

# High skilled ICT migration as tool for development

An analysis of the migration motives of high skilled Chinese and Ghanaian ICT migrants and their contribution to development in terms of knowledge, experiences and skills transfer.



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# **List of Abbreviations**

•	Academy for International Business Officials	AIBO
•	Central Business Districts	CBD
•	Centre for Migration Studies	CMS
•	China Communications Standards Association	CCSA
•	Cultural intelligence index	CQ
•	Ghana Investment Fund for Electronic Communications	GIFEC
•	Ghana Trade Fair Company	GTFC
•	ICT Based Distance Education	ICT-BDE
•	ICT for Accelerated Development	ICT4AD
•	Institute of Continuing and Distance Education	ICDE
•	International Telecommunication Union	ITU
•	Ministry of Communications	MoC
•	Ministry of Trade and Industry	MTI
•	Organization for Economic Cooperation and Development	OECD
•	Unisplendour Software Systems Corporation Limited	UNIS
•	United Kingdom	UK
•	United Nations	UN
•	United States of America	USA
•	University of Ghana	UG



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# **Abstract**

An increasing number of high skilled Chinese and Ghanaian ICT migrants have entered respectively Ghana and China since the last decade. In this context, the high skilled Chinese ICT migrants are operating within Chinese ICT firms which have decided to establish a branch in Ghana. In this study the group of Chinese participants is employed in Huawei Technologies and Unisplendour Software Systems Corporation Limited (UNIS) seen as Chinese ICT firms intended to explore the world. In contrast to the high skilled Ghanaian ICT migrants who have their jobs within governmental institutions/agencies, like Ministry of Communications (MoC). As representatives of Ghana this group of Ghanaians has participated in training/seminar programs in China. In this study the motives to migrate to respectively Ghana and China and also the extent that knowledge, experiences and skills have been transferred are investigated. This transfer process facilitates local development and therefore this study responds to the Migration-Development Nexus. The methodological triangulation is taken as starting point in this study, including the semi-structured interviews and participant observations as qualitative instruments and a questionnaire as quantitative instrument. The findings of this study showed that exploring a new cultural environment, developing a career abroad and receiving travel compensations are motives for high skilled Chinese ICT migrants to migrate to Ghana, while the high skilled Ghanaian ICT migrants highlighted the received invitations and the compensations, like scholarships, as motives to migrate to China. At their destination the high skilled Chinese ICT migrants transfer knowledge about firm strategies, transfer their experiences with ICT equipment to Ghanaian colleagues and transfer their communication skills towards Ghanaian colleagues. In contrast to the high skilled Ghanaian ICT migrants who basically acquire instead of transfer knowledge, experiences and skills. In addition, the Chinese participants in this study appointed also that language proficiency and time constraints are personal features that in this case affect the acquisition of this knowledge, experiences and skills.

Key words: high skilled ICT migrants, motives for migration, transfer of knowledge experiences and skills, training/seminar programs, China and Ghana.



# 1. Introduction

High skilled migration is a phenomenon in the world, which is linked to the concept of human capital. In concrete words, high skilled migration could affect the formation of human capital in sending and receiving countries. For a country the presence of human capital is important, because human capital is required for realizing a certain level of economic growth. Moreover, the level of human capital in a country could be measured by using the human capital stock. This is the number of persons who have obtained a certain level of knowledge and skills. After acquired the knowledge and skills the raw materials and capital could be transformed into goods and services (Son, 2010). To a large extent, human capital flows from developed to developing countries. This is also confirmed by Hendricks (2002) who determined that human capital flows from OECD countries to developing countries.

# 1.1 High skilled migration between China and Ghana

Also China as global player, considered as the second economy of the world, is a country that can be characterized as the sender of human capital (World Bank, 2014). As already explained human capital refers to the persons who have obtained a certain level of knowledge and skills. High skilled migration in this case affects the human capital stock. Between Ghana as developing country and China as more industrialized country the movement of high skilled persons takes place within Chinese ICT firms, like Huawei Technologies, UNIS and ZTE Corporation. Especially after settlement of new branches overseas high skilled persons are able to move within the same firm. The Chinese ICT firms, like Huawei Technologies, UNIS and ZTE Corporation, have established a variety of new branches overseas. Also the high level of competition in the domestic market should be taken into account in this case. Therefore these Chinese ICT firms are forced to look for new destinations abroad (Cissé, 2012). A developing country where Chinese ICT firms established branches is Ghana. Simultaneously, also Chinese high skilled employees will move to Ghana to operate in these new branches. The explanation is that there is a lack of expertise in the local environment where these Chinese ICT firms are operating (Koser & Salt, 1997). The statistics of the Ghana Immigration Service (2014A) showed that the number of high skilled Chinese operating in the ICT sector in Ghana has increased in the last decade. According to Iredale (2001) this group could be classified as high skilled because of their obtained university



degree or equivalent experience in the ICT sector. Next to recruiting Chinese high skilled employees, the Chinese ICT firms operating in Ghana also have the aim to increase the number of hired Host Country Nationals (HCNs), like the Ghanaians. The objective is to increase the number of HCNs in branches overseas to 80%, considered as percentage of the total workforce of a branch (Huawei, 2013; ZTE Corporation, 2013).

Next to the movement of high skilled Chinese employees within Chinese ICT firms from China to Ghana also an opposite movement could be recognized. This is the flow of high skilled Ghanaians moving from Ghana to China within governmental institutions. These high skilled Ghanaians are operating in governmental institutions such as the Ministry of Communications, GIFEC, Ministry of Trade and Industry (MTI) and Ghana Trade Fair Company (GTFC). This group of high skilled Ghanaians have jobs related to ICT and this group moved to China to participate in training/seminar programs. In China these training/seminar programs are organized by the Academy for International Business Officials (AIBO) as governmental institution. For both groups of high skilled Chinese and Ghanaians knowledge, skills and experiences could be transferred or acquired at their destination. However, before the transfer or acquisition of knowledge, experiences and skills could be investigated it would be relevant to get an understanding why both groups decided to move to respectively Ghana and China. From now onwards the high skilled Chinese and Ghanaians will be mentioned as high skilled Chinese ICT migrants and high skilled Ghanaian ICT migrants in this study. The motives of both groups to migrate could be investigated with the help of the following research question:

➤ What are the motives of high skilled Chinese and Ghanaian ICT migrants to relocate to respectively Ghana and China?

# 1.2 The link between high skilled migration and local development

After arrival at the destination in Ghana or China a high skilled person is able to transfer knowledge, skills or experiences. The intention is to support the local development. The high skilled Chinese ICT migrants who arrived in Ghana and who are operating in Chinese ICT firms are contributing to the local development through raising local employment. As appointed in section 1.1. the intention of these Chinese ICT firms is to increase the occupation rate of HCNs to 80% in their branches. When this percentage has been reached



the majority of high skilled Chinese ICT migrants could relocate to another place, because these HCNs have obtained a sufficient level of knowledge and skills. This makes it possible for them to operate independently. Afterwards, a multiplier effect is likely, because knowledge, skills and experiences could be provided by these HCNs. This is a way to transform Ghana in a knowledge based society, which is the objective illustrated in the ICT for Accelerated Development (ICT4AD) policy (Government of Ghana, 2003). On the other hand, high skilled Ghanaian ICT migrants who have participated in training/seminar programs contribute especially to the local development in Ghana. The explanation is that high skilled Ghanaian ICT migrants could implement the acquired knowledge, experiences and skills in Ghana itself. Nevertheless, it is not impossible that to some extent the high skilled Ghanaian ICT migrants also transfer knowledge, experiences and skills during their stay in China. This will support the local development in China. In the literature, the process of migration from both sides is also defined by Mahroum (2000) as 'brain circulation'. Nonetheless, the transfer of knowledge, experiences, skills and their effect on local development will be investigated from two perspectives. This will lead to the following research question:

To what extent do high skilled Chinese and Ghanaian ICT migrants transfer knowledge, experiences and skills as contributors for local developments?

# 1.3 The impact of personal features on the transfer of knowledge, experiences and skills

The transfer of knowledge, experiences and skills is not a self-sustained process, but takes place through social interactions. A variety of personal features could be acknowledged that facilitated these social interactions and therewith the transfer of knowledge, experiences and skills. These personal features are respectively; level of education, national culture, language proficiency, social trust and time constraints. For instance, it is not strange that misunderstandings may arise when the sender with a poor language proficiency wants to transfer knowledge, experiences and skills towards the receiver. In this study both the high skilled Chinese ICT migrants operating in the private sector and the high skilled Ghanaian ICT migrants operating in the public sector will be investigated. Subsequently the following research question could be designed:



➤ To what extent do personal features affect the transfer of knowledge, experiences and skills according to the high skilled Chinese and Ghanaian ICT migrants?

## 1.4 Research objectives

As discussed in section 1.3 the groups of high skilled Chinese and Ghanaian ICT migrants will be further investigated. Therefore, a bilateral approach has been introduced, because this study covers two groups of high skilled ICT migrants. The researcher will visit in the field phase one geographical location, namely Accra Metropolitan Assembly in Ghana. It is possible to visit only one geographical location. The reason is that both groups have commitments in Accra Metropolitan Assembly, also the Ghanaian participants who returned from their training/seminar program in China. Subsequently, a two-dimensional approach has been introduced. The explanation is that two disciplines are investigated in this study known as migration studies and local development. Meaning that the high skilled migrants could support capacity building, which is beneficial for the local development. The UN defined this capacity building also as 'the improvement in individual skills, knowledge and capabilities' (Garavan et al., 2001; Ghai & Edgren, 2002).

In the literature a variety of studies cover the subject of migration. In general, the main drivers of migration are political, social and economic related. Simultaneously, a large number of migration studies focused on the flows of migrants between the global North and South. Nowadays more attention should be paid to the migration flows between regions in the global South. This phenomenon has also been defined as South-South migration. Besides, the importance of this South-South migration is also reflected in the increasing number of migrants who migrate within the global South in the period 1990-2013 as confirmed by the United Nations (2013A). In this situation, both China and Ghana can be defined as a country belonging to the global South (UNDP, 2014, p. 5). Furthermore, a limited number of these migration studies focused on high skilled migration. In addition, the migration studies that have been conducted focused especially on North-South migration flows. The same type of study has been done by Iredale (2001) who used the Indian ICT professionals as target group. Nevertheless, the necessity to investigate Chinese migrants in Africa is also reflected in the growth of the number of Chinese migrants in Africa in the period 2000-2008 (Park, 2009, pp. 3-5). Through the increasing activity of high skilled migrants from China and Ghana in the field of ICT the researcher decided to include both groups of high skilled Chinese and



Ghanaian ICT migrants in this study. Through the complexity of migration flows, the researcher decided to focus on the motives of high skilled Chinese and Ghanaian ICT migrants to migrate to respectively Ghana and China. In this case, the motives are also responsible for the existence of these high skilled migration flows. The first research question in section 4.2 will cover this issue of migration motives. Furthermore, in the literature Britz et al. (2006) have already focused on the link between a knowledge based society and ICT. The objective to become a knowledge based society is also described in the ICT4AD policy of Ghana. The components in this case that are required to become a knowledge based society are knowledge, experiences and skills. Therefore, it is also relevant to focus on the transfer process of these components covered in the second research question as showed in section 4.2. Also the personal features that influence this transfer process will be investigated as defined in the third research question.



# 2. Regional thematic framework

#### 2.1 Introduction

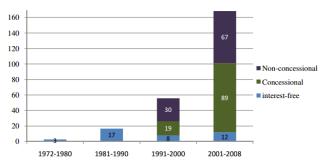
The cooperation between Ghana and China in the field of ICT was established in the last decade. After signing several agreements the cooperation between both countries was officially confirmed. In this chapter the effects of these agreements will be outlined, for instance the situation that Chinese ICT firms were allowed to operate in Ghana. Or the fact that after signing these agreements the high skilled Ghanaian ICT migrants got the opportunity to participate in training/seminar programs in China that are organized by the Chinese government. This means that the bilateral agreements facilitate high skilled migration flows. More specific information about the high skilled Chinese and Ghanaian ICT migrants will be outlined in this chapter. Lastly, also the Ghanaian and Chinese policies will be explained. These policies facilitate the high skilled migration flows between both countries.

# 2.2 The bilateral agreements China-Ghana

The first cooperation between Ghana and China became visible in 1961 when a bilateral agreement was signed. However, the diplomatic relationship between both countries was already established a year before in 1960 (China Embassy, 2015A; Frontani & McCracken, 2012, pp. 275-278). For China this bilateral agreement implied that China has the

responsibility to provide aid to Ghana in the form of 'Concessional loans and subsidized buyer's credits'. This type of financial support is disbursed in the Chinese Yuan by the Chinese Exim Bank. The growth of this type of financial support is also illustrated in figure 1, which shows a significant growth of the provision of 'concessional loans' in the period

Figure 1: Chinese financial support to Ghana (in \$ millions)



Source: ACET, 2009

1991-2008. Besides, 'concessional loans' are also used for upgrading the telecommunication



network of Ghana. An example is a concessional loan that is used for realizing the 'National Communication Backbone Network' in Ghana (Frimpong & Nubuor, 2013, pp. 120-122). In return to these loans China was invited to conduct these ICT related projects. This is an opportunity for Chinese ICT firms to enter Ghana and to bring in their high skilled Chinese workforce. One of the main contractors for this 'National Communication Backbone Project' is Huawei Technologies, which is nowadays responsible for the installation of telecommunication network in urban districts of Accra and Tamale (ACET, 2009, p. 19). Next to the installation of ICT infrastructure Huawei Technologies established a new branch in Accra Metropolitan Assembly. In a branch overseas there is also a department responsible for selling ICT equipment (Ahrens, 2013, pp. 2-8; Huawei, 2014). Giving the opportunity to Huawei Technologies to enter Ghana is in line with the ICT4AD policy introduced in 2003 that promotes the private sector with the aim to develop a globally competitive value-added service sector (Government of Ghana, 2003, p. 31). The profile of Huawei Technologies is showed in the box 1 below.

Box 1: Huawei Technologies and their operations in Ghana.

#### **Huawei Technologies:**

Huawei Technologies is one of the main contractors in Ghana, which is responsible for the installation of ICT infrastructure. Subsequently, this Chinese ICT firms has decided to establish a branch in Accra Metropolitan Assembly. The statistics show that only a relatively small part of the Huawei's workforce, determined on 5%, is operating in the sales department. The remaining departments by taking into account the number of employees are respectively; Research and Development, Delivery and Services, Manufacturing and Supply Chain, Marketing and Solutions, others. In addition, a majority of the total workforce of this Chinese ICT firm has an age between 20-30 years old, while 80% of the total workforce is male against 20% percent female. A part of the workforce of Huawei Technologies consists of Chinese employees. In this sense, these Chinese employees should be talented, because of their capability to build emerging international markets, even if the economy is in a stage of decline. These selected Chinese employees will be involved in temporary and short-term projects overseas (Farndale et al., 2010, pp. 161-164; Huawei, 2013, pp. 50-55). According to Michaels et al. (2001) a talent should be defined as; 'someone who can fulfill a company's aspiration, having a strategic mind, having emotional maturity, having communication skills and the ability to inspire others.'. Beside the Chinese employees, there is also room to hire local employees. According to Huawei (2013), hiring local employees has a positive effect on the creation of local employment and economic growth of a country. These local employees are known as HCNs. For a Chinese ICT firm hiring these HCNs will be beneficial. The HCNs have an understanding of the national culture, knowledge of the local language and good public relations that could reduce the general expenses of a firm. The statistics showed that the percentage of local hires working in overseas branches is 80% in 2013. From all these HCNs, 20% can be specified as mid-tohigh level managers (Huawei, 2013, pp. 50-55; Shen & Edwards, 2004, p. 818).



Also Unisplendour Software System (UNIS) is a Chinese ICT firm that is responsible for the installation of ICT networks, an important client is the University of Ghana. In 2012 UNIS and the University of Ghana (UG) signed an agreement that includes the implementation of the ICT-BDE Project (University of Ghana, 2013). The profile of UNIS is showed in box 2 below.

Box 2: UNIS and their involvement in ICT projects in Ghana.

#### **UNIS:**

UNIS is operating in Ghana as contractor. This Chinese ICT firm is owned by the University of Tsinghua in China and hires 50 executives, 500 lower officials and 500 general staff members (UNIS, 2014). In 2012 the Chinese ICT firm UNIS became a significant player in Ghana after having signed an agreement with the University of Ghana (UG) with the intention to implement an ICT-BDE Project (University of Ghana, 2013). The objective of this ICT project is to extend the ICT infrastructure at the UG campus, which makes E-learning as a new learning method accessible for students and the staff. This ICT-BDE project has been divided into phases. The first phase was completed in 2013. The second phase has been running since 2012 and involved supply, installation and commission of ICT equipment. Nonetheless, the ultimate objective is to connect the UG campus with all Institute of Continuing and Distance Education (ICDE) regional centers. After installation of this ICT equipment, exchange of knowledge and information between actors at different geographical locations could be realized, which is also known as distance learning. This ICT-BDE project is financed by grants and loans of the Chinese and Ghanaian government. Additionally, this is one of the ICT projects that was included in the five year strategic IT plan designed by the MoC of Ghana (Agyei-Mensah et al., 2014, pp. 328-331; Asabere & Mends-Brew, 2012, p.709). Thereafter, UNIS is also providing trainings for UG staff members with the aim that the UG staff could use the ICT equipment properly, like how to publish courses and learning materials digitally. A significant number of these trainings were performed in Ghana and to a lesser extent in China (University of Ghana, 2012).

