in humans. *Zoonoses and Public Health*, Vol. 68, Issue 7, pp. 823-833.

Mengistu MD 2014 Pattern of blood pressure distribution and prevalence of hypertension and prehypertension among adults in Northern Ethiopia: disclosing the hidden burden. *BMC Cardiovascular Disorders*, Vol. 14, Article No. 33.

Mersha TT, BM Wolde, NA Shumuye, AB Hailu, AH Mohammed, YT Redda, BH Abera, HT Menghistu 2021 Prioritization of neglected tropical zoonotic diseases: A one health perspective from Tigray region, Northern Ethiopia. *PLoS One*, Vol. 16, No. 7: 0254071.

Mesfin K, G Tekle, T Tesfay 2013 Assessment of threatening factors of medicinal plant species in Samre district, south-eastern Tigray, northern Ethiopia. *Journal of Medicinal Plants Studies*, Vol.1, Issue 4, 38-42.

Mesfin K, G Tekle, T Tesfay 2013 Ethnobotanical study of traditional medicinal plants used by indigenous people of Gemad District, Northern Ethiopia. *Journal of Medicinal Plants Studies*, Vol. 1, Issue 4, pp. 32-37.

Mesfin MM, J de la Camera, IG Tareke, G Amanual, T Araya, AM Kedir 2006 A community-based trachoma survey: prevalence and risk factors in the Tigray region of northern Ethiopia. *Ophthalmic Epidemiology*, Vol. 13, Issue 3, pp. 173-181.

Mesfin MM, TW Tasew, IG Tareke, GW-M Mulugeta, MJ Richard 2005 Community knowledge, attitudes and practices on pulmonary tuberculosis and their choice of treatment supervisor in Tigray, northern Ethiopia. *Ethiopian Journal of Health Development*, Vol.19, Special issue, pp. 21-27.

Mesfin MM, TW Tasew, IG Tareke, YT Kifle, WH Karen, MJ Ricahrd 2005 Delays and care seeking behavior among tuberculosis patients in Tigray of northern Ethiopia. *The Ethiopian Journal of Health Development* Vol. 19, pp. 7-12.

Mesfin MM, TW Tasew, MJ Richard 2005 The quality of tuberculosis diagnosis in districts of Tigray region of northern Ethiopia. *The Ethiopian Journal of Health Development* Vol. 19, pp. 13-20.

Mezgebe HB, B Tadesse, B Legesse 2015 Antibiotics prescribing pattern in pediatric unit of Ayder referral hospital, Tigray region, Northern Ethiopia. *Journal of Scientific and Innovative Research*, Vol. 4, No. 2, pp. 57-60.

Mezgebe HB, K Seid 2015 Prevalence of potential drug-drug interactions among psychiatric patients in Ayder referral hospital, Mekelle, Tigray, Ethiopia. *Journal of Scientific and Innovative Research*, Vol. 4, No. 2, pp. 71-75.

Mezgebo TA, S Niguse, AG Kahsay, H Hailekiros, N Berhe, TA Dejene 2018 Hepatitis B virus infection and associated risk factors among pregnant women attending antenatal care in health facilities of Tigray, Northern Ethiopia. *Journal of Medical Virology*, Vol. 90, Issue 3, pp. 503-509.

Mirutse G, G Fisseha, L Abebe, Z Birhanu, M Alemayehu 2014 Intention to donate blood among the eligible population in Mekelle City, Northern Ethiopia: using the theory of planned behavior. *American Journal of Health Research*, Vol. 2, No. 4, pp. 158-163.

Mirutse G, M Fang, AB Kahsay, X Ma 2019 Epidemiology of childhood tuberculosis and factors associated with unsuccessful treatment outcomes in Tigray, Ethiopia: a ten-year retrospective cross sectional study. *BMC Public Health*, Vol. 19, Article No. 1367.

Misgina KH, HM Boezen, EM Van der Beek, A Mulugeta, H Groen 2021 What factors are associated with pre-pregnancy nutritional status? Baseline analysis of the KITE cohort: a prospective study in northern Ethiopia. *BMJ Open*, Vol. 11, Issue 6.

Misgina KH, MG Weldu, TH Gebremariam, NB Weledehaweria, HB Alema, YS Gebregiorgis, YG Tilahun 2019 Predictors of mortality among adult people living with HIV/AIDS on antiretroviral therapy at Suhul Hospital, Tigray, Northern Ethiopia: a retrospective follow-up study. *Journal of Health, Population and Nutrition*, Vol. 38, Article No. 37.

Misgina KH, EM van der Beek, HM Boezen, AM Bezabih, H Groen 2021 Pre-conception and prenatal factors influencing gestational weight gain: a prospective study in Tigray region, northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 21, Article No. 718.

Misgina HG, HB Gebru, MM Birhanu 2016 Knowledge, practice and associated factors of essential newborn care at home among mothers in Gulomekada District, Eastern Tigray, Ethiopia, 2014. *BMC Pregnancy and Childbirth*, Vol. 16, Article No. 144.

Moges Y, T Hailu, B Dimtsu, Z Yohannes, B Kelkay 2018 Factors associated with uptake of post-abortion family planning in Shire town, Tigray, Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 928.

Moges Y, SA Worku, A Niguse, B Kelkay 2020 Factors associated with the unplanned pregnancy at Suhul General Hospital, Northern Ethiopia, 2018. *Journal of Pregnancy*, Vol. 2020, Article ID 2926097.

Mohamoud SA, TA Yesuf, EA Sisay 2016 Utilization assessment of surgical antibiotic prophylaxis at Ayder Referral Hospital, Northern Ethiopia. *Journal of Applied Pharmacy*, Vol. 8, Issue 2: 1000220.

Molla F, A Assen, S Abrha, B Masresha, A Gashaw, A Wondimu, Y Belete, W Melkam 2017 Prescription drug use during pregnancy in Southern Tigray region, North Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 17, Article No. 170.

Moravec I, E Fernandez, M Vlkova, L Milella 2014 Ethnobotany of medicinal plants of northern Ethiopia. *Boletín Latinoamericano y del Caribe de Plantas Medicinales y Aromáticas*, Vol. 13, No. 2, pp. 126-134.

Morrone A, A Pitidis, MC Pajno, F Dassoni, O Latini, G-Ab Barnabas, V Padovese 2011 Epidemiological and geographical aspects of leishmaniasis in Tigray, northern Ethiopia: a retrospective analysis of medical records, 2005-2008. *Transactions of The Royal Society of Tropical Medicine and Hygiene*, Vol. 105, Issue 5, pp. 273–280.

Morrone A, ML Dell'Anna, A Cristaudo, T Wubayehu, H Godefay, G-Ab Barnabas, F Dassoni, V Padovese, O Latini, T Lotti, P Saraceni, EG Di Domenico, V Lora 2020 Psoriasis in Tigray, Ethiopia: Focusing on available treatments. *Dermatologic Therapy*, Vol. 35, Issue 3: 14718.

Morrone A, V Padovese, F Dassoni, MC Pajno, R Marrone, G Franco, R Calcaterra, L Manni, GA Barnabas, E Maiani 2011 Podoconiosis: An experience from Tigray, Northern Ethiopia. *Journal of the American Academy of Dermatology*, Vol. 65, Issue 1, pp. 214-215.

Mulugeta A, M Gebre, M Abdelkadir, AG Tsadik, AG Yesus, BJ Stoecker 2010 Iron deficiency in adolescent school girls from Tigray, Northern Ethiopia. *The FASEB Journal*, Vol. 24, Issue S: 1, pp. 538.4.

Mulugeta A, M Tessema, K H/Sellasié, O Seid, G Kidane, A Kebede 2015 Examining means of reaching adolescent girls for iron supplementation in Tigray, Northern Ethiopia. *Nutrients*, Vol. 7, No. 11, pp. 9033–9045.

Mulugeta A, F Hagos, B Stoecker, G Kruseman, V Linderhof, Z Abraha, M Yohannes, GG Samuel 2009 Nutritional status of

adolescent girls from rural communities of Tigray, Northern Ethiopia. *Ethiopian Journal of Health Development*, Vol. 23, No. 1, pp. 5-11.

Mulugeta A, F Hagos, G Kruseman, V Linderhof, B Stoecker, Z Abraha, M Yohannes, GG Samuel 2010 Child malnutrition in Tigray, northern Ethiopia. *East African Medical Journal*, Vol. 87 No. 6, pp. 248-254.

Mulugeta A, GB Gebregergs, S Asfaw, D Yemane, M Mitiku, B Meresa, G Gigar, A Kidane 2018 Coverage, social mobilization and challenges of mass Zithromax administration campaign in South and South East zones of Tigray, Northern Ethiopia: A cross sectional study. *PLoS Neglected Tropical Diseases*, Vol. 12, No. 2: 0006288.

Mulugeta Y, HT Yacob, H Ashenafi 2010 Ectoparasites of small ruminants in three selected agro-ecological sites of Tigray Region, Ethiopia. *Tropical Animal Health and Production*, Vol. 42, No. 6, pp. 1219–1224.

Nega KE, B Lindtjørn 2002 Epidemiology of burn injuries in Mekele Town, Northern Ethiopia: a community based study. *The Ethiopian Journal of Health Development*, Vol. 19, No. 2 pp. 88-164.

Negash H, H Legese, G Adhanom, F Mardu, K Tesfay, SG Gebremeskel, B Berhe 2020 Six Years Trend Analysis of Tuberculosis in Northwestern Tigray, Ethiopia; 2019: A Retrospective Study. *Infect Drug Resistance*, Vol. 13, pp. 643–649.

Negash H, H Legese, M Tefera, F Mardu, K Tesfay, S Gebresilasie, B Fseha, T Kahsay, A Gebrewahd, B Berhe 2019 The effect of tuberculosis on immune reconstitution among HIV patients on highly active antiretroviral therapy in Adigrat general hospital, eastern Tigray, Ethiopia; 2019: a retrospective follow up study. *BMC Immunology*, Vol. 20, Article No. 45.

Niguse S, H Hailekiros, G Buruh, T Dejene, N Berhe, T Asmelas 2018 Seroprevalence and risk factors of hepatitis E virus infection among pregnant women attending antenatal care in health facilities of Tigray, Northern Ethiopia. *Journal of Medical Virology*, Vol. 90, Issue 8, pp. 1364-1369.

Padovese V, M Terranova, L Toma, G Ab Barnabas, A Morrone 2009 Cutaneous and mucocutaneous leishmaniasis in Tigray, northern Ethiopia: clinical aspects and therapeutic concerns. *Transactions of The Royal Society of Tropical Medicine and Hygiene*, Vol. 103, Issue 7, pp. 707–711.

Paulander J, H Olsson, H Lemma, A Getachew, M S Sebastian 2009 Knowledge, attitudes and practice about malaria in rural Tigray, Ethiopia. *Global Health Action*, Vol. 2, Issue 1, Article: 1839.

Prata N, C Gerdtts, A Gessesew 2012 An innovative approach to measuring maternal mortality at the community level in low-resource settings using mid-level providers: a feasibility study in Tigray, Ethiopia. *Reproductive Health Matters*, Vol. 20, Issue 39, pp. 196-204.

Prata N, K Weidert, A Fraser, A Gessesew 2013 Meeting rural demand: a case for combining community-based distribution and social marketing of injectable contraceptives in Tigray, Ethiopia. *PLoS One*, Vol. 8, No. 7: 68794.

Prata N, S Bell, A Gessesew 2013 Comprehensive abortion care: evidence of improvements in hospital-level indicators in Tigray, Ethiopia. *BMJ Open*, 3:002873.

Rajeshwar Y, A Yahya, T Eticha, G Kahsay, D Ali, H Gebretsadik, T Gebretsadik, YK Janapati 2016 Socio-economic and health effects of khat chewing in Mekelle, Tigray Region, Ethiopia. *International Journal of Pharmacy and Pharmaceutical Research*, Vol. 8, Issue 1, pp. 1-2.

Reda TH, MK Atsbha 2019 Nutritional Composition, antinutritional factors, antioxidant activities, functional properties, and sensory evaluation of cactus pear (*Opuntia ficus-indica*) seeds grown in Tigray region, Ethiopia. *International Journal of Food Science*, Vol. 2019, Article ID 5697052.

Reilley B, ZG Hiwot, J Mesure 2004 Acceptability and utilization of services for voluntary counselling [corrected] and testing and sexually transmitted infections in Kahsey Abera Hospital, Humera, Tigray. *Ethiopian Medical Journal*, Vol. 42, No. 3, pp. 173-177.

Sahile E, Y Yemaneh, A Alehegn, W Nigussie, M Salahuddin, A Yekoye, N Gebeyehu 2017 Practice of Labour Pain Management Methods and Associated Factors among Skilled Attendants Working at General Hospitals in Tigray Region, North Ethiopia: Hospital Based Cross-Sectional Study Design. Vol.11, No.4: 516.

San-Sebastian M, H Lemma 2010 Efficiency of the health extension programme in Tigray, Ethiopia: a data envelopment analysis. *BMC International Health and Human Rights*, Vol. 10, Article No. 16.

Schwei RJ, H Tesfay, F Asfaw, W Jogo, H Busse 2017 Household dietary diversity, vitamin A consumption and food security in rural Tigray, Ethiopia. *Public Health Nutrition*, Vol. 20, Issue 9, pp. 1540-1547.

Seid A, H Gerensea, S Tarko, Y Zenebe, R Mezemir 2017 Prevalence and determinants of erectile dysfunction among diabetic patients attending in hospitals of central and northwestern zone of Tigray, northern Ethiopia: a cross-sectional study. *BMC Endocrine Disorders*, Vol. 17, Article No. 16.

Seyife A, G Fisseha, H Yebyo, G Gidey, H Gerensea 2019 Utilization of modern contraceptives and predictors among women in Shimelba refugee camp, Northern Ethiopia. *PloS One*, Vol. 14, No. 3: 0212262.

Seyoum B, K Kiros, T Haileselese, A Leole 1999 Prevalence of gestational diabetes mellitus in rural pregnant mothers in northern Ethiopia. *Diabetes Research and Clinical Practice*, Vol. 46, Issue 3, pp. 247-251.

Shawel D, S Hagos, CK Lachat 2010 Post-production losses in iodine concentration of salt hamper the control of iodine deficiency disorders: a case study in northern Ethiopia. *Journal of Health, Population and Nutrition*, Vol. 28, No. 3, pp. 238–244.

Sherief ST, C Macleod, G Gigar, H Godefay, A Abraha, M Dejene, AB Kello, A Belete, Y Assefa, R Willis, BK Chu, AW Solomon 2016 The prevalence of trachoma in Tigray Region, Northern Ethiopia: results of 11 population-based prevalence surveys completed as part of the global trachoma mapping project. *Ophthalmic Epidemiology*, Vol. 23, Issue sup. 1: Trachoma Mapping, pp. 94-99.

Shumey A, M Demissie, Y Berhane 2013 Timely initiation of complementary feeding and associated factors among children aged 6 to 12 months in Northern Ethiopia: an institution-based cross sectional study. *BMC Public Health*, Vol. 13, Article No. 1050.

Sibhat M, M Kassa, H Gebrehiwot 2020 Incidence and predictors of treatment failure among children receiving first-line antiretroviral treatment in general hospitals of two zones, Tigray, Ethiopia. *Pediatric Health Medicine and Therapeutics*, Vol. 11, pp. 85–94.

