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CHINA-ETHIOPIA COOPERATION ON TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) : TERMS, MOTIVES AND FUTURE PROSPECTS

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Various studies have been carried out on China-Ethiopia general cooperation. However, studies on the field of China-Ethiopia educational cooperation are rare. China-Ethiopia Technical and Vocational Education and Training cooperation compose a vital part in China-Ethiopia cooperation. Therefore this thesis analyzes the Ethiopia Technical and Vocational Education and Training cooperation with China.

The purpose of this research is not only to uncover the Technical and Vocational Education and Training cooperation reasons, inputs, outcomes, and cooperation forms between China and Ethiopia, but also to look into the political and economic background of the cooperation, as well as to question the cooperation’s morality and efficiency in order to contribute to improving the cooperation. The research question is: how do Ethiopia and China cooperate on Technical and Vocational Education and Training, and what are the political and economic intentions? The data of this thesis mainly comes from empirical studies, academic publications, policies, and news. Because of the international neo-colonial phenomena and the controversial discussions on China-Ethiopia cooperation, the Post-colonial theory is also applied to guide the research conduction. Because of the variety of research data, the qualitative content analysis method is applied in analyzing the data. Through applying the methods, empirical studies are reviewed and discussed, policy implementations are examined in the research.

As a result, the researcher uncovered the Technical and Vocational Education and Training in Ethiopia and China and the formation of the cooperation forms. The successes and challenges are introduced. The paradox of the cooperation formation of China providing Technical and Vocational Education and Training assistances for Ethiopia has also been analyzed from a post-colonial perspective. Moreover, aside from the fact that the cooperation supported by both will continue in future, the researcher analyzed the influences and effects of Ethiopia-China cooperation in national, regional and global levels. This research provides recommendations for further cooperation as well as further academic research. This thesis contributes not only to better understanding of China-Ethiopia relations and education cooperation, but also to the debate of China neo-colonizing Ethiopia with education as a soft weapon.
Acknowledgement

Thanks to the inter-university double degree cooperation between the master’s program in education and globalization of Oulu University and the master’s program in African studies of Dalarna University, I have the opportunity to produce this thesis as an extension of my research in African Studies program in Dalarna University. Therefore, it is important to note that this thesis and the thesis for African Studies program have a significant part of the same content, mainly on the theoretical study part and research results part. However, this thesis is more profound on showing data collection and data analysis. Based on the thesis of African Studies program, this thesis also demonstrates the research process in conducting the research. The paradox of the post-colonial perspective in the cooperation between Ethiopia and China concerning Ethiopian Technical and Vocational Education and Training and its cooperation with China is also discussed and evaluated in this thesis.

It is very important for me to acknowledge the constant help and assistance I received from my supervisor -- Professor Maria Järvelä. I deeply thank her for her professional support and kind understanding. I am also very grateful to Professor Rauni Räsänen for her generous help and academic advices during my research, and for her help in proof reading my theses. I own my deepest respect to the program of Education and Globalization in Oulu University for its excellent and inspiring academic teachers, helpful and understanding faculty members, and strongly motivated and productive fellow student colleagues. I own my deep appreciation to all the teachers and fellow classmates in the African Studies program in Dalarna University for providing me the academic foundation and the precious opportunity to study in Oulu University. I am also thankful for my supervisor Professor Tekeste Negash from Dalarna University for his advices and comments in improving my research.

The last but not the least, my parents and my husband have my deepest gratitude for their ultimate spiritual and financial support as well as constant encouragement and assistance. Without my parents and husband’s support, I would not have been able to devote myself in the academic study and accomplish my education and research in Sweden and Finland.
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List of Abbreviations

AD the Christian era
AGOEAfrica Growth and Opportunity Act
China the Peoples’ Republic of China
COMESA Common Market for Eastern and Southern Africa
EBA Everything But Arms
Ethiopia the Federal Democratic Republic Of Ethiopia
EPRDF Ethiopian People's Revolutionary Democratic Front
FOCAC Forum on China-Africa Cooperation
GNP Gross National Product
GSP Generalized System of Preferences
IMF International Monetary Fund
OECD Organization for Economic Co-operation and Development
RMBY Chinese currency Ren Min Bi
SPFS Special Program for Food Security
TVET Technical and Vocational Education and Training
UNFAO United Nations Food and Agricultural Organization
1 Introduction

The topic of this research is Ethiopian Technical and Vocational Education and Training and its cooperation with China. In this research, Technical and Vocational Education and Training includes “skill levels ranging from functional /workplace literacy programs to advanced technical skills, delivery within institutional and workplace contexts, and training for both unemployed and employed participants” (Geoff, 2001). For the readability of the research, I use TVET as a short form for Technical and Vocational Education and Training.

In the research, I chose word “cooperation” instead of “collaboration” because almost all the relevant data I found used the word “cooperation” to indicate Technical and Vocational Education and Training communication and exchange between China and Ethiopia. Most of the empirical data used in this research adopted the term “post-colonization” instead of “neo-colonization”, and even though the differences between two terms are controversial, most academics I quoted did not differentiate them in this topic. Therefore, throughout this research paper, I do not differentiate “post-colonization” and “neo-colonization” either. As a matter of fact, neo-colonizing is used in this research as a verb, and post-colonizing as adjective for the process.

1.1 Reasons for the research

China has been seen as one of the newly growing powers in the current world. China also has become the biggest debt owner of the United States of America (Murse 2012), and “is becoming Africa’s main lender” (PB. 2006). A report prepared by the IMF and World Bank shows “China is the largest of six new creditor nations” (PB. 2006). Both developed countries and developing countries are paying attention on the diplomatic development of China, especially its cooperation with other regions and countries.

Being a Chinese person with study background in African Studies and Education, I am particularly interested in the country of Ethiopia not only because its potential in developing its education and its current educational cooperation with China, but also because the growing career opportunities created by the Chinese and Ethiopia educational cooperation.

From the empirical study, I found that researches and reports have been published focusing
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on China and Ethiopia cooperation in economic field such as economic investment (e.g. Gebre Egziabher 2006; Lumumba-Kasongo 2007, 8-16; Li 2009, 49), debt transferring and cancellation (see World Bank indicators - Ethiopia - official development assistance 2012); in social areas such as national cooperation sectors (e.g. Xinhua China Daily 2012), human rights and safety discussions (e.g. Xinhua China Daily 2007); and in political fields like challenges and prospects in Ethiopia-China relations (e.g. Gamora 2009; Asayehgn 2008). China has been widely analyzed, as an investor in the developing world, including very substantially in infrastructure and extractive industries in Africa (e.g. Rotberg 2008; Foster et al. 2008; Onjala 2008; Afrodad 2008; China Daily 2007) However, Ethiopia has not been separately studied as widely as China. Most significantly, researches about Ethiopian TVET cooperation were rare. The limited numbers of researches focused on TVET cooperation between China and Ethiopia were mostly done in Chinese academia instead of international academia. Therefore, the sector of Ethiopian TVET itself needs more academic research to support its development. Furthermore, its international cooperation, especially its cooperation with China has much potential to research on.

At the same time, it is important to study TVET because it is one of the most efficient ways to produce skilled work force to support economic development. In many kinds of productive and service fields, workers that have been to professional training and have acquired professional skills are the ones who can use natural resources to their largest extent. These workers are important to the development of society and economy. In the modernized competitive industrial and agricultural fields, professional workers who have professional principles and skills are vital to the development of corresponding fields. This kind of work force is able to face the challenges brought by globalization. (Li 2008, 157)

China and Ethiopia started to cooperate on education in the 1950s, which is the same period when China and other African countries started educational cooperation. The cooperation, however, started to groom only after the Sino-African triennial conferences organized by the Forum for China-Africa Cooperation (FOCAC) in 2000. Therefore, this research will mainly focus on the Ethiopian TVET cooperation with China after 2000.

1.2 Thesis structure

The thesis is structured after the logic of the research, which starts with introducing the topic,
and stating reasons of the research. It follows with rising research questions and aims. Thereafter, the thesis directs to answer research questions. In order to proceed the research and to answer research questions, post-colonial theory is chosen to guide the study. Based on data directions and to analyze the data, content analysis method is chosen as a methodological support. After the statement of the theoretical framework and methodology of the research, the research results are reported as a main part of the thesis. With the research results and the open questions remained in research, further discussions are carried out in the thesis. Further possibilities and suggestions for the research are contributed to the discourse. The reliability, validity, and ethical concerns are discussed in the end of the thesis.

To begin the research, I firstly do empirical study based on relevant studies and general research background. As research background, Ethiopian education system is summarized. China Ethiopia relations, as well as China-Africa relations are also stated and discussed.

As theoretical framework, Post-colonial theory and content analysis methodology are used in conducting this research. I use Post-colonial theory as the compass for this research in finding materials and data. The reason I chose Post-colonial theory is because the research topic, and because the relations between China and Ethiopia are debatable and controversial. The theory helps me to stay focused on the topic and not to go too wide. Content analysis is the methodology I chose to analyze my research data, which helps me in collecting and analyzing data under the background of the complex cooperation situations. It also helps in mapping massive information about Ethiopian TVET cooperation with China.

The main body of this thesis is the study results. In order to conclude the study results, research contexts are described and discussed, which includes the background of China-Africa cooperation, China-Ethiopia cooperation, and Ethiopian TVET system. The study results are focused on the Ethiopian TVET cooperation with China. The cooperation is analyzed globally, regionally, and nationally, also in political and economic forms. All kinds of personnel and institutions involved in the cooperation are stated as well. The current and the past educational cooperation has been stated and analyzed. Recommendations and suggestions are provided for developing Ethiopian TVET system. Recommendations also contributed to further educational cooperation and further academic researches.

The research topic together with answered and open research questions are discussed in the
end of the thesis. This part highlights the post-colonial perspective in looking at the Ethiopian TVET cooperation with China. Relevant debatable questions are also discussed in this part of research.

With ethical and reliability concerns, this research is conducted to help understanding the role of the Ethiopian TVET in an international cooperation environment, especially its role in cooperating with China. The research therefore should contribute to develop Ethiopian TVET system, and its cooperation with China. This research also functions as a watch tower, and draw attention to monitoring Chinese current diplomatic principle of mutual complementary, mutual benefit and coordinated development.
2 Research Questions and Aim

The research questions are vital and determine the data selection and the research methods. The research questions also help me to focus and locate my research materials in order to provide credible and academic research results.

The research questions of this paper are:
1. What are Ethiopian Technical and Vocational Education and Training like?
2. Why and how do Ethiopia and China cooperate on Technical and Vocational Education and Training, and what are the political and economic intentions?

The research aims to uncover the Ethiopia-China TVET cooperation landscape since 2000. In order to fulfill the research aim, the deep reasons, processes and challenges as well the results that both China and Ethiopia gain from cooperation on TVET will be explicitly examined and discussed. In order to discover the deep reasons of the TVET cooperation, international relations and national politics as well as economics will be discussed and examined.

To answer the research questions and to achieve the research aims, I break down the main research questions into the following sub-questions, thus the research task is to answer the following questions explicitly:
1. What does Ethiopian TVET system contain?
2. How has Ethiopian TVET been developing?
3. How does Ethiopian TVET function?
4. What are the challenges and problems Ethiopian TVET has solved and is facing?
5. Why do Ethiopia and China cooperate on TVET?
6. In what forms do China and Ethiopia cooperate on TVET?
7. What are the inputs and outcomes of the China-Ethiopia cooperation on TVET?
8. What are the challenges and opportunities in China-Ethiopia TVET cooperation?
3 Theory Framework

The Post-colonial theory is chosen for this qualitative research, which works as a compass in conducting the research. As mentioned before in the introduction, in many post-colonial studies, researchers do not differentiate “Post-colonialism” with “Neo-colonialism”. It is important to note that in this research, the researcher equals “Post-colonial” as “Neo-colonial”.

3.1 Post-colonial theory

I chose Post–colonial theory because it relates to my research objective. I intend to report on the actual results of Chinese Ethiopian educational communication and cooperation on TVET in terms of forms, means, input, and outcomes. I also would like to contribute to the debate of China cooperating with Ethiopia as a way of neo-colonizing, since China has been accused of using educational aids as soft weapons to invade and neo-colonize Ethiopia together with Chinese investments in other fields. For example, “The United States of America (USA) and the European Union have characterized China's growing influential role as a form of neo-colonialism.” (The Monitor 2012) Another example, “United States Secretary of State Hillary Clinton is on record as having cautioned Africa to be careful in their relations with China insinuating that Beijing is out to exploit Africa.” (Embassy of the People's Republic of China 2012)

“In the period after decolonization, it rapidly became apparent (to the newly independent nations, at least) that although colonial armies and bureaucracies might have withdrawn, Western powers were still intent on maintaining maximum indirect control over erstwhile colonies, via political, cultural and above all economic channels, a phenomenon which became known as neo-colonialism.” (Patrick, Peter 1996, 5) Postcolonial, in other words, is applicable not to all of the post-colonial period, but only to that period after colonialism when, among other things, a forgetting of its effects has begun to set in (Dirlik, op. cit., 339)

In the book “the Post-colonial Studies Reader”, the authors have pointed out that: “The Post-colonial theory is composed by a set of branch theories that support the causes of former colonies and present-day neocolonialism against the colonial legacy and imperialism. The theory investigates the effect and legacy of western invasion, occupation, subjugation,
Post-colonialism is a set of theories that fight against colonial legacy and imperialism caused by former colonial countries and present neo-colonizing countries. Fanon (1961) criticized the violence of colonialism and imperialism and advocated intellectuals to play a role in revolutionary social change. “Post-colonialism as an historical period is best understood as a phase of imperialism, in turn best understood as the globalizing of capitalism...” (Patrick, Peter 1996, 21) “Post-colonialism has an unescapable global dimension.” (Patrick, Peter 1996, 21) It is clear some western countries were colonizing some none-western countries as colonizers. However, present neo-colonizing countries is still a vague concept depending on from which perspective academics research on. Based on above quotations, it is hard to connect China as a non-western country to post-colonial theory, and considering China neo-colonizing Ethiopia since China is by itself a developing country (The World Bank 2015), and officially not a capitalist country. However, in this research, I am going to apply post-colonial theory on China Ethiopia EVET cooperation, because China’s active play in the globalized world of today, and the controversial discussions on the topic of China being a neo/colonizing country.

Empirical studies show that Post-colonial approach has mainly been studied through qualitative research methodology. The most influential researchers in the field of Post-colonial studies are Edward Said, Gayatri Chakravorty Spivak, Frantz Fanon, and Dipesh Chakrabarty. Said states that Post-colonialism is formerly under control of the European powers and tracking the immensity of colonialist acquisition and control is less of a problem. “No other set of colonies was as large, none so totally dominated, none so unequal in power to the western metropolis.” (Said, op. cit., 6.) Said’s list of the various modalities of domination indicates an important fact about colonialism – its extreme unevenness: different empires, different strategies, and different levels of territorial penetration. Post-colonial approach is mostly used to analyze social, economic, and political unevenness and injustice.
The trend and direction as well as the findings of the Post-colonial study tend to outline pressures and explorations from the west to the rest, from the first world countries to the third world countries, instead of within the third world countries.