The previous outlined bilateral agreements include performances in Ghana. However, during the Beijing Summit 2006 also a bilateral agreement was signed that entails activities in China. These activities refer to the training/seminar programs that are organized in China. These training/seminar programs are intended for the local workforce of Ghana (Ministry of Foreign Affairs China, 2014, Shinn & Eisenman, 2012, pp. 285-290; Thakur et al., 1997, p.



267). The Chinese government has established a fund known as 'China African Human Resources Development Fund' to finance these training/seminar programs. Recent statistics show that almost 7000 high-skilled African have participated in one of these programs with the help of this fund (FOCAC, 2012). According to the Ministry of Foreign Affairs China (2014), Ghana is the third largest African country in terms of persons who have participated in training/seminar programs in China. The expectation is that this number of Ghanaians participating in these training/seminar programs will increase significantly in the coming years (Idun-Arkhurst, 2008). At the same time, China is also member of the International Telecommunication Union (ITU) and established the China Communications Standard Association (CCSA), including universities and training centers. Within these CCSA, training/seminar program will be organized for ITU members, like Ghana (Levin, 2010, p.5; CCSA, 2015).

# 2.3 An overview of the migration policies in Ghana

The bilateral agreements signed between both countries facilate the high skilled migration flows between China and Ghana. For instance, through the presence of Chinese ICT firms in Ghana, high skilled Chinese have the opportunity to relocate to this country. On the other hand, high skilled Ghanaians have the possibility to visit China after having received their invitiation to participate in training/seminar programs in China. However, next to these bilateral agreements between Ghana and China, also migration policies of each country should be taken into account to clarify these high skilled migration flows. Focusing on Ghana, a well defined migration policy nowadays could not be identified. In the past, after independency of Ghana in 1957 a liberal migration policy has been pursued under the leadership of Dr. Kwame Nkrumah (Dzorgbo, 1998). In the 1990s a National Population Policy was introduced that address also migration issues. In this policy one of the key objectives is to monitor international migration and to diminish the phenomenon called 'brain drain'. This process of 'brain drain' can be defined as high skilled persons who are leaving the country (Awumbila et al, 2008, pp. 30-32). Currently, the International Organization for Migration (IOM) is supporting Ghana with the development of a comprehensive migration policy, which is required to tackle migration issues such as brain drain (IOM, 2014).



# 2.4 The Migration policies introduced by China

The economic reforms introduced in China in 1978 by Mao also affected migration. Before 1978 migration was highly regulated by the government of China, while after this year migration became more an individual choice (Fan, 2011, p.18). This was also an opportunity for Chinese to relocate to Africa as new destination to set up new businesses. The Chinese who went overseas after these reforms were also called 'new immigrants' (Anshan, 2013, p.62). In the beginning of the 1980s the Chinese government introduced new reforms, including less restrictions for the 'talented-aliens'. Meaning that it is easier for this group to apply for a visa and also to travel between different geographical locations, like Beijing, Tianjin and Shanghai (Liu, 2011, pp. 8-10). Since 1995 China has linked their migration policies to their strategic partnership with Africa. This strategic partnership includes the following elements; mutual political trust, mutual benefits of economic interest and mutual cultural learning. At the same time, this strategic partnership also faciliates international migration between Africa and China.

# 2.5 High skilled migration flows from Ghana to China

Since the 1990s high skilled migration from Ghana towards other countries has accelerated. This resulted in the fact that Ghana has nowadays the highest emigration rates for high skilled persons in Western Africa. In the past the trend was that high skilled Ghanaians moved especially to developed countries in the global North. While nowadays also Asian and Far East countries, like China and Dubai, are considered as favorable destinations for these high skilled Ghanaians (Awumbila et al., 2008, p.11). The exact number of the total arrivals of high skilled Ghanaians in China remains unknown. However, it is obvious that China has become an attractive destination, reflected in the different Ghanaian communities that can be found in cities like Hong Kong and Guangzhou. A majority of these high skilled Ghanaians can be defined as business men or official representatives of Ghana (Bodomo, 2010). Nevertheless, a feature of this group of high skilled Ghanaians is also that many of them returned temporarily or permanently to Ghana. This is reflected in the arrivals of Ghanaians that increased from almost 20 percent to almost 35 percent in the period 2000-2007 (Asare, 2012, pp. 4-7). The duration of their stay abroad is also influenced by the purpose of migration. The 700 Ghanaian professionals are operating in a variety of sectors, including the communication sector. These Ghanaian professionals participated in these training/seminar



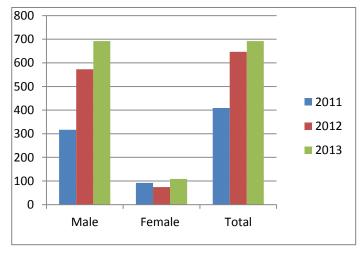
programs in China and therefore they stay there only for a few months (Shinn & Eisenman, 2012, p.289). Moreover, for this group of high skilled Ghanaians moving around the world is not unique. This is because a large number of these high skilled Ghanaians have already acquired their skills at foreign universities. However, the expectation is that the number of Ghanaian students who studied abroad will increase in the coming years. In 2006 as most recent year, 8 percent of all Ghanaian students studied abroad at a foreign university (Asara, 2012, p.6; Teferra & Knight, 2008, pp. 220-222).

# 2.6 The opposite direction; high skilled migration from China to Ghana

In the opposite direction, also migration flows can be recognized from China to Ghana. The first significant group of Chinese migrants arrived after independency in 1957. This Chinese group could be defined as business people, who established a significant number of small shops and restaurants. Subsequently, the second significant flow of Chinese migrants was in the period 1960s–1980s when a number of them arrived in Ghana with the intention to work in Chinese manufactories, like Chinese textile industries. After the collapse of these industries in the late 1980s, this group of Chinese migrants returned to Hong Kong and Western countries. Since last decade a group consisting of high skilled Chinese migrants has been moving to Ghana. A part of this group of high skilled Chinese migrants is operating in the light manufacturing sector, trade and small business (Ho, 2012). However, a significant

part of this group of high skilled Chinese migrants is also operating in the ICT sector. These high skilled Chinese migrants are employed mainly as managers and engineers. It is not surprising that especially these managers and engineers are relocating to Ghana. This could be explained by the shortage of high skilled personnel in the local environment (McNally, 2008, pp.54-56; Rotberg, 2008, pp. 100-102). In general, the number of Chinese migrants who arrived in Ghana increased significantly

Figure 2: Arrivals of Chinese employed in the ICT sector in Ghana in absolute numbers in the period 2011-2013 (categorized in total, female and male.



Source: Ghana Immigration Service, 2014B



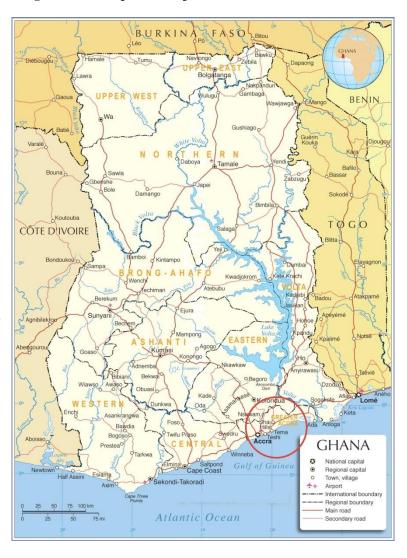
from almost 1500 to more than 7500 arrivals in the period 2000-2008 (GIS, 2000; GIS, 2008). Also the arrivals of Chinese migrants operating in the ICT sector have increased according to the Ghana Immigration Service (2014B). In the period 2011-2013 an increase of almost 70% could be recognized. The arrivals of Chinese migrants operating in the ICT sector in the period 2011-2013 are showed in figure 2. This figure also showed that a majority of them is male and a minority female in the period 2011-2013. The statistics about the arrivals of Chinese migrants in the ICT sector before 2011 were not available. Also statistics about the arrivals of high skilled Chinese operating in the ICT sector were not available for this study.

# 2.7 The location of this research; Accra Metropolitan Assembly, Ghana

The field phase of this study will be

conducted in 'Accra Metropolitan Assembly' in Ghana. The Republic of Ghana is located in Western-Africa (CIA, 2015B). The research will take place in Greater Accra region that is located within the red circle showed in figure 3. This is still a large region regarding the scope of this geographical area. Therefore, the researcher decided to focus only on Accra Metropolitan Assembly as geographical part of this Greater Accra region. In Accra Metropolitan Assembly both groups skilled Chinese high Ghanaians operating in the ICT sector can be reached in the field phase. This is because a significant number of high skilled Ghanaians operating in the ICT sector already

Figure 3: The map of the Republic of Ghana.



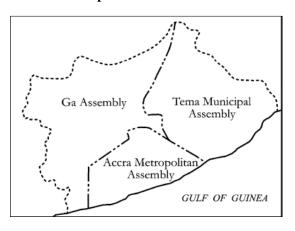
Source: UN, 2014



returned from their stay in China. This means that it is not necessary to visit different districts in China to collect data about this Ghanaian group. Next to Accra Metropolitan Assembly, the remaining assemblies in this district are 'Ga Assembly' and 'Tema Municipal Assembly'. The geographical location of these assemblies is illustrated in figure 4. Furthermore, Accra is the main capital of Ghana located in Accra Metropolitan Assembly and this city can be characterized as one of the fastest growing cities in West-Africa when looking at the urbanization rate (Grant & Yankson, 2003, pp. 65).

In more detail, the Accra Metropolitan Assembly is bounded by the University of Ghana in the North, Gulf of Guinea in the South, Korlee Lagoon in the West and Tema Township in the East as illustrated in figure 5. In the 16<sup>th</sup> Century Accra was characterized as a relatively small fishing port of Ghana. The importance of Accra has changed since the late 19<sup>th</sup> Century when the colonial headquarter of the British Empire shifted Cape Coast to Accra. After implementation of the 'Structural Adjustment Policies' in the 1980s Accra expanded and

Figure 4: Great Accra Metropolitan Area divided into Accra Metropolitan, Ga and Tema Municipal Assemblies.



Source: Grant & Yankson, 2003

nowadays Accra is known as an urban area with a diversified economy. Recently Accra as city became part of the Accra Metropolitan Assembly, which has a variety of 'Central Business Districts' (CBDs), an example is 'Osu'. Also ICT firms are located in these CBDs

University of Ghana

Actimotal PARK

Light Industrial Kwame Nkrumah Motorway

Area

Residential EPZ
Area

Kotoka
International Airport

Residential Area

Kotoka
International Airport

Residential Area

Central

Acrea

Control

Acrea

Control

Con

Figure 5: The city of Accra

Source: Grant & Yankson, 2003



(Grant & Yankson, 2003, pp. 65-70). Additionally, the Chinese migrants are living nearby these CBDs in 'gated communities'. This is a clustering of apartments and family houses secured by guards (Ho, 2012, pp. 28-30; Grant, 2009, pp. 50-54).



# 3. Theoretical framework

# 3.1 A closer look at high skilled migration

Since the last decade the phenomenon of high skilled migration has become more significant. Some institutions, like OECD (2013), confirmed that the absolute number of tertiary educated emigrants coming from a variety of countries has increased substantially in the last few years. Besides, most of these tertiary educated migrants are originally coming from Asia, approximately 10.000 emigrants in the year 2010. Thereafter, within this concept of high skilled migration a variety of movements could be recognized, like permanent settlement in receiving countries or temporary migration between countries (Castles & Miller, 2009, p. 252). Additionally, the assumption is also that high skilled migration is on temporary basis. It is only needed to supplement the shortage of skilled persons in a country and to make sure that economic growth will not be hampered. The flows of high skilled migrants will exist until the moment that the native population is able to train their own workforce (Iredale, 2001, pp. 8-10). According to Koser & Salt (1997) these high skilled migrants could be defined as professional, managerial and technical specialist. Iredale (2001) added that high skilled migrants obtained usually an university degree or equivalent experience in a specific sector. Thereafter, there is a concept that has been closely linked to high skilled migration known as 'brain exchange', which implies a two-way flow of high skilled migrants between origin and destination. In contrast, a one-way flow of high skilled migrants refers to the concepts of 'brain gain' or 'brain drain'. These concepts assume negative consequences for the sending countries and positive consequences for the receiving countries. However, 'brain drain' is a concept that has already been introduced in the 1960s. This concept addressed in this period the flows of high skilled persons from Europe to North America. Nowadays the trend is that an increase number of high skilled migrants move from Third World countries to developed countries (Gold & Nawyn, 2013, p.162; Carrington & Detragiache, 1998, p.4; Koser & Salt, 1997, p. 5).

In the present, high skilled migration could be defined as short term movements through the existence of temporary relocation contracts. The short term movements have become more important than the long-term relocations. The explanation is the increase of short-term assignments and businnes travels. In a theoretical perspective, the increase of high skilled



migration flows could be further clarified by the concept called 'new international spatial division of labour' highlighted by Frobel et al. (1980) and Walton (1985). This concept appoints that the world has to face with globalization, leading to worldwide labour reservers. In this globalization process, relocation of human resource are considered as a normal phenomenon. Also movements for training purposes especially for those who are staying in periphical countries is no longer extraneous (Koser & Salt, 1997, pp. 285-290). Additionally, Vertovec (2002) is convinced that the world has a 'global mobile workforce' and that high skilled workers would like to migrate for their personal and career development.

# 3.2 Decision-making process of high skilled migrants

International migration, including high skilled migration, has become more complex through globalization. Therefore, the 'migration systems theory' has been used since the 1990s to explain these complex migration issues. In this 'migration systems theory' macro, meso and micro structures could be recognized. Thereby, the macro structures refer to states policies and the role of governments. In addition, the meso structures focused on the organizations and agencies that mediate between migrants and political institutions. Lastly, the micro structures refer to individuals or the migrants themselves (Drbohlav, 2011, p. 45; O'Reilly, 2012, pp. 46-48). These individuals decide by themselves to migrate. Additionally, the governments and agencies as appointed before could facilitate these migration flows (Van der Erf & Heering, 1994, p.6). In the migration decision making process motives are significant. In this context, according to Daugherty & Kammeyer (1995) motives refer to 'things people value in life'. A motive to migrate is the willingness to explore a new cultural environment (Syed, 2008, p. 40; Daugherty & Kammeyer, 1995, p. 118). In addition, a motive to migrate could be experiencing freedom, like individual freedom (Chiswick & Miller, 2015, p. 35). Also firm related issues, like intra-company labour markets and compensations systems are seen as significant motives for especially the high skilled migrants (Iredale, 2001, p. 9; Istaiteyeh, 2011, p. 72). Also the local environment in the place of destination affect the migration decision making, like the presence of facilities (De Haas, 2010, p. 254; Hossain, 2001, p. 11). All these different types of motives to migrate will be further explained in the next sections.



#### 3.2.1 The cultural environment

In the migration decision making, the willingness of an individual to get involved in a new cultural environment is also significant motive to migrate. This concept has also been described as 'cultural flexibility', referring to the willingness of an individual to change their behavior patterns if that is required. Thereby, prejudices about the local citizens, like colleagues, should be avoided (Ang & van Dyne, 2008, p. 168; Berry, 1997, p.13). For measuring these cultural adaptations of migrants a tool has been introduced by Templer et al. (2006), which is known as the 'cultural intelligence index' (CQ). For example, a migrant with a high CQ is very motivated to adapt to a new cultural setting and to interact with local citizens who have a different cultural background. Thereafter, the CQ as measure scale could be used also in the work environment. For instance, a high CQ has a positive effect on the work performance of a person coming from abroad (Gelfand & Imai, 2010, pp. 83-86). Additionally, Storti (2001) appointed that having a successful time abroad for high skilled migrants also depends on the relationship with local citizens. If there is no interaction with local citizens at all, activities that are performed by high skilled workers can't be successful.

#### 3.2.2 Individual freedom

Also individual freedom is seen as motive to migrate as confirmed by Chiswick & Miller (2015). A host society in which high skilled migrants are welcome can be defined as an 'open society'. This assumes that individual freedom is not restricted, because of the issue that the host society is willing to accept minority groups. Individual freedom has also linked to self-autonomy, which could be restricted by a national system (Counihan, 2008, pp. 118-363; Webb & Wright, 1996, p. 43). Nonetheless, individual freedom has already been introduced by Amartya Sen (1999) in his approach 'Development as freedom'. In this approach he described that individuals within a society could enjoy substantive freedoms.

## 3.2.3 Compensations systems

In the migration decision making compensation systems should not be overlooked. Basically compensations systems are introduced for high skilled migrants to compensate them for any additional costs that arise after accepting an overseas assignment. A compensation system includes premium assignments that make it attractive for high skilled migrants to accept an overseas offer. Additionally, also housing has to be considered as a type of compensation. This is usually a financial compensation for the extra costs of housing in an overseas country. However, in some cases 'free' housing will be provided for high skilled migrants.