Tadesse D, Y Mekonnen, A Tsehay 2012 Adult mosquito populations and their health impact around and far from Dams in Tigray region, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 4, No. 2, pp. 40-51.

Tadesse DB, GT Gebrewahd, GT Demoz 2020 Knowledge, attitude, practice and psychological response toward COVID-19 among

nurses during the COVID-19 outbreak in northern Ethiopia, 2020. *New Microbes and New Infections*, Vol. 38:100787.

Tadesse HA, NB Gidey, K Workelule, H Hailu, S Gidey, A Bsrat, H Taddele 2018 Antimicrobial resistance profile of *E. coli* isolated from raw cow milk and fresh fruit juice in Mekelle, Tigray, Ethiopia. *Veterinary Medicine International*, Vol. 2018, Article ID 8903142.

Tadesse K, F Haile, N Hiruy 2014 Predictors of mortality among patients enrolled on antiretroviral therapy in Aksum hospital, northern Ethiopia: a retrospective cohort study. *PloS One* Vol. 9, No. 1: 87392.

Tadesse S, T Kahsay, G Adhanom, G Kahsu, H Legese, A G/wahid, A Derbie 2018 Prevalence, antimicrobial susceptibility profile and predictors of asymptomatic bacteriuria among pregnant women in Adigrat General Hospital, Northern Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 740.

Tadesse T, T Berhane, TH Abraha, B Gidey, E Hagos, T Grum, H Gerensea 2018 Blood donation practice and associated factors among health professionals in Tigray regional state public hospitals, northern Ethiopia. *BMC Research Notes*, Vol. 11: 677.

Taffese Y, A Ambaye, Z Wolde-Gebriel 1997 Nutritional blindness in Tigray region, northern Ethiopia. *Ethiopian Journal of Health Development*, Vol. 11, No. 2, pp. 157-162.

Tahir M, L Gebremichael, T Beyene, P Van Damme 2021 Ethnobotanical study of medicinal plants in Adwa District, Central Zone of Tigray Regional State, Northern Ethiopia. *Journal of Ethnobiology and Ethnomedicine*, Vol. 17, Article No. 71.

Tamiru MW, BE Tolessa, SF Abera 2015 Under nutrition and associated factors among under-five age children of Kunama ethnic groups in Tahtay Adiyabo Woreda, Tigray Regional State, Ethiopia:

Community Based Study. *International Journal of Nutrition and Food Sciences*, Vol. 4, Issue 3, pp. 277-288.

Tarekgne E, S Skeie, K Rudi, T Skjerdal, JA Narvhus 2015 Staphylococcus aureus and other Staphylococcus species in milk and milk products from Tigray region, Northern Ethiopia. *African Journal of Food Science*, Vol. 9, No. 12, pp. 567-576.

Tarekgne EK, T Skjerdal, S Skeie, K Rudi, D Porcellato, B Felix, JA Narvhus 2016 Enterotoxin Gene Profile and Molecular Characterization of Staphylococcus aureus Isolates from Bovine Bulk Milk and Milk Products of Tigray Region, Northern Ethiopia. *Journal of Food Protection*, Vol. 79, No. 8, pp. 1387–1395.

Tasew H, K Gebrekristos, K Kidanu, T Mariye, G Teklay 2018 Determinants of hypothermia on neonates admitted to the intensive care unit of public hospitals of Central Zone, Tigray, Ethiopia 2017: unmatched case case–control study. *BMC Research Notes*, Vol. 11, Article No. 576.

Tasew H, M Zemicheal, G Teklay, T Mariye 2019 Risk factors of stillbirth among mothers delivered in public hospitals of Central Zone, Tigray, Ethiopia. *African Health Sciences*, Vol. 19, Issue 2, pp. 1930-1937.

Tasew H, M Zemicheal, G Teklay, T Mariye, E Ayele 2018 Risk factors of birth asphyxia among newborns in public hospitals of Central Zone, Tigray, Ethiopia. *BMC Research Notes*, Vol. 11, Article No. 496.

Tasew H, T Mariye, G Teklay 2019 Nursing documentation practice and associated factors among nurses in public hospitals, Tigray, Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 612.

Tasew H, T Teshale, D Bahrey, T Mariye, G Teklay 2019 Immediate newborn care of knowledge, practice and associated factors among health care providers in northwestern zonal health

facilities Tigray, Ethiopia, 2018. BMC Research Notes, Vol. 12, Article No. 427.

Tassew SG, HN Abraha, K Gidey, AK Gebre 2021 Assessment of drug use pattern using WHO core drug use indicators in selected general hospitals: a cross-sectional study in Tigray region, Ethiopia. BMJ Open, Vol. 11, Issue 10.

Teame H, L Gebremariam, T Kahsay, K Berhe, G Gebreheat, G Gebremariam 2019 Factors affecting utilization of cervical cancer screening services among women attending public hospitals in Tigray region, Ethiopia, 2018; case control study. PloS One, Vol. 14, No. 3: 0213546.

Tedla DG, FH Bariagabr, HH Abreha 2018 Incidence and trends of leishmaniasis and its risk factors in Humera, Western Tigray. Journal of Parasitology Research, Vol. 2018, Article ID 8463097.

Tedla K, G Medhin, G Berhe, A Mulugeta, N Berhe 2020 Delay in treatment initiation and its association with clinical severity and infectiousness among new adult pulmonary tuberculosis patients in Tigray, northern Ethiopia. BMC Infectious Diseases, Vol. 20, Article No. 456.

Tedla K, G Medhin, G Berhe, A Mulugeta, N Berhe 2020 Factors associated with treatment initiation delay among new adult pulmonary tuberculosis patients in Tigray, Northern Ethiopia. PloS One, Vol. 15, No. 8: 0235411.

Tedla WH, A Aregay, K Gebremariam, M W Abrha, H G Weldearegay 2020 Reducing Undernutrition through Counseling on Diversified Food Intake among Adult People Living with HIV on HAART, Northern Ethiopia. Journal of Nutrition and Metabolism, Vol. 2020, Article ID 9858619.

Tefera S, M Teferi, A Ayalew, T Belete, H Hadush 2020 Prevalence of Scabies and Associated Factors among Primary School Children

in Raya Alamata District, Tigray, Ethiopia, 2017/2018. *Journal of Infectious Diseases and Epidemiology*, Vol. 6, Issue 5: 154.

Teka B, H Assefa, K Hailelassie 2015 Prevalence and determinant factors of exclusive breastfeeding practices among mothers in Enderta woreda, Tigray, North Ethiopia: a cross-sectional study. *International Breastfeeding Journal*, Vol. 10, Article No. 2.

Teka F, G Teklay, E Ayalew, T Teshome 2016 Potential drug–drug interactions among elderly patients admitted to medical ward of Ayder Referral Hospital, Northern Ethiopia: a cross sectional study. *BMC Research Notes*, Vol. 9, Article No. 431.

Tekaly G, M Kassa, T Belete, H Tasew, T Mariye, T Teshale 2018 Pre-lacteal feeding practice and associated factors among mothers having children less than two years of age in Aksum town, Tigray, Ethiopia, 2017: a cross-sectional study. *BMC Pediatrics*, Vol. 18, Article No. 310.

Teklay A, B Abera, M Giday 2013 An ethnobotanical study of medicinal plants used in Kilte Awulaelo District, Tigray Region of Ethiopia. *Journal of Ethnobiology and Ethnomedicine*, Vol. 9, Article No. 65.

Teklay G, T Teklu, B Legesse, K Tedla, E Klinkenberg 2016 Barriers in the implementation of isoniazid preventive therapy for people living with HIV in Northern Ethiopia: a mixed quantitative and qualitative study. *BMC Public Health*, Vol. 16, Article No. 840.

Teklay G, T Teshale, H Tasew, T Mariye, H Berihu, T Zeru 2018 Risk factors of preterm birth among mothers who gave birth in public hospitals of central zone, Tigray, Ethiopia: unmatched case–control study 2017/2018. *BMC Research Notes*, Vol. 11, Article No. 571.

Teklemariam A, T Dejenie, Z Tomass 2014 Infection prevalence of intestinal helminths and associated risk factors among

schoolchildren in selected kebeles of Enderta district, Tigray, Northern Ethiopia. *Journal of Parasitology and Vector Biology*, Vol. 6, No. 11, pp. 166-173.

Teklu GG, TG Hailu, GR Eshetu 2017 High incidence of human rabies exposure in northwestern Tigray, Ethiopia: A four-year retrospective study. *PLoS Neglected Tropical Diseases*, Vol. 11, No. 1: 0005271.

Tela FG, AM Bezabih, AK Adhanu 2019 Effect of pregnancy weight gain on infant birth weight among mothers attending antenatal care from private clinics in Mekelle City, Northern Ethiopia: A facility based follow-up study. *PloS One*, Vol. 14, No. 3: 0212424.

Tela FG, AM Bezabih, AK Adhanu, KB Tekola 2019 Fetal macrosomia and its associated factors among singleton live-births in private clinics in Mekelle city, Tigray, Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 19, Article No. 219.

Tela FG, LW Gebremariam, SA Beyene 2020 Food taboos and related misperceptions during pregnancy in Mekelle city, Tigray, Northern Ethiopia. *Plos One*, Vol. 15, No. 10: 0239451.

Terranova M, V Padovese, U Fornari, A Morrone 2008 Clinical and epidemiological study of cutaneous tuberculosis in Northern Ethiopia. *Dermatology*, Vol. 217, No. 1, pp. 89–93.

Tesema AG, Y Kinfu 2021 Reorienting and rebuilding the health system in war-torn Tigray, Ethiopia. *BMJ Global Health*, Vol. 6, Issue 8.

Tesfahunegn A, D Zenebe, A Addisu 2019 Determinants of malaria treatment delay in northwestern zone of Tigray region, Northern Ethiopia, 2018. *Malaria Journal*, Vol. 18, Article No. 358.

Tesfahunegn A, G Berhe, E Gebregziabher 2019 Risk factors associated with malaria outbreak in Laelay Adyabo district northern Ethiopia, 2017: case-control study design. *BMC Public Health*, Vol. 19, Article No. 484.

Tesfahunegn Z, D Asrat, Y Woldeamanuel 2009 Bacteriology of surgical site and catheter related urinary tract infections among patients admitted in Mekelle Hospital, Mekelle, Tigray, Ethiopia. *Ethiopian Medical Journal*, Vol. 47, No. 2, pp. 117-127.

Tesfanchal B, G Gebremichail, G Belay, G Gebremariam, G Teklehaimanot, H Haileslasie, G Kahsu, A Gebrewahd, F Mardu, G Adhanom, B Berhe, H Teame, A Tsegaye, M Wolde 2020 Alteration of Clinical Chemistry Parameters Among Visceral Leishmaniasis Patients in Western Tigray, Ethiopia, 2018/2019: A Comparative Cross-Sectional Study. *Infection and Drug Resistance*, 2020, Vol. 13 pp. 3055–3062.

Tesfay A, A Gebremariam, M Gerbaba, H Abrha 2015 Gender differences in health related quality of life among people living with HIV on highly active antiretroviral therapy in Mekelle Town, Northern Ethiopia. *BioMed Research International*, Vol. 2015, Article ID 516369.

Tesfay F, A Gebregerges, H Gebrehiwot, H Hailekiros, L Girmay, H Bekuretsion, G Gebrezigher, G Gebremariam, G Teklehaimanot 2021 Anemia among children living with HIV/AIDS on HAART in Mekelle Hospital, Tigray regional state of northern Ethiopia—a cross-sectional study. *BMC Pediatrics*, Vol. 21, Article No. 480.

Tesfay F, M Negash, J Alemu, M Yahya, G Teklu, M Yibrah, T Asfaw, A Tsegaye 2019 Role of platelet parameters in early detection and prediction of severity of preeclampsia: A comparative cross-sectional study at Ayder comprehensive specialized and Mekelle general hospitals, Mekelle, Tigray, Ethiopia. *Plos One*, Vol. 14, No. 11: 0225536.

Tesfay F, A Ziersch, L Mwanri, S Javanparast 2020 Contextual and individual level factors influencing nutritional program effectiveness in HIV care setting in Tigray region, northern Ethiopia: Mixed methods study. *PloS One*, Vol. 15, No. 4: 0231859.

Tesfay F, S Javanparast, L Mwanri, A Ziersch 2020 Stigma and discrimination: barriers to the utilisation of a nutritional program in HIV care services in the Tigray region, Ethiopia. *BMC Public Health*, Vol. 20, Article No. 904.

Tesfay FH, A Ziersch, L Mwanri, S Javanparast 2021 Experience of nutritional counselling in a nutritional programme in HIV care in the Tigray region of Ethiopia using the socio-ecological model. *Journal of Health, Population and Nutrition*, Vol. 40, Article No. 34.

Tesfay FH, A Ziersch, S Javanparast, L Mwanri 2021 Relapse into undernutrition in a nutritional program in HIV care and the impact of food insecurity: A mixed-methods study in Tigray Region, Ethiopia. *International Journal of Environmental Research and Public Health*, Vol.18, No. 2: 732.

Tesfay H, T Hailu, S Berhane, A Hailu, A Luel, HG Meles 2019 Patterns and Factors Associated with Cardiovascular Disorders at Ayder Comprehensive Specialized Hospital, Tigray, Northern Ethiopia. *East African Journal of Health Science*, Vol. 1, No. 2, pp. 149-159.

Tesfay K, F Mardu, B Berhe, H Negash, H Legese, G Adhanom, G Belay, A Gebrewahid, S Tesfay, ZH Gufue 2021 Household knowledge, practice and treatment seeking behaviors towards cutaneous leishmaniasis in the endemic rural communities of Gantafeshum district, Tigray, northern Ethiopia, 2019 : a cross-sectional study. *Tropical Diseases, Travel Medicine and Vaccines*, Vol. 7, Article No. 19.

Tesfay K, M Yohannes, F Mardu, B Berhe, H Negash 2019 Assessment of community knowledge, practice, and determinants of malaria case households in the rural area of Raya Azebo district, Northern Ethiopia, 2017. *Plos One*, Vol. 14, 10: 0222427.

Tesfay K, M Yohannes, S Bayisa 2018 Trend analysis of malaria prevalence in Raya Azebo district, Northern Ethiopia: a retrospective study. *BMC Research Notes*, Vol. 11, Article No. 900.

Tesfay K, S Tesfay, E Nigus, A Gebreyesus, D Gebreegziabiher, K Adane 2016 More than half of presumptive multidrug-resistant cases referred to a tuberculosis referral laboratory in the Tigray region of Ethiopia are multidrug resistant. *International Journal of Mycobacteriology*, Vol. 5, Issue 3, pp. 324-327.

Tesfaye T, Y Berhe, K Gebreselassie 2015 Microbial contamination of operating Theatre at Ayder Referral Hospital, Northern Ethiopia. *International Journal of Pharma Sciences and Research*, Vol. 6, No. 10, pp. 1264-1267.

Teshale T, S Belay, D Tadesse, A Awala, G Teklay 2018 Prevalence of intestinal helminths and associated factors among school children of Medebay Zana wereda; North Western Tigray, Ethiopia 2017. *BMC Research Notes*, Vol. 11, Article No. 444.