However, Post-colonial theory is also “impacted by other major areas of critical theory: Feminism, Marxism, post-structuralism, post-modernism, and their own internal devotes and complexities also impact on Post-colonial theory.” (Patrick, Peter 1996, 21) Post-colonial theory “introduces cultural and racial dimensions into analysis. The revolutionary pedagogy of Paulo Freire is a post-colonial practice of wholesale liberation from which the contemporary education system could learn a great deal, if it dared.” (Patrick, Peter 1996, 21) From this point of view, China-Ethiopia TVET cooperation has potential to be analyzed with Marxism, post-structuralism, post-modernism, cultural, and racial dimensions of post-colonial theory, which I will spread out in the following part of research.

Nowadays, the cultural perspective of post-colonizing has been studied as an important part of the post-colonial theory, since “Cultural borders are becoming recognized as a critical region of colonial and neo-colonial domination, of cultural erosion, and of class and economic marginalization.” (Bill, Gareth, Helen (eds.) 1995, viii) “Post-colonial special relations are likely to be dominated by a power struggle to shore up the boundaries of the nation-sate against all those forces which would ignore or bypass them.” (Patrick, Peter 1996, 12) In this research, Ethiopia and China are two independent cultural units with their own cultural regions. Through TVET cooperation, they exchange knowledge on TVET education, which is one part of all cultural exchange activities between Ethiopia and China. Since China is mostly exporting elites as trainers and equipment support to Ethiopia, China could be seen as aiding Ethiopia in TVET. However, because the cooperation and cultural exchange itself, most human and hardware support are imported from China to Ethiopia, at the same time, China also benefits from supporting Ethiopia by employing the educated man force, therefore, China could as well be considered to culturally neo-colonize Ethiopia.

Economically, “The need for a constantly expanding market for its goods chases the bourgeoisie over the whole surface of the globe. It must nestle everywhere, settle everywhere, and establish connections everywhere.” (Marx, Engels 1973, 71) “For others, however, ‘the search for markets as an explanation simply does not hold. A much more plausible explanation is the search for low cost labor forces.’” (Immanuel Wallerstein, Historical
Capitalism, London: Verso, 1983, 39) Above quotations from economic perspective explain that despite that China is ran by a communist party, China cooperates with Ethiopia on TVET as a way to eventually expand Chinese market to Ethiopia.

Specifically from the labor force perspective, slavery was a result from the colonial time, which directly transferred labor or slaves from Africa, Asia to the colonizing countries or colonized lands. In a post-colonizing world, “capitalism take the point of production to the workers, as transnational cooperation endlessly relocate factories to the zones of lowest-cost labor, such as central America or the pacific rim, providing themselves with a workforce which is low-paid, non-unionized, and which will have job security only as long as it stays that way.” (Patrick, Peter 1996, 6) From this perspective, China is expanding its businesses and markets to Ethiopia, which could be seen as China neo-colonizing Ethiopia through TVET program to produce suitable local comparatively cheap labor. Therefore, under this research topic, China is hypothesized to be the “neo-colonizing country” to Ethiopia. The neo-colonizing process is not only exporting cultural heritage to Ethiopia through the TVET communication and supporting, but also through taking Ethiopian educated elites as high standard local labor force, and taking Ethiopia itself as an extended market.

Post-colonialism is an ongoing discourse. Knowing the reasons which caused Post-colonialism helps in analyzing Post-colonial discourse, and the causes for Post-colonialism are the ongoing injustices and unevenness among different societies. At the same time, to understand and to analyze these injustices and unevenness, such as Occident to the Orient in India and the Middle East which was studied by Edward Said (Said 1978), we need the help of Post-colonial approach as a qualitative research method.

3.1.1 The role of China in co-operation with Ethiopia and other African countries

Whether China is neo-colonizing Ethiopia and other African countries has become a debatable topic internationally. For instance, Britain's foreign secretary Jack Straw remarked 2005 in Nigeria “what China was doing in Africa now was much the same as Britain had done 150 years before.” Like Straw, some Western scholars and politicians maintain that China is a new colonizing power, exploiting Africa's natural resources and harming its quest for democracy and human rights.” (Junbao 2006)
However, "June 18, 2005, Chinese Prime Minister Wen Jiabao said in Egypt, … that the cap of neo-colonialism could never adorn the head of China." (Junbao 2006). The "Beijing Declaration of 2006" stresses the policy of non-interference in domestic affairs, and declares that Sino-African relations are based on political equality and economic cooperation. Because of the international announcement of the non-alignment diplomatic policy of China, and the "Beijing Declaration of 2006", some academics support that China and Africa are doing fair trade and Africa has total control towards their economics, politics, and national societies, as well as the amount of Chinese investments. (Junbao 2006)

Moreover, the educational investments and cooperation from China to African countries have been seen as soft powers penetrating into Africa. However, advocators for China argue that financial aids and other investments from China are without political conditions, and are very helpful for African economies. For instance, in 2005, the rate of China's contribution to Africa’s total economic growth was at least 5%. Simultaneously, China buys African resources at a fair price to fuel its rapid economic growth. (Junbao 2006) “In practice, China not only buys natural resources from Africa but helps the continent construct infrastructure such as schools and hospitals, and provides it with technology.” (Junbao 2006)

“It may be that individual states come to rely on China more than China relies on them, but if Beijing keeps to the principle of non-interference in domestic affairs, the political systems of the individual states whose economies heavily depend on China will not end up being controlled by Beijing. China cannot be recognized as a colonizing power but only as a hegemonic power if it can influence African countries' domestic affairs without undue interference.” (Junbao 2006)

Since Ethiopia-China cooperation on TVET is based on the China-Africa cooperation context, the China-Africa relations are studied as a general and regional background.

Since 2000 the Sino-Africa cooperation has developed rapidly in all areas. China is also playing an important role in African issues. Liu Hongwu analyzed the Sino-Africa cooperation on an Asian-African cooperation level, and from a perspective of human development history. He thinks Africa has been marginalized in the old western-centered world, while Africa-China relationship has always been considered to be important in Chinese diplomatic development. He also thinks Sino-Africa relationship will have a great
contribution to a prosperous, fair and harmonious international environment. (Liu 2007, 15-22)

Outstanding young Chinese academics such as Liu Naiya, Liu Haifang, Pan Huaqiong, Zhang Zhe, Yang Baorong, Luo Yuanyuan, Wang Hongyi, Zhang Yongpeng, Gu Jianxin, Jiang Hengkun, and Luo Jianbo, Yuan Wu have respectively conducted studies on

1. Sino-Africa human resource cooperation,
2. Sino-Africa relationship,
3. cultural exchange,
4. debt issues,
5. China threat theory,
6. Chinese diplomatic strategies towards Africa,
7. inspiration from international education aid from China to Africa,
8. Darfur issues and the Chinese positions,

Chinese scholar Li Anshan analyzed African Chinese relationship from a globalization perspective. He took the Chinese peaceful development environment as study background. He thinks Chinese policies towards Africa have developed through three big turns. They are:

Table 1: Three big turns of Chinese policies towards Africa according to Li Anshan

<table>
<thead>
<tr>
<th>1. The transformation of ideology</th>
<th>From emphasis to equalize</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Communication areas</td>
<td>From singularity to multiplicity</td>
</tr>
<tr>
<td>3. Cooperation forms</td>
<td>From aids to Africa to equally win-win cooperation</td>
</tr>
</tbody>
</table>

Li Anshan thinks the Sino-Africa relationship is shown in

1. country leaders’ communication,
2. emphasis on equality in cooperation,
3. and focuses on win-win cooperation,
4. as well as a standardized cooperation system. (Anshan 2006; Anshan 2007; Anshan
Luo Jianbo brought up the study topic of Africa integration. He thinks politics, economics and trade as well as education are the supporting pillars for Sino-Africa cooperation. The Africa Integration encouraged China to have multiple diplomatic communications with Africa. (Luo 2007, 276-329) Since 1990s, the cooperation between China and Africa has expanded. The academic studies about Africa and China have transferred from history and culture to trading and investments, technical cooperation and foreign aids. (Zhang 1990, 23-25) There are also an enormous amount of studies in the west on China-Africa relations. “In the near past, the Asian - African Bandung conference of April 18 to 25, 1955 had a great effect on the establishment of modern diplomatic relations between China and the African countries. At the conference, there were representatives from Liberia, South Africa, Libya, Egypt, Sudan and Ethiopia (Fraser 1956; Gaye 2007).” (Gamora 2009)

In 1956 and 1957, Chinese delegations visited Ethiopia, Sudan and other African countries. From January 30 to February 1, 1964 (Fraser 1956, 1418; Gaye 2007, 5), the Chinese Premier at that time, Chon En Lai also visited a number of African countries including Ethiopia. (Gamora 2009) However, Ethiopia did not establish diplomatic relations until November of 1970.

“After the Cold War, China has directed its attention more to economic, and to some extent political aspects, and developed bilateral relations with Ethiopia and many African countries in an all-round way, without encouraging the features of new world order such as democracy, good governance, human rights and political transparency.” (Gamora 2009, 3) With the development of China-Africa relations, “Chinese activity in Africa has increased very fast from year to year. Today, China can get most African countries’ attention easily, because of its principles and policies.” (Gamora 2009, 3) “Africa-China relations are asymmetrical in favor of Africa on the political front because of Africa’s massive voting clout at the UN and other international bodies like the IOC and the WTO.” (Adams 2009) Moreover, “In terms of geopolitics Africa wields some considerable political power that China even benefits from, just as Africa benefits from China’s economic aid and investments in Africa”. However, there are other scholars who think China-Africa relations promote equality. “Africa-China relations are asymmetrical in favor of China is a largely exaggerated notion. Instead, the relationship is thus largely symbiotic and mutually beneficial:
• Africa has shown enough political muscle to counterbalance international decisions in favor of China.
• China is helping Africa through aid and favorable investments.
• Soft power or cultural diplomacy offers a promising path to an equilibrium.” (Adams 2009)

To understand the spreading of the Post-colonial thought, different academics have carried out researches from different perspectives. Marx and Engels analyzed Post-colonialism through economic lenses. Examining the analysis of Marx, Engels, and Wallerstein, the significance of labor forces has clearly lasted from colonial time till present time. Only the forms of labor exploration became more diverse. For instance, colonialism during the era of slavery in 17th and 18th centuries was more focused on exploring labor forces and raw material, while transnational corporations at present time are more obviously focused on exploring both labor forces and markets. In the sense of labor forces, corporations have offshore businesses that allow them to transfer assembly or other forms of work to labor centered countries to take advantage of the cheap work forces. In the sense of markets, corporations locate their product chains internationally in order to not only take advantage of local resources but also to sell products to local markets. This phenomenon is part of globalization.

In this research, the idea of expanding markets and labor forces as reasons of neo-colonialism directs also the data collection to find evidence of exploring labor markets through educational cooperation. As it is mentioned earlier that China has been suspected of taking education as a way of neo-colonizing. I will specifically talk about the case of China and Ethiopia in the following part.

In the case of China cooperates with Ethiopia in the education sector, if we apply the economic lenses of Post-colonialism by Marx and Engel, mentioned above. Can we interpret it in a way that China is taking the educated Ethiopian elites as high standard local labor force, and taking Ethiopia itself as an extended market? The following parts of the research will contribute to the answers.

If China is really neo-colonizing Africa including Ethiopia, then it would be obvious that neo-colonialism exists also among the third world countries, from south to south,
economically and politically. Through applying the Post-colonial theory to this research, I intend to contribute to the paradox of China has been neo-colonizing Ethiopia with education as a soft power.

3.2 Post-colonial theory in China-Ethiopia relations and cooperation

Ethiopia and China cooperation on TVET is intergraded in the whole China-Ethiopia cooperation. To understand the reasons of TVET cooperation, it is also important to understand Ethiopia-China relations, and the general background of their cooperation.

The People’s Republic of China established diplomatic relations with Ethiopia on November 24, 1970. “In 1972, China financed the Wereta - Weldiya road across Ethiopia's Rift Valley. Between 1998 and 2004, the Chinese contributed to 15% of the cost of Addis Ababa's ring road (Ethiopia paid the rest).” (Deborah 2011) In recent years, cooperation between China and Ethiopia has been an intensely discussed topic internationally with diverse Chinese investments in Ethiopia in all sectors. In 2009, “Chinese direct investment to Ethiopia has reached $900 million, making Ethiopia one of China’s biggest investment destinations in Africa.” (Ethiopolitics 2009) Just to highlight, the $900 million investments from China to Ethiopia is per year. IMF and OECD have been critical about Chinese investments and debt into Africa in general. They declared the Chinese investments, which are different from the western traditional investments, to be a capital risk and unsustainable model. (Martyn 2010)

Contemporary relations between China and Ethiopia started from communications on higher ministerial level. Cooperation between them started on economic fields and then transferred to educational fields. The cooperation forms first established were decided by higher levels of China’s and Ethiopia’s governments. Ethiopia received economic aid from China, and China invested in Ethiopia economically. During the process of this cooperation, ministerial and academic conferences were held gradually. Summarized from the data I found that Ethiopia and China always had good communication on higher governmental level, and the exchange of high-level visits consolidated the momentum.