The availability of housing and security of a country are motivations to provide 'free' housing (Stahl & Björkman, 2006, pp. 164-167). Next to this, also the provision of medical allowances for high skilled migrants is also a form of compensation. Thereby, insurance firms are responsible for the design of medical care plans for these high skilled migrants (Sim & Schraeder, 2005, p. 106). Subsequently, also transport is part of the compensation system. This includes the provision of a car or coach destined for these high skilled migrants. Also a lump-sum could be provided, which means that the high skilled migrant has the liberty to spend the received allowance on transportation (Nazir et al., 2014, pp. 205-209). At last, the assignment premium also belongs to the compensation system. This could be defined as a percentage of the salary that has been paid to someone to compensate them for the inconvenience of accepting an overseas offer. In some countries with dangerous conditions this 'assignment premium' can reach to 50 percent of their salary. Besides, this type of compensation also covers the inconvenience of not having the chance to meet up with family and friends (Phillip & Fox, 2003, pp. 467-472).

#### 3.2.4 The presence of facilities

The local environment, like the presence of facilities, is also for high skilled migrants a motive to relocate to a specific geographical location. For these high skilled migrants a city may be regarded as an attractive place to settle down, because of the presence of facilities. Basically in an urban environment a variety of facilities can be recognized. An example is the high-quality shopping facilities, including flagship stores. Also high-quality leisure facilities could be found in this urban environment. Some examples are top-class restaurants, night clubs and sport facilities, like tennis courts and fitness centers (Helbrecht & Dirksmeier, 2012, p. 66). Also the presence of cultural facilities is something that contribute to the quality of an urban environment (Towse, 2011, p.149). In general, high skilled migrants prefer to settle down in liveable cities with a high quality of life. Next to these facilities as described before, also the presence of green parks in the local environment has a positive effect on this quality of life in urban areas (UN-Habitat, 2013, pp. 7-76).

## 3.2.5 Career development

Next to the previous described motives, also career development is seen as a motive of high skilled migrant to relocate (Lowell & Findlay, 2001, p.20). According to Sullivan (1999) the trend at this moment is that people prefer to build a global career instead of a traditional career. The willingness to build a traditional career is based on the possibility to receive high



payments, to make promotion and to get a higher status within an organization or firm. In contrast, global careers are mainly driven by the possibility to accumulate your level of knowledge and to expand your professional network within an organization or firm (Lazarova & Taylor, 2009, p. 120). To make the concept of global career understandable Dickmann and Harris (2005) have introduced the concept of 'career capital' that consists of three components; knowing how, knowing whom and knowing why. Thereby, 'knowing how' refers to the provision of career relevant skills and work-related knowledge by a firm or organization required to improve the work performance. These career relevant skills and knowledge can be divided into explicit knowledge, experiences, soft skills and technical expertise. Secondly, 'knowing whom' refers to the social relations within a professional network. Within this social network, specific actors could support you with career development abroad. Thirdly, the 'knowing why' component refers to the motivations and confidence of someone to follow a specific career path (Dickmann & Harris, 2005, p. 400). Returning to global careers, also gender has to be included in this concept. The explanation is that both men and women have different perspectives on how to interpret a global career. Basically, men have the intention to focus more on work roles and advancements. In contrast to women who focus especially on experiences at work and in daily life during their stay abroad. These gender differences may be important when cultural integration will be investigated (Thomas et al., 2005, p. 343). Next to these issues, also the opportunity of flexworking abroad, including scheduling your own working hours, is belonging to the concept of a global career (Lazarova & Taylor, 2009, pp. 119-121; Kelliher & Anderson, 2008, pp. 420-424).

# 3.3 The link between migration and development

The personal motives to migrate have already been explained in the sections 3.2.1-3.2.5. The motives of high skilled migrants to migrate as explained in the previous sections may differ between groups of migrants. Simultaneously, the motives of high skilled migrants could clarify to a certain extent why high skilled migration flows exist. After knowing these motives of these high skilled migrants, migration flows could be further regulated by the organizations and firms. High skilled migration has also been described as return migration. In essence, return migration is beneficial for the country of origin. For instance, someone who has worked abroad and returned to his/her country of origin could further increase the average productivity in his/her home country. Simultaneously, return migration will also



result in the establishment of networks between their home country and the overseas country. Thereafter, not only financial capital also knowledge and technologies are beneficial for the home country, because it will boost the economy (Lowell & Findlay, 2001, pp. 7-10; Mahroum, 2000, pp. 169-171). These previous examples showed that migration could be linked to development. An approach that covers both concepts is called the 'migration-development nexus'. The idea is basically that return migration will support local economic development in the home country of migrants (Van Hear & Sørensen, 2002, pp. 287-289; Schiller & Faist, 2010, pp. 7-10). Besides, the local economic development will reduce also the emigration towards countries with an advanced economy.

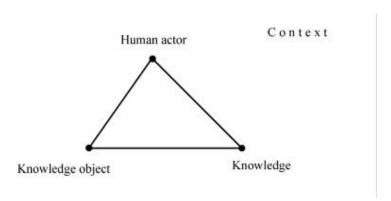
# 3.4 The transfer of knowledge, experiences and skills

Migration and development are linked to each other as illustrated in section 3.3. When knowledge has been transferred into a developing country then this will boost the economy and also the development of this country. High skilled migration can also be defined as the movement of high skilled migrants who have the capability to transfer knowledge into especially the developing countries (Balasubramanyam et al., 1996, p.95). However, knowledge is not the only element that will be transferred to developing countries according to Stewart (1997). Also skills and experiences have been transferred and together with knowledge this is called 'intellectual capital'. Human interactions in this case makes it possible to transfer knowledge, experiences and skills. All together this will contribute to the growth of intellectual activity within an economy (Lucas, 2014, pp. 277). There are a variety of factors that affect humans interactions. These human interactions is the way to transfer of knowledge, skills and experiences as appointed earlier. According to Billet et al. (2014) the concept of knowledge could be furher divided into research based knowledge and practicebased knowledge. The research based knowledge is scientifically grounded and is required to investigate complex problem situations. Through presentations and workshops this type of knowledge, like the results of a study, could be transferred to someone else. On the other hand, practice-based knowledge is required to solve problems that occur in every day life. When this practise-based knowledge is linked to specific situations or contexts then this could be defined as situational knowledge according to by Eraut (1994). Moreover, the practice-based knowledge has also been considered as a form of tacit knowledge that was introduced by Polanyi (2009). This tacit knowledge is embedded in human beings and actions rather than words and is therefore difficult to transfer. For understanding the transfer of



different types of knowledge Bürkland (2009) has introduced a model called 'the triangle of knowledge'. As showed in figure 6 the model consisted of three elements respectively; human actor, knowledge object and a context. In this model, human actor refers to a human being who has knowledge about specific issues. Therafter, a knowledge object refers to a object and the knowledge about it. Lastly, the context refers to organizations and the involvement of a human actor in certain situations and social relationships.

Figure 6: The triangle of knowledge



Source: Bürkland, 2009

Next to knowledge, also experiences could be transferred to actors in the surrounding. According to Beus et al. (2014) experiences are gained through job performances in the past. In this sense, the experience of someone is linked to a specific time frame. It is for someone who has a lot of experience easier to adapt to a new environment. Besides, someone with a lot of experience is more willing to share knowledge than an individual who have less or none experience (Wang & Noe, 2010, p.120). Furthermore, in the field of ICT, several transferable skills could be recognized. These are respectively operational skills, information skills and strategic skills. The operational skills refer to the capability of someone to work with hardware and software. Secondly, information skills can be defined as the ability of someone to search, select and process information of specific sources. Thirdly, strategic skills refer to the capability to express yourself creatively and to produce content instead of processing it (Veit & Huntgeburth, 2014, pp. 40-42).



## 3.5 The level of education

There are a variety of factors that affect the transfer of knowledge, experiences and skills. One of these is known as the 'level of education' of an individual. For instance, someone who has obtained a high educational degree, like university degree, is more willing to attract new knowledge, experiences and skills than someone who has completed a low educational degree (Wang & Noe, 2010, pp. 118-120; Lucas, 2006, p.14). Simultaneously, someone who has obtained a high educational degree is able to earn a relatively high income and could secure a job position and could create career opportunities. Additionally, someone with a high educational degree is also attractive for organizations and firms, because of the willingness to acquire knowledge, experiences and skills. In addition, acquired knowledge, experiences and skills also determined the employability of someone within a firm or organization (Tomlinson, 2010, p.87; Townsend & Wilkinson, 2011, p. 177).

#### 3.6 The national culture

Next to the level of education also the national culture of individuals influence the transfer of knowledge, experiences and skills as outlined by Denzau & North (1994). Through new technologies and transportation as a result of globalization, human interactions between individuals who are having different national cultures have become easier than a few decades ago. For investigating different national cultures Manev & Stevenson (2001) have introduced a concept called 'cultural distance'. This concept is defined as; 'the degree to which the cultural norms in one country differ from those in another country'. Through the existence of cultural distance, conflicts and misunderstandings may arise in the period that knowledge, experiences and skills are transferred. Nonetheless, knowledge, experiences and skills could be transferred through intercultural communication. This is a form of communication when a sender communicates with a receiver, while both have a different national cultural background (Samovar et al, 2012, pp. 6-8). For intercultural communication, face-to-face interaction is preferable. This is because it allows the sender and receiver to ask for clarification if that is required for instance when key words have been misinterpreted (Debasish & Das, 2009, p.38).



# 3.7 Language proficiency

Also a common language is required when individuals coming from different countries would like to transfer knowledge, experiences and skills as outlined by Bartol & Srivastava (2002). In this sense, English is a common used language at the international level. For the explanation of the use of English around the world a model consisting of three concentric circles has been introduced. These three concentric circles are respectively; Inner-Circle, Outer-Circle and Expanding-Circle. Firstly, the Inner-Circle countries are using English as primary language, like in the USA and UK. Secondly, the Outer-Circle countries are multilingual speaking countries and used English as second language, like Singapore and India. Thirdly, the Expanding-Circle countries are for instance China, Japan and Korea. In these countries English is taught as foreign language (Sharifian, 2009, pp. 2-4). The trend is that in these Expanding-Circle countries an increasing number of natives are using English to interact with other natives (Jackson, 2012, p. 423).

#### 3.8 The level of social trust

Furthermore, also the level of trust influence the transfer of knowledge, experiences and skills. In essence, a high level of social trust will reduce uncertainties. The outcome is that individuals are more willing to transfer knowledge, experiences and skills (Capasso et al., 2005, pp. 185-188). Beside this, social trust could also be increased through the predictability of desired outcomes. A type of social trust is also known as personal trust. This personal trust exists between individuals. In essence, personal trust emerged in networks in which individuals are involved. Additionally, building personal trust means that intensive social interaction is required (Mansell & Wehn, 1998, p. 58; Widen-Wullf, 2007, pp.20-23). Nonetheless, when someone has a high level of social trust then this person is willing to get involved in high risk situations. At the same time, social trust could also be realized when individuals have shared values and a shared moral code derived from a culture (Williams, 2010, p. 67).



## 3.9 Time constraints

As described by Back et al. (2005) the transfer of knowledge, experiences and skills is a time-consuming process. When there is a lack of time then this could have a negative impact on the transfer of knowledge, experiences and skills. In essence, the transfer of knowledge, experiences and skills could be regulated through time management (Al-Hawandeh, 2003, p. 143). The involved institutions and firms could organize meetings, workshops and conferences to make sure that individuals will meet each other at a specific time. This means that knowledge, experiences and skills could be transferred when both actors meet each other at a specific time (Argote, 2013, p. 178-180).



# 4. Research question and methodology

#### 4.1 Introduction

Before a study can be conducted a number of research questions and a methodology have to be designed. This chapter will start with an outline of the main research question. This is followed by the research questions, which are derived from the main research question. Thereafter, a description of the research design will be given that includes the methodological design and instruments. The research design presents an overview of the different steps that the researcher will take in the field. At last, also the limitations of this study will be explained, which is required to justify the outcomes of this study and to give advice for future research.

# 4.2 The research questions

#### **Main research question:**

What are the motives of high skilled Chinese and Ghanaian ICT migrants to relocate to respectively Ghana and China and to what extent do both migrant groups transfer knowledge, experiences and skills as contributors for local development and subsequently how do personal features affect this transfer process?

#### **Divided into the following research questions:**

- ➤ What are the motives of high skilled Chinese and Ghanaian ICT migrants to relocate to respectively Ghana and China?
- ➤ To what extent do high skilled Chinese and Ghanaian ICT migrants transfer knowledge, experiences and skills as contributors for local development?
- To what extent do personal features affect the transfer of knowledge, experiences and skills according to the high skilled Chinese and Ghanaian ICT migrants?

The high skilled Chinese and Ghanaian ICT migrants mentioned in these research questions have obtained a tertiary education degree, like an university degree. The competencies of these high skilled migrants can be divided into technical and non/technical skills. In the field of ICT technical skills refer to the capability to design and develop information and communication systems in an effective way. Additionally, also proficiency in infrastructure



design, programming and system analysis are competencies that have to be considered as technical skills. However, technical skills also refer to technical expertise, like having the practical expertise to use ICT and applications (Galliers & Leidner, 2009, p. 44; Shayo & Igbaria, 2004, p. 64). These technical skills and knowledge have to be adapted and updated regularly, because of the new technologies that have been introduced rapidly. Besides, new and updated systems operate usually independent. This makes working as technical architect challenging. Also an understanding of a wide range of technologies is required, including how these technologies are involved within an organization or firm. On the other hand, nontechnical skills refer to the applications of these technical skills and expertise through cooperation with other actors. Furthermore, non-technical skills and expertise also include the knowledge of the business environment. This can be defined as the ability of someone to provide ICT solutions for business needs. Next to this, also consultancy ability belongs to the non-technical skills. This consultancy ability could be defined as the ability of someone to communicate with clients, including the negotiations. In the same line, also management, problem-solving and analytical skills have to be categorized as non-technical skills (Lowry & Turner, 2007, pp. 352-355).

Returning to the research questions, the underlying drivers also refer to the motives of these high skilled Chinese and Ghanaian ICT migrants. There are several motives to migrate, like the willingness to explore a new cultural environment. Also the intention to experience individual freedom in another country could be considered as motive to migrate. Also firmrelated issues may be seen as motives to migrate. Compensation systems belonging to a firm, including premium assignments and housing, could be seen as motives. Next to this, also career development is an issue that has to be taken into account when high skilled migration flows will be investigated. At last, also the presence of facilities in the local environment is a potential motive to choose for a specific destination. As described in section 3.3 migration has also been linked to development. In this study, also the transfer of knowledge, experiences and skills will be investigated. In this sense, knowledge, experiences and skills are the facilitators for local development. Additionally, there are a variety of personal features that could hamper the transfer of knowledge, experiences and skills. These personal features are respectively; level of education, national culture, language proficiency, social trust and time constraints. All these personal features will be investigated and that makes it possible to answer the last research question.



The study will be conducted in Accra Metropolitan Assembly, including Accra as main capital. This geographical location is bounded by the 'University of Ghana' in the North, 'Gulf of Guinea' in the South, 'Korlee Lagoon' in the West and 'Tema township' in the East as described in section 2.7. Both groups of high skilled Chinese and Ghanaian ICT migrants are staying in Accra Metropolitan Assembly at the moment that this study will be performed. Besides, in this geographical area also the branches of Chinese ICT firms, like Huawei Technologies, are established here. This also applies to Ghanaian governmental ministries, agencies and universities, which are located in Accra Metropolitan Assembly.

## 4.3 The research design

For this study the methodological triangulation is chosen as framework. This is a widely used methodological framework in which both qualitative and quantitative methods are included. According to Johnson et al. (2007) the definition of triangulation or mixed methods given by John Creswell can be formulated as: 'Mixed methods research is a research design (or methodology) in which the researcher collects, analyses, and mixes (integrates or connects) both quantitative and qualitative data in a single study or a multiphase program of inquiry.'. With the help of the designed research questions the qualitative and quantitative data could be collected and analysed. These two types of data could be combined or mixed, like for instance the quantitative data can complement the qualitative data or vice versa. Creswell & Clark (2011) have also introduced different methods for data collection. One method is called the exploratory design and will be used in this study. Following this method the researcher will start with collecting qualitative data and used this data for a follow-up quantitative data collection (Creswell & Clark, 2011, pp. 187-190). In this study, the researcher will start with qualitative data collection with the intention to discover the motives of high skilled Chinese and Ghanaian ICT migrants to migrate to respectively Ghana and China. At the same time, qualitative data collection will also be used to investigate the transfer of knowledge, experiences and skills. The follow-up quantitative data collection is needed to collect data about the personal features that may influence the transfer of knowledge, experiences and skills. However, the motives to migrate could be confirmed by using the quantitative data collection method. An advantage of using the quantitative data collection method is also that differences between personal features and motives will become clearly visible. Subsequently, the uncertainty of interpretation will also be reduced when collected qualitative data will be included in a quantitative data collection method (Johnson et al., 2007, p. 114). In this study,



language proficiency of the high skilled Chinese and Ghanaian ICT migrants lead to difficulties. The high skilled Chinese ICT migrants included in this study could not be considered as native English speaking actors. On the other hand, the researcher is not able to speak the Chinese language fluently. To avoid misinterpretations, a quantitative and qualitative data collection method will be used for this group of high skilled Chinese ICT migrants. For the group of high skilled Ghanaian ICT migrants using only a qualitative data collection method would be sufficient, because they can characterized as native English speaking actors. Returning to the exploratory design, this has also been implemented by a variety of researchers, like Zheng et al. (2013). This exploratory design is frequently used when underexposed target groups will be investigated. Also in this study the high skilled Chinese and Ghanaians ICT migrants are seen as underexposed groups in the academic field. This means also that there is no data available about these specific groups that a researcher could use as starting point in future research. Moreover, for the collection of quantitative and qualitative data also instruments are required. In this study, a survey will be used as quantitative instrument. On the other hand, semi-structured interviews and participant observations will be included in this study as qualitative instruments. In the next sections the manner how these qualitative and quantitative instruments are implemented in this study will be explained.