Tessema SB, MM Adane 2015 Assessment of antiretroviral treatment (ART) care service provision in Tigray Region health centers, North Ethiopia. *BMC Health Services Research*, Vol. 15, Article No. 368.

Tewelde F, M Mesfin, S Tsewene 2017 Ethnobotanical survey of traditional medicinal practices in LaelayAdi-Yabo District, Northern Ethiopia. *International Journal of Ophthalmology and Visual Science*, Vol. 2, Issue 4, pp. 80-87.

Teweldemedhin M, A Gebremichael, G Geberkirstos, H Hadush, T Gebrewahid, SW Asgedom, B Gidey, N Asres, H Gebreyesus 2019

Seroprevalence and risk factors of *Toxoplasma gondii* among pregnant women in Adwa district, northern Ethiopia. *BMC Infectious Diseases*, Vol. 19, Article No, 327.

Teweldemedhin M, M Saravanan, A Gebreyesus, D Gebreegziabihier 2017 Ocular bacterial infections at Quiha Ophthalmic Hospital, Northern Ethiopia: an evaluation according to the risk factors and the antimicrobial susceptibility of bacterial isolates. *BMC Infectious Diseases*, Vol. 17, Article No. 207.

Tilahun F, W Alemu, G Mulatu 2014 Magnitude and associated factors of cutaneous leishmaniasis; in Mekelle city, Ayder referral hospital, Tigray, Northern Ethiopia, 2014. *Clinical Medicine Research*, Vol. 3, No. 6, pp. 189-199.

Tirfeneh E, M Srahbzu 2020 Depression and its association with parental neglect among adolescents at governmental high schools of Aksum town, Tigray, Ethiopia, 2019: a cross sectional study. *Depression Research and Treatment*, Vol. 2020, Article ID 6841390.

Tololu AK, MG Massa, MW Kerie, KH Misgina, HB Alema, MG Weldu 2020 Determinants of Home Delivery in the Central Zone of Tigray, North Ethiopia: Evidence from Case-Control Study. *Research Square*.

Tolossa FW, ML Bekele 2014 Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health sciences, Mekelle University, Mekelle, Northern Ethiopia. *BMC Women's Health*, Vol.14, Article No. 52.

Tomass Z, D Kidane 2012 Parasitological contamination of wastewater irrigated and raw manure fertilized vegetables in Mekelle city and its suburb, Tigray, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 4, No.1, pp. 77-89.

Tomass Z, T Dejene, D Kidane 2011 Knowledge, attitude and practice (KAP) about insecticide treated net (ITN) usage against malaria in Kolla Tembien district, Tigray, Ethiopia. *Momona Ethiopian Journal of Science*, Vol. 3, No. 2, pp. 64-77.

Tsegay A, A Damte, A Kiros 2020 Determinants of suicidal ideation among patients with mental disorders visiting psychiatry outpatient unit in Mekelle town, psychiatric clinics, Tigray, Northern Ethiopia: a case-control study. *Annals of General Psychiatry*, Vol. 19, Article No. 20.

Tsegay R, A Aregay, K Kidanu, M Alemayehu, G Yohannes 2017 Determinant factors of home delivery among women in Northern Ethiopia: a case control study. *BMC Public Health*, Vol. 17, Article No. 289.

Tsegay Y, T Gebrehiwot, I Goicolea, K Edin, H Lemma, M San Sebastian 2013 Determinants of antenatal and delivery care utilization in Tigray region, Ethiopia: a cross-sectional study. *International Journal for Equity in Health*, Vol. 12, Article No. 30.

Tsehaye WT, D Mengistu, E Birhanu, KK Berhe 2013 Assessment of Preference and its determinant factors to ward modern contraceptive methods among women of reproductive age group in Shire Indaselassie town, northern Ethiopia, 2011. *International Journal of Family Medicine*, Vol. 2013, Article ID 317609,

Tukue D, TG Gebremeskel, L Gebremariam, B Aregawi, MG Hagos, T Gebremichael, HN Tesfay, ZG Arefaine 2020 Prevalence and determinants of modern contraceptive utilization among women in the reproductive age group in Edaga-hamus Town, Eastern zone, Tigray region, Ethiopia, June 2017. *PloS One*, Vol. 15, No. 3: 0227795.

Villanucci A 2014 Salute, sviluppo e lotta alla povertà: vecchie e nuove forme di mobilitazione nelle campagne del Tigray. *TRANS:*

Health, development and the fight against poverty: old and new forms of mobilization in the countryside of Tigray. *L'Uomo Società Tradizione Sviluppo*, TRANS: Man Society Tradition Development, I: 121-139.

Wall LL, K Teklay, A Desta, S Belay 2018 Tending the 'monthly flower: a qualitative study of menstrual beliefs in Tigray, Ethiopia. *BMC Women's Health*, Vol. 18, Article No. 183.

Wall LL, S Belay, T Haregot, J Dukes, E Berhan, M Abreha 2017 A case–control study of the risk factors for obstetric fistula in Tigray, Ethiopia. *International Urogynecology Journal*, Vol. 28, pp. 1817–1824.

Wasihun AG, BG Kasa 2016 Evaluation of antibacterial activity of honey against multidrug resistant bacteria in Ayder Referral and Teaching Hospital, Northern Ethiopia. *SpringerPlus*, Vol. 5, Article No. 842.

Wasihun AG, LN Wlekidan, SA Gebremariam, AL Welderufael, S Muthupandian, TD Haile, TA Dejene 2015 Diagnosis and treatment of typhoid fever and associated prevailing drug resistance in northern Ethiopia. *International Journal of Infectious Diseases*, Vol. 35, pp. 96-102.

Wasihun AG, Y Zemene 2015 Bacterial profile and antimicrobial susceptibility patterns of otitis media in Ayder Teaching and Referral Hospital, Mekelle University, Northern Ethiopia. *SpringerPlus*, Vol. 4, Article No. 701.

Wasihun AG, LN Wlekidan, SA Gebremariam, TA Dejene, AL Welderufael, TD Haile, S Muthupandian 2015 Bacteriological profile and antimicrobial susceptibility patterns of blood culture isolates among febrile patients in Mekelle Hospital, Northern Ethiopia. *SpringerPlus*, Vol. 4, Article No. 314.

Wasihun AG, TA Dejene, GG Hailu 2020 Frequency of MTB and rifampicin resistance MTB using Xpert-MTB/RIF assay among adult presumptive tuberculosis patients in Tigray, Northern Ethiopia: A cross sectional study. *PloS One*, Vol. 15, No. 11: 0240361.

Wasihun AG, TA Dejene, M Teferi, J Marugán, L Negash, D Yemane, KG McGuigan 2018 Risk factors for diarrhoea and malnutrition among children under the age of 5 years in the Tigray Region of Northern Ethiopia. *PLoS One*, Vol. 13, No. 11: 0207743.

Weldeabezgi LT, TW Atsbha, HH Kassegn, TF Gebremichael, MH Berhe 2020 A quantitative risk assessment model for *Staphylococcus aureus* and *Salmonella* associated with consumption of informally marketed milk products in Tigray, Ethiopia. *Journal of Food Safety*, Vol. 40, Issue 2: 12749.

Weldearegawi B, Y Ashebir, E Gebeye, T Gebregziabihier, M Yohannes, S Mussa, H Berhe, Z Abebe 2013 Emerging chronic non-communicable diseases in rural communities of Northern Ethiopia: evidence using population-based verbal autopsy method in Kilite Awlaelo surveillance site. *Health Policy and Planning*, Vol. 28, Issue 8, pp. 891–898.

Weldearegawi GG, BF Teklehaimanot, HT Gebru, ZA Gebrezgi, KB Tekola, MF Baraki 2019 Determinants of late antenatal care follow up among pregnant women in Easter zone Tigray, Northern Ethiopia, 2018: unmatched case–control study. *BMC Research Notes*, Vol. 12, Article No. 752.

Weldearegawi GG, KB Tekola, BF Teklehaymanot 2019 Magnitude and associated factors of unintended pregnancy among pregnant women at Saesie Tsaeda Emba Woreda Eastern Zone of Tigray, North Ethiopia, 2018. *Journal of Pregnancy*, Vol. 2019, Article ID 1694808.

Weldearegawi TZ, H Gerensea, H Berihu, G Gidey, MZ Welearegay 2020 The magnitude of opportunistic infections and associated factors in HIV-infected adults on antiretroviral therapy in southern zone Tigray, Ethiopia: a cross sectional study. *Pan African Medical Journal*, Vol. 35: 126.

Weldearegay HG 2015 Factors affecting choice of place for childbirth among women's in Ahferom woreda, Tigray, 2013. *Journal of Pregnancy and Child Health*, Vol. 2, Issue 1: 1000133.

Weldearegay HG, AB Kahsay, AA Medhanyie, H Godefay, P Petrucka 2020 Quality of and barriers to routine childbirth care signal functions in primary level facilities of Tigray, Northern Ethiopia: Mixed method study. *PloS One*, Vol. 5, No. 6: 0234318.

Weldearegay KT, MG Gebrekidan, AA Gezahegne 2019 Health impact of hepatic-venous-occlusive disease in a small town in Ethiopia—Case study from Tahtay koraro district in Tigray region, 2017. *PloS One*, Vol. 14, No. 11: 0224659.

Weldearegawi GG, Z Negash, AB Kahsay, Y Gebremariam, KB Tekola 2020 Community-based essential newborn care practices and associated factors among women of Enderta, Tigray, Ethiopia, 2018. *International Journal of Reproductive Medicine*, Vol.2020, Article ID 2590705

Weldegebreal AS, F Tezeta, AT Mehari, W Gashaw, KT Dessale, NY Legesse 2019 Assessment of drug therapy problem and associated factors among adult hypertensive patients at Ayder comprehensive specialized hospital, Northern Ethiopia. *African Health Sciences*, Vol. 19, Issue 3, pp. 2571-2579.

Weldegebriel A 1998 Determinants of Child Feeding Practices: Adigrat, Tigray, Ethiopia. Trinity College Dublin.

Weldehaweria NB, EH Abreha, MG Weldu, KH Misgina 2017 Psychosocial correlates of nutritional status among people living

with HIV on antiretroviral therapy: A matched case-control study in Central zone of Tigray, Northern Ethiopia. PLoS One, Vol. 12, No. 3: 0174082.

Weldehaweria NB, KH Misgina, MG Weldu, YS Gebregiorgis, BH Gebrezgi, SW Zewdie, HA Ngusse, HG Gebrewa, W Alemu 2016 Dietary diversity and related factors among lactating women visiting public health facilities in Aksum town, Tigray, Northern Ethiopia. BMC Nutrition, Vol. 2, Article No. 38.

Weldemhret L, A Hailu, G Gebremedhn, H Bekuretsion, G Alemseged, G Gebreegziabher, G Tesfahuney, T Berhe, L Legesse, K Kalayu, M Tesfay, K Mehari 2020 Blinded rechecking of sputum smear microscopy performance in public health facilities in Tigray region, Northern Ethiopia: Retrospective cross sectional study. Plos One, Vol. 15, No. 10: 0239342.

Weldemhret L, T Asmelash, R Belodu, D Gebreegziabiher 2016 Sero-prevalence of HBV and associated risk factors among HIV positive individuals attending ART clinic at Mekelle hospital, Tigray, Northern Ethiopia. AIDS Research and Therapy, Vol. 13, Article No. 6.

Welderufael AL, BA Berihu, Y Berhe, T Magana, S Asfaw, K Gebreselassie, E Belay, H Kebede, A Mulugeta 2019 Nutritional status among women whose pregnancy outcome was afflicted with neural tube defects in Tigray region of Ethiopia. Brain and Development, 41, 406-412.

Weldesamuel E, H Gebreyesus, B Beyene, M Teweldemedhin, Z Welegebriel, D Tetemke 2019 Assessment of needle stick and sharp injuries among health care workers in central zone of Tigray, northern Ethiopia. BMC Research Notes, Vol. 12, Article No. 654.

Weldesamuel GT, TT Alemayoh, HT Atalay, TM Zemichael 2019 Modern health-seeking behaviour and associated factors among

mothers having under 5-years old children in Shire town, Tigray, Ethiopia: A cross-sectional study 2018. *African Journal of Primary Health Care and Family Medicine*, Vol.11 No.1. 1913.

Weldu MG, H Berhane, N Berhe, K Haile, Y Sibhatu, T Gidey, K Amare, H Zelalem, R Mezemir, T Hadgu, K Birhane 2018 Magnitude and determinant factors of surgical site infection in Suhul hospital Tigrai, northern Ethiopia: a cross-sectional study. *Surgical Infections*, Vol. 19, No. 7, pp. 684-690.

Weldu Y, M Naizgi, A Hadgu, AA Desta, A Kahsay, L Negash, GG Hailu, AG Wasihun 2020 Neonatal septicemia at intensive care unit, Ayder Comprehensive Specialized Hospital, Tigray, North Ethiopia: Bacteriological profile, drug susceptibility pattern, and associated factors. *Plos one*, Vol. 15, No. 6: 0235391.

Welekidan LN, YW Bahta, MG Teklehaimanot, GK Abay, AG Wasihun, TA Dejene, S Muthupandian, TA Mezgebo, AK Hagos 2019 Prevalence and drug resistance pattern of *Listeria monocytogenes* among pregnant women in Tigray region, Northern Ethiopia: a cross-sectional study. *BMC Research Notes*, Vol. 12, Article No. 538.

Welekidan LN, E Skjerve, TA Dejene, MW Gebremichael, O Brynildsrud, A Agdestein, GT Tessema, T Tønjum, SA Yimer 2020 Characteristics of pulmonary multidrug-resistant tuberculosis patients in Tigray Region, Ethiopia: A cross-sectional study. *PloS One*, Vol. 15, No. 8: 0236362.

Wellay T, M Gebreslassie, M Mesele, H Gebretinsae, B Ayele, A Tewelde, Y Zewedie 2018 Demand for health care service and associated factors among patients in the community of Tsegedie District, Northern Ethiopia. *BMC Health Services Research*, Vol. 18, Article No. 697.

Welu SG, DH Aregawi, HT Gebreslassie, KG Kidanu 2021 Prevalence and Associated Factors of Depressive Disorder among Prisoners in Mekelle General Prison Center, Tigray, Ethiopia: A Cross-Sectional Study. *Depression Research and Treatment*, Vol. 2021, Article ID 1942674.

Wendmagegn TA, GB Abera, WT Tsehaye, KB Gebresslasie, BG Tella 2018 Magnitude and determinants of surgical site infection among women underwent cesarean section in Ayder comprehensive specialized hospital Mekelle City, Tigray region, Northern Ethiopia. *BMC Pregnancy and Childbirth*, Vol. 18, Article No. 489.

Weres ZG, HG Yebyo, KB Miruts, HA Gesesew, TE Woldehymanot 2015 Assessment of adolescents' under nutrition level among school students in Eastern Tigray, Ethiopia: a cross-sectional study. *Journal of Nutrition and Food Sciences*, Vol. 5, Issue 5: 1000402.

Woldeamanuel BT, KK Gelebo 2019 Statistical analysis of socioeconomic and demographic correlates of perinatal mortality in Tigray region, Ethiopia: a cross sectional study. *BMC Public Health*, Vol. 19, Article No. 1301.