The relations of China and Ethiopia during and after the transitional government of Ethiopia have been strengthened as Prime Minister Meles Zenawi visited China in 1995. The visit was reciprocated by the president of China who visited Ethiopia in 1997. Further high–level
visits followed. As stated in the foreign affairs and national security policy and strategy of the Federal Democratic Republic of Ethiopia in 2002, “currently China has very good relation with Ethiopia.” The document adds, “We should pay special attention to the strengthening of relations with China. (Ethiopian Foreign Policy Document, 2002:27)” (Foreign affairs and national security policy and strategy of the Federal Democratic Republic of Ethiopia in 2002; Gamora 2009)

“Ever since the dawn of the new millennium, bilateral ties have registered new progress within the context of China-African Cooperation Forum, October 2000, which adopted a program towards the creation of a new type long-term and stable strategic partnership between China and Ethiopia. The two sides mutually consulted on a series of prominent international issues, cooperated closely, and supported each other. In December 2003, Ethiopia, in collaboration with China, hosted the second ministerial conference of the Forum on Sino-African Cooperation (FOCAC). This was the first time the Ministerial Conference was held on the African continent. The year 2006 was seen to be the year for China-Africa relations. January 2006 the third China-Africa Forum was held in Beijing in which 48 African heads of state and government participated. The Beijing Summit released a new ‘China’s African Policy Paper’, which reiterated China’s declared policy of respect for national sovereignty, and non-interference in the internal affairs of other states. The paper confirmed the five cornerstones of China’s African Policy declared by former president Jiang Zemin in 1996, which are “sincere friendship, equality, unity and co-operation, common development, and looking to the future”.” (Gamora 2009)

3.2.1 Ethiopian high level representatives’ relation to China

On 24th November, 2000, on the celebration of 30 years of diplomatic relations between China and Africa, the Ethiopian ambassador in China Mr. Addis Alem Balema expressed his wish to enhance the China-Africa cooperation especially in the area of financial investment. He said, nowadays, there are more and more Chinese companies investing in Ethiopian textile industry, agriculture, road construction and hydroelectricity plants. To encourage trade and investments, China and Ethiopia have signed a series of treaties. The bilateral trading volume is not very big but it has kept growing 30% each year for the last eight years. (Ma 2000, 11-25) According to Chinese official media, Mr. Addis Alem Balema hoped to enhance the cooperation on human resource development between Ethiopia and China. In
my interpretation, the cooperation on human resource development necessarily includes also cooperation on education since education is one of the key issues in developing human resources. At the same time, Addis Alem Balema also hoped that Ethiopia could establish communication with Chinese experts from all kinds of fields and communicate more often. He encouraged starting cooperation on fertilizers, natural gas, medicine, refinery, irrigation and other fields. (Ma 2000, 11-25) The encouragement speech also referred to the cooperation opportunity on TVET between China and Ethiopia. By the year of 2000, four provinces in China, Si Chuan, Hu Nan, He Nan, and Zhe Jiang, were planned to be direct cooperation partners with Ethiopia. (Ma 2000, 11-25)

On 6th of November, 2004, the Ethiopian business partner forum was held in the Diaoyutai State Guesthouse. Ethiopian Prime minister Meles had a speech to the Ethiopian and Chinese entrepreneurs on the forum. Mr. Meles said that Ethiopia is one of the least developed countries in the world, while China is the biggest developing county. The economic development of Ethiopia and China can complement each other well. Especially in recent years, with the rapid development of Chinese economy, Chinese products gradually became affordable for millions of Ethiopian consumers, and the tight trading relations developed rapidly. For Chinese entrepreneurs, Ethiopia has potential for investment and development in agriculture, human resource development, infrastructure construction and tourism. Meles welcomed Chinese investors to go to Ethiopia. He also said that China and Ethiopia are geographically far away, but China and Ethiopia both are ancient civilizations, and have kept their friendship for centuries. He stated that since signing the economic and technical cooperation agreement in 1971, Chinese government has provided fruitful economic, technical, medical, and cultural aid to Ethiopia, which helped Ethiopian’s economic and social development. (Gao 2004, 12)

3.2.2 Main reasons for Ethiopia to cooperate with China

Currently, Ethiopia’s quest for development has led it to forge closer relations with China. Through empirical studies, I hereby summarize seven points to explain the reasons for Ethiopia to cooperate with China.

Firstly, Ethiopian government’s priority is to fight poverty and backwardness (Embassy of The Federal Democratic Republic of Ethiopia in London, Core principles of Ethiopia’s
Foreign Policy: Relations with Neighboring Countries. 2015, and Ethiopia needs to seek foreign aids, loans, investments and arms supply from China. Meles Zenawi said at the 2006 forum on China–Africa cooperation, “Our challenge now is not to fight colonialism, but fighting poverty and backwardness and achieving economic independence. Africa needs the support of its friends to overcome these challenges”. (African Business 2006, 39) This statement explains Ethiopia’s disposition towards China.” (Gamora 2009, 4) “During the two days official visit of Chinese Foreign Minister Yang Jiechi, Prime Minister Meles called upon the Chinese government to extend development assistance to Ethiopia.”(Ethiopian Herald 2008, 1)

Ethiopian Foreign Minister Seyoum Mesfin also said, “China is an important partner for us. It is involving in the area of our priorities such as agriculture, infrastructure including roads and rural hospital and Schools” (The Daily Monitor 2008, 1; African Business 2006, 39) An example of financial aid and loans offered from China to Ethiopia is in 2003, the second phase of the Addis Ababa Ring Road opened. Zero–tariff export items to China increased from 130 to over 440. China has financed a number of development projects in Ethiopia, including the Gotera flyover project in Addis Ababa, which is under construction with 60 million RMBY and construction of Maganagna - Kebena - Menelik Hospital and Kebena Bridge - Arat Killo Road Project with 40 million RMBY. Some Chinese enterprises have also been involved in Ethiopia’s construction sector. (The Daily Monitor 2008, 1)

Secondly, China supports Ethiopia’s development without political attachments. China has been supporting Ethiopia’s economic development by rendering help in areas such as financial aids, debt reductions, loans and technical assistances without any political strings attached except for the one China Policy. (Gamora 2009, 3) “Whenever Ethiopia sought Chinese aid, loan, investment and arms, the latter has responded positively by providing debt reduction and technical assistance to Ethiopia with no political strings attached.” (Final report by Ethiopian Economics Association/ Ethiopian Economic Policy Research Institute (EEA/EEPRI) To FES, Addis Ababa, Ethiopia 2009, 17) Further, “Ethiopia has received over US $500 million in concessional loans from the Chinese government and a further US $1.5 billion of investments in telecoms infrastructure, as well as US $ 1.5 billion in short-term trade credits.” (The Daily Monitor 2008)

Thirdly, Ethiopia also sees China as an alternative to the West. For example, China has
offered to compensate good any shortfall in assistance following the suspension of European Union aid due to the alleged human rights violations during and after the 2005 Ethiopian election. Hence, China’s foreign policy of non-interference has helped Africans and Ethiopian leaders to act freely in their dealings with China. In addition, the Beijing Summit in January 2006 released a new China’s African Policy Paper, which reiterated China’s declared policy of respect for national sovereignty and non-interference in the internal affairs of other states. (Gamora 2009, 3)

Fourthly, China is seen as the “most reliable trading partner” to Ethiopia. (Vines 2007, 214) “Ethio-China trade relation reveals that China was the first top trade partner of Ethiopia in the year 2006 and coupled with the 2005 election crisis.” (Gamora 2009, 3)

Fifthly, China was one of the first governments to congratulate the EPRDF (Ethiopian People's Revolutionary Democratic Front) on its ‘electoral’ victory. Like Savimbi in Angola who was supported by Mao Zedong in the 1960s and then Reagan in the 1980s, Meles and the EPRDF are supported by China and US. (Gamora, Mathews 2010, 96) “Chinese Foreign Minister on his part underlined his country’s interest to further strengthen the existing good relations with Ethiopia.” (African Business 2006, 3-4)

Sixthly, “China’s development is also considered as a role model for Ethiopia. In the past two decades, China has helped millions of its people out of poverty and transformed itself from a backward agricultural country into a country with the highest growth rate in the world. (Gaye 2008, 15-19; Ndubisi 2006, 16)” (Gamora, Mathews 2010, 96) Moreover, there is a very practical yet profound reason for the appeal of China’s model to Ethiopia: its historic achievements in economic reform and national construction and its successful leap from a backward to developing nation. (Obiorah 2006; Gamora, Mathews 2010, 96)

Seventhly, “China is also a diplomatic ally of Ethiopia on different issues such as democratization process and human rights at international forums like the United Nations and G-77.” (Gamora 2009) Moreover, “China is a major global power in geo-political and economic competition with the US, EU and other major and emerging powers such as India.” (Gamora 2009)
3.2.3 Main attractions for China to invest in Ethiopia

There are many reasons for Chinese government and Chinese enterprisers to invest in Ethiopia. Hereby I state five major reasons. Firstly, Ethiopia has a stable political and economic environment, and a stable and safe social environment in spite of its diverse landscapes, two main religions of orthodoxy Christianity and Islam, and 80 races.

Secondly, Ethiopia with a population of about 81.5 million people according to a UN publication is potentially a very lucrative market for Chinese products, trading and investment opportunities. (Gamora 2009) The massive population also makes Ethiopia one of the largest markets in Africa.

Thirdly, Ethiopian products benefit from preferential treatment in many parts of the world. According to European proposal 3 of Everything But Arms (EBA 3) and the Africa Growth and Opportunity Act (AGOA) of the United States, Ethiopian products have preferential treatments when entering European and American markets. Besides, many Ethiopian products with Generalized System of Preferences (GSP) can enter the markets of Australia, Canada, Finland, Japan, Norway, and Sweden, the United States, and most of the European countries. At the same time, Ethiopia is a member of Common Market for Eastern and Southern Africa (COMESA), thus Ethiopian products can have preferential tariff treatment in the common market of 20 countries in east and south of Africa with 353 million populations in total. Ethiopia is also a member of African Caribbean and Pacific Ocean organization (ACP). This entire international environment provides attractive conditions for international investors.

Moreover, Ethiopia can provide raw materials to fuel Chinese industrialization. The products China exports to Ethiopia are light industrial products, hardware and building materials, mechanical and electrical products, pharmaceutical and chemical products, textiles and clothing and the National Cereals, Oils and Foodstuffs. Among them, light industrial products take almost 50% percent of all exports from China to Ethiopia. The products China imports from Ethiopia are: Tantalum, leather products, natural gum, coffee, frankincense, and myrrh.

Furthermore, "Ethiopia could be a commercial launch pad for Chinese companies and China
is also getting diplomatic support from Ethiopia for its policy on Taiwan among others.” (Final report by Ethiopian economics association/ Ethiopian economic policy research institute 2012, 16) There are also several factors egging China to look towards Ethiopia especially in terms of Ethiopia’s strategic importance and market potential. (Ibid.)
4 Methodology and Data Processing

Striving to be as objectivity as possible and doing justice to the research, I chose to combine Post-colonial theory with content analysis method to conduct the research. Content analysis is chosen as the analysis method because it helps in locating and analyzing data, as well as answering the research questions. The post-colonial theory controls my data selection, and makes sure the research data is located within the field of education and the topic of Post-colonial study, while content analysis makes sure the data I collect and use are from all voices and are not totally subjective, or imbalanced. I collected all data regardless of negativeness or positiveness, also not limiting the sources of the data, which include reports, official documents, international academic researches, etc. In this way, the data I collected covers all sectors related to China-Ethiopia educational cooperation.

4.1 Content analysis and its application in the research

In this part, definitions of content analysis are introduced. How content analysis contributes to conduct this research and how it is applied in the research is also explained in this part of thesis.

There are various scientific definitions of what content analysis is. For example, Franzosi pointed out that content analysis was initially created as a tool for quantitative analysis. (Roberto 2004 548). Carney argues that the content analysis process has different kinds of sieves for choosing which one or ones to use. (Carney 1972, 75) Berelson states that, “content analysis is a research technique for the objective, systematic and quantitative description of the manifest content of communication”. (Bernard 1952, 18) Krippendorff stresses, "it is also for making replicable and valid inferences from data to their contexts". (Krippendorff 1980, 21) Krippendorff has also brought an interpretive qualitative approach to content analysis, which means studying and interpreting the text from a hermeneutical point of view. (Krippendorff 2004, 17)

In this research, the qualitative approach of content analysis is chosen and applied for data analysis. According to Hocking, a quantitative approach of content analysis is only concerned about the words in the text, so that it is easy to fail in noticing the meanings that could be found from the context. Different from quantitative research, a qualitative approach
concentrates on both implicit and explicit concepts, so that the researcher has more freedom to see not only the words but also the concepts in the bigger context and then treat them as individual cases. (Huckin 2003, 15)

According to Krippendorff, data used for qualitative content analysis includes not only written material but also art, images, maps, sounds, signs, symbols, and even numerical records. (Krippendorff 1980, 19) This research will focus not only on the words of data but also the context of the articles, which included some of the elements mentioned above.

“Content analysts have to know the conditions under which they obtain their texts, but, more important, they also have to be explicit about whose readings they are speaking about, which processes or norms they are applying to come to their conclusions, and what the world looks like in which their analyses, their own reading, and their readings of others’ readings make sense to other content analysts.” (Krippendorff 1980, 30) With different contexts, data may lead to different analysis results. Therefore, contexts are vital elements for the analysis process. The actual meaning of the text is the core that the content analysis is trying to find. (Gillham 2000, 71)

Therefore, in conducting this research, while I locate words and content of the data, I also pay attention to the wider contexts, which include educational, social, political, and economic backgrounds. The results of applying a qualitative content analysis method will be shown in the data analysis and study result part of the research. In this research, data is selected with the Post-colonial theory as the framework. The context is the Ethiopian Technical and Vocational Education and Training, and China-Ethiopia educational cooperation. The context details are categorized into different fields, which will be stated in the data analysis part of this thesis.

Three qualitative methods of content analysis are applied in this research. Firstly, the thematic method is applied in this research, which means that instead of looking for individual words, certain themes are looked for. According to Krippendorff, these thematic distinctions can be very rich in information, yet at the same time, it can be challenging to maintain their reliability. (Krippendorff 2004, 110) Krippendorff also noted, “Thematic connotes combination of categories. (Aron, 1950) motifs (Thompson, 1932), imagery, and thoughts (Krippendorff 2004, 4)”. In this research, I mainly use related key words from the
research questions and their sub questions as research themes.

Secondly, the relational analysis method is applied in this research. According to Huckin (2003), there are two basic methods in content analysis. The first is conceptual analysis where the meaning is looked for inside the concepts, which are found through mechanical coding of the text. On the other hand, the relational analysis also identifies the concepts, but rather than concentrating on them, it focuses on the relationship between the concepts and looks for the answer from the relationship. (Huckin 2003, 14) The latter method is used in the research. Thus, I firstly clarify concepts about Ethiopian TVET, and relationships between China and Ethiopia. Through them, I look for answers why Ethiopia and China cooperate on TVET.

Thirdly, the problem-driven analysis is applied in the research. Krippendorf talks about problem-driven analysis: there is a question and a problem, which needs to be answered and the answer lies in the text. (Krippendorff 2004, 343) The problem-driven analysis, which looks for answers to corresponding questions from existing data, is used in this research. Hence, I divide the main research question into its sub-questions that direct me to categorize and find out appropriate data to match research questions. In addition, during the research-conducting period, I ask topic related questions to redirect my data collection and analysis. My research questions are answered and concluded in the Result section.

For the content analysis method application, the actual analysis process was carried out as follows. As the first step, in order to apply content analysis methodology into data analysis, I firstly obtain a big amount of general background knowledge by wide reading, tracing relevant news, watching videos, talking to people related to the research. While reading, I also collect citable references to support my research conduction. This also contributes to my data collection and data categorizing.

Secondly, I apply the analysis method of content analysis design, which locates texts and results, inputs and outputs of the analysis in a chosen context. According to White and Marsh, in content analysis the research questions or the hypothesis determine the units, which are used for analyzing the texts. (White, Marsh 2006, 30) The “units” refer to an element of coding, a theme that emerges from the text, which can be a word or a larger unit. In this research, themes and key words are used as units in finding citable data. White and Marsh
also stated that, in a qualitative content analysis the object is transferable, which means the findings of the text should be purposive and theoretical. (White, Marsh 2006, 36) So when collecting data, it is important to find all the relevant data connected to the phenomenon in the text, which is also what I kept in mind.

Thirdly, mainly the inductive approach is applied in this research: “Data are collected that relate to a focus of inquiry… The data are not grouped according to predetermined categories. Rather, what becomes important to analyze emerges from data itself, out of a process of inductive reasoning.” (Maykut, Pamela, Morehouse 1994, 126-127) I collect data with focus on research related questions, themes, and key words. I review data before I categorize it, and it is easy to trace back the data to their resources, which helps in finding full information in all related areas on each topic. I pay attention to be as objectively as possible so that there are no positive or negative emotions added to the data. However, the categories of the original data are not completely fixed as I might need to change categories of data when I re-examined them according to the contexts of the research.