## 4.4 Surveys

The high skilled Chinese ICT migrants will be asked to fill in a questionnaire. All of them are operating in a Chinese ICT firm. As described in section 4.3 the reason to introduce a survey is to avoid misinterpretations. In this survey the motives to migrate and also the personal features that influence the transfer of knowledge, experiences and skills will be included. The specific motives and personal features included in this survey were derived from the semi-structured interviews and also the literature. In this situation motives and personal features could be identified and if possible be confirmed. In this study, the Chinese participants who were involved in the semi-structured interviews will also be requested to fill in the questionnaire. Looking at the content of the survey, then it starts with questions about the respondent itself, like gender, year of birth, level of education. The next part of the survey focuses on the motives to migrate to Accra Metropolitan Assembly in Ghana. Subsequently, the personal features that affect the transfer of knowledge, experiences and skills have been converted into questions. For measuring the importance of these motives and personal



features the researcher has used a Likert scale. The reason is that the Likert scale is a widely used scale to measure the respondent's opinion in an absolute and concrete way. In essence, a Likert scale can be defined as 'a summation of item scores or a number of individual items' (Clason & Dormody, 1994, pp. 31-32). Furthermore, a Likert scale has usually a rating scale varying from 5 up to 7. In this survey, the researcher decided to choose for 6 categories as showed in question 8. An advantage of this number is that the respondent does not have the opportunity to choose for a neutral answer. A neutral answer could not be chosen when you have uneven categories, like 5 as number of categories. Additionally, question 9 covers the departments of the ICT firm where this Chinese respondent is operating. All these 7 categories have been defined by using the literature and the outcomes of the semi-structured interviews. Some of these Chinese participants were willing to mention the name of the department of the Chinese ICT firm. Subsequently, question 10 is aiming at the personal features that may affect the transfer of knowledge, experiences and skills. For question 10 the researcher decided to choose for 5 categories. The same categories have been used by Vagias (2006) who is supervised by Clemson University. The choice for unequal categories for this question could be explained by the sensitivity of this question. The respondent will feel more comfortable due to the existence of a neutral category. The high skilled Chinese ICT migrants are cautious about giving their opinion about their Chines ICT firms and their work performance, like the transfer of knowledge, experiences and skills. In contrast, giving an opinion about migrating to Ghana would not be an issue, because it is not directly linked to their work. In this study, the outcomes of the survey are intended to confirm statements of the high skilled Chinese ICT migrants. In this study, this survey is a quantitative instrument and the quantitative outcomes will complement the qualitative outcomes collected by qualitative instruments, like semi-structured interviews and participant observations. The number of collected surveys in this study is 8 and therefore the outcomes are not representative for the whole group of high skilled Chinese ICT migrants in Accra Metropolitan Assembly. This can be explained by the number of respondents. In essence, a number of 248 respondents are required to speak of representative outcomes with 95% confidentially (Krejcie & Morgan, 1970, pp. 607-610).

### 4.5 Semi-structured interviews

For this study the semi-structured interviews are used to discover the motives of high skilled Chinese and Ghanaian ICT migrants for migrating to respectively Ghana and China. In



addition, the semi-structured interview is a qualitative instrument that is able to collect data about the transfer of knowledge, experiences and skills. Subsequently, also the personal features that affect the transfer of knowledge, experiences and skills could be investigated by using semi-structured interviews. Both groups of high skilled Chinese and Ghanaian ICT migrants are requested to participate in these semi-structured interviews. As described in the previous section, the high skilled Chinese ICT migrants will also be requested to fill in a survey that focused on the motives to migrate and the personal features that influence the transfer of knowledge, experiences and skills. The decision to choose for a survey can be explained by the language proficiency of the researcher and the group of high skilled Chinese ICT migrants. In this sense, speaking the English as language could be an issue for some of these high skilled Chinese ICT migrants. On the other hand, the high skilled Chinese ICT migrants could speak Chinese fluently, but this is not the case for the researcher. For the high skilled Ghanaian ICT migrants, speaking English would not be a problem during the semistructured interviews. This is because English is considered as a native language in Ghana. During the semi-structured interviews it is likely that the high skilled Chinese ICT migrants do not prefer to speak openly about their work. The reason is that they do not want to hamper their job position within their Chinese ICT firm. For the high skilled Ghanaians the expectation is that they are willing to talk about their work and would appreciate it if someone asks about their work and the development of Ghana in general. In this study, the semi-structured interviews with high skilled Chinese ICT migrants are taken place in their homes and not at their workplace. An explanation is also the lack of time during the work week and therefore most semi-structured interviews are conducted during the evenings and weekends. On the other hand, the semi-structured interviews with high skilled Ghanaian ICT migrants are happened at their workplace. However, the limitation of this location is that to a large extent the opinions of the participants are coloured by their profession. In this situation the semi-structured interview is an appropriate instrument according to Bernard (2006). His explanation is that this instrument is useful if a researcher has to deal with participants who are operating in bureaucratic organizations/firm, because they have limited time during a working day. The researcher has experienced in the field that this issue applies to both groups. In other words, the high skilled Chinese and Ghanaian ICT migrants operating in multinational firms or governmental institutions/agencies have to deal with a relatively high workload that affects their availability. For the high skilled Chinese ICT migrants the semistructured interviews are scheduled in the evenings/weekend. While for the high skilled



Ghanaian ICT migrants the semi-structured interviews are planned on working days. However, through their limited availability it will take a few weeks before a semi-structured interview can take place. A practical aspect is also that a voice recorder to save all sounds and spoken words would not be appreciated by the participants. A clarification is that the participants feel themselves more comfortable when the researcher decided to make only notes. The consequence is that some information is missing when a voice recorder will not be used, like the tone of voice of the participants and the moments of silence during an interview. On the other hand, the advantage of using notes instead of a voice recorder is that participants are more willing to speak openly about sensitive issues, like work related issues. The researcher will provide in this case only written summaries of the outcomes of the semi-structured interviews instead of providing comprehensive transcriptions. This is because the comprehensive transcriptions include also all spoken words and particularities such as the tone of voices and moments of silence.

### 4.6 Participant observations

The intention is to perform participant observations for both groups. For the Chinese high skilled ICT migrants conducting a participant observation at their workplace is a challenge. Firstly, this group has to deal with a relatively high workload and therefore it would be difficult to make appointments at their workplace. Thereafter, the Chinese ICT firms would like to protect their status. In this sense, observing behaviour and getting an understanding of the company strategies will not be beneficial for the reputation of these Chinese ICT firms. Besides, this study was not imposed by the management of the Chinese ICT firms, which makes conducting participant observations at the workplace impracticable. Also for high skilled Ghanaian ICT migrants it was difficult to get involved in their workplaces. However, with the help of the introduction letter of the Centre for Migration Studies it was possible to have a participant observation during the 'Digital Family Forum'. For the Chinese high skilled ICT migrants the researcher decided to plan the participant observations at their homes. A clarification is also that the researcher already knows a number of high skilled Chinese ICT migrants within his social network in an informal way. Nevertheless, the researcher conducted 4 participant observations in the field. Three participant observations took place during informal dinners at the homes of the Chinese high skilled ICT migrants. Simultaneously, these informal dinners were also an opportunity to meet potential interviewees and to build a social relationship with them. Attending these informal dinners



was also a chance for the researcher to have a look at how high skilled Chinese ICT migrants are sharing their work experiences with other colleagues in an informal setting. All these informal dinners were organized in a domestic environment, like a living room of an apartment. Looking at the participant observation of Ghanaians, the researcher attended an official event organized by the MoC of Ghana called 'Digital Family Forum'. During this event, the researcher had the opportunity to get a clear picture of the operations of a variety of actors, like policy makers, regulators, stakeholders and the private sector in the Ghanaian ICT sector. Also the different interests of all these actors became visible during this event. For instance, representatives of the Ghanaian government have the priority to improve the accessibility of ICT services for all Ghanaian citizens. In contrast, the private sector will take into account particularly the cost-benefit of their operations, assuming that sparsely populated areas will be avoided by the private sector. During all these participant observations the researcher was able to make field notes. However, to be able to analyse these random field notes the researcher decided to use a specific framework. Different categories are included in this framework and therefore it is possible to structure the random field notes derived from the participant observations (Mack et al., 2005, pp. 13-27).

### 4.7 Limitations and risks

Before a study could start a number of participants are required. Through privacy issues, it was not possible to have access to an official contact list of high skilled Chinese ICT migrants prepared by the Ghana Immigration Service. For a researcher this is an efficient way to determine the target group and to request them to participate in this study. Therefore, the researcher decided to use the snowball sampling method. This is not a strange choice because some social relationships already exist with a number of high skilled Chinese ICT migrants operating in Accra Metropolitan Assembly in Ghana. Next to this, also high skilled Ghanaian ICT migrants are included within this study. Compared to the high skilled Chinese ICT migrants, the group of Ghanaian participants are not operating in the private sector. This group of Ghanaian participants operate only in the public sector, like governmental ministries, governmental agencies and universities. Before the field phase started, the researcher had received an introduction letter signed by CMS, department of the University of Ghana. Therefore, the researcher had the position to arrange meetings with Ghanaians operating in the public sector, like MTI, MoC, GIFEC and the UG. This introduction letter was not necessary intended for contacting the high skilled Chinese ICT migrants, because the



type of data collection for this Chinese group has been done in an informal way. Using this informal way does not mean that reaching the Chinese group is easier compared to the formal way. Trust in this case is as a significant precondition before high skilled Chinese ICT migrants as potential participants could be reached. Regarding the limitations of this study, both groups are operating in the private and public sector that makes analysing the data and drawing conclusions about the collected data more complicated. Nevertheless, investigating both public and private sector can also be considered as valuable for this study, because it will lead to insights that not have been discovered before in previous studies. After the end of the field phase, the researcher has collected in total 20 semi-structured interviews. The participants are respectively 9 high skilled Chinese ICT migrants and 1 high skilled Chinese ICT migrant. Also 4 high skilled Ghanaian ICT migrants and 6 high skilled Ghanaians with an ICT related job position have participated in a semi-structured interview. The last mentioned group has been included in this study to get an understanding of their perspective on Chinese operations in Ghana. Besides, they could further clarify whether the Chinese transfer knowledge, experiences and skills to them in Ghana. Moreover, the explanation for this relatively low number of semi-structured interviews is that both groups have to deal with a relatively high work load and therefore their availability is limited. During the fieldwork phase, the semi-structured interviews with high skilled Chinese ICT migrants took place during the weekends, while the interviews with the Ghanaian participants were scheduled in the break times on working days. In some cases an interview could take place during working time. Therefore an appointment should be made at least a number of weeks beforehand. Additionally, in the case of high skilled Chinese ICT migrants the number of semi-structured interviews and surveys could not only be clarified by the issue of availability. Also the fact that the researcher had a different ethical and cultural background may play a significant role in this case. Building trust and social relationships with the Chinese participants were preconditions before the researcher was able to enter the group of high skilled Chinese ICT migrants. A number of weeks were needed for the researcher to build up these social relationships. The consequence is that the time that has been used to build up these social relationships has a negative effect on the number of semi-structured interviews and surveys performed in the field. Besides, an issue that should not be overlooked is also the number of visits. The researcher has visited the high skilled Chinese ICT migrants more than once to make sure that all relevant information was collected. In summary, limitations as described in this section should not only ascribe to the groups of Chinese and Ghanaian participants. Also



the fact that the researcher has a different cultural and ethnical background should be considered as a limitation, which makes it more complicated to collect in-depth information. Besides, the limitation is also that the researcher is not able to speak fluently the Chinese language, which could hamper the in-depth data collection for this study.



# 5. High skilled migration of Chinese and Ghanaians operating in the field of ICT

#### 5.1 Introduction

As described in section 2.6 the number of Chinese ICT migrants who entered Ghana has increased substantially since 2006. The destination of this group is Accra Metropolitan Assembly, because Chinese ICT firms have established their branches in this geographical area. A significant number of these Chinese ICT migrants could be specified as high skilled persons who are operating as manager or engineer. An explanation for this relatively high number is the shortage of high skilled personnel in the local environment. In this study, the high skilled Chinese ICT migrants are operating in the following Chinese ICT firms; Huawei Technologies and UNIS. In contrast to the high skilled Ghanaian ICT migrants who are operating in governmental ministries, governmental agencies and universities. An increasing number of these high skilled Ghanaian ICT migrants move to China to attend seminar/training programs. Through the process of globalization, mobility of labour across the world has become a common phenomenon compared to a few decades ago. The globalization in the world is a process that is supporting this labour mobility, but does not directly explain the personal motives of these high skilled Chinese and Ghanaian ICT migrants.

# 5.2 Description of high skilled Chinese and Ghanaian ICT migrants

As described in the introduction 5.1, the Chinese ICT firms that are operating in Accra Metropolitan Assembly and which are included in this study are respectively Huawei Technologies and UNIS. Looking at the different districts, Huawei Technologies has established a branch in 'Osu' also defined in section 2.7 as one of the CBDs of Accra Metropolitan Assembly. While UNIS has their operations at the campus of the University of Ghana, Legon and therefore established a branch at the same campus. During the first meetings with the high skilled Chinese ICT migrants they appointed that they are living in residential clusters. Huawei Technologies as Chinese ICT firm has located their employees in the city of Accra, while UNIS has provided accommodation for their employees at the



campus of the UG, Legon. This has been confirmed by Mr. Wang, Project Manager of UNIS, who appointed that at the moment that this study was performed 12 high skilled Chinese ICT migrants were accommodated at the campus. The group of high skilled Chinese ICT migrants included in this study is a relatively young group with an average age varying from 24 to 34 years. This is in line with the number provided by the Chinese ICT firms, like ZTE Corporation (2013) and Huawei Technologies (2013), in which a majority of the work force that operate globally have an age varying from 20-30 years old. Nonetheless, also high skilled Ghanaian ICT migrants are included in this study. These persons are operating at the Ministry of Communications, GIFEC, MTI and GTFC. All these governmental institutions and governmental institutions established their offices in Accra Metropolitan Assembly. All high skilled Ghanaian ICT migrants in this study are employed in the public sector. All of them have stayed maximum three months continuously in China and remarkable is that all Ghanaian participants are male.

## 5.3 The motives of high skilled migrants for migration in a nutshell

There are a variety of motives for high skilled migrants to migrate, like the willingness to explore a new cultural environment. Also the intention to experience individual freedom in a country abroad could be considered as motive to migrate. Also firm-related issues may be seen as motives to migrate. For instance, compensation systems provided by firms, including premium assignments, housing and transportation, are seen as motives. Furthermore, also career development and the presence of facilities in the local environment are motives that have been described in the literature. In the following section the motives of the high skilled Chinese ICT migrants will be further explained.

## 5.4 The motives for migrating to Ghana

In this study a total number of 9 high skilled Chinese ICT migrants were involved. This number includes the high skilled Chinese ICT migrants who participated in the semi-structured interviews and those who were involved in the participant observations. Kimberly is one of these high skilled Chinese ICT migrants. She is 32 years old and is originally from Hunan province in China. During the interview she appointed that she has been working in Ghana since January 2012. Furthermore, she appointed that she has experienced more individual freedom in Ghana compared to China. According to Kimberly, individual freedom



should be placed in a societal context. She mentioned that especially the Ghanaian and Chinese societies differ from each other and that explained why someone experienced more or less individual freedom. Kimberly quoted: 'In Ghana I experience more individual freedom in the society than in China. I have no worries about issues like buying a house and getting married.'. Besides, the importance of self-autonomy and individual freedom for Kimberly is also reflected in her marital status. She is single and that is something she appreciates. Her quote can also be confirmed by the outcomes of the survey. Thereafter, she also made a comparison between Ghana and Nigeria. Kimberly appointed she experienced more individual freedom in terms of security in Ghana. Kimberly quoted: 'I am feeling comfortable in Ghana, because I am able to travel safely by myself in this country, which is not the case for Nigeria.'. Another issue that Kimberly highlighted during the interview was the provision of housing by her Chinese ICT firm. This is also one of the motives to relocate to Accra Metropolitan Assembly. Kimberly quoted: 'I think housing is not a problem for us in Accra, because an apartment has been provided by our company. Our company is also taking care of the supply of electricity and water which is irregular in Accra.'. Also the fact that she was able to make a career switch between departments was for Kimberly a motive to migrate to Ghana. According to Kimberly: 'In Nigeria I was operating in the Sales department, while in Ghana I have made a switch to the Human Resource department.'. Also within the survey she confirmed that the opportunity to make a career is a significant motivation for her to migrate. Subsequently, also the presence of facilities has been appointed during the interview. Kimberly has a positive attitude towards the presence of facilities in Accra Metropolitan Assembly. She appointed that there is diverse pattern of facilities and that facilities are in the vicinity of her accommodation. Kimberly quoted: 'Within Accra everything is well organized. In the main capital you can find facilities, like shopping malls, cinemas and restaurants. Thereafter, also sport facilities are presented, like a tennis court at my accommodation.'. Nevertheless, the presence of facilities should not be marked as an important motive for her to migrate as confirmed by the outcomes of her survey.