Woldeamanuel BT, TT Tesfaye 2019 Multivariate Analysis of Correlates of Under Five Children Malnutrition in Tigray Region, Ethiopia. *Mathematical Modelling and Applications*. Vol. 4, Issue 4, pp. 49-63.

Woldeamanuel BT, TT Tesfaye 2019 Risk factors associated with under-five stunting, wasting, and underweight based on Ethiopian demographic health survey datasets in Tigray region, Ethiopia. *Journal of Nutrition and Metabolism*, Vol. 2019, Article ID 6967170.

Woldegebriel AG, KA Fenta, AB Aregay, AD Aregay, NB Mamo, TW Wubayehu, A Bayray, A Mulugeta 2020 Effectiveness of

Anthropometric Measurements for Identifying Diabetes and Prediabetes among Civil Servants in a Regional City of Northern Ethiopia: A Cross-Sectional Study. *Journal of Nutrition and Metabolism*, Vol. 2020, Article ID 8425912.

Wondimu A, F Molla, B Demeke, T Eticha, A Assen, S Abrha, W Melkam 2015 Household storage of medicines and associated factors in Tigray Region, Northern Ethiopia. *PloS One*, Vol. 10, No. 8: 0135650.

Workneh BD, MG Gebrehiwot, TA Bayo, MT Gidey, YB Belay, DM Tesfaye, TT Kassa 2016 Influence of medical representatives on prescribing practices in Mekelle, Northern Ethiopia. *PloS One*, Vol. 11, No. 6: 0156795.

World Health Organization 2009 Deployment of artemether-lumefantrine with rapid diagnostic tests at community level, Raya Valley, Tigray, Ethiopia. Project Report, April 2005–June 2007.

Wossen MT 2019 Pattern of Emergency Surgical Operations Performed for Non-Traumatic Acute Abdomen at Ayder Referral Hospital, Mekelle University, Tigray, Ethiopia by the Year 2000-2003 EC. *Journal of Clinical Trials*, Vol.e 9, Issue 5: 1000375.

Yared S, OD Kirstein, A Moncaz, H Tekie, M Balkew, A Warburg, A Hailu, T Gebre-Michael 2015 Host-feeding preference of *Phlebotomus orientalis* (Diptera: Psychodidae) in an endemic focus of visceral leishmaniasis in northern Ethiopia. *Parasites and Vectors*, Vol 8, Article No. 270.

Yebyo HG, C Kendall, D Nigusse, W Lemma 2013 Outpatient therapeutic feeding program outcomes and determinants in treatment of severe acute malnutrition in Tigray, northern Ethiopia: a retrospective cohort study. *Plos One*, Vol. 8, No. 6: 65840.

Yehualaw A, C Taferre, AT Bantie, DG Demsie 2021 Appropriateness and Pattern of Antibiotic Prescription in Pediatric

Patients at Adigart General Hospital, Tigray, Ethiopia. *BioMed Research International*, Vol. 2021, Article ID 6640892.

Yesuf TA, NA Eshete, EA Sisay 2018 Dysmenorrhea among university health science students, northern Ethiopia: impact and associated factors. *International Journal of Reproductive Medicine*, Vol.18, Article ID 9730328.

Yirga G 2010 Assessment of indigenous knowledge of medicinal plants in Central Zone of Tigray, Northern Ethiopia. *African Journal of Plant Science*, Vol. 4, No. 1, pp. 6-11.

Yirga G 2010 Assessment of traditional medicinal plants in Endrta district, south-eastern Tigray, northern Ethiopia. *African Journal of Plant Science*, Vol. 4, No. 7, pp. 255-260.

Yirga G 2010 Use of traditional medicinal plants by indigenous people in Mekele town, capital city of Tigray regional state of Ethiopia. *Journal of Medicinal Plants Research*, Vol. 4, No. 17, pp. 494-509.

Yirga G 2010 Ethnobotanical study of medicinal plants in and around Alamata, Southern Tigray, Northern Ethiopia. *Current Research Journal of Biological Sciences*, 2(5): 338-344.

Yirga G, M Teferi, M Kasaye 2011 Survey of medicinal plants used to treat human ailments in Hawzen district, Northern Ethiopia. *International Journal of Biodiversity and Conservation*, Vol. 3, No. 13, pp. 709-714.

Yirga G, M Teferi, Y Gebreslassea 2011 Ethnozoological study of traditional medicinal animals used by the people of Kafta-Humera District, Northern Ethiopia. *International Journal of Medicine and Medical ASciences*, Vol. 3, No. 10, pp. 316–320.

Yohannes M, M Haile, TA Ghebreyesus, KH Witten, A Getachew, P Byass, SW Lindsay 2005 Can source reduction of mosquito larval

habitat reduce malaria transmission in Tigray, Ethiopia? *Tropical Medicine and International Health*, Vol. 10, Issue 12, pp. 1274-1285.

Yohannes M, Z Abebe, E Boelee 2019 Prevalence and environmental determinants of cutaneous leishmaniasis in rural communities in Tigray, northern Ethiopia. *PLoS Neglected Tropical Diseases*, Vol. 13, No. 9: 0007722.

Zemicheal TM, DB Tadesse, HTAtalay, GT Weldesamuel, GB Gebremichael, HN Tesfay, TG Haile 2020 Determinants of Diabetic Nephropathy among Diabetic Patients in General Public Hospitals of Tigray, Ethiopia, 2018/19. *International Journal of Endocrinology*, Vol. 2020, Article ID 6396483.

Zenebe G, M Zerihun, Z Solomon 2012 An ethnobotanical study of medicinal plants in Asgede Tsimbila district, Northwestern Tigray, northern Ethiopia. *Ethnobotany Research and Applications*, 10, 305–320.

Zenebe N, T Habtamu, B Endale 2014 Study on bovine mastitis and associated risk factors in Adigrat, Northern Ethiopia. *African Journal of Microbiology Research*, Vol. 8, No. 4, pp. 327-331.

Zeru F, G Romha, G Berhe, G Mamo, T Sisay, G Ameni 2014 Prevalence of bovine tuberculosis and assessment of Cattle owners awareness on its public health implication in and around Mekelle, Northern Ethiopia. *Journal of Veterinary Medicine and Animal Health*, Vol. 6, No. 6, pp. 159-167.

Zeru T, H Berihu, G Buruh, H Gebrehiwot, M Zeru 2020 Parental knowledge and practice on antibiotic use for upper respiratory tract infections in children, in Aksum town health institutions, Northern Ethiopia: a cross-sectional study. *Pan African Medical Journal*, Vol. 35: 142.

Zeru T, H Berihu, H Gerensea, G Teklay, T Teklu, H Gebrehiwot, T Wubayu 2020 Assessment of knowledge and attitude towards

palliative care and associated factors among nurses working in selected Tigray hospitals, northern Ethiopia: a cross-sectional study. *The Pan African Medical Journal*, Vol. 35: 121.

Zeru T, H Gerensea, H Berihu, M Zeru, T Wubayehu 2020 Nurses practice towards palliative care in Shire Endasilasie health facilities, Northern Ethiopia: a cross-sectional study. *The Pan African Medical Journal*, Vol. 35:110.

Zeweld SW 2014 Cultural and molecular detection of zoonotic tuberculosis and its public health impacts in selected districts of Tigray region, Ethiopia. *Sokoto Journal of Veterinary Sciences*, Vol. 12, No. 1, pp. 1-12.

Zeweld SW, DH Reta, AG Abay, YB Zelelew 2013 Detection of human and bovine tuberculosis using an existing diagnostic practice in residential districts of Tigray region, northern Ethiopia. *Journal of Environmental and Occupational Science*, Vol. 2, No. 2, pp. 77-88.

History

Asrat A 2009 The Temple of Yeha: Geo-Environmental Implications on its Site Selection and Preservation. In: Vol. I, pp.1-10., *Proceedings of the 16th International Conference of Ethiopian Studies*, Svein Ege, Harald Aspen, Birhanu Teferra and Shiferaw Bekele (eds.), Trondheim. Svein Ege, Harald Aspen, Birhanu Teferra and Shiferaw Bekele (eds.),

Bard KA, R Fattovich, A Manzo, C Perlingieri 2014 The chronology of Aksum (Tigray, Ethiopia): a view from Bieta Giyorgis. *Azania: Archaeological Research in Africa*, Vol. 49, Issue 3, pp. 285-316.

Barradas M 1996 A Seventeenth Century Historical and Geographical Account of Tigray, Ethiopia. *Tractatus tres historico-geographici (1634)*. Created by Barradas, Manuel (1572-1646),

translated from the Portuguese by Elizabet Filleul; edited by Richard Pankhurst.

Butzer KW 2017 Rise and fall of Axum, Ethiopia: A Geo-Archaeological Interpretation. *American Antiquity*, Vol. 46, Issue 3, pp. 471-495.

Cascadden Z, D Lyons, E Paris 2020 On the surface: an ethnoarchaeological study of marginalised pottery production and the social context of pottery surface treatments in Tigray Regional State, northern highland Ethiopia. *Azania: Archaeological Research in Africa*, Vol. 55, Issue 1, pp. 69-96.

Chaix L 2013 The fauna from the UNO/BU excavations at bieta giyorgis (Aksum) in tigray, northern Ethiopia: campaigns 1995–2003; pre-aksumite, 700–400 BC to late aksumite, AD 800–1200. *Journal of African Archaeology*, Vol. 11, No. 2, pp. 211-241.

Claude L, M Jacques 2005 *Les Églises Historiques du Tigray*. TRANS: Ancient churches of Tigray. Paris, ADPF Editions Recherche sur les Civilisations. TRANS: ADPF Editions Research on Civilizations.

D'Andrea AC, A Manzo, MJ Harrower, AL Hawkins 2008 The Pre-Aksumite and Aksumite settlement of NE Tigray, Ethiopia. *Journal of Field Archaeology*, Vol. 33, pp. 150-176.

D'Andrea AC, L Perry, L Nixon-Darcus, AG Fahmy, EAE Attia 2018 A pre-Aksumite culinary practice at the Mezber site, northern Ethiopia. *Plants and People in the African Past*, pp 453–478.

D'Andrea AC, MP Richards, LA Pavlish, S Wood, A Manzo, HS Wolde-Kiros 2011 Stable isotopic analysis of human and animal diets from two pre-Aksumite/Proto-Aksumite archaeological sites in northern Ethiopia. *Journal of Archaeological Science*, Vol. 38, Issue 2, pp. 367-374.

Dugast F, I Gajda 2012 Reconsidering contacts between southern Arabia and the highlands of Tigrai in the 1st millennium BC according to epigraphic data. 18th International Conference of Ethiopian Studies, Oct 2012, Dire Dawa, Ethiopia.

Dugast F, I Gajda 2014 Archaeological Survey in the Area of Meqele and the Eastern Edge of the Highlands in Tigrai Region. *Annales d'Éthiopie*, Vol. 29, pp. 275-277.

Dugast F, I Gajda 2014 The Aksumite site of Wakarida, Tigrai. First results of archaeological investigations (2011-2013). 4th International Enno Littmann Conference.

Fattovich R 2019 From community to state: the development of the Aksumite polity (Northern Ethiopia and Eritrea), c. 400 BC–AD 800. *Journal of Archaeological Research*, Vol. 27, pp. 249–285.

Finneran N 2005 The Archeological Landscape of the Shire Region, Western Tigray, Ethiopia. *Annales d'Ethiopie*, Vol. 21, pp. 7-29.

Finneran N, S Boardman, C Cain 2000 Excavations at the Late Stone Age site of Baahti Nebait, Aksum, northern Ethiopia, 1997. *Azania: Archaeological Research in Africa*, Vol. 35, Issue 1, pp. 53-73.

French C, F Sulas, M Madella 2009 New geoarchaeological investigations of the valley systems in the Aksum area of northern Ethiopia. *Catena*, 78: 218–233.

Gajda I, J Charbonnier, X Peixoto 2020 The Aksumite site of Wakarida in the region of Tigrai, Ethiopia: first results of archaeological investigations. *Polish Archaeology in the Mediterranean*, Vol. 29, No. 1.

Gebre Selassie Y, I Gajda 2009 A Pre-Aksumite Inscribed Incense Burner and Some Architectural Ornaments from Addi Akaweh (Tigrai, Ethiopia). *Annales d'Éthiopie*, Vol. 24, pp. 49-61.

Gebre Selassie Y, I Gajda, B Hiluf 2009 Pre-Aksumite Inscriptions from Mäqabər Ga 'əwa (Tigray, Ethiopia). *Annales d'Ethiopie*, Vol. 24, pp. 33-48.

Gerlach I 2013 Cultural contacts between South Arabia and Tigray (Ethiopia) during the early 1st millennium BC: results of the ethiopian-german cooperation project in Yeha. *Zeitschrift für Orient-Archäologie*, Vol. 6, pp. 254-277.

Hendrickx B 1999 The Image of Ethiopian-Axumite Kingship as Reflected in the Greek Axumite Royal Inscriptions (2nd—6th Centuries). *Acta Patristica et Byzantina*, Vol. 10, Issue 1, pp. 128-136.

Hendrie B 1999 Now the people are like the Lord": Local effects of revolutionary reform in a Tigray village, northern Ethiopia. PhD Dissertation, University College London.

Hiluf B 2009 Preliminary Report on the Archaeological Excavation of Mäqabər Ga 'əwa at Addi Akaweh (Tigray, Ethiopia). *Annales d'Éthiopie*, Vol. 24, pp. 15-31.

Japp S, I Gerlack, H Hitgen, M Schnelle 2011 Yeha and Hawelti: Cultural contacts between Saba' and D'MT- New research by the German Archeological Institute in Ethiopia. *Proceedings of the Seminar for Arabian Studies*, 41: 145-160. Cited by 22

Lepage C 2006 Entre Aksum et Lalibela: les églises du sud-est du Tigray (IXe-XIIe s.) en Éthiopie. *TRANS: Between Aksum and Lalibela: the churches of southeastern Tigray (9th-12th centuries) in Ethiopia. Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, persee.fr Année. *TRANS: Minutes of meetings of the Academy of Inscriptions and Belles-Lettres Year 2006* 150-1, pp. 9-39.

Loiseau J, S Dorso, Y Gleize, D Ollivier, D Ayenachew, H Berhe, A Chekroun, B Hirsch 2021 Bilet and the wider world: new insights

into the archaeology of Islam in Tigray. *Antiquity*, Vol. 95, Article No. 380, pp. 508–529.

Loiseau J 2020 Retour à Bilet. Un cimetière musulman médiéval du Tigray oriental (Inscriptiones Arabicae Aethiopiae 1)- *Bulletin d'études orientales*, TRANS: A Medieval Muslim Cemetery in Eastern Tigray (Inscriptiones Arabicae Aethiopiae, *Bulletin of Oriental Studies*. Vol. 1, No. 67, pp. 59-96.

Lyons DE 2007 Building power in rural hinterlands: An ethnoarchaeological study of vernacular architecture in Tigray, Ethiopia. *Journal of Archaeological Method and Theory*, Vol. 14, pp. 179–207.

Maigret A 2002 The First Excavation Campaign in "Temple I" at Yeha (Tigrai, Ethiopia). *Вестник древней истории*, TRANS: *Journal of Ancient Stories*, Vol. 3, pp. 184-190.