All in all, I apply the systematic framework to conduct qualitative content analysis provided by Krippendorff. The prescriptive purpose of this framework is “to guide the conceptualization and design of practical content analytic research.” (Krippendorff 2004, 29-30) The methodological purpose of this framework is “to point to performance criteria and precautionary standards” researchers can apply in evaluating ongoing content analyses. (Krippendorff 2004, 29-30) The framework employs the following components: Firstly, “A body of text, the data that a content analyst has available to begin an analytical effort.” (Krippendorff 2004, 30) Secondly, “a research question that the analyst seeks to answer by examining the body of text.” (ibid.) Thirdly, “an analytical construct that operationalizes what the analyst knows about the context.” (ibid.) Fourthly, “inferences that are intended to answer the research questions, which constitute the basic accomplishment of the content analysis.” (ibid.) Lastly, “to validating evidence, which is the ultimate justification of the content analysis” (ibid.)

This systematic work process is mainly applied in categorizing, analyzing and interpreting the data. Results from this content analysis method can be seen throughout this research report. The study results, for instance the list of main attractions for China to invest in Ethiopia, are concluded from applying this method.
4.2 Data analysis processes

Above, I illustrated some processes of data collection and data analyzing. The following part, I will demonstrate more specifically how my database was formed and analyzed.

This research applies study centers based data collection, which means I do not directly use the data from field studies. Instead, I mainly use second hand resources from study centers such as libraries, research centers, whose publications from Ethiopia are also in the English language. To make sure this study is as comprehensive and accurate as possible I collect data in two languages: English and Chinese.

Firstly I make some background studies as mentioned above. Besides that I talk to relevant people, watch relevant videos, search and read all relevant materials I can find in English and in Chinese to obtain a general picture of the background. The materials generally provide extensive background information about politics, sociology, and economic areas. Some of the materials are not strictly focusing on the field of education. The table below is shown as an example where I targeted my research background reading.

### Table 2: Background Reading Examples

<table>
<thead>
<tr>
<th>Data Categories</th>
<th>Data Sources Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books, relevant researches</td>
<td>From libraries and online</td>
</tr>
<tr>
<td>Academic articles</td>
<td>From ERIC database, CNKI database, journals</td>
</tr>
<tr>
<td>News</td>
<td>From internet such as BBC</td>
</tr>
<tr>
<td>Bureaucratic official websites</td>
<td>OECD</td>
</tr>
<tr>
<td>Reports</td>
<td>From conferences and IGOs such as the World Bank</td>
</tr>
<tr>
<td>Forums</td>
<td>The Nordic Africa Development Policy Forum</td>
</tr>
<tr>
<td>Official documents</td>
<td>Such as publications from Ethiopian government</td>
</tr>
<tr>
<td>Others</td>
<td>Archives and Unpublished Materials</td>
</tr>
</tbody>
</table>

ERIC database: World’s largest digital library of education literature

CNKI database: China Academic Journals Full-text Database

Except the data I collect above, I also locate my data in Chinese language from Chinese academic publications. To do so, I research on all the Chinese universities that provide African Studies as educational and research programs. I have also gone through data
published by African Study Centers in China.

As the second step, I start to formulate the database. I select and file stable data and materials from different places. The data selected is informative, to my mind reliable, and can be traced back, and covers all aspects. All the material selected in this step relates to education. The keywords of the materials are Ethiopian TVET, China-Ethiopia/Africa Education cooperation, and China-Ethiopia Education, China-Ethiopia TVET, China Neo-colonize, China-Ethiopia relations.

From the background reading part, I take the “Forums” as one type of data resource to give an example:

**Table 3: Example of database formulating process in the type of “Forums”**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Read all relevant Forums</td>
<td>The Nordic Africa development policy forum</td>
</tr>
<tr>
<td>2</td>
<td>Forums’ parts selected into my database</td>
<td>Themes such as China and India in Africa</td>
</tr>
<tr>
<td>3</td>
<td>Content in the forums selected into my database</td>
<td>What Can Africa Learn from China’s Experience in Agricultural Development? (Xiaoyun Li &amp; Gubo Qi. August 7, 2012.)</td>
</tr>
</tbody>
</table>

Criteria used in selecting data from all forums:
1. Education and cooperation related;
2. with key words of: China, Ethiopia, cooperation, and Africa;
3. with clear and reliable citations and contacts of authors;
4. informative, and can be traced back.

Thirdly, I categorize the data and materials.

1. All material and data is categorized into two big categories:
   1) Chinese publications;
   2) International publications in English.
2. Among these two big categories, I separate them into smaller categories of:
1) official documents and speeches;  
2) academic articles and researches;  
3) news and reports from newspapers and internet;  
4) cited interviews published on magazines and reports, which were done by journalists.  

Lastly, basing on all the three big steps of background study, database formulation, and data categorization, the final research database is been formulated. Data is directly examined and analyzed. Data examples can be seen in the citations of research and the reference list. Data analysis results can be seen in the study results part of this research.

The actual data analysis process is explained to make the process as clear and transparent as possible.

Firstly, I clarify my research questions. To do so, I look back to my research questions and their sub-questions and write down each question.

Secondly, I analyze the data according to my research questions and objective. This includes the following small steps:

1. I collect question-relevant data from different categories of the database. This is done by locating the key words from the corresponding research question. For instance, the key words relate to the research question “What areas within TVET do China and Ethiopia cooperate on?” are “areas/fields”, “China and Ethiopia”, “China-Ethiopia”, “Sino-Ethiopia”, or “Chinese Ethiopian”, and “cooperate or cooperation”, “Technical and Vocational Education and Training cooperation” etc.

2. In order to obtain all related information from my data, I also look for potential topic-related synonyms of the selected key words. In this research context, synonyms of “areas” would be “field(s)”, “subject(s)” and “school(s)”; and synonyms of “China and Ethiopia cooperate” would be “Sino-Ethiopia cooperation”, “invest” and “educational aid”.

3. From the results, I select data evenly spread within different categories. For example, to answer question 1, I try to collect the same amount of academic articles, news,
official documents, and internet forum resources. Sometimes, there is more information available in one category than in others, and then I choose data according to its reliability and credibility by where it comes from and its supporting materials.

Thirdly, with the question-related key words I locate answers of the questions in the available data. I look for answers with the principle of using data as informative resource without preference for any political or social idea or opinion. To do so, I firstly categories data base on each branch research questions, then I write a small summery when I process each pieces of data of reports, journals, and academic articles, and news, and etc. finally, I locate the answers by key words base on the summaries.

Fourthly, with consideration of the reliability and researcher’s ethics, I conclude the findings and summarize answers for my research questions. In this step, the research results are finally produced.

Because a lot of manual works are also involved in data collection and categorizing, I have to admit any unconscious subjectivity which might involve in data interpreting and processing. For example, when processing data from articles and publications in hard copies I mostly need to summarize it and then add to my database manually, and the translation and summarizing of data are based on my own understanding on the topic and the data. However, throughout the research, I try to keep the whole data selecting and analyzing process as transparent and objective as it could be.
5 Research Results

In order to study the Ethiopian TVET cooperation with China, it is important to know the educational background and the cooperation background. Therefore, in this part of the research, I firstly provide an introduction of the general education system and the history of TVET in Ethiopia (Figure 1 and Table 4), followed by a brief introduction of Chinese education and Chinese TVET (Figure 2). Secondly, I state the findings of TVET cooperation between Ethiopia and China from different scales in political and economic perspectives. Finally, I sum up the empirical findings and analyses of taking educational cooperation as a tool of neo-colonizing, and locate the case of TVET cooperation between Ethiopia and China in the context. In the end, my personal analyses and opinions are contributed to the ongoing discussion.

5.1 Ethiopian Technical and Vocational Education and Training

5.1.1 Development of Ethiopian TVET

The figure below illustrates the Ethiopian education system. The Ethiopian education system has three stages, which are primary education, middle school education and higher education. Primary school stage has two parts, which are from the 1st grade to the 4th grade and from the 5th grade to the 8th grade. It is worth highlighting that graduated and dropped out students from these two stages of primary school can also join TVET programs and then get corresponding basic levels of Vocational qualification certificates, which can be seen from the figure 1.
Figure 1: Entry requirements, program duration and certification levels


Ethiopian formal education has less than 100 years of history. In its early time, it mainly cultivated governmental officers. There were almost no primary and middle schools in rural areas. There were also no certified technicians in rural cities. The following table 4 contains brief information on the Ethiopian TVET history.

Table 4: Ethiopian Technical and Vocational Education and Training Chronicles

<table>
<thead>
<tr>
<th>Years</th>
<th>Chronicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>The Ethiopian TVET started, but developed slowly in the following</td>
</tr>
</tbody>
</table>
Before 2001 | Ethiopian TVET were on the beginning stage. There were 23 TVET schools in the whole Ethiopia, which include 13 public and 10 private schools. Besides, there were 25 Skill Training Centers all over Ethiopia.

2001 | Ethiopian government started the Giant Mode of Capacity Building Strategy. As an important component of this strategy, TVET entered a phase of rapid development.

2004 | By 2004 Ethiopia has founded 183 agricultural and non-agricultural TVET schools, 132 were public and 51 private schools. These schools are spread throughout Ethiopian regional cities.

2004 to 2009 | There were 27 times more students enrolled in TVET programs than 2000.

The table is designed according to data from (Meng, Liu, Wang 2007).

The Ethiopian government implemented a capability development strategy that focused on human resource development, enhanced bureaucracy systems development and increased working efficiency. The Ethiopian government opened agricultural technical vocational education to improve agricultural productivity and to improve the development of agricultural economy. The federal government invested more than 1 billion US dollars in total, opened 25 agricultural technical vocational schools all over Ethiopia, which offer the following majors: botany, animals, house stocks, veterinarian, natural resources and agricultural cooperation. The schools mainly recruit rural middle school and high school graduates. In 8 years, the agricultural technical vocational schools have educated more than 680,000 students to stimulate Ethiopian agricultural and economic development. (Ministry of Agriculture, P. R. C. 2008)

Ethiopian TVET are under reforming and construction. The final goal is to build a TVET system that oriented by employment rate, bases on market needs, and stimulates the national economic development. Ethiopian government made capability development strategy that focus on human resource development, enhance bureaucracy systems development, and increase working efficiency. Ethiopian government takes the measure of opening Agricultural technical vocational education to push agricultural productivity and to push the development of agricultural economy. The federal government invested more than 1 billion
US dollars in total, opened 25 Agricultural 3 years technical vocational schools all over Ethiopia, which have 5 majors covered botany, animals, house stocks, veterinarian, natural resources and agricultural cooperation. The schools mainly recruit rural middle school and high school graduates. In 8 years, the Agricultural technical vocational schools have educated more than 680,000 students, which made up the human resource to stimulate Ethiopian agricultural development and, furthermore, economic development. (Ministry of Agriculture, P. R. C. 2008)

5.1.2 Efforts made by Ethiopian government in supporting its Technical and Vocational Education and Training

Programs are better focused and well divided

According to the national industrial development, Technical and Vocational Education Training all over Ethiopia have opened about 40 programs of Agriculture, machinery, electronics, business, construction, textile, medicine and health, law, etc. All these programs are supported by the government because of the need in corresponding economic development.

Improvement in education quality

Ethiopian Ministry of Education made the syllabus for each professional course. The syllabus mostly adopted Curriculum Development Mode, which focuses on practical and scientific side of knowledge with more than 70% of learning are from actual practice. Through cooperation with German TVET schools, Ethiopia enhanced its TVET schools’ designing and building.

Not only did Ethiopia invest in building the teaching and living infrastructure, Ethiopia has also bought a big amount of teaching and learning equipment for TVET schools. 40 TVET schools have developed and proved to be three years TVET schools with 50 occupational standards and Professional Testing Centers. Half of the TVET teachers hold master’s degrees. All teachers passed short-term on-the-job training. Besides, a big amount of teachers were hired from China, India, Cuba, volunteers from Japan, South Korea, Nigeria had also participated in Ethiopian TVET programs. (Hongmei, Yi, Guomin 2008)
Improve ability of organizing and management

Ethiopian government paid much attention on TVET by setting a series policies and developing strategies for TVET. TVET are under charge of the minister of the Federal Ministry of Education. There is a quality assurance department, a Curriculum Development Department, Research and Development Department. The bureaucratic system is shown as the graphic below.

Federal Ministry of Education

Quality Assurance Department

Curriculum Development Department

Research and Development Department

The board of education in each state

Each TVET school and program

The federal government is mainly responsible for policymaking, curriculum development, and quality assurance, as well as international cooperation. Each state government is responsible for appropriation budget, teachers hiring, and teaching quality monitoring, as well as evaluation of each local TVET school. Eventually, federal government together with state governments plan appropriation budget together for TVET.

Ministry of Agriculture has also founded specialized management institutions to take charge
on agricultural TVET. The board of education in each state points people to take responsibility for TVET programs.

By the year of 2005, Ethiopian TVET programs already had obvious progress. TVET schools with different programs were built all over Ethiopia. Enrollment of female students reached 51.1%, which is higher than male students’ enrollment.

The intention of TVET was to satisfy the need of professional and practical work force in all fields, and to make sure students have specialized skills. Therefore, TVET programs were designed to fit the local needs while fitting for the Ethiopian national requirements. Some of the former trainees had become professionals and specialist in their field of work. This happened especially in the fields of construction, engineering, textile industry, garment industry, and service fields, such as business, hotel, and tourism.

From 2005 to 2010, with the guidance of the third Education Sector Development Program, Ethiopian TVET focused on reducing poverty. The programs tended to make agriculture focused industry possible, by providing sufficient and skilled human resource. In 2005, information and communication technology has been introduced into TVET to improve the quality of training. (Hongmei, Yi, Guomin 2008, 157) Currently, the main plan of TVET sector is to cultivate more students into professionals with technologies and skills in agriculture field who are able to support the agricultural development in rural places in Ethiopia. (Hongmei, Yi, Guomin 2008, 157)

Improve the Ethiopia Technical and Vocational Education and Training cooperation environment

Ethiopian government has taken the following effort in creating a better international TVET cooperation:
1. Promoting Technical and Vocational Education Training became a developing strategy of Ethiopia.

The shortage of work force with high technologies and high quality are part of the reasons Ethiopia have been facing economic dilemma. Ethiopian government decided to invest more in education in order to support the need of economic and societal development, and to
stimulate the growth in economic. Ethiopian government therefore made plans to cultivate all kinds of high quality professionals in all fields of study as a developing strategy. The core of the strategy is TVET, which means producing a big amount of practical professionals according to national environment to satisfy the need of professionally skilled work force from different fields.

2. Invest more money into education, and spread compulsory education. Ethiopian government promised to input more than 4% of each year’s gross national product (GNP) into education to improve educational environment, spread compulsory education, and to buy advanced educational equipment, so that to increase the proportion of educated Ethiopian people.

3. Found schools all over Ethiopia to make sure students have schools nearby where they live. Because TVET directly educate work force to support society development, the TVET schools are evenly spread all over Ethiopia in cities and towns so that to increase the student enrollment. As a side benefit, students can live at home to reduce their economic burdens while receiving education.