Also Collin was willing to participate in an interview about his motives for migration. Collin is also 32 years old and has been working in Ghana since February 2011. Before he arrived in Ghana, he has worked in a variety of African countries, like Nigeria, Benin and Togo. During the interview Collin highlighted that Ghana is an attractive cultural environment compared to for instance Nigeria.



According to Collin: 'Ghana has the best local conditions of West-Africa, in terms of culture and people's kindness. I don't experience difficulties in the interaction with local Ghanaians.'. Collin added that especially in Nigeria he is always feeling social pressures, which hamper the willingness to interact with local and to adapt to a new cultural environment. Also the opportunity to make a career in Ghana was a motive for him to migrate. According to Collin: 'When I moved to Ghana in 2011 I could make a switch from the Research and Development towards the Marketing department.'. Also the compensation for international travel expenditures has been explicit highlighted by Collin. According to Collin: 'I am able to visit my friends and family in China one or two times a year, while international travel costs are paid by my ICT company.'. During the interview, Collin also showed his satisfaction about the presence of facilities, especially the sport facilities. According to Collin: 'My company is taking care of the employees, because they organize football matches. These football matches take place at a well maintained sport accommodation in Accra.'. The presence of facilities is despite his satisfaction not an important motivation for him to migrate as confirmed by outcomes of the survey.

Also Kalan was a participant in this study who was willing to participate in an interview. Kalan is 28 years old and is coming originally from the Central region in China. He arrived in Ghana in 2011 and this is also his first African country where he has worked. During his interview, he appointed the presence of local facilities in Accra Metropolitan Assembly. He highlighted that the number of leisure facilities is limited in this area. According to Mr. Kalan: 'The number of leisure facilities is limited and at the same time the leisure facilities that are located in Accra have a poor quality compared to China.'. Therefore, the presence of facilities should not be considered for him as motive to migrate to Accra Metropolitan Assembly in Ghana.

The gatekeepers in this study are John and his wife Caroline. Both of them have participated in semi-structured interviews and participant observation. It is important to mention that only John can be specified as a high skilled Chinese ICT migrant, while Caroline is a lecturer at the University of Ghana and therefore a high skilled Chinese migrant. Caroline is also included in this study, because she is able to support the statements of John. Both of them arrived in 2009. John is 30 years old and is originally from the Hengzhou region in China. Caroline is 31 years old and is originally from Zhejiang region in China. They married in 2012. During the interview, Caroline as partner of John emphasized on the issue of individual



freedom. Also she makes a comparison between the societies of Ghana and China, which is in line with the statement of Kimberly. She appointed that in Ghana life is more simplified than in China with fewer responsibilities. According to Caroline: 'I am feeling less responsible in Ghana than in China and have no concerns about getting married before buying a house. So you could say life in Ghana is more simplified.'. Also the outcome of the survey confirmed that individual freedom was a significant motivation for her to migrate to Ghana. On the other hand, John didn't appoint individual freedom during his interview. A topic that John raised was the compensations for travelling. John appointed that he received international travel compensations which he used for visiting his family and friends in China. John quoted: 'My company is willing to compensate international travel expenditures once a year for a trip to China with the aim to visit family/friends, which is an asset if you are working abroad.'. Simultaneously, Caroline confirmed that the Chinese ICT firm of John is also providing local transportation. She said during the interview that the local transportation for her husband is well organized. According to Caroline: 'Every day John is able to take a car with a driver hired by his ICT company.'. In essence, a distinction can be made between the provision of international travel cost and the provision of local transportation. The first mentioned is especially for John a significant motivation for him to migrate to Ghana as overseas country. Subsequently, also the premium compensations were highlighted by John. He was willing to speak about this financial aspect, which was not the case for the majority of the high skilled Chinese ICT migrants who participated in this study. This could be explained by the intensive relationship that the researcher had with John. During the participant observation on 8<sup>th</sup> March 2014, John confirmed that a bonus provided by his Chinese ICT firm makes it attractive to accept an overseas offer. John quoted: 'I and also my Chinese colleagues receive a bonus on top of their average income, because you are working in a different environment. This will make it more attractive for me and I think also for my Chinese colleagues to accept an overseas assignment.'. Also Caroline confirmed during the participant observation that Job received a relatively high salary due to the different working environment. Caroline quoted: 'My husband received a relatively high salary in Ghana, because of the inconvenience of working overseas. I have understood that this salary of these high skilled Chinese ICT migrants is double or triple compared to salary in China.'. Additionally, also building an international career is an important issue for John. He appointed that Ghana should be considered as a temporary destination. In this case, having work experience in Ghana can contribute to your international career. With work experience



In Ghana it would be easier to continue your career in European countries or the United States according to John. For him and also his Chinese colleagues the European countries and United States are seen as final destinations. According to John: 'I and also my colleagues prefer to work in European countries or the United States, because the people there have the same working attitude like us.'. John also explained that within his professional network he has noticed that for him Germany would be a preferable country. According to John: 'I have heard from my colleagues in Europe that Germany is an European country where you have the opportunity to develop your skills in commercial management.'. As last issue, John highlighted also the lack of facilities during his interview. According to John: 'There is a limited number of supermarkets selling Chinese food in Accra and at the same time the number of facilities, like bars and cinema's is insufficient compared to China.'. Therefore, the presence of facilities is not a significant motive for him to migrate to Ghana.

Donald is a colleague of John and during his interview he highlighted that the cultural environment of Ghana should not be overlooked. He emphasized on the kindness of Ghanaians as cultural aspect and his interaction with local Ghanaians. This was also a motivation for him to leave Nigeria where he worked before. According to Donald: 'The feeling of social pressure in Nigeria makes interacting with other ethnic groups difficult and makes Nigeria as country less attractive, which is not the case for Ghana as friendly country.'. Subsequently, in the same line as John, Donald acknowledged that Ghana is a perfect temporary destination. From Ghana it is easier to make a step further and to continue your career in a well-developed country. Donald appointed during the participant observation on 22<sup>nd</sup> March 2014 that his intention is to continue his career in Europe. According to Donald: 'After expiration of my contract in Ghana I have the intention to continue my career in the United Kingdom.'. Donald added that he is convinced that there are opportunities to develop yourself in these European countries. Donald quoted: 'I prefer to continue my career in Europe, where I have the ability to learn and to develop myself professionally. Thereafter I have also the possibility to move to Europe, because my ICT company has several branches located in Northern and Southern Europe.'. This statement of Donald is in line with the description given by Lazarova & Taylor (2009). They described that continuing your career abroad entails that an individual has the opportunity to accumulate his knowledge.

Furthermore, Sabine arrived in September 2013 in Ghana and is 24 years old. She is a high skilled Chinese ICT migrant and does not share the opinion of Kimberly about the individual



freedom that she experienced in Ghana. An alternative issue that Sabine highlights during her interview is the provision of housing by her Chinese ICT firm. In Ghana her Chinese ICT firm is able to provide housing for the employees, which is not the case in China where she has worked before. Sabine quoted: 'My ICT company is providing compensations, like an accommodation in Ghana, this is much better organized than in China where you have to look for an accommodation by yourself.'. Next to the provision of housing, also the provision of local transportation is a topic that Sabine emphasized on during her interview. She said that local transportation is well organized by her Chinese ICT firm. According to Sabine: 'My ICT company is providing transportation, they even hire Ghanaian drivers to bring us to our office.'. In this research, transportation has not been included in the survey due to the issue that transportation could be interpreted in different ways, like local and international transportation. During the interview, Sabine also spoke about an assignment premium that she received from her Chinese ICT firm. As described before, this assignment premium is a financial aspect that is highly personalized. Through the social relationship with the researcher also the more sensitive topics were discussed by Sabine. She outlined that she received a relatively high salary in Ghana compared to China where she worked before. According to Sabine, this is due to the assignment premium, which is the major part of the salary. She received it because of the inconvenience of accepting an overseas offer. Sabine quoted: 'In Ghana I have the possibility to earn a lot of money compared to China where I have worked before. A large part of this salary consists of compensations for not having the chance to see your family and friends.'.

For an informal dinner on 22<sup>nd</sup> March 2014, John invited one of his colleagues called Steven. During this informal dinner a participant observation took place. At the beginning Steven as high skilled Chinese ICT migrant confirmed that as manager he has a high job function within his Chinese ICT firm. Also he emphasized on the importance to discover new cultural environments. He explained that he has travelled to several countries in the world because of his business. According to Steven: 'I have travelled to different places around the world, because of my work. These countries are respectively; Iraq, Kuwait, Singapore, Japan, Spain and the Netherlands.'. Simultaneously, Steven linked a new cultural environment with personally and professionally development of a person. He added: 'I am convinced that people should work for a certain time abroad, to gain new cultural experiences with the intention to develop themselves personally and professionally.'.



His intention is to visit all continents once in his life. According to Steven: 'I have never been to Latin-America and my intention is also to work there for a few years, because then I have been to all continents in the world.'. To a large extent, his travel experience could be clarified through his high job position within a Chinese ICT firm. During the participant observation the department in which Steven is operating remains unknown. In this context, Steven would have a high CQ as described by Templer et al. (2006) meaning that he is willing to adapt to a variety of new cultural environments. This is also an indication that he is willing to interact with local colleagues.

Robert as high skilled Chinese ICT migrant contributed to this study through his participation in a semi-structured interview. Also Robert highlighted that he has the willingness to discover the Ghanaian culture. However, in practice it is difficult to discover the Ghanaian culture due to his relatively high workload. According to Robert: 'I am willing to learn a new culture, through our work we don't have the chance to get in touch with our Ghanaian colleagues and to learn their culture.'. Furthermore, Robert was during his interview able to make a comparison between the Chinese and Ghanaian culture. He explained that the Chinese culture is mainly based on work, while the Ghanaian culture is mainly dominated by religion.

Next to the informal dinner on 22<sup>nd</sup> March 2014, the researcher also attended an informal dinner on 16<sup>th</sup> February 2014. Also Mike as colleague of John joined this informal dinner. He is 23 years old and has worked in Ghana since 2013. Mike highlighted that his expectation was that he should experience more individual freedom in Ghana compared to China. However, due to circumstances his feeling of freedom in Ghana is limited. According to Mike: 'At this moment, I have to make a decision about when to return to China to get married with my girlfriend and to buy a house.'. In this sense, his decision about his return to China also depends on the expiration date of his contract in Ghana. However, individual freedom was still an important element in his decision making to migrate to Ghana as showed by the outcomes of the survey.

## 5.5 The motives for migrating to China

The motives of high skilled Chinese ICT migrants have already been outlined in the section 5.4. Also the high skilled Ghanaian ICT migrants that will be investigated in this study will also have their motivations for migrating to China. A large part of the high skilled Ghanaian ICT migrants stay temporary in China for business, like participating in training/seminar



programs. To avoid misinterpretations of migration, the UN (1949) made a distinction between permanent and temporary migration. The interpretation of the UN (1949) is: 'when the removal is for one year or more the migration should be regarded as permanent, while migration for less than one year should be regarded as temporary.'. According to the UN (2006) these temporary migrants should be defined as; tourists, business people who travel internationally and who stays less than one year in a foreign country. In this research the high skilled ICT migrants are seen as business people who attend training/seminar programs and international conferences.

In the field phase, Mr. Johnson was one of the high skilled Ghanaian ICT migrants who was willing to participate in an interview. Mr. Johnson is operating as staff member at Ministry of Communications of Ghana at the Department Policy, Planning, Monitoring and Evaluation. For his work he has visited China several times. In 2006 he attended the ITU Telecom World Conference in Hong Kong as neighbouring country of China. According to Mr. Johnson: 'I received an invitation of the government of Hong Kong, many other countries in the world were also invited.'. Next to this, Mr. Johnson emphasised on a training program in China in 2009. Mr. Johnson quoted: 'I was invited by the Chinese government to visit China for a twoweeks training program in 2009 which was organized by the Chinese government and led by Chinese ICT experts from their universities.'. The last time that Mr. Johnson visited China was in March 2013. As representative of MoC he participated in a training program also organized by the Chinese government. According to Mr. Johnson: 'Several groups participated in this training program, like academics, officials and business people. The training program focused on the following subjects; E-government, E-business applications.'. Looking at the migration pattern of Mr. Johnson then it has a circular character, because he moved back and forth over a period of several years (Triandafyllidou, 2013, p. 5).

Also Mr. Mensah as representative of MTI visited China in 2013. He appointed that he received an invitation of the government of China to participate in a seminar program in China. According to Mr. Mensah: 'I participated in seminar sessions who took place from 21<sup>st</sup> July until 14<sup>th</sup> August 2013. Also representatives of other African countries, like Kenya and Zimbabwe, were attending these seminar sessions.' Mr. Mensah added the Academy for International Business Officials (AIBO) organized all the seminar sessions. At the same time, Mr. Mensah added that he received also a scholarship to cover travel expenditures and accommodation costs.



Mr. Amoah as Marketing Officer at the Ghana Trade Fair Company confirmed that he accompanied Mr. Mensah, both representatives of Ghana as African country. Mr. Amoah was invited by the Chinese government to participate in a seminar sessions called 'E-commerce and exhibition economy for developing countries' that took place between 21<sup>st</sup> July and 14<sup>th</sup> August 2013. According to Mr. Amoah: 'The AIBO in cooperation with the Shanghai International College of Culture (SICC) organized these seminar sessions.' Thereafter, Mr. Amoah added that the Chinese Ministry of Finance and Commerce financially supported these seminar sessions through provision of scholarships to cover international travel costs.

As high skilled Ghanaian ICT migrant Mr. Akiti travelled to China to attend a training program. The subject of this training program was 'Communication technology for rural areas'. According to Mr. Akiti: 'Our office received an invitation of the government of China and they decided to propose me as candidate.'. Mr. Akiti appointed in a previous interview together with Honourable K. Attor, CEO GIFEC and Mr. Takyi, Technical Manager that China has provided scholarships to be able to attend these training programs. These scholarships could cover the international travel costs, accommodation and food/drinks.

### 5.6 Conclusion

In this chapter the motives of high skilled Chinese and Ghanaian ICT migrants to migrate to respectively Ghana and China have been investigated. In essence, during their stay abroad both migrant groups operate within a firm, attend training/seminar programs or international conferences. A difference between both high skilled migrant groups is the duration of their stay. The high skilled Chinese ICT migrants usually stay in Ghana for a variety of years, whereas the high skilled Ghanaian ICT migrants stay maximum three months in China. For the group of high skilled Chinese ICT migrants the willingness to explore a new cultural environment is a significant motive for migrating. This is followed by the motive of building a career abroad in Ghana. To a certain extent, these two motives for migration are explicable, in both cases it refers to the development of high skilled Chinese ICT migrant himself/herself in a cultural and professional way. To a lesser extent, compensations provided by a Chinese ICT firm have been highlighted. In this category the compensation for transportation, like international travel expenditures, is a common topic. Furthermore, the individual freedom and presence of facilities in the local environment are not considered by a significant number of high skilled Chinese ICT migrants as important elements in their decision making to migrate



to Ghana. On the other hand, the high skilled Ghanaian ICT migrants only highlighted the invitations of the Chinese government and also the receipt of scholarships as motives to migrate temporary to China. In this sense, these high skilled Ghanaian ICT migrants represented Ghana as country, which is not directly the case for the group of high skilled Chinese ICT migrants operating in Ghana. A difference is also that career development and exploring a new cultural environment are motives to migrate for this group of high skilled Chinese ICT migrants. In contrast to the group of Ghanaian participants who consider career development and exploring a new cultural environment mainly as positive outcomes of migration and consider those not at the first place as motives to migrate. In table 1 the motives of both groups of high skilled Chinese and Ghanaian ICT migrants have been illustrated in order of most cited to least cited.

Table 1: The motives for migration according to high skilled Chinese and Ghanaian ICT migrants.

High skilled Chinese ICT migrants:	High skilled Ghanaian ICT migrants:
Exploring a new cultural environment	Invitations of Chinese government
Career development abroad	Compensations (Scholarships)
Compensations (Transportation)	
Individual freedom	
Presence of facilities	



# 6. The transfer of knowledge, experiences and skills; a two-sided process?

### 6.1 Introduction

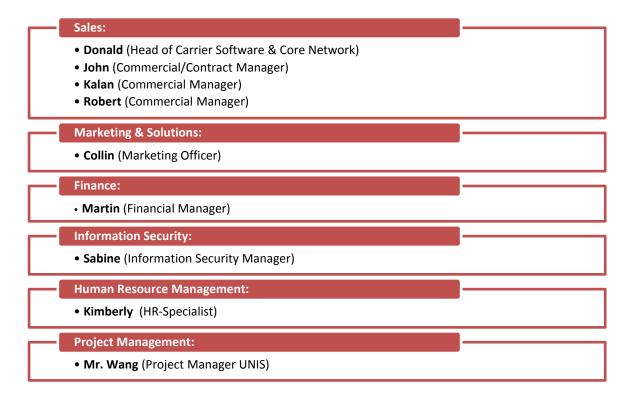
The motives of high skilled Chinese and Ghanaian ICT migrants to migrate have already been discussed in the chapter 5. Migration has become a significant phenomenon in this globalized world. Nowadays, migration should no longer be considered as self-contained phenomenon, but should be linked the local development in a country. A concept that is aiming to explain this relationship is known as the 'migration-development nexus' (Van Hear & Sørensen, 2002, pp. 287-289; Schiller & Faist, 2010, pp. 7-10). This study focused also on the existence of knowledge, experiences and skills transfer and determined whether this transfer process is one-sided or two-sided. Therefore, both groups of high skilled Chinese and Ghanaian ICT migrants have been taken into account in this study. Both groups are operating in respectively the private sector and the public sector. Furthermore, outcomes of this study are also useful for the revision of national policies. One of these policies is called the ICT4AD policy introduced in 2003 by the Ghanaian government.