Mordini A 2017 Un crucifix en bois sculpté provenant du monastère de Dabra Dàmmò (Tigrai Oriental, Ethiopie) TRANS A carved wooden crucifix from the monastery of Dabra Dàmmò (Eastern Tigrai, Ethiopia). In: *Mélanges Marcel Cohen: Etudes de linguistique Etudes de linguistique, ethnographie et sciences connexes offertes par ses amis et ses élèves à l'occasion de son 80ème anniversaire*. Published by De Gruyter Mouton 1970, Vol. 27 in the series *Janua Linguarum*.

Nebes N 2010 Die Inschriften aus dem 'Almaqah-Tempel in 'Addi 'Akawəḥ (Tigray). TRANS: The inscriptions from the 'Almaqah Temple in 'Addi 'Akawəḥ (Tigray). *Zeitschrift für Orient-Archäologie*, TRANS: *Journal of Oriental Archaeology*, Vol. 3, pp. 214-237.

Negash A 1997 Preliminary results of an archaeological reconnaissance of Tigrai, northern Ethiopia. *NYAME AKUMA*, No. 47, 27-32.

Negash A 2001 The Holocene prehistoric archaeology of the Temben region, northern Ethiopia. PhD Dissertation, University of Florida.

Nyssen J, M Yonas, S Annys, T Ghebreyohannes, W Smidt, K Welegerima, S Gebreselassie, A Sembroni, F Dramis, C Ek, D Causer 2020 The Zeyi cave geosite in northern Ethiopia. *Geoheritage*, Vol. 12, Article No. 6.

Peterson E 2017 Development of craft specialisation during the Pre-Aksumite Period in Eastern Tigray, Ethiopia: A study of hideworking traditions. Thesis, Simon Fraser University.

Phillipson DW 2009 The first millennium BC in the highlands of Northern Ethiopia and South-Central Eritrea: A reassessment of cultural and political development. *African Archaeological Review*, Vol. 26, pp. 257–274.

Phillipson DW, A Reynolds, S Boardman, N Finneran, J Phillips, A Jackson, S Semple 1996 BIEA excavations at Aksum, northern Ethiopia. *Azania: Archaeological Research in Africa*, Vol. 31, Issue 1, pp. 99-147.

Reid R 2003 Old problems in new conflicts: Some observations on Eritrea and its relations with Tigray, from liberation struggle to inter-state war. *Africa*, Vol. 73, No. 3, pp. 369-401.

Robin C, A de Maigret 1998 Le grand temple de Yéha (Tigray, Éthiopie), après la première campagne de fouilles de la mission française (1998). *TRANS: The great temple of Yéha (Tigray, Ethiopia), after the first excavation campaign by the French mission (1998)*. In: *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 142 année, *TRANS: Minutes of the sessions of the Academy of Inscriptions and Belles-Lettres*, 142nd year, N. 3, pp. 737-798.

Ruiz-Giralt A, C Bouchaud, A Salavert, C Lancelotti, A Catherine D'Andrea 2021 Human-woodland interactions during the Pre-Aksumite and Aksumite periods in northeastern Tigray, Ethiopia: insights from the wood charcoal analyses from Mezber and Ona Adi. *Vegetation History and Archaeobotany*, Vol. 30, pp. 713–728.

Taddesse H 2019 The Pre-Aksumite to Aksumite Transition in Eastern Tigray, Ethiopia: The View from Ona Adi. Thesis, Simon Fraser University.

Tefera M 2004 Recent Evidence of Animal Exploitation in the Axumite Epoch, 1st–5th Centuries AD. *Tropical Animal Health and Production*, Vol. 36, No. 2, pp. 105–116.

Tsehaye G 2019 Preliminary result of the rock art reconnaissance carried out in Tigray region, Ethiopia. *Semitica et Classica, International Journal of Oriental and Mediterranean Studies*, Vol. 12, pp. 267-280.

Wiederick B 2020 Archaeological site distribution and the formation of early polities in Eastern Tigray (Agame), Ethiopia. Thesis, Simon Fraser University.

Woldearegay AG 2019 Fighting and broadcasting: a history of Ethiopia's Radio Voice of Tigray People's Liberation Front. *South African Journal of Communication Theory and Research*, Vol. 45, No. 4. pp. 64-96.

Wolf P, U Nowotnick 2010 The Almaqah temple of Meqabesr Ga'ewa near Wuqro (Tigray, Ethiopia). *Proceedings of the Seminar for Arabian Studies*, Vol. 40, pp. 367–380.

Wolf P, U Nowotnick, C Hof, M Daszkiewicz, S Gerwulf, B Ewa, P Alexandra 2010 Das Heiligtum des Almaqah von Meqaber Ga'ewa in Tigray/Äthiopien. *Zeitschrift für Orient-Archäologie*, Vol. 3, pp. 164-213.

Young J 2006 Peasant Revolution in Ethiopia: The Tigray People's Liberation Front, 1975-1991. Cambridge University Press.

Young J 1996 The Tigray and Eritrean Peoples Liberation Fronts: A history of tensions and pragmatism. *The Journal of Modern African Studies*, Vol. 34, Issue 1, pp. 105-120.

Zamora F 2009 Las iglesias rupestres de Tigray (Etiopía)
Localización: Restauo. *Revista internacional del patrimonio histórico*, TRANS: The rock churches of Tigray (Etiopía) Location: Restoration. *International review of the historical heritage*, No. 3, pp. 40-53.

Social

Abafita J, CS Kim 2015 Determinants of childrens schooling: The case of Tigray Region, Ethiopia. *Educational Research and Reviews*, Vol. 10, No. 8, pp. 1130-1146.

Abraham ST 2002 The effect of American mathematics teaching practices on middle grade teachers in Tigray, Ethiopia. PhD. Thesis, North Carolina State University, USA.

Alemayehu M, G Yohannes, A Damte, A Fantahun K Gebrekirstos, R Tsegay, A Goldberger, H Yebyo 2015 Prevalence and predictors of sexual violence among commercial sex workers in Northern Ethiopia. *Reproductive Health*, Vol. 12, Article No. 47.

Ali M 2012 Socio-economic analysis of homeless population in urban areas a case study of Northern Ethiopia. *International Journal of Scientific and Research Publications*, Vol. 2, Issue 8, pp.1-7.

Allen M, MN Raghallaigh 2013 Domestic violence in a developing context: The perspectives of women in northern Ethiopia. *Affilia*, Vol. 28, No. 3, pp. 256-272.

Annys S, T Vanden Bempt, E Negash, L De Sloover, J Nyssen 2021 Tigray: atlas of the humanitarian situation July 2021.
<http://www.researchgate.net/publication/349824181>

Annys S, T VandenBempt, E Negash, L De Sloover, R Ghekiere, K Haegeman, D Temmerman, J Nyssen 2021 Tigray: Atlas of the humanitarian situation December 2021.
[https://www.researchgate.net/profile/Jan-Nyssen/publication/349824181_Tigray Atlas of_the_humanitarian_situation/links/61cad94ada5d105e5500f330/Tigray-Atlas-of-the-humanitarian-situation.pdf](https://www.researchgate.net/profile/Jan-Nyssen/publication/349824181_Tigray_Atlas_of_the_humanitarian_situation/links/61cad94ada5d105e5500f330/Tigray-Atlas-of-the-humanitarian-situation.pdf)

Areaya KM 2020 Exploring small and medium enterprises' corporate social responsibility practice in Ethiopia's Tigray Regional State: a supportive conceptual framework. Thesis, University of South Africa.

Asfaw A 2015 Quality of primary education in Ethiopia: The case of early grade mathematics competency in Tigray. PhD Dissertation, Addis Ababa University.

Asfaw, A 1997 A Study of Students' and Societal Needs Regarding an Approach to the First Cycle Primary School Curriculum Integration in Tigray. Master's Thesis, Addis Ababa University.

Asmelash M 2014 Rural household food security status and its determinants: The case of Laelaymychew Woreda, Central Zone of Tigray, Ethiopia. *Journal of Agricultural Extension and Rural Development*, Vol. 6, Issue 5, pp. 162-167.

Atsbaha G, D Hailu, H Berhe, AG Slassie, D Yemane, W Terefe 2016 Determinants of high fertility among ever married women in Enderta district, Tigray Region, Northern Ethiopia. *Journal of Health and Medical Informatics*, Vol. 7, Issue 5: 1000243.

Atsebeha AT 2016 Principals' leadership styles and their effects on teachers' performance in the Tigray region of Ethiopia. Thesis, University of South Africa.

Ayalew A, K Abreha, A Shumey K Berhane 2015 Magnitude and predictors of early sexual debut among high and preparatory school students in northern Ethiopia: a school-based Crosssectional study. *Journal of Health Education Research and Development*, Vol. 3, Issue 3, pp. 1-8.

Babulo B, B Muys, F Nega, E Tollens, J Nyssen, J Deckers, E Mathijs 2008 Household livelihood strategies and forest dependence in the highlands of Tigray, Northern Ethiopia. *Agricultural Systems*, Vol. 98, No. 2, pp. 147–155.

Berhe Y 2013 An Assessment of Indigenous Conflict Resolution Mechanism of Mezard in Rural Alamata Woreda, Tigray National Regional State, Ethiopia. Thesis, Munich, GRIN Verlag.

Bhatta BP, T Årethun 2013 Barriers to rural households' participation in low-skilled off-farm labor markets: theory and empirical results from northern Ethiopia. *SpringerPlus*, Vol. 2, Article No. 97.

Cochi M 2021 La Crisi Del Tigrai Si Estende In Eritrea E Sudan. Le Possibilità Di Un Disastro Umanitario. Documenti geografici, *TRANS: The Tigris Crisis Extends Into Eritrea and Sudan. The Chances of a Humanitarian Disaster. Geographical Documents. DOCUGEO2281*, pp. 171-180.

Dadi AF, FG Teklu 2014 Risky sexual behavior and associated factors among grade 9–12 students in Humera secondary school, western zone of Tigray, NW Ethiopia, 2014. *Science Journal of Public Health*, Vol. 2, No. 5, pp. 410-416.

Debebe GE 1998 The Effect of Experience on Attitude to and on Utilization of Educational Radio Broadcasting: The Case of Tigray Region. MA Thesis, Addis Ababa University.

Debela BL 2017 Factors affecting differences in livestock asset ownership between male-and female-headed households in Northern Ethiopia. *The European Journal of Development Research*, Vol. 29, pp. 328–347.

Degefu TH 2011 The Role of Cooperatives in Unlocking Potentials of People with Disability: The Case of Tigray War Veterans in Mekelle, Thesis. Mekelle University.

Embiza S, S Hadush 2015 Assessing the Dimensionality and Reliability of Teachers' Performance Evaluation in Eastern Zone High Schools, Tigray National Regional State, Ethiopia. *Journal of Education and Practice*, Vol. 6 No. 7, pp. 91-99.

Ezra M 1997 Demographic responses to ecological degradation and food insecurity: drought prone areas in Northern Ethiopia. Thela Pub.

Ezra M 2001 Demographic responses to environmental stress in the drought-and famine-prone areas of northern Ethiopia- *International Journal of Population Geography*, Vol.7, Issue 4, pp. 259-279.

Fesseha G, A G/Mariam, M Gerbaba 2012 Intimate partner physical violence among women in Shimelba refugee camp, northern Ethiopia. *BMC Public Health*, Vol. 12, Article No. 125.

Gebre T, F Hagos, G Teklu, M Fisseha, M Abera 2020 The prevalence of gender-based violence and harmful traditional practices against women in the Tigray Region, Ethiopia. *Journal of Asian and African Studies*, Vol. 55, Issue 1, pp. 58–75.

Gebreegziabher Z, B Gebremedhin, A Mekonnen 2012 Institutions, sustainable land use and consumer welfare: the case of forest and

grazing lands in northern Ethiopia. *Environment and Development Economics*, Vol. 17, Issue 1, pp. 21–40.

Gebrekirostos HA 2015 Occupational stress among secondary school teachers and their coping strategies: The case of central zone of tigray region. *International Journal of Academic Research in Education and Review*, Vol. 3, No. 6, pp. 143-157.

Gebremedhin T, N Gebreegzi 2019 Assessing Factors that Affect Female Trainees' Academic Achievement in Teacher Training Colleges of Tigray, Ethiopia. *Methodology*, Vol. 9, No. 23.

Gebreyesus H, T Berhe, Z Welegebriel, T Wubayehu, G Hailemariam, G Gebrekirostos, M Teweldemedhin 2019 Premarital sexual practice and associated factors among adolescents in the refugee camps in Tigray, northern Ethiopia. *BMC Research Notes*, Vol. 12, Article No. 415.

Gebru B, S Bezu 2014 Environmental resource collection: implications for children's schooling in Tigray, northern Ethiopia.

Environment and Development Economics, Vol. 19, Issue 2, pp. 182–200.

Gebru GW, F Beyene 2012 Causes and consequences of out-migration on rural households' livelihood in Gulomekeda district, Tigray, Ethiopia. *Agricultural Research and Reviews*, Vol. 1 No. 1, pp. 26-33.

Gebru GW, F Beyene 2012 Rural household livelihood strategies in drought-prone areas: A case of Gulomekeda District, eastern zone of Tigray National Regional State, Ethiopia. *Journal of Development and Agricultural Economics*, Vol. 4, No. 6, pp.158-168.

Gebru GW, HE Ichoku, PO Phil-Eze 2018 Determinants of livelihood diversification strategies in Eastern Tigray Region of Ethiopia. *Agriculture and Food Security*, Vol. 7, Article No. 62.

Girmay A, T Mariye 2019 Risky sexual behavior practice and associated factors among secondary and preparatory school students of Aksum town, northern Ethiopia, 2018. BMC Research Notes, Vol. 12, Article No. 698.

Girmay A, T Mariye, H Gerensea 2019 Early sexual debut and associated factors among secondary school students of central zone of Tigray, Northern Ethiopia, 2018. The Pan African Medical Journal, Vol. 34: 1.

Hagos AG 2010 Status of school-based teachers' professional development: A case study in selected schools in the Tigray Regional State. VDM Verlag Dr. Müller.

Hailu GT 2014 An Assessment of Training Materials Management Practice in Selected Public Technical Vocational Education and Training Colleges of Southern Zone of Tigray. Thesis, Esuit Historical Institute in Africa (JHIA).

Hishe S, J Lyimo, W Bewket 2019 Impacts of soil and water conservation intervention on rural livelihoods in the Middle Suluh Valley, Tigray Region, northern Ethiopia. Environment, Development and Sustainability, Vol. 21, pp. 2641–2665.

Inquai S 2007 Tigray: the agony and the ecstasy. Berhanena Selam Printing.

Kahsay S 2014 Rural household food security status: The case of Laelay Maichew Woreda, Tigray. International Journal in Commerce, IT and Social Sciences, Vol.1, Issue 3.

Kidanu D, E Kidane, M Abadr 2015 Consumer Protection Status In Tigray: A Survey Study On Selected Food Items. CLEAR International Journal of Research in Commerce and Management, Vol. 6, Issue 1, pp. 55-61.

Kiros GE, DP Hogan 2000 The impact of famine, war, and environmental degradation on infant and early child mortality in Africa: The case of Tigray, Ethiopia. *Genus*, Vol. 56, No. 3-4, pp. 145-178.