4. Learn from the past experience in short-term training programs, and emphasize on fulfilling the shortage on teaching materials, and supporting continuous training for teachers. Moreover, Ethiopia is mending the education and training policies and educational strategies. Ethiopia is also selecting majors, which have tight connections to economic development, so that to make sure students are connected to practical work after education.

5. Ethiopia has implemented many measures to prevent a lack of teachers. Measures include firstly, constantly recharge and educate teachers on their working positions in order to keep teachers upgraded for continuous teaching. Secondly, open distant education for both students and teachers, so that TVET schools with outstanding teachers can teach and share teaching experience to teachers and students in other TVET schools. Thirdly, encourage teachers to go for further education in vacations. For example, in summer, every teacher has to participate in training in teacher’s training base to have further study. In this way, while recruiting more teachers, old teachers can as well keeping their teaching positions. Fourthly, the salary of teachers is kept as high as
governmental officers. Furthermore, being teachers are seen as been promoted as glorious jobs in Ethiopia.

6. Attract foreign investments and aids into education, and further multinational cooperation in education. Ethiopian government hires teachers internationally from China, India, and Cuba.

5.1.3 Current funding system of Ethiopian Technical and Vocational Education and Training

Ethiopian government took TVET as an important mean to enhance development. The government also intends to increase the usability of human resource through TVET. Though, due to the backwardness in economic development, Ethiopian TVET lack of funding support for a long time, which makes it difficult to keep good balance in schools in terms of scales, quality, structures, and outcomes. Lack of funding has also made it difficult to construct the system for TVET.

Ethiopian National Technical and Vocational Education and Training Development Plan

Ethiopian government made a National TVET Development Plan, which encourages all kinds of ways to collect funding for Ethiopian TVET so that to cut down public financial expenses.

Public TVET and private TVET in Ethiopia have their own separated funding systems and principles. From the funding system of TVET, we can see the attitude and investment of Ethiopian government into Ethiopian TVET system.

Funding of Public TVET schools is mainly from Ethiopian government, partially from donations from society. Funding of federal and state owned public TVET institutions are provided respectively by federal government and state government according to their budget planning. Though, in some states, the financial issues are decided by local city level government, for instance, Addis Ababa. Additionally, public TVET get funding from tuitions and through cooperation with enterprises. Donators only in special cases can directly
donate to specific schools. The ways donators contribute is through capital investment.

Some Ethiopian private TVET schools are opened by business organizations, charity associations, churches, and NGOs etc. These schools are normally self-financed instead of getting support from government. Also, these schools usually charge tuitions. However, the government might reward some outstanding private TVET schools. Enterprises opened private TVET schools are mostly financed by the tuition fees from students and potential employers. The purpose of enterprise-owned TVET schools is to train newly employed workers and to improve working skills of senior workers.

Reasons of Ethiopian Technical and Vocational Education and Training financial limitations

Nowadays, with the development of Ethiopian TVET, the financial funding became diverse, but lack of funding still is a common problem. The funding for Ethiopian education is mostly coming from Ethiopian government. The finance for Ethiopian TVET mainly comes from governmental financial expenses and state charged educational taxes. Within the Ethiopian TVET budget, educational funding is far behind the developing need of the Ethiopian TVET.

According to the third National Educational Development Planning goals, from 1998 to 2002, Ethiopian government have raised the input in Ethiopian TVET from 177.5 million Birr in 1998 to 322 million Birr in 2002, which takes 5.9% of the whole Ethiopian education input. Moreover, according to the Ethiopian TVET Development Plan, during 1998 and 2002, there would be twice as much student enrollment in TVET. Therefore, even though Ethiopian government raised the investment in TVET, the funding for TVET was still not enough. (Jutta 2006, 23, 24, 27, 33, 61)

Donations coming from society are mainly from social organizations and international organizations, and some donations are done in the form of investments from companies and enterprisers. (Xiaoqun J.; Yulan L. 2008, 16) Funding from international organizations and educational aids from foreign countries are mainly financial support for Ethiopian education and not specifically for TVET. During the third Educational Development Planning, donations from five organizations of German Cooperation Organization, the Italian Cooperation, Japan International Cooperation Agency, and the United Nations Educational,
Scientific and Cultural Organization (UNESCO), as well as the World Bank (IMF), took 33.5% of Ethiopian total educational budget. However, in general, social support is still comparatively limited in the investment of Ethiopian TVET.

Not enough attention is paid on the private investments on Ethiopian TVET market. There is no proper system and policies to promote investments and donations from enterprisers. Employers’ investment into training employees is not sufficiently developed. Moreover, there is no beneficial investment environment for private investments. Private TVET schools do not have capability in supporting work markets. They face problems such as lack of funding, too small scale of schools, low quality and low outcomes.

The Ethiopian Ministry of Education published TVET Financing Strategy in 2003 and TVET Declaration in 2004. The announcements encouraged the spread of the tuition fee system. The tuition fee varies from 60 Birr to 250 Birr according to the program. The Ethiopian Ministry of Education plans to have students take 30% of the training cost. The reality is that in average the tuitions and fee from each student covers only 10% of all invest in cultivating one student.

Speaking of the tuitions, the average training cost in different fields is calculated depending on each training course. The tuition fee is charged by TVET schools and directly taken as part of school financial budget. Students in poverty can apply free tuition positions. Each TVET schools may have no more than 5% tuition free positions among all students. Some TVET schools suggest that the tuition free positions should be canceled. Students in poverty can earn tuition by working for their schools or enterprisers while they study. The suggestion has been practiced in some TVET schools but is not widely applied. Moreover, there are some educational programs outside of TVET programs that are free from tuition. Yet, they provide students with food and living, so it gets hard for TVET schools to even recruit students. (Jutta 2006, 23, 33, 24, 27, 61)

Income generating activities may be productive, but they have no incentive to be more productive. In 2003, with the TVET financing strategy announced by The Ethiopian Ministry of Education, TVET schools are encouraged to hold income generating activities aside from charging tuition fees. In fact, most of the schools have been holding income
generating activities all the time. However, the public financing system does not support the
school to have their own banking account. All the income from activities has to go to the
national financial account, which does not motive the schools to make high quality income
generating activities.

In 2004, the TVET Declaration suggested partial financial independence for TVET schools.
Concerning the income from income generating activities, the declaration announced that,
each public TVET school has rights to use the income left from annual financing budget.
The declaration has also suggested new regulations to the income generating activities. For
example, the TVET schools can have their own bank account to keep all the income left from
the annual budget planning. The TVET schools can use the income according to their
education invests and needs, but the usage of income has to be approved by local
governmental finance authorities.

In general, the income from activities is less than 10% of the TVET financing budget.
Moreover, management skills, cost and accounting techniques required for productive
income generating activities are limited. (Jutta 2006, 23 , 33 , 24 , 27 , 61)

5.1.4 Ethiopian vocational qualification certifying system

High unemployment rate while lacking high quality workers is one of the reasons for the
low productivity of Ethiopia. Ethiopian government plans to reform the whole TVET system.
The problems faced by reformers are how to improve the vocational qualification
certificating system, which include defining qualification standards, certification and
certification issuing.

Vocational qualification certificates certify the professional standards of workers. It is also
the certifications that prove the workers have received qualified professional education and
are eligible for their work. Certifications are also the connections of education and the needs
of markets. Vocational qualification certificating system ‘refers to fair, objective, scientific
valuation and assessment of works’ skill levels or vocational qualifications, and issues the
qualified people corresponding national vocational certificates according to the vocational
skill standards or qualification requirements established by the government. It is based on
the vocational classification and standards, and conducted by assessment agencies approved
The current Ethiopian vocational qualification certificate system has many kind of skill training which produce all corresponding certificates for its graduates after vocational qualification evaluation. The certifications includes
1. Intermediate level vocational qualification certificate after graduated from grade 10,
2. primary level vocational qualification certificate after graduated from grade 8,
3. and the basic level vocational qualification certificate after dropped out form the 4\textsuperscript{th} grade.

Ethiopian vocational qualification certificate bases on TVET courses and trainings. There is no verifying and evaluation system for personally obtained skills outside of a TVET program. The personnel with skills but not educated in TVET programs cannot get official vocational qualification certificate. (Ethiopia Ministry of Education 2003, 21)

5.1.5 Technical and Vocational Education and Training reforming in Ethiopia

Acknowledging that education is the root of improving the economic development of Ethiopia, Ethiopian government made a set of strategic plans that includes performance on Vocational education certifying system in Ethiopia.

Requirements and capability analysis of different vocational qualification levels

Vocational qualification levels show the professional skills and the knowledge required to accomplish specific tasks. The paragraphs below describes the vocational qualification level analysis process for different working environments, different working fields.

1. basic level vocational qualification:
   Be able to improve basic living conditions, be able to do simple agricultural works.
2. primary level vocational qualification:
   Have knowledge and skills in one specific professional field; be able to accomplish simple tasks in this professional field.
3. Intermediate level vocational qualification, grade 10+1 level:
   Have knowledge and skills in one specific professional field; be able to operate diverse professional activities after training, for example as equipment operating, maintaining,
and repairing.

4. Intermediate level vocational qualification, grade 10+2 level:
   Have intermediate professional technical skills in one specific professional; be able to accomplish various works independently, for example to produce products, operate and mend complex equipment and technical systems.

5. Intermediate level vocational qualification, grade 10+3 level:
   Have intermediate professional technical skills in one specific professional; be able to accomplish various works independently; be able to instruct other people in the professional, for example as being able to evaluate, analyze, operate, maintain, and mend very complex equipment and systems; be able to communicate, coordinate, and manage ongoing projects. (Li 2006, 70)

Vocational qualifications have different requirements according to different programs. Students have to fulfill the requirements in order to get corresponding certificates. For example, Carpenter and welder are 10 + 1 year students and they can obtain intermediate level vocational qualification certificate, grade 10+1 level. Moreover, its vocational qualification level is one year of study with 1280 hours, out of which 960 hours are training at schools and 320 hours are field studies hours. Students can obtain the titles of carpenter and welder after they pass the vocational program. After this, they can apply to study in 10+2 level training programs. In the 10+2 level, students need to obtain organizing capability, they will have to be able to install scaffold, be able to construct both wood and metal roofs, as well as make and weld doors and windows independently.

The courses in each program are connected but remain independent. For example, in the program of construction, there are different courses about architecture material, construction workers training, weld skills training, and scientific drawing etc. Each course has defined both theoretical and practical study time. Students do not have to finish all the courses in a defined period of time. As long as trainees pass all courses and tests in the program, they will get corresponding certificates.

   Occupational qualification standards

TVET has been adjusting its Competency Based Training according to economic development. TVET develops and reformulates teaching syllabus, and spreads training mode
according to the TVET standards. Ethiopian government already made occupational standards for some of the work fields, which provided standards base for the occupational qualification certifying system, and reduced the gap and difference between training content and working markets. The occupational standards are designed according to specific requirements for work, and they provide recruiting measurements for employers, job hunters, and training unites such as TVET schools. Until 2005, Ethiopia has made occupational standards for more than 50 working professions, such as automation, machinery, electronics, architecture, accounting, sales, human resource management etc. (Ethiopia Ministry of Education 2005, 5)

The training standards are built accordingly to the occupational standards. The content and requirements to reach each training standards are stated in each TVET course. The training standards include studying content, training scheme, equipment to be used in training, and training differences in different stages, etc. For example, to be a welder for doors and windows, a student has to be able to accomplish the following tasks stated in the course standards and requirements: cut metals, drilling holes, install windows and doors, welding, metal surface painting etc. Moreover, each step or way of doing the task, relevant knowledge, and accident preventions are specified in the training standards.

Each TVET school decides itself how to reach the training standards. The government hires teachers and specialists from different work fields, and then spreads them into different TVET schools to improve teaching quality. (Li 2006, 70)

Development directions of Occupational qualification certifying system

For this part of thesis, I will just list below informative study results.

1. Developing the occupational qualification certifying system, especially with authorizing and approving the certificates. For example, build authentication scheme database could work for approving occupational qualification certificates.

2. Set regulations for personnel who are in charge of the certificate authorizing and approving. Some of the personnel can be experienced specialist from enterprises. Some other personnel can be instructing teachers from training institutes including TVET Schools. (Li 2006, 70)
Moreover, in order to fulfill the requirements for different levels of vocational qualification certificate, there are the following measurements that should be considered:

3. Set occupational standards according to the needs of government and enterprises.
4. Course designing and examination system ought to be set according to the occupational standards.
5. Set flexible vocational qualification certificates authenticate system according to students with different working target.

5.1.6 Recommendations for developing Ethiopian Training

The Ethiopian TVET should be directed by the needs of market and economic development with a high quality system. In order to do that, besides the recommendations provided in the TVET funding part of the research, there are the following measurements that can be taken into consideration.

1. Improve the vocational qualification certificate system. It includes making Occupation Standard and Occupational Training Standard; and building exam centers and the examination systems. Students have to pass exams to get TVET certifications.

2. Putting more effort in improving TVET quality. It includes small steps of improving school infrastructures, efficient the processes in training programs; investing in improving training materials; improving the study results of theoretical study; building a TVET information exchange network to enhance the communication among schools, enterprisers.

3. Keep improving the quality of teaching teams. Build a teaching system with qualifications and examinations, encourage in hiring competent teachers, and to attract outstanding teachers to join the TVET. In the same time, select some teachers to have study on master’s level or enhance their short term on job trainning. Improve teacher quality through distance learning and using audio-visual instruction; improve teachers’ operation skill training.

4. Encourage more on the society in helping with education improving. For examples,
encourage enterprisers to open training centers and found private schools; encourage schools to cooperate with enterprises; encourage enterprisers, trade associations to participate in making training standards, syllabus, and teaching programs.

5. Build multi-channel financial input mechanisms. TVET is not compulsory education. Investment from the government is still an important way to support it. Though it is also vital to absorb investments and supports from enterprises, communities and NGOs, students shall take part of the expenses too. (The education and training policy and its implementation; education statistics annual abstract 2003-2004) It could be an efficient to allow schools to directly benefit from the funds they collect through their activities, instead of moving it all to a central fund.

6. Improve the management ability of TVET schools, which includes evaluating the TVET management structure to standardize the human resource division.

7. Enhance the course designing ability of TVET schools. Relevant authorities should improve the work quality and efficiency on working through building up the efficiency evaluation system.

8. Build a cooperation system between TVET schools and enterprises to encourage the connection between study and work, also to encourage enterprisers to financially support TVET schools. There can be rewards provided for enterprisers such as, reputation rewarding, taxes reduction, technical skills providing and supporting etc. For example, the government could reduce the educational taxes to certain proportion or on some aspects for the enterprises with private TVET schools.

5.2 Introduction of Chinese Technical and Vocational Education and Training

As it is shown in Figure 2, the Chinese education system has been influenced by the American education system. There are six years of primary education and three years of middle school education.
In China, TVET is given high priority because it is acknowledged that TVET could promote direct economic boost. The enrolment rate in vocational education institutions has been increasing each year. For example, the number of trainees enrolled increased from 3.98 million to 6.65 million between 2001 and 2005.