## 6.2 The job positions of the high skilled Chinese ICT migrants

The high skilled Chinese ICT migrants included in this study are operating in Chinese ICT firms, like Huawei Technologies and UNIS. The increase of the high skilled Chinese ICT migrants in Ghana is reflected in the statistics of Ghana Immigration Service (2014B). The high skilled Chinese ICT migrants are also mentioned as the Chinese participants in this study. These Chinese participants have an age varying between 24 and 34 years old. In addition, the majority of these Chinese participants is male, 62,5% against 35,5% a minority that is female. In these Chinese ICT firms, the Chinese participants hold different job positions. Through privacy reasons the departments have not been linked to the name of a Chinese ICT firm. An exception is Mr. Wang, Project Manager at UNIS. Moreover, the job positions and the different departments of the Chinese participants are illustrated in figure 7.



Figure 7: The high skilled Chinese ICT migrants subdivided into the various departments of their Chinese ICT firm.



# 6.3 The Chinese perspective on the transfer of knowledge, experiences and skills

In figure 7 several departments are respresented, which makes it possible to investigate the Chinese participants belonging to different departments and their view on the transfer of knowledge, experiences and skills. In this study, John who is operating as Sales/Contract Manager was willing to share his perspective on the transfer of knowledge, experiences and skills. He elaborated especially on the knowledge, experiences and skills of his Ghanaian colleagues. During the interview John highlighted that his Ghanaian colleagues deliver specific knowledge, which support the operations of his Chinese ICT firm. According to John: 'My Ghanaian colleagues have extensive knowledge of the local ICT systems.'. Subsequently, John added that his Ghanaian colleagues also support the different departments of his Chinese ICT firm. John quoted: 'My Ghanaian colleagues are supporting the company and also my department with the Enterprise Resource Planning system (ERP-system), known as business software to facilitate the flows of information between departments.'. An ERP-



system has also been implemented in the sales department of his Chinese ICT firm as explained by John. According to Monk & Wagner (2009), an ERP-system is able to improve the sales order process. This process includes the following components; pre-sales activities, sales order processing, inventory sourcing, delivery, billing and payment. On the other hand, John and his Chinese colleagues do also transfer specific knowledge towards their Ghanaian colleagues. In this context, the transfer of knowledge is linked to his Chinese ICT firm strategy. John said that in the long term his Chinese ICT firm aims to get a ratio of 90/10. In concrete words, the workforce of the branch in Ghana should consist of 90% Ghanaian and 10% Chinese colleagues. According to John: 'It will take some time before we get this ratio, because transferring knowledge and skills is a time consuming operation.'. He added that workshops and seminar groups are organized for his Ghanaian colleagues to acquire knowledge and skills. According to John: 'Within these workshops and seminars my Ghanaian colleagues will acquire professional skills and ICT knowledge.'. At the end of the interview, John elaborated also on the composition of his Sales department. He mentioned that 7 employees are operating in the Sales department, including 4 Chinese and 3 Ghanaian colleagues.

Also Kalan is operating in the Sales department in a Chinese ICT firm. He is employed as Commercial Manager. He did not emphasize on the transfer of knowledge, experiences of skills. Nonetheless, he clarified that he is a newcomer in the ICT sector. He studied Civil Engineering at the University of Guangzhou and afterwards he worked in an architectural firm for some years. Kalan decided to make a switch to a Chinese ICT firm and ends up in Ghana. In this country he closely cooperates with the management of MTN, a telecom firm in Africa. MTN is a customer of his Chinese ICT firm. According to Kalan: 'The staff members of MTN are originally coming from Ghana and Lebanon.'. Kalan mentioned that his Chinese ICT firm is providing a variety of services to MTN. During the interview, he was not allowed to speak openly about the different types of services.

The transfer of knowledge, experiences and skills is according to John a two-sided process. This view does not correspondent with the opinion of Sabine. Also Sabine is operating within a Chinese ICT firm and is employed as Information Security Manager. According to Sabine, the transfer of knowledge, experiences and skills is basically one-sided. In other words, most knowledge, experiences and skills have been transferred from the high skilled Chinese ICT migrants towards their Ghanaian colleagues. She added that the acquisition of knowledge and



skill by her Ghanaian colleagues proceed easily. According to Sabine: 'My Ghanaian colleagues are learning quite easily. During sessions organized by my ICT company they have the opportunity to gain knowledge about the company's strategy and at the same time have the ability to improve their skills, like their communication skills.'. The knowledge about the firm's strategy and the professional skills were transferred by using a formal learning method, like sessions.

Furthermore, Mr. Wang is the only Chinese participant in this study who agreed with announcing the name of his Chinese ICT firm known as UNIS. Mr. Wang is Project Manager of the Phase 2 ICT Distance Education Project. This ICT Distance Education project can be divided into different phases. Phase 1 was completed in 2013 and entails the installation of ICT infrastructure in a cost-effective manner at the campus of the University of Ghana, Legon. Subsequently, Phase 2 is a follow-up to Phase 1 and has been progressing since 2012. The aim of Phase 2 is to implement distance learning by using ICT on a regional and international scale. One of the key operations within Phase 2 is to train the Ghanaian staff of the UG. After installation of the ICT infrastructure and equipment, this Ghanaian staff should get an understanding of how to use it. Mr. Wang highlighted during the interview that in particular experiences have been transferred to the Ghanaian staff. According to Mr. Wang: 'We shared our experiences with the Ghanaian staff. For instance, how they could organize the daily administration by using a PC and how to maintain the database on campus.'. Also skills have been transferred to the Ghanaian staff according to Mr. Wang. For instance, the Ghanaian staff got training about how to download course materials and presentations by using ICT equipment. Also making videoconferences with actors around the world, also known as 'video on demand', is possible according to Mr. Wang. He confirmed also that the Ghanaian staff acquired these experiences and skills easily, but support in the future is still needed. Mr. Wang quoted: 'My Ghanaian colleagues are learning quickly during working time and the weekly meetings. However, supporting them is required to keep them on the right track.'. Mr. Wang also added that the objective of UNIS, owned by the University of Tsinghua, is that the University of Ghana should reach the same ICT proficiency level as that of Chinese universities. According to Mr. Wang: 'The final goal is that the Ghanaian staff should get the same ICT proficiency level as Chinese ICT employees of Chinese universities.'. In general, a Project Manager could be defined as someone who is responsible for project imitation, project planning, project execution and project closure as described by Westland (2006). In this context, Mr. Wang is also a team player, because he is frequently in



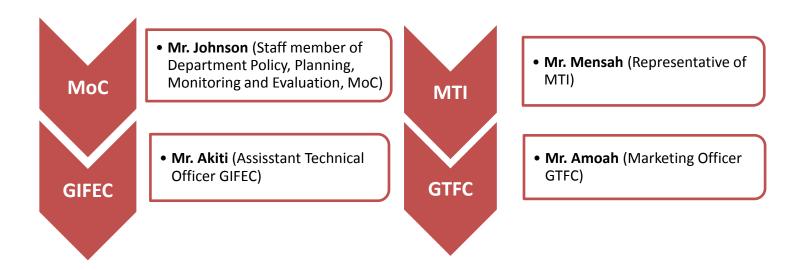
touch with the Ghanaian staff during working time and weekly meetings. One of the representatives of the Ghanaian staff is Mr. Yikimpa Chigabatia who is operating as IT Manager UG Computing Systems. During the interview Mr. Yikimpa Chigabatia appointed that he cooperates closely with Mr. Wang. Also he confirmed that his Chinese colleagues, including Mr. Wang, are transferring their experiences to them. Mr. Yikimpa Chigabatia quoted: 'The Chinese give us advice and they share their experiences with ICT equipment, like data centres. They also compare their proposals with ours and sometimes we explain why we don't accept their proposal.'. The transfer of these experiences takes place during working time or weekly meetings as confirmed by Mr. Wang. In this context, during working time means that the transfer of experiences happened in an informal setting. This has also been defined by Berg & Chyung (2008) as a type of informal learning. A formal and an informal way of learning have been appointed by the Chinese participants. In this study, the sessions organized by the Chinese ICT firm where Sabine is operating is an example of formal learning.

# 6.4 High skilled Ghanaian ICT migrants and their job positions

To get a mutual understanding of the transfer of knowledge, experiences and skills it would also be relevant to focus on the group of high skilled Ghanaian ICT migrants. The Ghanaian participants in this study are employed at MoC, MTI, GFTC and GIFEC. All of them have stayed temporary in China for business purposes, like to attend trainings/seminar groups or international conferences. At the same time, these Ghanaian participants are also belonging to the group of 700 Ghanaian professionals who were invited by the Chinese government to attend training/seminar programs in China as outlined by Shinn & Eisenman (2012). Additionally, all these Ghanaian participants in this study have stayed maximum three months continuously in China. It is known that the Ghanaian participants hold a different job position within their governmental institution or agency. The names of the high skilled Ghanaian ICT migrants, job position and governmental institution/agency are illustrated in figure 8. The remaining Ghanaian participants listed in table B in Appendix 11 have not visited China for business purposes. These Ghanaian participants cooperate with high skilled Chinese ICT migrants in Ghana and therefore their input is still valuable. This is due to their ability to justify the statements of these high skilled Chinese ICT migrants.



Figure 8: The high skilled Ghanaian ICT migrants operating in MoC, GIFEC, MTI, GTFC placed in hierarchical order.



# 6.5 The Ghanaian view on the transfer of knowledge, experiences and skills

As described in the section 6.4 the high skilled Ghanaian ICT migrants have different purposes to move to China. Mr. Johnson as staff member of Department Policy, Planning, Monitoring and Evaluation of MoC went to China several times. In the past he obtained a Bachelor degree in Business Information Systems with Applied Computing at Middlesex University in the United Kingdom. During the interview Mr. Johnson explained that Hong Kong was also one of his destinations. The government of Hong Kong has invited Mr. Johnson to attend an ITU Telecom World Conference in 2006. Ghana is member of the international organization called 'ITU Telecom'. Mr. Johnson represented Ghana as African country during the ITU Telecom World Conference in 2006. According to Mr. Johnson this World conference can be divided into two components; exhibitions and a forum. In these exhibitions Chinese ICT firms, like Huawei Technologies, had the opportunity to show their ICT equipment and technologies. The second part of the ITU Telecom World Conference 2006 could be defined as a forum. Stakeholders of ICT firms and also representatives of countries had the opportunity to discuss issues linked to policies, regulations and the business



environment. Mr. Johnson added that almost 200 member states were represented at the ITU Telecom Conference in 2006. Next to Hong Kong, also China was a country where Mr. Johnson has stayed temporary. In 2009 he was invited by the government of China to participate in a training program with a duration of two weeks. This training program was led by high skilled Chinese ICT experts from Chinese universities. According to Mr. Johnson, the training program included also small group discussions. Generally speaking, the training program was focusing on the planning and building of ICT-research and development parks. Mr. Johnson explained that Ghana nowadays is building an ICT park in Ghana, to be precisely in Tema 15 kilometers from Accra. Honorable H. Cobbina as Chairman of the Ghanaian Parliament confirmed the construction of an ICT park in Tema that started in 2012 (Parliament of Ghana, 2014). Returning to the training program, China provided information about how to develop business plans and introduced new technologies. According to Mr. Johnson: 'China provided information about how to develop a business plan and they also introduced a variety of new technologies.'. Subsequently, Mr. Johnson added that he is convinced that China will support Ghana also in the long term in the field of ICT. Regarding the ICT park in Tema, Mr. Johnson said that this is a logical choice because its already a flourishing and economically important district in Ghana. Developing an ICT park is according to Mr. Johnson also a way to attract new investors and is needed to become a competitive country in the world. Nevertheless, the last time that Mr. Johnson stayed temporary in China was in March 2013. He was invited by the government of China to participate in a training program about E-government and E-business applications. Mr. Johnson quoted: 'The training program was hosted by representatives of Chinese universities. The group who participated in this training program consisted of academics, officials and business people.'. In this training program these groups attended different sessions. The group of business people focused especially on how to set up an online business and how to optimize online transactions. The group of Mr. Johnson attended a session about E-governance. According to Mr. Johnson: 'During our session we learnt about application systems for passport or driving licence.'. In essence, the aim of this session was to reduce the gap between the government and the citizens. Other issues that have been highlighted in this session were the electronic regulation of traffic flows and an electronic network system that register the consumption of water, electricity and gas by citizens. At the end of the interview Mr. Johnson concluded: 'China has the expertise and also the capacity to support countries like Ghana with the establishment of those electronic systems.'.



Also Mr. Akiti is one of the Ghanaian participants who went to China. Mr. Akiti is operating as Assistant Technical Officer at GIFEC. This governmental agency was founded in 2004 after the introduction of ICT4AD policy. It is an implemention agency of MoC and facilitates ICT infrastructure in the remote areas of Ghana (GIFEC, 2014). Mr. Akiti obtained a degree in Management and Computer Studies at Sikkim Manipal University in Ghana. In 2012 Mr. Akiti received a request of the Chinese government to participate in a training and cultural program. The topic of the training program was 'Communication Technology for rural areas'. Mr. Akiti explained that he has learnt about different types of equipment, which could be implemented in fibre optic projects in rural areas. After this training program he is able to give advice about this equipment. According to Mr. Akiti: 'I am able to give advice about the different types of equipment that could be used for a fibre project.'. Thereafter, Mr. Akiti was also involved in a cultural program organized by the government of China. This includes cultural visits to Chinese cities and landmarks in the Hubei province. Mr. Akiti added that there were also business related visits. For instance, they went to an exhibition of ICT products hosted by China Telecom. During the interview Mr. Akiti said that China is a country that is opening-up and their intention is that foreign people get insight into their country what they are doing. He confirmed that through his experience in China he has gained new insights that could be used for the development of Ghana, especially in the field of policies. Mr. Akiti quoted: 'I was exposed to see what is there in China. So when I came back I had the feeling that I could change our policy directions.'.

Also representatives of MTI were invited by the Chinese government to participate in training/seminar programs in China. Mr. Mensah as representative of MTI received an invitation to attend a seminar program, which took place from July to August 2013. Several representatives of African countries, like Kenya and Zimbabwe, were also attending this program. The Academy for International Business Officials (AIBO) also known as the training centre of the Ministry of Commerce of China organized this seminar program. Mr. Mensah outlined during the interview that he has learnt about how to transform a physical market into a electronic market of goods. He added that nowadays it's common to view and order goods by using internet. Internet in this case is a medium that is useful to improve the accessibility of E-commerce activities. According to Mr. Mensah: 'In the coming years the physical market will become less important in the world, Ghana as country should make steps in the good direction to make sure not to fall behind.'



Next to the development of electronic markets of goods, also the importance of policies has been discussed according to Mr. Mensah during the seminar program. The policies are needed to manage the electronic market and to be able to collect taxes derived from these goods. Mr. Mensah explained that China has introduced a policy that manages this electronic market. In contrast, in Ghana there is still a lack of these kinds of policies. According to Mr. Mensah: 'In Ghana we should introduce a similar policy, which makes it possible to collect taxes on products.'. An electronic market is not bounded by borders of a country, so the next step is an international agreement with neighbouring countries in West-Africa. Lastly, also the importance of online banking has been explained during the seminar program according to Mr. Mensah. He appointed that Ghana as country is lagging behind in terms of online banking. Mr. Mensah quoted: 'At this moment online banking is still not commonly used in Ghana and should be introduced on a large scale as soon as possible to develop Ghana as country.'. Next to these issues, the participants in this seminar program had also room to share their ideas and experiences. Mr. Mensah concluded that China is also interested in the perceptions of the participants. According to Mr. Mensah: 'Also China would be interested in us, like in the challenges and the difficulties that Ghana has to deal with.'.