Kumar HRS, K Haddish, D Lacerenza, S Aneli, CDi Gaetano, G Teweledmedhin, RV Manukonda, N Futwi, V Alvarez-Iglesias, M de la Puente, M Fondevila, MV Lareu, C Phillips, C Robino 2020 Characterization of ancestry informative markers in the Tigray population of Ethiopia: A contribution to the identification process of dead migrants in the Mediterranean Sea. *Forensic Science International: Genetics*, Vol. 45, Issue: March: 102207.

Lurgain JG, C Eyber 2019 Understanding female adolescent 'runaways' and the implications of their decisions in Tigray, northern Ethiopia. *Child Abuse and Neglect*, Vol. 44, No. 1, pp. 59-67.

Lyons D 2014 Perceptions of consumption: constituting potters, farmers and blacksmiths in the culinary continuum in eastern Tigray, northern highland Ethiopia. *African Archaeological Review*, Vol. 31, pp. 169–201.

Lyons D, A Freeman 2009 'I'm not evil': materialising identities of marginalised potters in Tigray Region, Ethiopia. *Azania: Archaeological Research in Africa*, Vol. 44, Issue 1, pp. 75-93.

Lyons D, J Ferguson, D Harlow, J Casey 2018 Marginalized potters and ceramic compositional groups: Neutron Activation Analysis of contemporary pottery from Tigray, northern highland Ethiopia. *African Archaeological Review*, Vol. 35, pp. 567–595.

Manjur K, H Amare, G Haile-Mariam, L Tekle 2014 Livelihood diversification strategies among men and women rural households: Evidence from two watersheds of Northern Ethiopia. *Journal of Agricultural Economics and Development*, Vol. 3, Issue 2, pp. 17-25.

Maxwel D, B Vaitla, G Tesfay, N Abadi 2013 Resilience, Food Security Dynamics and Poverty Traps in Northern Ethiopia. Analysis of a Biannual Panel Data Set, 2011–2013. Feinstein International Center.

Meehan F 2004 Female headed households in Tigray, Ethiopia: A study review. Drylands Coordination Group, Norway (DCG).

Melaku YA, BW Sahle, FH Tesfay, AM Bezabih, A Aregay, SF Abera, L Abreha, GA Zello 2014 Causes of death among adults in northern Ethiopia: evidence from verbal autopsy data in health and demographic surveillance system. PLoS One. PLoS One, Vol. 9, No. 9: 106781.

Mesfin G 2002 The role of men in fertility and family planning program in Tigray Region. Ethiopian Journal of Health Development, Vol. 16, No. 3 pp. 247-255.

Mezgebo GK, T Ymesel, G Tegegne 2017 Do micro and small business enterprises economically empower women in developing countries? Evidences from Mekelle city, Tigray, Ethiopia. Journal of Organizational Change Management, Vol. 30, Issue 5, pp. 767-778.

Mitchell R 2017 An ethnographic case study of the agendas, participation and influence of stakeholders at an urban government primary school in Tigray, Ethiopia. PhD Thesis, University of Leicester, UK.

Mitchell R 2017 Democracy or control? The participation of management, teachers, students and parents in school leadership in Tigray, Ethiopia. International Journal of Educational Development, Vol. 55, pp. 49-55.

Mitchell R 2019 Radical student participation: lessons from an urban government primary school in Tigray, Ethiopia: Compare. Journal of Comparative and International Education, Vol. 49, Issue 1, pp. 98-114.

Mjaaland T 2018 Negotiating gender norms in the context of equal access to education in north-western Tigray, Ethiopia. *Gender and Education*, Vol. 30, Issue 2, pp. 139-155.

Nordanger D 2007 Discourses of loss and bereavement in Tigray, Ethiopia. *Culture, Medicine and Psychiatry*, Vol. 31, pp.173–19

Nordanger DØ 2007 Beyond PTSD: socio-economic bereavement in Tigray, Ethiopia. *Anthropology and Medicine*, Vol. 14, Issue 1, pp. 69-82.

Nordanger DØ 2007 Coping with loss and bereavement in post-war Tigray, Ethiopia. *Transcult Psychiatry*, Vol. 44, No. 4, pp. 545-65.

Nugusse WZ, G Van Huylenbroeck, J Buysse 2013 Determinants of rural people to join cooperatives in Northern Ethiopia. *International Journal of Social Economics*, Vol. 40, Issue 12, pp. 1094-1107.

Nyssen J, K Descheemaeker, A Zenebe, J Poesen, J Deckers, M Haile 2009 Transhumance in the Tigray highlands (Ethiopia). *Mountain Research and Development*, Vol. 29 No. 3, pp. 255–264.

Salih NA, H Metaferia, AA Reda, S Biadgilign 2015 Premarital sexual activity among unmarried adolescents in northern Ethiopia: a cross-sectional study. *Sexual and Reproductive Healthcare*, Vol. 6, Issue 1, pp. 9-13.

Sebhatu KT 2015 Determinants of women empowerment in cooperative societies: A survey in south eastern zone Tigray Region of Ethiopia. *Journal of Economics and Sustainable Development*, Vol.6, No.3, pp.18-25.

Sebhatu KT 2012 Determinants of women's empowerment in cooperatives societies: survey evidence from south eastern Tigray, Ethiopia. *Continental Journal of Social Sciences*, Vol. 5, No. 2, pp. 45-53.

Siyum BA, MA Gebremedhin 2015 Teachers in Politics: Impact of Political Party Membership on Teachers' Freedom and Stability. The Case of Nigste-Saba High School, Adwa, Tigray, Ethiopia. *Journal of Education and Practice*, Vol. 6, No. 13, pp. 223-235.

Srahbzu M, E Tirfeneh 2020 Risky Sexual Behavior and Associated Factors among Adolescents Aged 15-19 Years at Governmental High Schools in Aksum Town, Tigray, Ethiopia, 2019: An Institution-Based, Cross-Sectional Study. *BioMed Research International*, Vol. 2020, Article ID 3719845.

Teka AM 2014 Does participation of women on micro and small scale enterprises address poverty in Northern Ethiopia? Evidences from central and north-west zones of Tigray. *Global Journal of Commerce and Management Perspective*, Vol. 3, No. 2, pp. 109-119.

Tesfamariam SK, HS Petros 2013 Determinants of Women's Empowerment in Cooperative Societies: Survey Evidence from South East Tigray, Ethiopia. *Journal of Indian Association Of Social Science Institutions (IASSI)*, Vol. 32, Issue 1, pp. 91-105.

Tesfay A, H Tadele 2013 The role of cooperatives in promoting socio-economic empowerment of women: Evidence from multipurpose cooperative societies in South-Eastern zone of Tigray, Ethiopia. *International Journal of Community Development*, Vol. 1, No. 1, pp. 1-11.

Tilahun M, M Maertens, J Deckers, B Muys, E Mathijs 2016 Impact of membership in frankincense cooperative firms on rural income and poverty in Tigray, Northern Ethiopia. *Forest Policy and Economics*, Vol. 62, pp. 95-108.

Tsegai M 2016 School Effectiveness: A Comparison of Urban-Rural Public Primary Schools in Tigray. *The Ethiopian Journal of Education*, Vol. 36, No. 1, pp. 79-110.

Vaitla B, G Tesfay, M Rounseville, D Maxwell 2012 Resilience and livelihoods change in Tigray, Ethiopia. Feinstein International Center. Tufts University, USA.

Wall LL, S Belay, A Bayray, S Salih, M Gabrehiwot 2016 A community-based study of menstrual beliefs in Tigray, Ethiopia. International Journal of Gynecology and Obstetrics, Vol. 135, Issue 3, pp. 310-313.

Weldegebreal R, YA Melaku, M Alemayehu, TG Gebrehiwot 2015 Unintended pregnancy among female sex workers in Mekelle city, northern Ethiopia: a cross-sectional study. BMC Public Health, Vol. 15, Article No. 40.

Worku GB 2021 Socio-economic Factors Influencing Migration: The Case of Eastern Zone Tigray Regional State, Ethiopia. International Journal of Science, Technology and Society, Vol. 9, Issue 2, pp. 62-74.

Annex I: List of Journals

1. ABC Research Alert
2. Academia Journal of Agricultural Research
3. Acta Agriculturae Scandinavica
4. Acta Parasitologica Globalis
5. Acta Patristica et Byzantina
6. Acta Tropica
7. Acta Horticulturae
8. Advancement in Medicinal Plant Research
9. Advances in Medical Education and Practice
10. Advances in Meteorology
11. Advances in Pharmacoepidemiology and Drug Safety
12. Affilia
13. Africa
14. Africa Today
15. African Archaeological Review
16. African Crop Science Journal

17. African Development Review
18. African Health Sciences
19. African Journal of Agricultural and Resource Economics
20. African Journal of Agricultural Research
21. African Journal of Emergency Medicine
22. African Journal of Environmental Science and Technology
23. African Journal of Food Science
24. African Journal of Hospitality, Tourism and Leisure
25. African Journal of Microbiology Research
26. African Journal of Plant Science
27. African Journal of Primary Health Care and Family Medicine
28. African Journal of Range and Forage Science
29. African Journal of Reproductive Health
30. African Journal of Bacteriology Research
31. African Journal of Ecology
32. African Journal of Microbiology Research
33. African Journal of Plant Science
34. African Security Review
35. Agrekon
36. Agricultural and Food Economics
37. Agricultural and Forest Meteorology
38. Agricultural and Resource Economics Review
39. Agricultural Economics
40. Agricultural Journal
41. Agricultural Research and Reviews
42. Agricultural Sciences
43. Agricultural Systems
44. Agricultural Water Management
45. Agriculture and Biology Journal of North America
46. Agriculture and Food Security
47. Agriculture and Human Values
48. Agriculture and Natural Resources
49. Agriculture, Ecosystems and Environment
50. Agriculture, Forestry and Fisheries
51. Agroforestry Systems
52. Agronomy for Sustainable Development

53. Agronomy Journal
54. AIDs Care
55. AIDS Research and Therapy
56. AMBIO: A Journal of the Human Environment
57. American Antiquity
58. American Journal of Advanced Drug Delivery
59. American Journal of Agricultural Economics
60. American Journal of Biological and Environmental Statistics
61. American Journal of Chemistry
62. American Journal of Economics and Business Management
63. American Journal of Entrepreneurship
64. American Journal of Environmental Sciences
65. American Journal of Health Research
66. American Journal of Nursing Science
67. American Journal of Trade and Policy
68. Anemia
69. Animal and Veterinary Sciences
70. Animal Feed Science and Technology
71. Annales d'Éthiopie
72. Annals of General Psychiatry
73. Annals of Global Health
74. Annals of Tropical Medicine and Parasitology
75. Anthropology and Medicine
76. Antimicrobial Resistance and Infection Control
77. Antiquity
78. Applied and Environmental Soil Science
79. Applied Earth Science
80. Applied Journal of Hygiene
81. Applied Vegetation Science
82. Applied Water Science
83. Aquatic Ecology
84. Arabian Journal of Geosciences
85. Archives of Agronomy and Soil Science
86. Archives of Public Health
87. Asian Journal of Agricultural Sciences
88. Asian Journal of Multidimensional Research

89. Asian Journal of Plant Science
90. Asian Nursing Research
91. Asian Pacific Journal of Tropical Biomedicine
92. Austrian Journal of Earth Sciences
93. Azania: Archaeological Research in Africa
94. Behavioural Neurology
95. Biodiversity and Conservation
96. Biofuels
97. BioMed Research
98. BioMed Research International
99. Biomedical Journal of Scientific and Technical Research
100. BMC Cardiovascular Disorders
101. BMC Endocrine Disorders
102. BMC Health Services Research
103. BMC Immunology
104. BMC Infectious Diseases
105. BMC International Health and Human Rights
106. BMC Nursing
107. BMC Nutrition
108. BMC Pediatrics
109. BMC Pregnancy and Childbirth
110. BMC Public Health
111. BMC Research Notes
112. BMC Veterinary Research
113. BMC Women's Health
114. BMJ
115. BMJ Global Health
116. BMJ Open
117. Boiling Point
118. Boletín Latinoamericano y del Caribe de Plantas Medicinales y Aromáticas
119. Brain and Development
120. Branna Journal of Engineering and Technology
121. Breastfeeding Review
122. Bulletin du Jardin botanique National de Belgique,
123. Bulletin of Engineering Geology and the Environment

124. Bulletin of Oriental Studies
125. Bulletin of the Chemical Society of Ethiopia
126. Bulletin of the Geographic Society of Liege
127. Bulletin World Health Organization
128. Canadian Journal of Infectious Diseases and Medical Microbiology
129. Caraka Tani Journal of Sustainable Agriculture
130. Carbon Balance and Management
131. Carbon Management
132. Catena
133. Chemical Geology
134. Chemie der Erde (chemistry of the earth)
135. Chemistry and Materials Research
136. Child Abuse and Neglect
137. CIGR Journal, Agricultural Engineering International
138. Cities
139. Civil and Environmental Research
140. CLEAR International Journal of Research in Commerce and Management
141. Clinical Medicine Research
142. Clinical Nursing Research
143. Clinics in Mother and Child Health
144. Cogent Business and Management
145. Cogent Economics and Finance
146. Cogent Environmental Science
147. Cogent Food and Agriculture
148. Communications in Biometry and Crop Science
149. Community Development Journal
150. Computational Ecology and Software
151. Continental Journal of Social Sciences
152. Cost Effectiveness and Resource Allocation
153. Crop protection
154. Culture, Medicine and Psychiatry
155. Current Research in Nutrition and Food Science Journal
156. Current Research Journal of Biological Sciences
157. Depression Research and Treatment

158. Dermatologic Therapy
159. Dermatology
160. Developing Country Studies
161. Diabetes Research and Clinical Practice
162. Diabetes, Metabolic Syndrome and Obesity
163. Diabetologia
164. Disasters
165. Discourse Journal of Agriculture and Food Sciences
166. Diversity
167. E3 Journal of Agricultural Research and Development
168. Earth Surface Processes and Landforms
169. Earth Systems and Environment
170. East African Journal of Sciences
171. East African Journal Health Sciences
172. East African Medical Journal
173. Ecological Processes,
174. Ecology and Society
175. Economics of Agriculture
176. Ecotoxicology and Environmental Safety
177. Edorium Journal of Nutrition and Dietetics
178. Edorium Journal of Pediatrics
179. Educational Research and Reviews
180. Energy Economics
181. Energy Policy
182. Energy Procedia
183. Energy Sources
184. Energy, Sustainability and Society
185. Engineering Geology for Society and Territory
186. Enterprise Development and Microfinance
187. Entomological Research
188. Environment and Development Economics
189. Environment, Development and Sustainability
190. Environmental Earth Sciences
191. Environmental Geosciences
192. Environmental Management
193. Environmental Modelling and Software

194. Environmental Science and Pollution Research
195. Environmental Systems Research
196. Environments
197. Enzyme Engineering
198. Epidemiology
199. Epidemiology and Health
200. Epidemiology and Infection
201. ESci Journal of Crop Production
202. Ethiopian Journal of Applied Sciences and Technology
203. Ethiopian Journal of Economics
204. Ethiopian Journal of Environmental Studies and Management
205. Ethiopian Journal of Health Development
206. Ethiopian Journal of Health Sciences
207. Ethiopian Journal of Health Development
208. Ethiopian Journal of Natural Resources
209. Ethiopian Journal of Science
210. Ethiopian Journal of Water Science and Technology
211. Ethiopian Journal of Health Development
212. Ethiopian Medical Journal
213. Ethiopian Veterinary Journal
214. Ethnobotany Research and Applications
215. European Journal of Biological Sciences
216. European Journal of Business and Economics
217. European Journal of Business and Management
218. European Journal of Wildlife Research
219. Experimental Agriculture
220. Extensive Journal of Applied Sciences
221. Food and Waterborne Parasitology
222. Food policy
223. Food Science and Quality Management
224. Food Security
225. Foods
226. Forensic Science International: Genetics
227. Forest Ecology and Management
228. Forest Policy and Economics
229. Forest Research