In the 1980s in China, there was a shift from emphasizing political development to economic development. Vocational education was used as an engine for economic development. Senior vocational education aims to produce highly skilled technicians. In the past 30 years, China's vocational schools and universities have produced more than 50 million highly skilled personnel. This has raised the technical level and structure of the people working in the cities and countryside, promoting the employment and the adjustment of China's structure and contributing to China's socio-economic development. (Ministry of Science P.R.C. 2006, 11-14, 26) “China has made great progress in vocational education models, vocational education methods and instruments, and vocational education research. Much of this has been achieved with international assistance, especially from Germany.”(Xu 2009, 54)
The Chinese vocational education follows the German model of curriculum design and vocational guidance. The goals of Chinese vocational education include an increase in the output of graduates. The Chinese vocational education system is very closely connected with industry. These close connections have resulted in a high number of graduates immediately finding jobs. The central government gives great importance to TVET. Vocational education is also used to promote employment and reemployment. The development of TVET is regarded as an important foundation for economic and social development. The fast development of cities and towns along with the development of the service industry provides an excellent opportunity for the development of vocational education.

The problems identified in the Chinese TVET system include imbalanced development, insufficient investment, poor school-running conditions as well as low standard education structure and quality that cannot meet the needs of socio-economic development.

### 5.3 Ethiopian Technical and Vocational Education and Training cooperation with China

Because of industrialization and economic development, many African countries are in need of a big amount of workers with specialized technical skills. China has been sending teachers to Africa to help African countries developing their higher education and middle school education for more than half a century. China-Africa cooperation on higher level education started in the 1980s and has become one of the very important parts of the whole China-Africa cooperation. It has produced many valuable elites in all fields. (Meng, Liu, Wang 2007, 51)

The cooperation between China and Ethiopia covers basic education, TVET and higher education as well as other areas. Until 2007, 16 Ethiopian universities have established connections with Chinese universities and started scientific research and relevant activities together. The Addis Ababa TVET School which was built with Chinese financial aids adopted the Chinese TVET education model. (Sun, Wang, 2007, 71)

China practices its Out-Going developing strategy with its diverse talent and technology resources through cooperating with Ethiopia on TVET. Ethiopia benefits from the Out-Going policy and the Chinese non-political attachment policy. (Ministry of Agriculture, P. R.)
C. 2008) Ethiopia is supported technically by China, which enhanced the funding and developing of Ethiopian TVET.

All in all, Ethiopia-China cooperates on TVET in many fields. To illustrate the TVET cooperation between Ethiopia and China, the agricultural cooperation is taken as an example.

Ethiopia-China agricultural TVET officially started in 2001. It was founded by Ethiopian government. The specialists in agriculture were provided by China to teach in Ethiopian agricultural TVET schools. The purpose of this cooperation is to provide means for Ethiopia to learn the Chinese agricultural TVET mode, to import Chinese agricultural TVET skills into Ethiopia, and to learn from the experience of Chinese agricultural development. Eventually, cooperation between China and Ethiopia would improve Ethiopian education quality in agricultural TVET programs. As results, Ethiopian TVET would be able to produce more practical agricultural intellectuals independently.

Until 2010, the Chinese Ministry of Agriculture has chosen and sent 293 teachers to Ethiopia, which were sent nine times between 2001 and 2010. Those teachers have educated over 10 000 graduates. This cooperation provided teachers and allowed Ethiopia to start its agricultural TVET program. (Ministry of Agriculture, P. R. C. 2012) Until 2010, Ethiopia has founded 25 TVET schools offering three years study periods. The programs and the graduates made a big contribution to the development of Ethiopian agriculture and rural living. (Ministry of Agriculture, P. R. C. 2012)

5.3.1 Policies and plans towards Ethiopia-China Technical and Vocational Education and Training cooperation

There are international and regional treaties and policies made not specifically for China-Ethiopia TVET cooperation, but China-Ethiopia TVET cooperation do benefit from those policies. Hereby, significant policies and treaties are stated on international, regional, and country level. I shall first discuss these benefits on the various levels of cooperation as well as the academic benefits of the cooperation.
On an global level

NGOs have made positive policies, plans and considerable effort in encouraging cooperation among developing countries. The United Nations Food and Agricultural Organization (UNFAO/FAO) is a good example: “Achieving food security for all is at the heart of FAO's efforts - to make sure people have regular access to enough high-quality food to lead active, healthy lives. FAO's mandate is to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy.”(FAO's mandate) FAO provides techniques to improve agricultural productivity and help in emergency situations such as natural and political disasters.

On a regional level

The regional level includes geographically continental region and politically south to south region. The African continent in general (including Ethiopia) is seeking for international cooperation to achieve food security and reduce poverty. On a regional level, I take Ethiopia as part of the African continent and as one of the developing countries.

Africa has rich agricultural resources, but mainly due to the lack of technological support, they are not fully utilized. Many African countries cannot fulfill their own food needs. At present, development targets of many African countries include developing agriculture and achieving food security. These African countries wish to improve their agricultural productivity and to raise food varieties through international cooperation. (Ministry of Agriculture, P. R. C. 2012)

Ethiopia has diverse agricultural resources. Due to backwardness in agricultural methods, Ethiopia still often faces food crisis, such as the starvation in 2011. Developing agriculture to reach national food security has been taken as an important strategic task in Ethiopia. Ethiopia intends to improve its agricultural productivity through international cooperation on agriculture. TVET is a platform for international cooperation on agriculture. TVET also helps to satisfy basic needs in agricultural working fields.

South-South cooperation is not only for African countries but also other developing countries to have more choices to cooperate internationally to reach food security and reduce poverty.
South-South cooperation means technological and economic cooperation among developing countries. Because most of the developing countries are located in southern hemisphere or southern part of northern hemisphere, it is called South-South cooperation. Most developing countries have similar historical tragedies and face similar challenges after independence. The South-South cooperation provides opportunities for international multilateral cooperation.

To solve the food crisis in low-income countries, FAO proposed the Special Program for Food Security, SPFS. South-South cooperation is part of the FAO SPFS, which aims at improving the lives of the world’s poorest people through improving food productivity, introducing more ways to produce food and to improve the agricultural resistance towards natural disasters. The funds for South-South cooperation in agriculture are provided by donor countries, aids receiving countries, international organizations, third parties as well as FAO. (Ministry of Agriculture, P. R. C. 2009, 3-30) Technical assistance projects intend to support the development of each national project under the instruction of SPFS. The donor countries support donor-receiving countries through providing agricultural specialists and technicians. The specialists and technicians organize trainings and formulate experiments for donor receiving countries to spread advanced experiences, skills, and techniques to help improving agricultural productivity, and to achieve food security of less developed developing countries. (Ministry of Agriculture 2009, 3-27) The purpose of this cooperation is to help less developed countries to improve their agricultural productivity and to reach their food security. (Ministry of Agriculture, P. R. C. 2009, 3-27)

Chinese participation in South-South Cooperation of FAO illustrates Chinese diplomatic policies and Chinese Out-Going strategy. Until 2012, under the frame of SPFS of FAO, China had sent 736 specialists and technicians to Asia, Africa, South Pacific and Caribbean areas of 22 countries to support local agricultural development, which made positive contribution to local food security and economy development. (Ministry of Agriculture, P. R. C. 2012) Conclusively, China is one of the main countries to provide specialists and technicians in the South-South Cooperation plan. China has already made treaties with Bangladesh, Ethiopia, Ghana, Mali, Mauritania, Nigeria, and 14 other developing countries according to regional planning alignment. (Ministry of Agriculture, P. R. C. 2009, 3-27)

China shares its experience of successfully practicing intensive agriculture on small pieces
of lands, which has been practiced for hundreds of years in China. Telfair Tackle from the FAO said that China has also proved its promises by helping other countries to improve their food security, which makes a huge contribution to reach the Millennium development goals and to overcome the food crisis worldwide.

18th of May 2006, China signed an agreement of supporting developing countries with FAO. The Chinese government promised to provide at least 3000 specialist and technicians to help developing countries to improve the productivity for farming and fishing in small scales. (Ministry of Agriculture, P. R. C. 2012) Moreover, Chinese government promised to send Chinese specialists for six years. Each specialist has tasks for three years of time. The specialists are from fields of irrigation, agriculture, animal husbandry, fishery, harvesting, post-processing, etc.

With the influence of Forum on China-Africa Cooperation (FOCAC), especially after the Beijing Summit ON 2006, China-Africa relations have improved. Until 2012, Chinese government has helped more than 40 African countries to launch about 200 agricultural cooperation projects. Among which, projects such as One Hundred Specialists to Africa for aiding, Ethiopian TVET Teachers Sending etc. were organized by the International Exchange and Cooperation department of the Ministry in Agriculture. (Ministry of Agriculture, P. R. C. 2012)

**Within countries**

This level mainly includes policies and agreements made or signed by Ethiopia and China for better cooperation on TVET. For example, Chinese higher education has certain policies for international students, including Ethiopian students. There is a regulation document of Rules on Foreign Students’ Enrollment in China’s Colleges & Universities. (News At 0086, At China 2006) The rules state that to receive and to educate foreign students is part of the national diplomatic work, and is an international obligation in which China should participate. Since the Chinese political reform and policy of opening in the 1970s, it is a developing strategy to enhance international cooperation in education, technology, cultural communication and trading. It is encouraged by Chinese government to learn from foreign elites and to welcome them to contribute to China’s scientific and technological productivity.
In the case of cooperation with China, the Ethiopian Ministry of Education has picked outstanding Ethiopian teachers and specialists from each TVET schools to receive further training in China. China cooperates with Ethiopia by receiving Ethiopian students to study in China, and by sending teachers and specialists to Ethiopia. The cooperation between China and Ethiopia is based on national cooperation programs, and is relying on the support from Chinese universities. Chinese government provides different kinds of scholarships while building up educational aids providing centers, and hold forums for TVET school principles. (Ministry of Education, P.R.C. 2004)

5.3.2 Cooperation starts from the government level

As it can be perceived from the China-Ethiopia relations, Ethiopia and China started communication from political governmental level. In the sense of TVET, the Chinese and Ethiopian governments decided upon cooperation programs and the means to cooperate. Ethiopia cooperates with China on TVET in order to learn foreign advanced skills and knowledge, and to import foreign productive skills. Cooperation on agricultural TVET is one important part of the whole cooperation. Agricultural cooperation is financed by Ethiopian government, technically supported by Chinese government through sending Chinese agricultural specialists to teach in Ethiopia. The program was admitted directly by the Chinese vice prime minister at that time, Wen Jiabao.

5.3.3 Cooperation founded because of the need for market

Economic, politic and social issues are always connected together and influence each other. “A decade ago, Chinese companies building the ring road complained they couldn't find enough local skilled workers. The Ethiopian government asked China to establish a college that would focus on construction and industrial skills. The fully equipped Ethiopia-China Polytechnic College opened in late 2009, funded by Chinese aid. Chinese professors offer a two-year degree with Chinese language classes alongside engineering skills. Chinese companies were waiting to hire its first crop of graduates.” (Deborah 2011, 11-30) The citation shows that the school was built under the cooperation between Ethiopia and China. Moreover, the school contributed to the cooperation by providing qualified skilled workers. China financed the school, but the graduates also contribute to Chinese enterprises. On the one hand, Chinese utilized local human resources. On the other hand, Ethiopia gets its
citizens educated and raised its employment rate. As a result, it is win-win cooperation.

5.3.4 Cooperation supported by academic research

To enhance the educational cooperation between China and Africa, in 2003, Chinese Ministry of Education founded the first educational base for aids to Africa in Tian Jing University, which intends to push the communication and exchanges on TVET between China and Africa. The same year, Tian Jing University founded the African TVET Study Center.

29th of April 2005, African TVET study center was founded in Tian Jing Vocational Normal University. Since then, Tian Jing Vocational Normal University was appointed by the Chinese Ministry of Education to be Chinas vocational education aid center. The African TVET study center in Tian Jing Vocational Normal University has been studying African TVET development situations with the help from the Department of International Cooperation and Exchanges under Chinese Ministry of Education. (Wan 2005, 4) Until 2005, Tian Jing Vocational Normal University educated more than 200 scholars for 18 countries over Asia, Africa, and Europe. The university has also sent more than 50 teachers and administrators to support the TVET development of some countries in Asia and Africa.

Zhe Jiang University started to participate in the Educational Aides to Africa project in 2001. In 2003, Zhe Jiang University founded the African Education Study Center. In 2004, Zhe Jiang University was approved by the Chinese Ministry of Education to be the direct center for educational aids to Africa. In 2006, Zhe Jiang University held the “Forum of China-Africa University Presidents” for the first time. 14 university presidents from Africa and some Chinese university presidents attended the forum. 2007, Zhe Jiang University founded African Study Center on the center of educational aids to Africa, which provided a platform for multi-disciplinary study on Africa. In 2004, except for Zhe Jiang University, Chinese Ministry of Education has also set up educational centers for aids to Africa in North East Normal University, and Ji Lin Normal University. The educational centers are respectively responsible for Africa-China cooperation on educational management for schools, distant learning, and computer science and communications. In 2008, Chinese Ministry of Education admitted six more educational centers for aid to Africa to fulfill the tasks brought up in FOCAC.
5.4 Efforts made for Ethiopia-China Technical and Vocational Education and Training cooperation

China has taken the TVET cooperation with Ethiopia seriously, which has been demonstrated especially in political and academic fields. Politically, China held governmental conferences and forums to improve Ethiopia-China cooperation. Academically, China has founded many African Study Centers within China to provide profound knowledge about cooperation with Africa and Ethiopia. Actions have been taken both in political and academic forums.

5.4.1 Politically

“There are triennial Forums for Africa-China Cooperation (FOCAC) alternating between Beijing and African capitals. The first one was in 2000 in Beijing, the second was in 2003 in Addis Ababa and the third was in Beijing in 2006. During this forum, attended by almost 40 African Heads of State (more African Heads of State congregating in Beijing than at anywhere else apart from the United Nations Headquarters), China made a pledge to increase the number of scholarships for African students coming to study in China from 2000 each year at the time to 4000 each year by 2009. Obviously, this generous commitment would go a long way to promote Africa-China relations. Clearly, these students would play a significant role in Africa-China relations when they return to Africa and begin to work at institutions, both in the private and public sectors. Seen from the perspective of the African presence in China, this commitment undoubtedly raises the profile of Africans in China.” (Adams 2009)

In 2006, the 19-page document containing the “Beijing Action Plan for Africa-China cooperation” was adopted at the end of the 3rd FOCAC summit in Beijing. A wide range of topics from political, economic and international affairs as well as social development cooperation were discussed in the summit. Among these topics, there was a clear commitment from Chinese government in the field of education:

The Chinese Government decided to
- Help African countries set up 100 rural schools in the next three years;
- increase the number of Chinese government scholarships to African students from 2,000 per year to 4,000 per year by 2009;
provide annual training for a number of educational officials as well as heads and leading teachers of universities, primary, secondary and vocational schools in Africa;
- establish Confucius Institutes in African countries to meet their needs in the teaching of the Chinese language and encourage the teaching of African languages in relevant Chinese universities and colleges”. (FOCAC 2006 Beijing Action Plan 14 - 15)

5.4.2 Academically

Along with the increasing speed of China-Africa cooperation, the Chinese government has invested more in studying China-Africa relations. At present, there are many national projects of China-Africa Cooperation ongoing, for example:
1. on Law responsible by Hong Yonghong;
2. China-Africa Multi-Win Cooperation responsible by Liu Hongwu;
3. China-Africa Sustainable Cooperation System Study responsible by Li Anshan, together with other ministerial level topics. (Anshan 2009, 15)

Academic Conferences about China-Africa cooperation

December of 2006, the Conference of National Wide Researches on African Studies and Aid to Africa was jointly organized by 4 institutions:
1. African Studies Center in Beijing University,
2. Chinese Department of International Cooperation and Exchanges,
3. Department of International Cooperation in Beijing University,

The topics of the conference covered
1. Studies of teaching and learning in Africa, and
2. Chinese aid to Africa.