At the end of the interview Mr. Mensah mentioned that Mr. Amoah accompanied him as representative of Ghana in 2013. Mr. Amoah as Marketing Officer at GFTC participated in an equal seminar program. In Ghana the GTFC is a governmental agency of MTI that is promoting domestic and export trade in Ghana. This promotion has been done through frequent organization of domestic and international fairs. GTFC has a total staff of 36 persons operating in the following departments; Marketing, Accounts, Human Resource and Administration, Technical, Security and Internal Audit (GTFC, 2014). The seminar program that Mr. Amoah attended in China was called 'E-commerce and exhibition economy for developing countries' and focused on economy and trade. Mr. Amoah added that AIBO in cooperation with Shanghai International College of Culture (SICC) organized this event. During the interview Mr. Amoah said that he has learnt about the development of electronic markets. Also Mr. Amoah highlighted, like Mr. Mensah, that Ghana as country is lagging behind. According to Mr. Amoah: 'In China the electronic market of goods is already established, in contrast to Ghana that is still in the early stage of this transformation.'. A topic that also has been raised is how to set up a database that is needed to register all products. Also the issue of how to facilitate electronic transactions has been discussed. Also



Mr. Amoah had the opportunity to give a presentation about the constraints that Ghana has to deal with and why Ghana as country is lagging behind. Next to this seminar program about E-commerce the SICC organized cultural tours to Chinese landmarks with the intention to improve the knowledge of the participants regarding the Chinese culture.

#### 6.6 Conclusion

In this chapter the transfer of knowledge, experiences and skills of both groups, high skilled Chinese and Ghanaian ICT migrants have been studied. As discussed in the sections 5.4 and 5.5 the duration of their stay abroad differs for both groups. The group of high skilled Chinese migrants stays for a variety of years in Ghana, while the group of Ghanaians stays for maximum three months in China. In this study, the Chinese group acknowledged that the transfer of knowledge, experiences and skills is two-sided. Knowledge towards Ghanaian colleagues has been transferred about firm strategies. Additionally, also experiences with ICT equipment, like how to maintain a database or to organize the digital administration, have been transferred towards the Ghanaian colleagues located in Accra Metropolitan Assembly. Besides, also skills have been transferred to the local Ghanaian colleagues according to the Chinese participants, like professional communication skills. Also the local Ghanaian colleagues of the Chinese participants transfer knowledge, for instance about local ICT systems and the ERP-system to the high skilled Chinese ICT migrants. On the other hand, the high skilled Ghanaian ICT migrants who went to China explained that the transfer of knowledge, experiences and skills is basically one-sided. These high skilled Ghanaian ICT migrants who stayed in China actually acquired knowledge, experiences and skills instead of transferring it towards the local Chinese colleagues. The knowledge about technical equipment, like application systems, has been transferred by the high skilled Chinese ICT experts towards these high skilled Ghanaian ICT migrants. Furthermore, also local knowledge about cultural heritage and Chinese ICT firms has been transferred as confirmed by a number of the high skilled Ghanaian ICT migrants. Next to this knowledge, also experiences have been transferred toward the Ghanaian group. For instance, experiences with policies have been transferred, like policies that regulate product taxes. At last, also skills have been transferred towards the high skilled Ghanaian ICT migrants, like the skills how to develop a business plan. In this study, some of the high skilled Ghanaian ICT migrants mentioned that knowledge about the Ghanaian local environment and their experiences have been transferred towards the high skilled Chinese ICT experts. However, it remains unknown



how and what kind of knowledge or experience has been transferred and therefore we do not use these statements to draw conclusions. Furthermore, both groups of high skilled Chinese and Ghanaian ICT migrants acknowledged that knowledge about and experiences with ICT equipment have been transferred. The transfer of this knowledge and experiences is to a large extent one-sided towards the Ghanaians and therefore beneficial especially for Ghana and its local development. The quotes of high skilled Chinese and Ghanaian ICT migrant confirmed also that both groups acquire local knowledge about for instance ICT systems and firms. However, the question remains whether this acquired local knowledge could be implemented in their home country, because both countries have of course different local settings. The transferred knowledge, experiences and skills of high skilled Chinese ICT migrants and also the similar components acquired by high skilled Ghanaian ICT migrants are illustrated in table 2.

Table 2: Transfer of knowledge, experiences and skills by high skilled Chinese ICT migrants and the acquired knowledge, experiences and skills by high skilled Ghanaian ICT migrants.

High skilled Chinese ICT migrants	High skilled Ghanaian ICT migrants
Knowledge about firm strategies	Knowledge about technical equipment
Experiences with ICT equipment	Local knowledge (Cultural sites)
Communication skills	Experiences with national policies
	Business plan developing skills



# 7. The transfer of knowledge, experiences and skills and the role of personal features

#### 7.1 Introduction

Chapter 6 has illustrated that especially the high skilled Chinese ICT migrants have transferred knowledge, experiences and skills, while the high skilled Ghanaian ICT migrants mainly acquired knowledge, experiences and skills. However, the process of knowledge, experiences and skills is not straightforward, which has already been outlined in the theoretical framework, chapter 3. As illustrated in this chapter the following personal features could affect the transfer of knowledge, experiences and skills; level of education, national culture, language proficiency, social trust and time constraints. The opinions of both groups, Chinese and Ghanaian high skilled ICT migrants have been included. This makes it possible to compare the statements of both groups and afterwards eventually to provide recommendations.

# 7.2 The influence of personal features; an explanation of the high skilled Chinese ICT migrants

A variety of the Chinese participants in this study focused on these personal features. The level of education is one of these personal features and this has been discussed by Collin as Chinese participant. During the interview, Collin as Marketing Officer linked the level of education to the obtained university degree. He appointed that his obtained university degree is equivalent to the degree of his Ghanaian colleagues. According to Collin: 'I don't experience any knowledge gap between the Chinese and the Ghanaian colleagues. Most of the Ghanaian colleagues have obtained an university degree at universities abroad, like in Spain and Germany.' Nonetheless, when both actors have obtained the same educational degree then this could facilitate the transfer of knowledge, experiences and skills. As outlined by Wang & Loe (2010) and Lucas (2006) an individual is more willing to transfer and acquire knowledge, experiences and skills when this person has obtained a high educational degree compared to other persons who have obtained a low educational degree. In the field phase, also Sabine, operating as Information Security Manager within a Chinese ICT firm, highlighted that her Ghanaian colleagues are well qualified. According to Sabine: 'My



Ghanaian colleagues have the capability to do their job well, because they have good qualifications in different fields like engineering and design.' It's important to mention that the level of education as personal feature has not been included in the questionnaire. This is because the level of education could be misinterpreted by the respondent. For instance, the level of education could be confused with the overall level of knowledge of an individual. These invalidated research outcomes could affect the quality of this study. Next to this, also differences between national cultures have been highlighted. The differences between national cultures may lead to misunderstandings during conversations as outlined by Manev & Stevenson (2001). In this sense, misunderstandings could also arise when knowledge, experiences and skills has been transferred during a conversation.

During one of the interviews, Robert as Commercial Manager acknowledged that cultural differences exist between China and Ghana. This is clearly reflected in the work-leisure balance of both Chinese and Ghanaian actors according to Robert. He mentioned that Ghanaians prefer to take some rest during the weekend, while Chinese have the drive to continue with working even in the weekends. Robert quoted: 'Ghanaians prefer to go to church every weekend and enjoy themselves, while Chinese are continuing with their work in the weekends.'. In the same line, also Kimberly refers to the work-leisure balance and agreed that Ghanaians have their life equal balanced compared to the Chinese. According to Kimberly: 'My experience is that my Ghanaians colleagues can be characterized as hard working people. The only difference is that their life is more in balance in terms of leisure and work.'. Both examples confirmed that work-leisure balance is an element of the national culture and differs significantly between the Chinese and Ghanaian culture.

Subsequently, also the language proficiency of both actors may influence interactions and the transfer of knowledge, experiences and skills as explained by Bartol & Srivastava (2002). In this context, English is the language that has been used by the high skilled Chinese and Ghanaian ICT migrants. Thereafter, China in this case is an expanding circle country where English is not the primary language, while Ghana is an inner-circle country where English has been introduced as official and primary language. One of the high skilled Chinese ICT migrants who highlighted language as issue is Kimberly operating as HR specialist. She appointed that speaking English is a requirement at work. According to Kimberly: 'For me speaking and writing English is obligated at work, because I am also collaborating with other nationalities in my company. I haven't experienced any difficulties with my Ghanaian



colleagues when I have a conversation with them. I think their English language proficiency is excellent.'. Looking at the composition of Kimberley's department then all her colleagues have a Chinese background. For them speaking English is still common at their department. A clarification is that as HR specialist you have to recruit international job seekers. In this perspective also Western firms, like Nokia, use English for their recruitment to be sure that the staff includes international professionals (Stahl et al., 2012, p. 553). Additionally, also John, operating as Commercial/Contract Manager, emphasized on the importance of speaking English at work. According to John: 'An asset of our Ghanaian colleagues is that they are able to speak English fluently at work.' The importance of speaking English could be clarified by his job position within the Chinese ICT firm. As Commercial Manager John has to cooperate with Ghanaian colleagues who are English native speakers. In contrast to Sabine who operates as Information Security Manager. Speaking English is a requirement at work, however in practice she prefers to speak the Chinese language. This is because she cooperates mainly with her Chinese colleagues within her department. Sabine explained during her interview that she struggles with the English language. Sabine quoted: 'I have sometimes some struggles with the English language, which makes collaborating with Ghanaian colleagues challenging.'. However, Sabine is not the only high skilled Chinese ICT migrant who struggles with the English language. Looking at the outcomes of the questionnaire of Sabine, then these confirmed that language proficiency significantly affect the transfer of knowledge, experiences and skills. Also Kalan operating as Commercial Manager acknowledged that speaking English at work is challenging. Kalan highlighted that especially the limited vocabulary is a matter of concern. According to Kalan: 'The English vocabulary of my Ghanaian colleagues can be characterized as extensive. While for us speaking English remains a challenge. The reason is that we didn't speak English outside school. A relatively low number of my Chinese colleagues have extensive knowledge of English, only the Chinese who have been working in Chinese companies overseas for many years.'. For Kalan as Commercial Manager it is required to speak English fluently, because interaction with Ghanaian colleagues is one of the tasks as already explained by John. In this research also the participant observations on 16<sup>th</sup> February and 22<sup>nd</sup> March 2014 were used to investigate the English language proficiency of high skilled Chinese ICT migrants. The only difference in this situation is that more technical terms in English will be used at work than at home. An important observation was that during both participant observations the Chinese participants were all willing and able to speak English. However, only Chinese traditions, cultures and



norms were translated into the Chinese language.

The level of social trust has already been addressed by Capasso et al. (2005), which could affect the willingness of actors to transfer knowledge, experiences and skills. In this study the level of social trust has been measured through semi-structured interviews and also by using the questionnaire. Donald operating as Head of Carrier Software & Core Network within a Chinese ICT firm explained during his interview that especially the predictability of behavior of his Ghanaian colleagues affects the level of social trust. He refers to an example about the absence of his Ghanaian colleagues during a meeting at work. According to Donald: 'The meeting supposed to start at 2:00pm, while our Ghanaian colleagues arrived at 4:00pm with the notification that there was a traffic jam. I think this is for Chinese colleagues a form of disrespect.'. However, highlighting concerns is easier for Donald compared to other high skilled Chinese ICT migrants. This is due to the high job position of Donald within a Chinese ICT firm. Therefore, Donald is able to judge his statements and to determine whether it affects his job position. Also outcomes of the questionnaire would be useful in this case to determine the level of social trust. In this study Sabine and Collin marked social trust as an issue that to a moderate extent affects the transfer of knowledge, experiences and skills. In other words, a lack of social trust exists between them and their Ghanaian colleagues. Also Donald confirmed that social trust to some extent affects the transfer of knowledge, experiences and skills and this is also in line with his previous statement about predictability of behaviour of his Ghanaian colleagues.

Next to social trust, also time constraints could hamper the transfer of knowledge, experiences and skills as described by Back et al. (2005). In this context, time constraints refer to the lack of time due to for instance a busy work schedule of the actors. During the field phase, also John operating as Commercial/Contract Manager acknowledged that in Ghana he has to deal with a busy work schedule resulting in a relatively high workload. This high workload is also reflected in the quote of John in which he outlined that working in evenings and weekends is not rare. According to John: 'Sometimes I have to work in the weekends and evenings to make sure that I will finish the work. In some weeks I have worked more than 40 hours.' This is in line with the statement of Collin who mentioned that he experienced a relatively high workload compared to countries where he has worked before. According to Collin: 'In Ghana we have to deal with strict deadlines, which means that



sometimes we have to work in the evenings and weekends.'. Collin and John added that meetings with Ghanaian colleagues do not take place regularly. To be precisely, not every week. These organized meetings are seen as example of time management as outlined by Al-Hawandeh (2003). Due to these organized meetings the sender and receiver has the possibility to meet each other, which result in the transfer of knowledge, experiences and skills. Furthermore, Kimberly as HR specialist also confirmed that she experienced a lack of time through the relatively high workload. This also affects the interaction with Ghanaian colleagues as showed in her statement. According to Kimberly: 'In Ghana I have to deal with a high workload that makes interacting with Ghanaian colleagues during working time challenging. Sometimes I have to work 12/14 hours a day within my department.'. Not only the interaction, but also the transfer of knowledge, experiences and skills has been hampered through time constraints as illustrated by the outcome of the questionnaire. According to Kimberly the lack of time affects through a moderate extent the transfer of knowledge, experiences and skills. Kimberly added that the relatively high workload is explainable. According to Kimberly the branch of her Chinese ICT firm in Ghana is still in the start-up phase meaning that a variety of job positions have to be fulfilled. Furthermore, also the composition of her department, only Chinese colleagues, and the use of a PC desktop for her recruitment tasks are explanations for her limited interaction with Ghanaian colleagues at work.

# 7.3 The opinion of high skilled Ghanaian ICT migrants about the impact of personal features

In the field phase, also high skilled Ghanaian ICT migrants have been asked to give their opinion about the influence of personal features on the transfer of knowledge, experiences and skills. Also in this part the following personal features have been included; level of education, national culture, language proficiency, social trust and time constraints. Through the introduction of a worldwide system of academic degrees it has become easier to compare both groups of Ghanaian and Chinese participants (CHSI, 2013; NUFFIC, 2015, p.5-10). For the Ghanaian participants the level of education has been measured by using a semi-structured interview. The outcomes of these interviews have showed that the majority of the Ghanaian participants have obtained a university degree. Mr. Johnson operating as staff member of Planning, Monitoring and Evaluation at MoC highlighted during the interview that he has obtained a Bachelor Degree at Middlesex University London. His willingness to



acquire knowledge, experiences and skills is also reflected in his quotes. For instance, he explained that he has learnt how to develop a business plan and also about new technologies. Mr. Johnson quoted: 'China provided information about how to develop a business plan and they also introduced a variety of new technologies.'. In addition, also Mr. Akiti, operating as Assistant Technical Officer at GIFEC, acknowledged that he has obtained an university degree at Sikkim Manipal University in Ghana. Also Mr. Akiti has an open attitude towards learning as reflected in his statements. He linked personal experience with the knowledge and skills that he has acquired in China. Mr. Akiti quoted: 'My personal experience was great, because if you are looking where I come from Ghana and my educational background. I have learnt many things. '. In the same line, also Mr. Mensah as representative of MTI has obtained an university degree at University of East Anglia London Campus. Also his willingness to acquire knowledge, experiences and skills is reflected in one of his statements. During the seminar program he has learnt about for instance the transformation of a physical market into an electronic market. According to Mr. Mensah: 'I learnt about the transformation of physical markets of goods into electronic markets of goods.'. In addition, also Mr. Amoah, operating as Marketing Officer at GTFC, obtained an university degree at University of Ghana, Legon. His open attitude towards learning is reflected in one of his statements. As Marketing Officer at GTFC he learnt about developments in E-commerce. According to Mr. Amoah: 'During the seminar session I learnt about the recent developments in E-commerce.'. In summary, it's also remarkable that the Ghanaian participants have obtained university degrees at Ghanaian universities and also at universities abroad, like in the United Kingdom. This does not correspondent to outcomes of the Chinese participants who all obtained an university degree in China as illustrated in figure 9.

Figure 9: The obtained university degree of the high skilled Chinese ICT migrants.





Also the differences between the national cultures have been highlighted by a variety of high skilled Ghanaian ICT migrants. According to a number of high skilled Ghanaian ICT migrants the differences between both national cultures have been minimalized through the cultural programs organized by the Chinese government. During these cultural programs the Ghanaian participants had the opportunity to visit different cultural sites of China. During the field phase, Mr. Amoah mentioned that a certain level of cultural awareness has been created through these cultural programs. These cultural programs include cultural tours and also cultural sessions about the Chinese culture and language. Mr. Amoah quoted: 'The SICC as organizer was providing cultural sessions to learn about the Chinese culture, also we have visited cultural places in China.'. Nonetheless, raising cultural awareness is especially useful for Mr. Amoah who is operating as Marketing Officer at GTFC. During his interview, Mr. Amoah acknowledged that also in Ghana he cooperates regularly with Chinese firms, because these Chinese firms participate in international exhibitions organized by GTFC. Therefore, raising cultural awareness positively affects doing business as outlined by Maude (2011). The result is that an actor is able to interpret the communicative attitude of business partners, like Chinese firms. Furthermore, also Mr. Akiti, operating as Assistant Technical Officer at GIFEC, confirmed that his cultural awareness has been raised through a cultural program. According to Mr. Akiti: 'I had the chance to visit three different provinces of China and learnt about the Chinese culture.'. Subsequently, Mr. Mensah acknowledged also the differences between the national cultures of China and Ghana. During his interview, he focused especially on the hierarchical structure of governmental institutions in China as part of the national culture. According to Mr. Mensah: 'I think my voice was not clearly heard by China, because as representative of Ghana I didn't have the opportunity to talk to Chinese officials.' The quote of Mr. Mensah is in line with the literature of Guo (2002), who elaborated on the political hierarchical structure in China. The samples in this section have showed that differences between both national cultures exist and that cultural programs have been introduced to raise the cultural awareness by the group of high skilled Ghanaian ICT migrants.