230. Forest Science and Technology
231. Forestry and Fisheries
232. Forests
233. Forests, Trees and Livelihoods,
234. Gender and Education
235. Genus
236. Geo: Geography and Environment
237. Geoarchaeology: An International Journal
238. Geocarto International
239. Geoderma
240. Geo-Eco-Trop
241. Geoheritage
242. GeoJournal
243. Geological Society, London, Memoirs
244. Geomorphology
245. Germs
246. Global Ecology and Conservation
247. Global Health Action
248. Global Journal of Agricultural Research
249. Global Journal of Commerce and Management Perspective
250. Global Veterinaria
251. Gondwana Research
252. Greener Journal of Agricultural Sciences
253. Health and Environmental Research Online
254. Health Policy and Planning
255. Health Science Journal
256. Heliyon
257. HIV AIDS (Auckl.)
258. HIV/AIDS- Research and Palliative Care
259. Human Resources for Health
260. Human Vaccines and Immunotherapeutics
261. Hydrobiologia
262. Hydrogeology Journal
263. Hydrological Processes
264. Hydrological Sciences Journal
265. Indian Journal of Traditional Knowledge

266. Infection and Drug Resistance
267. Infection, Genetics and Evolution
268. Infectious Diseases and Therapy
269. Information Technologist (The
270. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences
271. International Breastfeeding Journal
272. International Food and Agribusiness Management Review
273. International Forestry Review
274. International Journal for Equity in Health
275. International Journal in Commerce, IT and Social Sciences
276. International Journal of Academic Research in Education and Review
277. International Journal of Agricultural Economics and Extension
278. International Journal of Agricultural Policy and Research
279. International Journal of Agricultural Research
280. International Journal of Agricultural Sciences
281. International Journal of Agricultural Sustainability
282. International Journal of Agricultural Research
283. International Journal of Agriculture and Biosciences
284. International Journal of Agriculture and Forestry
285. International Journal of Agronomy
286. International Journal of Applied Research in Veterinary Medicine
287. International Journal of Architecture, Arts and Applications
288. International Journal of Biodiversity and Conservation
289. International Journal of Business and Economics Research
290. International Journal of Caring Sciences
291. International Journal of Community Development
292. International Journal of Complementary and Alternative Medicine
293. International Journal of Current Microbiology and Applied Sciences
294. International Journal of Current Research
295. International Journal of Disaster Risk Reduction
296. International Journal of Earth Sciences and Engineering

297. International Journal of Ecology and Environmental Sciences
298. International Journal of Economic and Environmental Geology
299. International Journal of Economic Behavior
300. International Journal of Educational Development
301. International Journal of Endocrinology
302. International Journal of Environmental Research and Public Health
303. International Journal of Environmental Studies
304. International Journal of Family Medicine
305. International Journal of Fisheries and Aquaculture
306. International Journal of Food and Agricultural Economics
307. International Journal of Food Science
308. International Journal of Forestry Research
309. International Journal of Gynecology and Obstetrics
310. International Journal of Horticulture and Plant Breeding Sciences
311. International Journal of Infectious Diseases
312. International Journal of Innovation and Scientific Research
313. International Journal of Life Sciences
314. International Journal of Linguistics, Literature and Translation
315. International Journal of Livestock Production
316. International Journal of Mental Health Systems
317. International Journal of Microbiology
318. International Journal of Mining and Mineral Engineering
319. International Journal of Mycobacteriology
320. International Journal of Nutrition and Food Sciences
321. International Journal of Nutrition and Metabolism.
322. International Journal of Ophthalmology and Visual Science
323. International Journal of Pediatrics
324. International Journal of Pest Management
325. International Journal of Pharma Sciences and Research
326. International Journal of Pharmaceutical and Biological Sciences Fundamentals
327. International Journal of Pharmaceutical Sciences and Nanotechnology

328. International Journal of Pharmaceutical Sciences and Research
329. International Journal of Pharmacy and Pharmaceutical Research
330. International Journal of Plant Breeding and Genetics
331. International Journal of Population Geography
332. International Journal of Remote Sensing
333. International Journal of Reproductive Medicine
334. International Journal of Research in Agriculture and Forestry
335. International Journal of Research in Commerce and Management
336. International Journal of Research in Finance and Marketing
337. International Journal of Science and Research
338. International Journal of Science, Technology and Society
339. International Journal of Scientific and Research Publications
340. International Journal of Social Economics
341. International Journal of Sociology and Anthropology
342. International Journal of Technology Enhancements and Emerging Engineering Research
343. International Journal of Therapeutic Applications
344. International Journal of Water Resources Development
345. International Journal of Women's Health
346. International Journal of Zoology
347. International Journal of Analytical Chemistry
348. International Journal of Gynecology and Obstetrics
349. International Journal of Livestock Production
350. International Journal of Medicine and Medical Sciences
351. International Journal of Women's Health
352. International Journal Pharmaceutical Sciences and Research
353. International Research Journal of Pharmacy and Pharmacology
354. International review of the historical heritage
355. International Soil and Water Conservation Research
356. International Urogynecology Journal
357. International Breastfeeding Journal
358. IRF Examiner
359. Irrigation and Drainage

360. Irrigation and Drainage Systems Engineering
361. ISABB Journal of Food and Agricultural Sciences
362. Italian Journal of Geosciences
363. Journal Community Medicine and Health
364. Journal of African and Asian Studies
365. Journal of African Archaeology
366. Journal of African Earth Sciences
367. Journal of African Economies
368. Journal of Agribusiness and Rural Development
369. Journal of Agricultural Economics and Development
370. Journal of Agricultural Extension and Rural Development
371. Journal of Agricultural Science
372. Journal of Agricultural Technology
373. Journal of Agricultural Extension and Rural Development
374. Journal of Agriculture and Crops
375. Journal of Agriculture and Ecology Research International
376. Journal of Agriculture and Environment for International Development
377. Journal of Agrometeorology
378. Journal of Agronomy and Crop Science
379. Journal of AIDS and HIV Research
380. Journal of American Science
381. Journal of Ancient Stories
382. Journal of Animal and Veterinary Advances
383. Journal of Animal Ecology
384. Journal of Applied Animal Research
385. Journal of Applied Pharmacy
386. Journal of Applied Sciences and Environmental Management
387. Journal of Archaeological Method and Theory
388. Journal of Archaeological Research
389. Journal of Archaeological Science
390. Journal of Arid Environments
391. Journal of Asian and African Studies
392. Journal of Basic and Clinical Pharmacy
393. Journal of Biodiversity and Conservation
394. Journal of Biodiversity and Endangered Species

395. Journal of Biodiversity and Environmental Sciences
396. Journal of Biological Sciences
397. Journal of Biology, Agriculture and Healthcare
398. Journal of Biomaterials
399. Journal of Biomaterials and Nanobiotechnology
400. Journal of Biometrics and Biostatistics
401. Journal of Biosocial Science
402. Journal of Business Management and Social Sciences Research
403. Journal of Cancer Research
404. Journal of Cancer Science and Therapy
405. Journal of Cereals and Oilseeds
406. Journal of Child and Adolescent Behavior
407. Journal of Citizenship and Morality
408. Journal of Climatology and Weather Forecasting
409. Journal of Clinical Trials
410. Journal of Community Medicine and Health Education
411. Journal of Comparative and International Education
412. Journal of Crop Improvement
413. Journal of Dairy, Veterinary and Animal Research
414. Journal of Demography Africa
415. Journal of Development and Agricultural Economics
416. Journal of Diabetes and Metabolism
417. Journal of Drug Delivery and Therapeutics
418. Journal of Earth Science and Climate Change
419. Journal of Earth Sciences and Geotechnical Engineering
420. Journal of Eastern African Studies
421. Journal of Ecology and Environment
422. Journal of Economic Development
423. Journal of Economics and Sustainable Development
424. Journal of Ecotourism
425. Journal of Education and Practice
426. Journal of Environment and Earth Science
427. Journal of Environmental and Analytical Toxicology
428. Journal of Environmental and Occupational Science
429. Journal of Environmental and Public Health

430. Journal of Environmental Management
431. Journal of Ethnobiology and Ethnomedicine
432. Journal of Experimental Agriculture International
433. Journal of Fertilizers and Pesticides
434. Journal of Field Archaeology
435. Journal of Fisheries and Livestock Production
436. Journal of Food and Nutrition Sciences
437. Journal of Food Protection
438. Journal of Food Science and Nutrition Therapy
439. Journal of Food Safety
440. Journal of Forestry Research
441. Journal of Geographic Information System
442. Journal of Geographical Sciences
443. Journal of Geomorphology
444. Journal of Global Health
445. Journal of Gynecology and Obstetrics
446. Journal of Health and Medical Informatics
447. Journal of Health Education Research and Development
448. Journal of Health, Population and Nutrition
449. Journal of Herbal Medicine
450. Journal of HIV/AIDS and Infectious Diseases
451. Journal of hydrology
452. Journal of Indian Association of Social Science Institutions
453. Journal of Infectious Diseases and Epidemiology
454. Journal of International Food and Agribusiness Marketing
455. Journal of Land and Rural Studies
456. Journal of Land Use Science
457. Journal of Maps
458. Journal of Medical Virology
459. Journal of Medicinal Plants Research
460. Journal of Medicinal Plants Studies
461. Journal of Microbiology and Virology
462. Journal of Natural Sciences Research
463. Journal of Neurosciences in Rural Practice
464. Journal of Nutrition and Food Sciences
465. Journal of Nutrition and Health Sciences

466. Journal of Nutrition and Metabolism
467. Journal of Organizational Change Management
468. Journal of Oriental Archaeology
469. Journal of Parasitology and Vector Biology
470. Journal of Parasitology Research
471. Journal of Pediatrics and Neonatal Care
472. Journal of Petrology
473. Journal of Physical and Chemical Sciences
474. Journal of Plant Breeding and Crop Science
475. Journal of Plant Pathology and Microbiology
476. Journal of Plant Sciences
477. Journal of Poverty, Investment and Development
478. Journal of Pregnancy
479. Journal of Pregnancy and Child Health
480. Journal of Preventive Medicine and Hygiene
481. Journal of Public Administration and Governance
482. Journal of Public Health and Epidemiology
483. Journal of Public Health Medicine
484. Journal of Research in Commerce, Economics and Management
485. Journal of Research in Economics and International Finance
486. Journal of Risk Research
487. Journal of Scientific and Innovative Research
488. Journal of Small Business and Enterprise Development
489. Journal of Social Sciences
490. Journal of Soil and Water Conservation
491. Journal of Soil Science and Environmental Management
492. Journal of Soil Science and Plant Nutrition
493. Journal of Soils and Sediments
494. Journal of Structural Geology
495. Journal of Sustainable Agriculture
496. Journal of Sustainable Development and World Ecology
497. Journal of the American Academy of Dermatology
498. Journal of the Drylands
499. Journal of the Professional Association for Cactus Development

500. Journal of Tourism and Hospitality Management
501. Journal of Tourism, Culture and Territorial Development
502. Journal of Transportation Technologies
503. Journal of Tropical Diseases
504. Journal of Veterinary Medicine and Animal Health
505. Journal of Veterinary Science Technology
506. Journal of Water and Climate Change
507. Journal of Women's Health Care
508. Journal of Hydrology
509. Journal of Pregnancy
510. Korean Journal of Family Medicine
511. Lakes and Reservoirs: Science, Policy, and Management for Sustainable Use
512. Land
513. Land Degradation and Development
514. Land Degradation in Africa
515. Land Economics
516. Land Tenure Reform in Asia and Africa
517. Land Use Policy
518. Landscape Ecology
519. Law and Development Review
520. Limnologica
521. Livestock Research for Rural Development
522. Livestock Science
523. Maejo International Journal of Science and Technology
524. Malaria Journal
525. Malaria Research and Treatment
526. Mammalian Biology
527. Mathematical Modelling and Applications
528. Mémoires du Muséum national d'histoire naturelle
529. Memorize di scienze geologiche
530. Methodology
531. Minutes of meetings of the Academy of Inscriptions and Belles-Lettres
532. Modeling Earth Systems and Environment
533. Momona Ethiopian Journal of Science

534. Mountain Research and Development
535. Nagoya Journal of Medical Science
536. Natural Products Chemistry and Research
537. Nature Conservation Research
538. Neurological Science
539. Neurology Research International
540. New Microbes and New Infections
541. NJAS-Wageningen Journal of Life Sciences
542. Norsk Geografisk Tidsskrift (Norwegian Journal of Geography)
543. Nursing Research and Practice
544. Nutrient Cycling in Agroecosystems
545. Nutrients
546. Nutrition
547. Nutrition and Development
548. Nutrition Journal
549. NYAME AKUMA
550. Obstetrics and Gynecology International
551. Occupational Medicine and Health Affairs
552. Onderstepoort Journal of Veterinary Research
553. Open Access Library Journal
554. Open Agriculture
555. Open Journal of Animal Sciences
556. Open Journal of Preventive Medicine
557. Open Journal of Soil Science
558. Ophthalmic Epidemiology
559. Palaeogeography, Palaeoclimatology, Palaeoecology
560. Pan African Medical Journal
561. Parasite Epidemiology and Control
562. Parasites and Vectors
563. Parassitologia
564. Patient Prefer Adherence
565. Pediatric Health Medicine and Therapeutics
566. Pediatric Dermatology
567. Pedosphere
568. Periodico di Mineralogia

569. Perspectives on Global Development and Technology
570. Physical Geography
571. Plant and Soil
572. Plant Ecology
573. Plants and People in the African Past
574. PLoS Neglected Tropical Diseases
575. PLoS One
576. Polish Archaeology in the Mediterranean
577. Precambrian Research
578. Preventive Veterinary Medicine
579. Problems of Agricultural Economics
580. Proceedings of the Seminar for Arabian Studies
581. Public Health Action
582. Public Health Nutrition
583. Quarterly Journal of International Agriculture
584. Quaternary Research
585. Regional and Federal Studies
586. Regional Environmental Change
587. Remote Sensing
588. Remote Sensing Applications: Society and Environment
589. Remote Sensing of Environment
590. Renewables: Wind, Water, and Solar
591. Reproductive Health
592. Reproductive Health Matters
593. Research for Rural Development
594. Research Journal of Agricultural and Environmental Sciences
595. Research Journal of Finance and Accounting
596. Resources, Conservation and Recycling
597. Restoration Ecology
598. Revue de Médecine Vétérinaire
599. Scholarly Journal of Medicine
600. Science Journal of Clinical Medicine
601. Science Journal of Public Health
602. Science of the Total Environment
603. Science, Technology and Arts Research Journal
604. Scientific Reports