The subtopics in the area of “Studies of teaching and learning in Africa” included several topics which were discussed in the conference concerning education:
1. The China-Africa educational cooperation and communication.
2. Intellectual education.
4. The construction and coordination of study centers in Africa.

5. The suggestion of building an African studies material database, which was adopted by the Chinese Ministry of Education and university leaders of Beijing University. Almost 100 people including personnel from the Chinese Ministry of Education, Chinese Ministry of Foreign Affairs, and Chinese Ministry of Commerce attended the conference.

African Studies Center in Beijing University has also been arranging communication opportunities for both African international students and Chinese master students to discuss issues about Africa and China cooperation.

African study centers with different focuses in different academic institutions.

The table below illustrates the African study centers in China, and their focuses in study.

**Table 5: Africa related study centers in China**

<table>
<thead>
<tr>
<th>Institutional bases</th>
<th>Chronicles of Centers and their Study Focuses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nan Jing University</td>
<td>African Studies Center focuses on studies about China-Africa agricultural cooperation</td>
</tr>
<tr>
<td>Xiang Tan University</td>
<td>African Issues Study Center founded on 1978</td>
</tr>
<tr>
<td></td>
<td>African Laws Study Center founded on 1998</td>
</tr>
<tr>
<td></td>
<td>Since 2005, studies on the law cooperation and communication between China and African countries.</td>
</tr>
<tr>
<td></td>
<td>2006, the center organized an international conference on “African Law and Social Economic Development”.</td>
</tr>
<tr>
<td></td>
<td>15 scholars from 6 African countries attended the conference</td>
</tr>
<tr>
<td>Yunnan University</td>
<td>African Study Center</td>
</tr>
<tr>
<td>Shanghai Normal University</td>
<td>African Economic Study Center</td>
</tr>
<tr>
<td>Xu Zhou Normal University</td>
<td>Asia-Africa Study Center, organized different forums</td>
</tr>
<tr>
<td>University</td>
<td>African Study Center</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Su Zhou University</td>
<td>Study</td>
</tr>
<tr>
<td>Nan Chang University</td>
<td>Study</td>
</tr>
<tr>
<td>African Issues Study Center of China</td>
<td>Founded in 1979</td>
</tr>
<tr>
<td>African History Study Center of China</td>
<td>Founded in 1980</td>
</tr>
<tr>
<td>African Issues Study Center of China</td>
<td>Organized the conference of China and Africa Trade and Economic Cooperation in September of 2008.</td>
</tr>
<tr>
<td>Shan Xi University</td>
<td>Study</td>
</tr>
</tbody>
</table>

Academic research is important to the Chinese government. From time to time, the Chinese government organizes conferences for consulting and communication between government and academic researchers on issues of China-Africa cooperation. The Chinese government has also outsourced some of the controversial topics to academic research centers or researchers. Documents for China-Africa Cooperation Forum were discussed and reviewed many times by academic researchers together with governmental officers before they were released.

### 5.5 Challenges and Recommendations for the Technical and Vocational Education and Training cooperation

Besides the recommendations brought up along the facts in China-Ethiopia cooperation,
there are more recommendations that can be considered in the African students selecting processes. Instead of writing recommendations separately as an independent part of the research, I will just state the suggestions and recommendations correspondingly to the challenges faced in different stages.

5.5.1 Chinese volunteers to Ethiopia

Selection of Chinese voluntary teachers to Ethiopia

In order to see challenges in the selecting process and to provide suggestions, I will firstly explain the selection system and illustrate with an example. There are common standards in selecting Chinese volunteers to teach in Ethiopia, such as fluent in English. Volunteers in all fields share the same process and standards with modifications according to their professions. Here is an example of picking agricultural professional volunteers.

The China-Ethiopia TVET cooperation on agriculture started from 2001. Ethiopian government provides financial support. Chinese government provided technical support by sending teachers to teach in Ethiopia. The program has been operating for 12 years with 324 Chinese teachers having taught in Ethiopia until 2012. With the request from Ethiopian government, Chinese government has included the Ethiopia-China agricultural cooperation period of 2012 to 2016 into the foreign aids program, which was financially supported by Chinese government. The salary for Chinese voluntary teacher to Ethiopia has also been raised considerably. Chinese voluntary teachers have to be able to use English as the medium of professional teaching. For general selection for all kinds of volunteers, the local Chinese Communist Youth League publicly recruits professional volunteers for going to Ethiopia. After several selections, the selected volunteers flew to Beijing for specialized training together with other volunteers from all over China.

2006, in the Forum on China-Africa Cooperation (FOCAC) Beijing Summit, the president of then Hu Jintao announced eight new policies to enhance aids to Africa: to offers loans in favorable terms, set up China-Africa development fund etc. Hu Jintao also said to send 300 volunteers to support African development in the following three years till 2009. Each year, an official notification for selecting volunteers to support Ethiopian agricultural TVET education is sent by the International Communication Service Center of Chinese Ministry of
Agriculture to each province, agriculture department, and bureau of animal husbandry, agricultural universities, agricultural research institutes, and other relevant units. All criteria, requirements, responsibilities of volunteers, available positions amounts, salary, application forms etc. were all stated in the notification and its attachments.

The challenges in voluntary teachers selecting mainly are lacking of motivation of potential Chinese TVET professionals, and lacking of knowledge about African countries where they are going to do voluntary work at. In order to select top skilled voluntary professionals, Chinese governments and institutions should encourage potential Chinese TVET professionals in all means. The following actions can be taken into consideration:

1. Award honor to voluntary professionals who participated in voluntary TVET program,
2. Enhance the welfare system of Chinese TVET teachers in Ethiopia, which includes insurance of health, pension, family members, etc.
3. Provide information and means of getting knowledge about Ethiopian societies. For example, Chinese government and local Chinese Communist Youth League can organize forums and activities to gather old and new voluntary program participants together in order to exchange voluntary experience and Ethiopian society as well as local culture.
4. Organize oversea Chinese league or Chinese voluntary society to spiritually support Chinese voluntary teachers.

Chinese voluntary teachers in Ethiopia

Chinese voluntary teachers in Ethiopia have different professions. The programs they teach vary from technical skills in TVET schools to Chinese languages in Confucius institutes. They live with locals on daily basis.

The following data are summarized from published interviews of Chinese voluntary teachers who taught in Ethiopia. For example, one of the reports was published on a Chinese magazine Feng Yu Ren Sheng, Life Show, (Feng 2007) which was written according to an interview with a volunteer who stayed in Ethiopia for one year from November 2006 to 2007 as a teacher in an agricultural TVET school. Challenges faced by Chinese volunteers summarized below vary depending on the place volunteers work at. Recommendations are
also provided corresponding to the challenges and difficulties voluntary teachers facing.

Ethiopia is situated in tropics with diverse landscapes from lowlands to high plateaus. The climate in Ethiopia also varies from very dry to seasonally very wet depending on different regions. The various differences in landscape and climate between Ethiopia and China cause challenges for Chinese voluntary teachers in Ethiopia. However, except for the natural challenges described above, there are more challenges about natural environment, such as wild animals and limited fresh vegetables because of droughts and over rain. (Feng 2007, 15) For example from the report, “The scariest is that there are wild animals in the woods. Xin Yuan always carries a stiff stick and a whistle while she walks. Stick for protecting herself from wild animals, and whistle to call for help from local guards because all mobile phones cannot receive any signals in that area so she cannot make phone calls.” (Feng 2007, 14)

The results from empirical studies show that most of the living environments in Ethiopia have caused challenges for Chinese expertise and voluntary teachers. The challenges are shown in many aspects, for examples: domestically lacking of running water; shortage of electricity when the weather is rainy; living in small rooms without kitchen and cooking tools; schools are sparsely separated and far away from live location; bad road conditions and bad transporting conditions in communities; insects such as misquotes can be found anywhere inside and outside of the room; lacking of medical support so that when Chinese volunteers got infections or injured, they have to be transferred back to China to get medical treatment. The quotations below demonstrated the local situation in Ethiopian TVET schools.

“After arriving at the living area of the school, two teachers were set to live in the same row of small cottages. The rooms were about six to seven square meters, one bed, one table, and one chair take almost all the space in the room.” (Feng 2007, 14) "The living conditions were harsh. There was no kitchen or cooking tools. Xin Yuan had to cook with the induction cooker she brought from China. The water was provided only at a certain time every day. Every time when it was raining, there was no electricity. They had to go to outside to pick wood in order to make fire and to cook. …. because the school she worked at is located in the most desert-like part of Ethiopia, they could not plant vegetables in the whole area. To solve the problem of no fresh vegetables, the school sent cars to buy fresh vegetables every half a month. However, because there was no fridge, they could not keep vegetables for more
than a few days. Also, because of the tough and dry climate and soil, the vegetables tasted badly.” (Feng 2007, 14-15) “March of 2007, while Xin Yuan was injected a vaccine she got infected by a dangerous virus because there was lack of a onetime injector. In two days, Xin Yuan had bumps all over her body”.

There are some practical recommendations that could be adopted to help Chinese voluntary teachers in adjusting into Ethiopian natural environment. Except for providing information and knowledge about Ethiopian social and natural environment, surviving skills such as how to face flood, drought, and what to do when encountering wild animals could be taught before leaving for Ethiopia. It is also important to ensure Chinese volunteers have all medical access before and during voluntary work in Ethiopia.

In order to promote China Ethiopia TVET, except for good governmental communications and good policies, the cooperation details such as improving living environment should be paid attention to. After all, the educational cooperation process from the root is done by expertise exchanging and training and most of the processes are done in Ethiopia. The content analysis results shows the following recommendations could be taken into considerations.

Chinese government should negotiate with Ethiopian government to reinforce the protection and living conditions for Chinese voluntary teachers in Ethiopia. At the same time, Chinese government and Chinese volunteers have to come up with methods to protect and improve their own living condition and standards. Chinese embassy in Ethiopia could equip each volunteer with basic living package needed for living in different parts of Ethiopia. The survival package can include maps, medical toolkit, living tools, etc. the package can be distributed upon the arrival of each volunteer professional. Chinese embassy could also cooperate with Ethiopian government to make associate programs, which involve both Chinese and Ethiopians to exchange and communicate with each other, also to make friends.

Speaking of the teaching environment, there are some challenges that need immediate improvement in order to have efficient TVET cooperation. The challenges include:

1. Schools lack of teaching tools and education supportive facilities. For example: three teachers including Xin Yuan were teaching seven classes with more than 400 students. The school provided a curriculum: the first semester from November 2006
to February 2007, main course is Veterinary Clinical Diagnosis. The second semester starts from March 2007 to July 2007, main course is Computer Training. The Veterinary Clinical Diagnosis starts after the courses finish. Three teachers needed to prepare for contact teaching in classes and they had to teach students from the very beginning how to do experiment in open laboratory. (Feng 2007, 15) For another example, the school Xin Yuan worked at does not have an internet connection. There were no phones either. Because the teaching locations of the school are spread all over different small villages around, every time teacher has to walk through hills or mountains to his class.

2. Students are diverse with different religions and different beliefs, which increases the frequency of conflicts. There were conflicts caused by the differences of ethnicity and religious beliefs. (Feng 2007, 15) January 22th of 2007, a conflict occurred among students, and students did not go for classes but participated in group fighting. Guards in school had to shoot to stop the fighting. In the end, there was one student dead and two heavily injured. Because of the conflict, school stopped teaching for two weeks.

The teaching environments mostly depend on each TVET institution. Therefore, to improve teaching environment from root, it is vital for Ethiopian TVET to develop a more comprehensive and well-designed system. However, Chinese teachers can still actively prepare for all kinds of diverse and complicated teaching environments. Chinese voluntary teachers ought to take courses about Ethiopian culture in all areas such as religions, food, languages, races, etc. before they start to teach and live in Ethiopia. Chinese voluntary teachers should be trained in typical methodologies about how to handle diverse macro and micro teaching environments.

The cultural environment in TVET has reflected an image of being warm and thoughtful. For example: “On May 2007, Xin Yuan got a tumor on her left leg which needed to be retreated back in China. One of the local female herdswoman found Xin Yuan by riding her donkey after she heard the incidence of Xin Yuan. In Xin Yuan’s room, the herdswoman feed her self-made pastry a bit by a bit and feed her self-made coffee. The herdswoman did not leave until Xin Yuan fell asleep. Not long after the herdswoman left, students also gathered
to Xin Yuan’s room. The herdswoman went to see Xin Yuan everyday with her bread and coffee. Xin Yuan was so touched for she had only helped the herdswoman treated her donkey and they had only met once before. In the end Xin Yuan decided to stay and teach until the delegation has finished all teaching tasks.” Xin Yuan was interviewed by the end of January 2008. (Feng 2007, 16)

To improve cultural environment, efforts have to be made by the Chinese side both governmentally and personally. Relevant knowledge should be provided for Chinese voluntary teachers to learn about Ethiopia both before and during living in Ethiopia. At least some basic Ethiopian local language is encouraged to obtain by Chinese voluntary teachers.

5.5.2 Taking African students to study in China

As it was mentioned earlier, The Forum on China-Africa Cooperation (FOCAC) Action Plan in 2006 increased the number of scholarships for African students to study in China to 4000 annually. The well intentioned action plan made it possible for more African students to learn advanced technologies and to contribute to their home country after study. The program also enhances the China – Africa relation in a long run.

However, Ethiopian students as part of the African students group, like other African students, face challenges in studying in China. The challenges occur both before study in China and during study in China. Challenges faced by African students before they go to study in China are mainly the African students’ selection processes. Challenges faced by African students during studying in China include poor reception upon arrival; different study forms of teaching and learning, different culture, languages, and food.

Before African students studying in China

The Chinese government and participating educational institutions do not interfere with the African student selection process. They only define the amount of students who can study in China, for each African country. So the African students who go to study in China are selected in Africa by African authorities. However, because of this, student selection process is influenced by the political affiliations. Meaning, there are phenomena that students with different political opinions or supporting other political parties are excluded from applying
seats to study in China. For example, “Many of the students I interviewed complained of unfairness in earlier attempts to get selected. As mentioned above, one of them even said that he had to wait patiently for a government he supported to come to power before he could be selected for a Chinese-government scholarship. For the program to succeed in the long run, students should be selected based on quality and not on government affiliation.” (Adams 2009, 5)

For better cooperation in the African students selecting process, Chinese government and educational institutions could join the African authorities in each country in selecting African students to study in China. One way to do this is that, African students apply directly to Chinese available institutions. Another possible way is that African authorities in each country can provide candidates list with their qualifications, and Chinese institutions select students from the student lists.

Because of the unevenness of quality of education in Ethiopia and China, which is caused by different education environment and education system, it is not fair to ask for the same diploma or degree from Ethiopian students applying to study in Chinese universities. However, for educating Ethiopians, China can consider equalizing the Ethiopian diploma and degrees. For example, to enable Ethiopian students with bachelor’s degree to apply master’s study in China, and enable Ethiopian students with master’s degree in Ethiopia to take doctoral studies in China. For those students whose diplomas are not eligible to further a degree study, Chinese universities can consider of opening one year pre-school programs to prepare those Ethiopians for further study. Most of the Ethiopian students in China do not intent for a one-year diploma or study but for a higher degree level of study, to possibly make their career easier when they return to Ethiopia.

During African students’ studying in China

Many African students who got accepted to study in China have never been outside of their home country before. It is hard for them to adjust to the Chinese way of doing things while they do not speak Chinese and most of the Chinese do not speak English or their languages. African embassies in China in this case should provide some help to get newly arrived African students around to be familiar with living in China. Since African embassies are located in Beijing, which is far away from most of the students receiving institutions, African
embassies need to come up with methods to help African students. For example, provide information and materials about Chinese culture for African students before or/and upon their arrivals, or/and opening hotline for consulting. In the same time, Chinese receiving institutions and local governments should also provide help such as reception in the airport and local tutoring.

5.6 Language in Cooperation

Most of the Chinese people are not able to communicate in English. Also not all of the African scholarship reciprocates are English speakers. Let alone the study, it is still hard for newly arrived African students to adapt to life in China. Therefore, it appears reasonable and should be encouraged or included in the scholarship coverage that African scholarship reciprocates attend a Chinese language course or have some Chinese language training before they come to study in China, so that it is easier for the African students to adjust to Chinese customs and society, and also easier to begin their studies. From the Chinese institutions side, institutions should provide facilities and encourage African students to form student societies to gather, help each other and to help other newly arrived African students.

Languages problems do not only appear in daily living in China but also during the studying process. All the courses provided by Chinese institutions to the African students are taught in English. Some African students from francophone area have hard time during study. However, this case is also connected to the student selection process. For example: “Said Mahabmadane from Mali, who was brought in to study a Master’s degree in Electronic Communication Engineering: "I am not sure if I can do my program in English but with the help of my other African friends, especially those from Anglophone countries, I hope I can cope." (Adams 2009, 5)

The hardship for new arrivals in a different environment with a different culture and languages is imaginable. However, there are measures that can be done to make lives for newly arrived African students easier. “University administrators in China, especially people in charge of student welfare and international students, also have a unique opportunity at internationalization of their campuses. With so many African and other foreign students on campus, it is a unique opportunity to create cross-cultural spaces and structures like global lounges and ethnic restaurants to cater to the international students. My own university, the
University of Hong Kong, is a leader in the idea of setting up global lounges and ethnic restaurants on its campuses, which serve as intercultural and international spaces for both international and local students to intermingle and share each other’s cultures and values.” (Adams 2009, 5)

African students are in China to study. Therefore, aside of challenges from food, culture, and urban environments, study life of African students should be looked at seriously. Both African and Chinese governments should pay attention not only on the quantitative goals but also on improving the students and study quality.

1. There are activities such as cultural exchange and intermingling can be encouraged both in campuses and in the society.
2. There should be international student welfare organizations to provide consulting, and all kinds of service for international students.
3. Universities and embassies can also gather voluntary families to host African students for a certain time, so that to build safe environment and comfortable atmosphere for newly arrived African students.

English is used as the means of instruction in Ethiopia-China TVET cooperation, which is seen from the outgoing Chinese experts’ recruitment criteria. (Ministry of Agriculture, P. R. C.) English is also the common instruction language for African students studying in Chinese universities, unless the African students study Chinese as their subject or take Chinese courses.

In the China-Ethiopia cooperation, Chinese language can be learned in Confucius institute which is located in Ethiopia. Some of the Ethiopian universities also offer Chinese courses. Moreover, Confucius institute provides scholarships for Ethiopian students to study Chinese in Ethiopia, and in mainland China.¹ Since English is the only language officially used as the language for instruction in TVET, Ethiopian students who are not good at English face difficulties in learning process.
6 Conclusion and Further Discussions

In this part of the thesis, I will firstly provide a brief conclusion and examination of my research including the research process and main findings. Secondly I will bring up an ongoing discussion to inspire further thinking. Thirdly, based on this research, recommendations for further researches will be provided. In the end, the validity and reliability of this research is examined.

The topic of this research is Ethiopian TVET cooperation with China. The study objects are defined in the beginning of this research which is not only to study the China-Ethiopia TVET cooperation itself, but also analyses the cooperation from political and economic perspectives. To begin the research, the reasons of studying on the topic and the reasons of why the topic is important to research on are discussed, in which part I illustrated the China’s growing cooperation and market expansions in Africa and in Ethiopia. The research questions are derived from the research topic and are divided into sub-questions in order to make the research systematic, and to make the research questions easier to be answered. The nature of research questions correspond to the post-colonial theory. And the research process defined the research methods I pick, which is content analysis methodology. With the guidance of post-colonial theory and the help of content analysis methodology, the research questions are answered in the research results part of the research. They will also be further discussed in this part of the research. The research questions defined the directions of data I was looking for, which mainly come from publications, forums, news, and literature in both Chinese and English. The structure of the thesis is managed in a logical order. In order to keep the topic focused, and the research informative, detailed subtitles are used and listed in the research.

As study results, the Ethiopian TVET system was explained and illustrated. The developing processes, results, and challenges of the system were clarified. Corresponding recommendations are also provided. The cooperation system of Ethiopian cooperation TVET with China was explicitly explained. The cooperation reasons, environments, backgrounds, inputs, and current outcomes were analyzed from international level, regional level, and national levels. Evidences from different perspectives and from different researchers were discussed and were shown in each study aspect. Arguments and discussions were provided along the study conducting process corresponding to each study field.
Recommendations and suggestions are being discussed and provided with profound reasons.

As main findings, Ethiopian TVET cooperation with China started on high government levels, and it is currently mainly China providing educational support to Ethiopia through sending teachers, transporting educational equipment, building as well as helping Ethiopia to build TVET schools, and providing scholarships for Ethiopian students to study in China. Ethiopian TVET principals and teachers are also frequently invited to visit China. Under the general South-South cooperation and international treaties and policies, the forms of Ethiopia-China TVET cooperation have been changing from 2000 till present time. However, the passion of Ethiopian and Chinese government level on the Ethiopia-China cooperation has never faded. The TVET cooperation between China and Ethiopia has kept growing. From the post-colonial perspective, empirical data might suggest that the TVET cooperation might mean China neo-colonizing Ethiopia. However, the debate remains open and the topic itself is controversial, which will be also discussed in the following part of the research.

6.1 China-Ethiopia TVET cooperation from Post-colonial perspective

The TVET cooperation between China and Ethiopia was systematically explained in the results part of the research. They are informative research results and support conclusions. Therefore, in this part, I will mainly reveal and contribute to the ongoing discourse of China neo-colonizing Ethiopia with the soft weapon of TVET cooperation.

As I explained with evidences in the “Post-colonial theory” part of this research, China was suspected to be neo-colonizing Ethiopia by taking Ethiopian educated elites as high standard local labor force, and taking Ethiopia itself as an extensional market area. Throughout the research, I have listed reasons for China-Ethiopia general cooperation from both Chinese and Ethiopian perspectives. The TVET cooperation reasons and processes are also demonstrated in the research. The cooperation context is analyzed on different scales internationally, regionally, and nationally. Based on research results, no solid evidences support that China-Ethiopia TVET cooperation means neo-colonizing of either human and natural resources or economic market. The above conclusion is also based on data analysis result, because the data shows evidences of Ethiopian appreciation on Chinese-Ethiopian TVET program, and the co-operation is more characterized by China providing to Ethiopian TVET education.
The Ethiopian ambassador in China Mr. Addis Alem Balema, in his speech on 24th November, 2000 encouraged and welcomed Chinese investments to Ethiopia. Obviously, as long as Chinese enterprises invest in Ethiopia, Chinese enterprises could be accused of taking advantage of local Ethiopian labor market by producing products locally, and accused of occupying the Ethiopian market by selling products produced by local Chinese enterprises. From this point of view, the whole question of if China is neo-colonizing Ethiopia by TVET cooperation as a soft weapon is no way to have an accurate answer, and is heavily dependent on the perspectives when looking at the cooperation. The same question could also be applied to many globally cooperated businesses, and cross-continental companies, such as the Apple Company from the United States of America have some their assembly lines in China for Chinese cheap labor and local market.

Speaking of the work force, China cooperates with Ethiopia in TVET, which helps Ethiopia producing highly skilled work force for companies and corporations including Chinese ones. In this case, China does hire Ethiopian educated skilled workers, also some other non-skilled workers for jobs with low technical requirements. Therefore, China is making use of Ethiopian work force to work for Chinese companies and cooperation. However, there are clear regulations on how foreign companies including Chinese companies should operate in Ethiopia. Except for the cooperation reasons listed in the context study part of this research, the employment rate boost and tax money paid to Ethiopian government, along with the new technologies and social inspiration brought by the foreign investments to Ethiopia, guaranteed that foreign investments including Chinese are welcomed in Ethiopia. Therefore, questions arise: if the China-Ethiopia cooperation is beneficial and welcomed by both China and Ethiopia, is it still a neo-colonializing process of China to Ethiopia? If it is, is it a negative process like colonialism? If it is negative, should we rise up and stop it from happening? Can we stop it, and what are the prices we have to pay to stop it?

There are relevant ongoing discussions on the topic in academia as well. “The discourse on whether Chinese aid in Africa is irresponsible or not conceals the realities of all donors’ agenda in their delivery of foreign assistance. It sets up western aid as ideologically and morally better. This is no longer helpful to Africa. In fact, suggesting that China has just suddenly discovered Africa for its own motives is not only selfish and opportunistic but ignores the longer history of Chinese solidarity with Africa particularly during its struggle
against colonialism.” (Adrodad 2008, 6; Kenneth 2009) Katumanga thinks that “In general Chinese engagements are positive, misgivings are temporary, and basically a managerial issue that can be resolved given the existing political will on the side of the Chinese” (Katumanga 2007, 133)

Based on the study results from Post-colonial theory, the neo-colonizing from China to Ethiopia remains an open topic and open discussion, and cannot be considered as one of the answered conclusions of this research. After all, both China and Ethiopia welcome the cooperation between two countries. Moreover, the China-Ethiopia cooperation on TVET and other fields are considered by Ethiopian high levels as necessary. Furthermore, there are other similar foreign investments and foreign-Ethiopian cooperation in Ethiopia as well, if China is the neo-colonizer, do other foreign investments share the same accusation?

6.2 Suggestions for Further Research

In terms of study objects, this research provided a systematic demonstration for TVET cooperation between Ethiopia and China. It is not practical to separately study a specified cooperation program or subject in this research, such as agricultural cooperation in specific, due to my research focuses, and the limitation of research length. As answering the research questions in this thesis does not require wholesome information from a specified cooperation program, and a though study of a specific field of TVET cooperation would extent the research length significantly.

However, as an independent extension from this research, China-Ethiopia agricultural cooperation could be studied as a separate topic, because results of this research show that Ethiopia is in need of agricultural support, and agricultural TVET is a vital part in the whole TVET program. Detailed suggestions and recommendations are needed for helping enrolling advanced agricultural technologies into Ethiopian education in both formal university education and in TVET. Recommendations are also needed in applying education into actual agricultural fields in order to improve agriculture productivity. Additionally, in the field of agriculture, China is comparatively more advanced than Ethiopia in terms of human resource and technology usage, education and training. Therefore, a thorough study on China-Ethiopia agricultural TVET cooperation can be of great help for furthering China-Ethiopia agricultural cooperation, and furthermore for reducing poverty and hunger in Ethiopia.
In terms of methodologies for further researches, more detailed quantitative researches could be applied to show how educational cooperation on TVET affects Ethiopian and Chinese economy. Together with economic data from different fields, the influences could be also visualized with numbers, and quantitative analyses. If the Post-colonial theory would be applied, the suspected neo-colonizing phenomena could then be divided culturally, economically, and politically, the cooperation could also be divided into different fields, such as industry, education, agricultural.

Relevant to this research, the similarities and differences among China-Ethiopia educational cooperation on TVET and China-Ethiopia cooperation on other fields are interesting topics and are worth researching on. Study focuses could be cooperation forms, input, and outcomes including policies, economic investments, academic and technology input, human resource input etc.

Although this study focused on Ethiopia-China TVET cooperation, it has similarities to the TVET cooperation of China with other African countries. Researches such as comparing China-Ethiopia TVET cooperation to Chinese educational cooperation with other African countries would be beneficial as well.

6.3 Validity, Reliability, and Ethical Concerns in the Research

Concerning the theory and methodologies, I applied content analysis method to analyze data in this research. “The research results should not be influenced by the methods and techniques researchers chose and how researchers apply the techniques in analyzing data.” (Krippendorff 2004, 413) Therefore, applying the same method of content analysis with different techniques should not produce different study results. In this thesis, if the word frequency coding is applied instead of thematic information analyzing, there would be the same study results. As Weber pointed out “to make valid inferences from the text, it is important that the classification procedure be reliable in the sense of being consistent: different people should code the same text in the same way.” (Weber 1990, 12)

The data collected in this research is diverse not only because of the different sources from which the data is collected, but also because the linguistic differences between Chinese and
English. The thematic way of content analysis is also used in locating and finding research data. Therefore, word coding techniques of content analysis method do not fit in this research. Consequently, thematic analysis techniques of content analysis fit best for this research. However, themes can be conventional, and both positive and negative opinions on one theme can be profoundly reasonable and rich in information. For example, information and resources are rich in both sides of supporting and against the claim of China cooperation on TVET with Ethiopia as a way of neo-colonializing. Making sure the transparency for research process and data analysis should insure the reliability of my research and the research results. Though, different researchers doing the same research with the same technique might still produce different findings as research results. According to Krippendorf, thematically way of content analysis can be challenging to maintain their reliability. (Krippendorff 2004, 110)

To avoid bias in applying thematic approach of content analysis, I list all the resources of my data and different backgrounds of my research so that readers have the same accessibility to data I used and cited in the research. To make sure the research results being credible and trustworthy, I transparently state my methods and processes of data analysis so that readers are able to follow the research systematically from raw material and diverse data till study results and conclusions. As it was explained in the methodological part of the research, summarizing data and the thematic way of analyzing data are applied in data processing phase of the research, I have to admit any unconscious and unintentional subjectivity in locating data, defining data, and analyzing data. All in all, I attempt to be objective throughout the research.
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