605. Scientific Research and Essays
606. *Semitica et Classica*, International Journal of Oriental and Mediterranean Studies
607. Sexual and Reproductive Healthcare
608. SINET: Ethiopian Journal of Science
609. Singapore Journal of Tropical Geography
610. Sky Journal of Food Science
611. Small Ruminant Research
612. SMART Journal of Business Management Studies
613. SMU Medical Journal
614. SN Applied Sciences
615. SocioEconomic Challenges
616. Soil and Tillage Research
617. Soil Science Society of America Journal
618. Soil Use and Management
619. Sokoto Journal of Veterinary Sciences
620. South African Journal of Communication Theory and Research.
621. Springer Plus
622. Statistics and Applications
623. Substance Abuse Treatment, Prevention, and Policy
624. Surgical Infections
625. Sustainability
626. Sustainability Science
627. Sustainable Water Resources Management
628. Targets and Therapy
629. *Tellus A: Dynamic Meteorology and Oceanography*
630. The American Journal of Tropical Medicine and Hygiene
631. The Brazilian Journal of Infectious Diseases
632. The Electronic Journal on Information Systems in Developing Countries
633. The Ethiopian Journal of Education
634. The Ethiopian Journal of Health Development
635. The FASEB Journal
636. The Geographical journal
637. The Journal of Agricultural Science

638. The Journal of Development Studies
639. The Journal of Earth and Planetary Sciences (Nagoya University)
640. The Journal of Graduate Medical Education
641. The Journal of Modern African Studies
642. The Korean Journal of Parasitology
643. The Lancet
644. The Pan African Medical Journal
645. The Rangeland Journal
646. The Scientific World Journal
647. The International Journal of Gynecology and Obstetrics
648. Therapeutics and Clinical Risk Management
649. Transactions of the Royal Society of Tropical Medicine and Hygiene
650. Transboundary and Emerging Diseases
651. Transcult Psychiatry
652. Trees
653. Tropical Animal Health and Production
654. Tropical Diseases, Travel Medicine and Vaccines
655. Tropical Medicine and International Health
656. Tropicultura
657. Vascular Health and Risk Management
658. Vector-Borne and Zoonotic Diseases
659. Vegetation History and Archaeobotany
660. Veterinary Medicine International
661. Veterinary Parasitology
662. Veterinary Research Forum
663. Veterinary World
664. Viruses
665. Waste Management
666. Water
667. Water International.
668. Water Resource Management
669. Water Science
670. Wayamba Journal of Animal Science
671. Wildlife Research

672. Work, Employment and Society
 673. World Applied Sciences Journal
 674. World Development
 675. World Journal of Agricultural Sciences
 676. World Journal of Animal Science Research
 677. World News of Natural Sciences
 678. Zeitschrift für Geomorphologie
 679. Zeitschrift für Orient-Archäologie
 680. Zoonoses and Public Health

Annex II: Details of Ranked citation count list 100+

AGRICULTURE

Cite	Subject	Author(s)	Journal
288	Land management and impacts on crop production	Pender J, B Gebremedhin	Journal of African Economies
185	Soil organic carbon	Gelaw AM et al	Agriculture, ecosystems and environment
175	Grazing land management	Gebremedhin B et al	Agricultural Systems
174	Agricultural technologies	Hailu BK et al	International Journal of Food and Agricultural Economics
168	Drought risk and irrigation need	Araya A, L Stroosnijder	Agricultural and Forest Meteorology
167	Spatial variability of soil properties	Tesfahunegn GB et al	Soil and Tillage Research
164	Effects of tied ridges and mulch on barley	Araya A, L Stroosnijder	Agricultural Water Management

162	Productivity and land enhancing technologies	Ersado L et al	American Journal of Agricultural Economics
158	Organic carbon and nitrogen association with soil	Gelaw AM et al	Land Degradation and Development
143	Bovine brucellosis	Berhe G et al	International Journal of Applied Research in Veterinary Medicine
142	Agro-climatic classification for crop suitability zoning	Araya A et al	Agricultural and Forest Meteorology
123	Adoption of sorghum technologies	Wubeneh NG, JH Sanders	Agricultural Systems
120	Effects of conservation agriculture on runoff, soil loss and crop yield	Araya T et al	Soil Use and Management
100	Removal of rock fragments and its effect on soil loss and crop yield	Nyssen J et al	Soil Use and Management,

ENVIRONMENT

Cite	Subject	Author(s)	Journal
585	Investment in soil conservation	Gebremedhin B, SM Swinton	Agricultural Economics
381	Effectiveness of exclosures	Mekuria W et al	Journal of Arid Environments
256	Effectiveness of stone bunds	Gebrenichael D et al	Soil Use and Management
250	Sediment deposition and pedogenesis in exclosures	Descheemaeker K et al	Geoderma
247	Runoff and sediment-associated nutrient losses	Girmay G et al	Journal of hydrology
231	Runoff on slopes with restoring vegetation	Descheemaeker K et al	Journal of Hydrology.
225	Reservoirs characteristics and sediment deposition	Haregeweyn N et al	Land degradation and Development
206	Evaluation of stone bunds to control soil erosion	Nyssen J et al	Soil and Tillage Research
199	Sediment yield variability	Tamene L et al	Geomorphology

197	Community natural resource management of woodlots	Gebremedhin B et al	Environment and Development Economics
190	The effects of exclosures in restoring degraded grazing lands	Yayneshet T et al	Journal of Arid Environments
175	Modeling the effect of soil and water conservation	Hengsdijk H et al	Agriculture, Ecosystems and Environment
175	Household waste disposal	Tadesse T et al	Waste Management
174	The impacts of watershed management on land use and land cover	Alemayehu F et al	Resources, Conservation and Recycling
171	knowledge on climate change and their coping strategies	Mengistu DK	Agricultural Sciences
169	Litter production and organic matter accumulation in exclosures	Descheemaeker K et al	Forest Ecology and Management
166	Desertification: re-photographed after 140 years	Nyssen J et al	Science of The Total Environment
158	Evaluation of environmental degradation	Feoli E et al	Agriculture, Ecosystems and Environment
156	Trend and variability of rainfall	Hadgu G et al	Academia Journal of Agricultural Research
155	Species composition and diversity of forest fragments	Aerts R et al	Plant Ecology

155	The effectiveness of loose rock check dams for gully	Nyssen J et al	Soil Use and Management,
152	Toxicological assessment of heavy metals.	Gebrekidan A et al	Ecotoxicology and Environmental Safety
151	Contour furrows for in situ soil and water conservation	Gebreegiabher T et al	Soil and Tillage Research
150	Assessment of gully erosion rates	Nyssen et al	Earth Surface: Processes and Landforms
148	Effects of land use, slope gradient, and soil and water conservation structures on runoff	Taye G et al	Physical Geography
146	An assessment of restoration of biodiversity in degraded high mountain grazing lands	Asefa DT et al	Land Degradation in Africa
143	Urban energy transition and technology adoption	Gebreegiabher Z et al	Energy Economics
139	Sediment dynamics and the role of flash floods in sediment export	Vanmaercke M et al	Journal of Soils and Sediments
134	Gully head retreat rates	Frankl A et al	Geomorphology
134	The Environmental History	Kathryn AB et al	African Archaeological Review
126	Assessing the performance of a spatially distributed soil erosion and	Haregeweyn N et al	Land Degradation and Development

	sediment delivery model		
120	Sediment yield variability	Haregeweyn N et al	Catena
119	Linking long-term gully and river channel dynamics to environmental change	Frankl A	Geomorphology
118	Demographic responses to drought	Ezra M	International Journal of Population Geography
116	Integrated watershed management	Haregeweyn N et al	Environmental Management
114	Sediment-bound nutrient export from micro-dam catchments	Haregeweyn N et al	Land degradation and Development
113	Assessing the sustainability of forest management	Balana BB et al	Journal of environmental management
112	Spatial analysis of land cover changes	Belay KT et al	Land Degradation and Development
109	Spatial analysis of groundwater potential	Fenta AA et al	Hydrogeology Journal
105	Some aspects of climate variability	Conway D	Ethiopian Journal of Science
102	Land-use changes and their impacts on soil degradation and surface runoff	Gebresamuel G et al	Acta Agriculturae Scandinavica
102	Estimating soil loss using USLE	Brhane G, K Mekonen	Journal of American Science

100	Reservoir siltation in the semi-arid highlands	Tamene L et al	Earth Surface: Processes and Landforms
-----	--	----------------	--

HEALTH

ite	Subject	Author(s)	Journal
501	Teaching mothers to provide home treatment of malaria	Kidane G, RH Morrow	The Lancet
322	Incidence of malaria among children living near dams	Ghebreyesus TA et al	BMJ
269	Determinants of antenatal and delivery care	Tsegay Y et al	International Journal for Equity in Health
230	Factors associated with utilization of contraceptive	Alemayehu M et al	BMC Pregnancy and Childbirth
209	An ethnobotanical study of medicinal plants	Teklay A et al	Journal of Ethnobiology and Ethnomedicine
171	Treatment outcome of smear-positive pulmonary tuberculosis	Berhe G et al	BMC Public Health
157	Prevalence, impacts and medical	Tolossa FW, ML Bekele	BMC Women's Health

	managements of premenstrual syndrome		
144	An ethnobotanical survey of plants of veterinary importance	Giday M, G Ameni	SINET: Ethiopian Journal of Science
141	Feeding practices, nutritional status and associated factors of lactating women	Hailelassie K et al	Nutrition Journal
139	Source reduction of mosquito larval habitat to reduce malaria transmission	Yohannes M et al	Tropical Medicine and International Health
135	Nutritional status of adolescent girls from rural communities	Mulugeta A et al	Ethiopian Journal of Health Development
135	Ethnobotanical study of traditional medicinal plants used by indigenous people	Mesfin K et al	Journal of Medicinal Plants Studies
135	Prevalence of anemia and associated factors among	Gebre A, A Mulugeta	Journal of Nutrition and Metabolism

	pregnant women		
125	Application of nursing process and its affecting factors among nurses	Hagos F et al	Nursing Research and Practice
124	Cervical cancer screening service uptake	Bayu H et al	PloS One
122	Serological survey of bovine brucellosis in barka and arado breeds	Mekonnen H et al	Preventive Veterinary Medicine
121	Use of insecticide treated nets by pregnant women	Belay M, W Deressa	Tropical Medicine and International Health
120	Visceral leishmaniasis and HIV	Lyons S et al	Tropical Medicine and International Health
119	Echinococcosis/hydatidosis: its prevalence, economic and public health significance	Kebede W et al	Tropical Animal Health and Production
112	Task shifting and sharing to achieve comprehensive	Gessesew A et al	International Journal of Gynecology and Obstetrics

	emergency obstetric care		
110	Assessment of indigenous knowledge of medicinal plants	Yirga G	African Journal of Plant Science
107	Intention to use long acting and permanent contraceptive methods	Gebremariam A, A Addissie	Reproductive Health
107	Risk factors for iron deficiency anemia	Adish AA et al	Public Health Nutrition
105	Knowledge about obstetric danger signs	Hailu D, H Berhe	Plos One
104	Sanitary conditions of food establishments	Kumie A, K Zeru	Ethiopian Journal of Health Development
103	Level of adherence and predictors of adherence to the Option B+ PMTCT programme	Ebuy H et al	International Journal of Infectious Diseas es

Annex III: Impact Factor Score of Journals 100+

Journal Name	IF Score
The Lancet	79.32
BMJ	39.89
Resources, Conservation and Recycling	10.204
Science of The Total Environment	7.963
Waste Management	7.145
Energy Economics	7.042
Journal of environmental management	6.789
Ecotoxicology and Environmental Safety	6.230
Geoderma	6,114
Agricultural and Forest Meteorology	5.734
Journal of Hydrology	5.722
Soil and Tillage Research	5.374
Soil and Tillage Research	5.374
Agricultural Systems	5.37
Academia Journal of Agricultural Research	5.317
Catena	5.198
Land degradation and Development	4.977
Land Degradation and Development	4.71
Agricultural Water Management	4.516
Nutrition Journal	4.281
Agriculture, ecosystems and environment	4.241
Agriculture, Ecosystems and Environment	4.241
Earth Surface: Processes and Landforms	4.133
American Journal of Agricultural Economics	4.082
International Journal of Infectious Diseases	3.623
International Journal of Gynecology and Obstetrics	3.561
Journal of Soils and Sediments	3.308
PLOS ONE	3.24
Environmental Management	3.2
Geomorphology	3.19
Public Health Nutrition	3.182

BMC Public Health	3.18
Forest Ecology and Management	3.126
BMC Pregnancy and Childbirth	2.938
Journal of American Science	2.917
Journal of Nutrition and Metabolism	2.89
Soil Use and Management	2.67
Soil Use and Management	2.67
Preventive Veterinary Medicine	2.670
Agricultural Economics	2.585
Tropical Medicine and International Health	2.519
International Journal for Equity in Health.	2.378
Reproductive Health	2.295
Journal of Arid Environments	2.211
Plant Ecology	1.829
Hydrogeology Journal	1.718
Tropical Animal Health and Production	1.559
Environment and Development Economics	1.51
African Journal of Plant Science	1.504
Agricultural Sciences	1.476
Journal of Ethnobiology and Ethnomedicine	1.391
BMC Women's Health	1.353
African Archaeological Review	1.29
Physical Geography	1.086
Journal of African Economies	0.905
Acta Agriculturae Scandinavica	0.81
Ethiopian Journal of Health Development	0.725
Journal of Medicinal Plants Studies	0.43
International Journal of Applied Research in Veterinary Medicine	0.34

“Standing on the Shoulders of Giants”

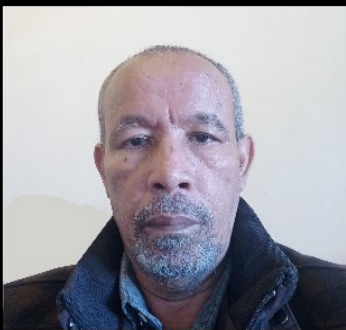
Sir Isaac Newton

Tigray: Bibliography and Bibliometry 1996-2021

For the last two years the attention of the whole world is drawn to Tigray. World leaders and lay people in the streets alike grieved about the inhumanity, but at the same time marveled at the stamina and discipline of the people of Tigray for not only surviving the devastating multi-national invasion but also for the swift and humiliating counter offensive on the invaders. The economy and the livelihoods in Tigray are ravaged; but there is something that the war could not eliminate: the soft component of the socioeconomic organization. Knowledge created through research, unlike infrastructure, is indestructible. A bibliography of research output is analogous to a seed-bank which plays an enabling role for a successful postwar restoration. This book has compiled and analyzed the huge volume of research output in the three decades before the war. Those who are directly or indirectly engaged in the restoration and those who would like to give a helping hand should keep this book as their companion.



Defiant Scholars of Tigray under a year-long siege founding the Institute of Biotechnology



Yohannes Aberra Ayele- PhD, Associate Professor (Geography, Environment, and Development); Educated in Addis Ababa University and Delhi University (Delhi School of Economics); Served in teaching and research in Bahir Dar and Addis Ababa Universities for 30 years, in BA, MA, and PhD programmes; Published several articles and book chapters, co-edited a book on pastoralist development with IPSS; Participated in international projects as researcher; Served in academic administrative posts; Visiting research fellow at IDP-Tokyo-Japan; Been to six African countries for workshops.