The high skilled Ghanaian ICT migrants are known as native English speakers, because Ghana is an Inner-Circle country where English is the primary language. This can be explained by the history of Ghana, because in the past Ghana was a colony of the British Empire (Samson, 2001, p. 254). In this sense, English as common language is also required for both actors to transfer knowledge, experiences and skills as described by Bartol &



Srivastava (2002). In the field phase, Mr. Akiti explained in an interview that the English language proficiency of Chinese ICT trainers was sufficient. According to Mr. Akiti: 'My trainers can speak English fluently, in some cases we have to correct them with the pronunciation. In general, we can understand their point that they want to make.'. In contrast, Mr. Akiti is less satisfied about the English language proficiency of Chinese citizens. According to Mr. Akiti: 'The Chinese didn't speak fluently English, they try to understand to speak English. Some of them can speak a little English, because they are not an English speaking country. If you are also going to the local market it's difficult to communicate with them.'. For Mr. Akiti it's relevant that the Chinese ICT trainers could speak English fluently, because those are persons who have to transfer knowledge, experiences and skills. In this study, also Mr. Ofosu-Ampong operating as ICT Officer at Ghana-Korea Information Access Centre has been included. This is not because he is a high skilled Ghanaian ICT migrant who visited China. He has been asked for an interview, because he closely cooperates with another Asian group known as the high skilled Korean ICT migrants. This group of high skilled Koreans comes to Ghana to transfer knowledge, experiences and skills. Mr. Ofosu-Ampong appointed that this group of Koreans teach the Ghanaians how to build websites and how to use an electronic database program. He added that these Koreans come to Ghana for one month or longer to provide this kind of learning sessions. Mr. Ofosu-Ampong confirmed that he didn't experience any difficulties when he interacts with high skilled Korean ICT migrants. According to Mr. Ofosu-Ampong: 'I have never experienced any difficulties with the English proficiency of our Korean ICT experts who are operating at the university campus as ICT volunteers. These Koreans have finished a language test before they arrived in Ghana.'. With this information a comparison could be made between the group of high skilled Chinese and Korean ICT migrants in terms of their English language proficiency. However, both countries have introduced an English language test, in China this test is known as the China Public English Test and has been used by a majority of the Chinese firms (Galloway & Rose, 2015, p. 132). In this study, the Ghanaian participants are to a large extent satisfied about the English language proficiency of their Chinese and also Korean colleagues. In contrast to the statements of high skilled Chinese ICT migrants, like Kalan, who explained that the English proficiency level of himself and his Chinese colleagues is insufficient. According to Kalan, this English proficiency level could be improved easily when you are working abroad.



Building social trust has also been discussed by Ghanaian participants in the field phase. With a high level of social trust individuals are more willing to transfer knowledge, experiences and skills as outlined in section 3.8. Also the frequency of interactions could affect trust-building. Mr. Yikimpa Chigabatia operating as IT Manager at University of Ghana Computing Systems department, has participated in an interview, however he could not be considered as a high skilled Ghanaian ICT migrant who visited China. A motivation to include Mr. Yikimpa Chigabatia in this study is because of his close collaboration with Mr. Wang, a high skilled Chinese ICT migrant who operates as Project Manager at UNIS. Mr. Yikimpa Chigabatia confirmed that every week he has a meeting with Mr. Wang and he cooperates with Mr. Wang for a relatively long period. This is possible, because Mr. Wang stays permanently in Ghana in contrast to his Chinese colleagues who leaved Ghana after some weeks. According to Mr. Yikimpa Chigabatia: 'Most of them will leave after some weeks after finishing the job, while only the Project Manager will stay here.'. Next to the frequency of interaction, also the predictability of human behaviour may play a significant role for trust-building. In this context, Mr. Wang is responsible for managing the project and that the outcomes of the project correspondent to the expected outcomes of Mr. Yikimpa Chigabatia. He appointed that he is satisfied with the outcomes and would like to cooperate with Mr. Wang also in the future. According to Mr. Yikimpa Chigabatia: 'Yes, why not. As a matter of fact, we have discussed this with the leader some days ago. But it also depends on how this project ends, if we are happy with it we would like to cooperate with him again.'. In this situation, the outcomes also include acquisition of knowledge, experiences and skills. The transfer of knowledge, experiences and skills by Mr. Wang towards his Ghanaian colleagues has already been outlined in section 6.3.

At last, for the high skilled Ghanaian ICT migrants who participated in seminar/training programs time constraints have not been highlighted as factor that influence the transfer of knowledge, experiences and skills. For all of them these seminar/training programs have been designed with the intention that involved actors will meet each other at the same time. The result is the transfer of knowledge, experiences and skills within this specific time frame as outlined by Argote (2013). In this study, Mr. Johnson operating as staff member of the Policy, Planning, Monitoring and Evaluation department at MoC acknowledged that he participated in a training program in 2009. During this training program there was the possibility to acquire knowledge and experiences about building ICT-research and



development parks. According to Mr. Johnson: 'During the training program we got information about the planning and building of ICT-research and development parks.'. Thereafter, there was also some room to give presentations about recent developments in Ghana. According to Mr. Johnson: 'As participant you had the opportunity to give a presentation about developments in your country.'. Furthermore, Mr. Mensah as representative of MTI participated in a seminar program in 2013. During this seminar program there was the possibility to acquire knowledge and experiences about the transformation of a physical market into an electronic market. According to Mr. Mensah: 'I had the opportunity to learn about the transformation of physical markets into electronic markets.'. Also in his seminar program there was room to share experiences. Mr. Mensah quoted: 'We had the opportunity to share our experiences, while I think it's also important for China to get an understanding of our perspectives.'. As illustrated by these examples, time constraints are not mentioned by Ghanaian participants. This is also because the Ghanaian participants only focused on these seminar/training programs and don't have to deal with other work activities. This differs with the high skilled Chinese ICT migrants included in this study. These Chinese participants also have to finish a significant number of work assignments, reflected in the relatively high work load.

#### 7.4 Conclusion

This chapter has showed the perceptions of high skilled Chinese and Ghanaian ICT migrants about the influence of personal features on the transfer knowledge, experiences and skills. Regarding the level of education, the Chinese participants in this study acknowledged that

their Ghanaian colleagues are well-educated, because most of them have obtained an university degree. The Chinese participants in this study also highlighted the differences between the Chinese and Ghanaian culture in terms of the work-leisure balance. However, the same Chinese participants do not explain that these national cultural differences also affect the

Table 3: The personal features that affect the transfer of knowledge, experience and skills according to high skilled Chinese ICT migrants.

# High skilled Chinese ICT migrants: Personal features: Language proficiency Time constraints

transfer of knowledge, experience and skills. Subsequently, a number of Chinese participants outlined that they struggle with the English language at work. An exception is Kimberly, who said that English is not an issue for her. To a large extent, the good English language proficiency of Kimberly is also due to her previous work experience in Europe. Social trust is



an issue that has not been explicit highlighted by the Chinese participants during the interviews or participant observations. Also it is insufficient to draw a conclusion about the effect of social trust by using the outcomes of the survey. Therefore, social trust as personal feature will not be included in the conclusion of this study. The latter personal feature known as time constraints would hamper the transfer of knowledge, experiences and skills. This is caused by the relatively high workload due to assignments and the limited number of meetings with Ghanaian colleagues. The fact that both English language proficiency and time constraints have been highlighted as personal features influencing the transfer of knowledge, experiences and skills is understandable. As results of limited English language proficiency it will take more time to interpret the message for the receiver, like knowledge, experiences and skills that have been transferred. On the other hand, the high skilled Ghanaian ICT migrants showed during the interviews that they are well-educated, this is reflected in their obtained university degrees. In addition, quotes of these Ghanaian participants illustrate also that there is a willingness to acquire knowledge, experiences and skills. Thereafter, the Ghanaian participants explained that differences between the Chinese and Ghanaian culture exist. Therefore, cultural tours have been organized to raise the cultural awareness of them. However, this does not mean that the differences between both national cultures also affect in this case the acquisition of knowledge, experiences and skills. Also the English language proficiency has not been considered as issue as showed by a number of high skilled Ghanaian ICT migrants. Furthermore, social trust shall not be included in the conclusion due to the fact that Mr. Mr. Yikimpa Chigabatia cannot be specified as a high skilled Ghanaian ICT migrant who visited China. At last, the Ghanaian participants explained that time constraints are not an issue that hamper the acquisition of knowledge, experiences and skills. Due to a scheduled training/seminar program the Ghanaian participants have regularly interaction with the Chinese ICT supervisors and trainers. Nonetheless, it is explainable that the level of education and also the English language proficiency have not been considered as personal features that affect in this case the acquisition of knowledge, experiences and skills. In China ICT supervisors and trainers are high skilled and learn the English language during the first year of the university. Besides, frequently also English language tests were introduced to improve the English language proficiency.



#### 8. Conclusion

High skilled migration has become a popular phenomenon since the last decade as showed by the statistics of the OECD (2013). Also between Ghana and China an increasing number of high skilled migrants, especially those with an ICT background, moved between both countries. Through a shortage of high skilled personnel Ghana has become a favorite destination for high skilled Chinese ICT migrants as described by McNally (2008) and Rotberg (2008). On the other hand, also China has become a well-known destination for high skilled Ghanaian ICT migrants, for instance to attend a training/seminar program as described by Shinn & Eisenman (2012). In this study, both groups of high skilled Chinese and Ghanaian ICT migrants have been taken in consideration. First of all, the motives of both groups to migrate to Ghana and China have been investigated and therefore the following research question has been designed:

➤ What are the motives of high skilled Chinese and Ghanaian ICT migrants to relocate to respectively Ghana and China?

The outcomes of this study showed that for high skilled Chinese ICT migrants, exploring a new cultural environment, developing a career abroad and compensations for transportation are motives to migrate to Ghana according to a significant number of these high skilled Chinese ICT migrants. In contrast to the high skilled Ghanaian ICT migrants, a significant number of them highlighted that the invitations of the Chinese government and also the compensations, like scholarships, are important motives to migrate to China. Additionally, the quotes of the Chinese participants confirmed that social interaction with Ghanaian locals as part of a new cultural environment is a significant element for them. This corespondents with the concept of CQ introduced by Templer et al. (2006) measuring the extent that someone interact with local citizens in a new cultural environment. Subsequently, also the development of a career abroad has also been highlighted by the Chinese participants. The Chinese participants focused in this case especially on the opportunity to switch between departments within the same ICT firm. At the same time, the work experience gained in Ghana is required to build a further career abroad in the developed countries. The high skilled Chinese ICT migrants who highlighted the development of a career abroad, all of them are motivated to follow a specific career path. This has also been explained by the concept of



career capital, which has been introduced by Dickmann & Harris (2005). For the Chinese participants switching between departement entails that there is an opportunity to work abroad, like in Ghana. Moreover, the mobility between departments by Chinese ICT firms has been stimulated by the Chinese ICT firms. Regarding the compensations for transportation, these refer basically to the compensations for international travel expenditures according to the Chinese participants. In this sense, these compensations for international travel is an amount of money that could be spend for flights tickets to China. Also the provision of a car is a form of transport compensation according to the Chinese participants and is in line with the literature of Nazir et al. (2014). However, the difference with the outcome of this study is that next to a car also a driver has been delivered by the Chinese ICT firm. On the other hand, the received invitations and also scholarships as a form of compensation have been appointed by the high skilled Ghanaian ICT migrants. This scholarship includes reimbursables for accomodation, food and travel. In future research it would be relevant to include also the perception of the Chinese government. For instance what the key reasons are of the Chinese government to provide these scholarships to the high skilled Ghaniana ICT migrants. This is a macro structural issue as outlined by Drbohlav (2011) and O'Reilly (2012), because it covers the government as institution. While in this study only the opinion of individuals in this case the high skilled migrants has been investigated. Lastly, for future research it would also be valuable to focus on the assignment premiums. Participants have discussed this issue in an abstray way. For a better understanding of these assignment premiums it would be helpful to use interpreter/translator, which makes it possible to acquire more detailed information. Its also remarkable that the provision of medical allowances has not been highlighted by especially the high skilled Chinese ICT migrants, while this group has to deal with health challenges in Ghana as developing country, like the disease of malaria.

As discussed by Van Hear & Sørensen (2002) the concept of high skilled migration is interconnected with development. The assumption is that high skilled migration will contribute to the local development in the country of origin. This study has led to a better understanding of the concept of 'Migration-Development nexus'. In the literature Van Hear & Sørensen (2002) acknowledged that skills as element contribute to local development. However, this study distinguished that also different types of knowledge and experiences contribute to local development.



In this research both high skilled Chinese and Ghanaian ICT migrants have been investigated. The contribution to local development is in this case the transfer of knowledge, experiences and skills of these high skilled migrants. Also the UNDP (2015) considers knowledge particularly as a facilitator for local development. For investigating the transfer of knowledge, experiences and skills by high skilled migrants the following research question has been designed:

➤ To what extent do high skilled Chinese and Ghanaian ICT migrants transfer knowledge, experiences and skills as contributors for local development?

The group of high skilled Chinese ICT migrants explained that especially knowledge about firm strategies has been transferred towards the Ghanaian colleagues based in Ghana. The content of these firm strategies has not been discussed by the Chinese participants. This is understandable, because sharing this privacy sensitive information could harm the competitiveness of Chinese ICT firms. The only issue that has been highlighted as part of this strategy is that the employment ratio will be turned into 90/10, meaning that 90% of the employees will be Ghanaians and the remaining 10% will be Chinese employees. Currently the ratio within a Chinese ICT firm is respectively; 10% international, 40% Ghanaian and 50% Chinese employees. Taking this in consideration, then this strategy will contribute to the local development in Ghana, because it raised the employment ratio. Additionally, also experiences with ICT equipment have been transferred by the Chinese participants. For example, how to maintain a database or how to organize the digital administration. In the future one of the possibilities is also to introduce a study that focused on the group of Ghanaians who have acquired these knowledge, experiences and skills derived from the high skilled Chinese ICT migrants. This future study should investigate whether Ghanaians transfer these knowledge, experiences and skills towards each other. If so, a chain reaction occurs that raises the level of knowledge and contributes to the local development. Additionally, also the communication skills of Ghanaians have been improved through the high skilled Chinese ICT migrants. The communication skills in this case don't refer to the English language proficiency, but to the professional communication skills and attitude.

As described before also high skilled Ghanaian ICT migrants have been investigated in this area. In general, the findings show that knowledge, experiences and skills haven't been transferred by high skilled Ghanaian ICT migrants. In contrast, the Ghanaian participants in



this study have acquired knowledge, experiences and skills during their stay abroad in China. With these outcomes, the statements of Van Hear & Sørensen (2002) could be confirmed. High skilled migration contributes to the local development in the country of origin. This is possible, because high skilled migrants stay temporary abroad. After a certain time these migrants return to their home country to implement their acquired knowledge, experiences and skills. This is also illustrated by the high skilled Ghanaian ICT migrants included in this study. The outcomes of this study showed that the group of high skilled Ghanaian ICT migrants acquired knowledge in China about technical equipment/applications and also local knowledge regarding Chinese businesses and Chinese cultural sites. This local knowledge is a type of practice-based knowledge as outlined by Billet et al. (2014) and refers to knowledge embedded in a specific context. This specific form of knowledge is also difficult to transfer to others. Nonetheless, this study has illustrated that knowledge about technical equipment like fibre optic networks have been transferred by high skilled Chinese experts in China. Also knowledge about different technical applications has been transferred during training/seminar programs in China, for instance about E-business and E-government applications. A limitation of this study is that only a limited number of types of ICT equipment and applications have been discovered. To get an overall understanding of the ICT sector more research is required. This is also needed to discover the knowledge transfer process of other ICT equipment and applications. Furthermore, this study has showed that Chinese actors transfer their experiences with national policies towards the high skilled Ghanaian ICT migrants during seminar/training programs. These national policies cover the regulation of electronic markets. This is also a good starting point for future research, cyber-crime is high on the agenda in Ghana, because it has been discussed during the 'Digital Family Forum' in Ghana. New strategies are required to combat the cyber-crime. This event was attended by policy makers, regulators, stakeholders coming from Ghana. Additionally, during the seminar/training programs in China also skills have been transferred towards the high skilled Ghanaian ICT migrants. These skills are required to develop business plans. Overall the outcomes of this study confirmed that knowledge, experiences and skills have been transferred mainly by the high skilled Chinese ICT migrants operating in Ghana. While the high skilled Ghanaian ICT migrants acquire instead of transfer these elements in China. Simultaneously, this study has also illustrated that different types of knowledge, experiences and skills have been transferred or acquired. This will lead to opportunities for future research, because each type could be studied in more detail.



As already appointed the high skilled Ghanaian ICT migrants acquired local knowledge about cultural sites in China. This is a way to raise the cultural awareness of this group of high skilled Ghanaians. These cultural sites of China are belonging to the national culture. This national culture as concept has also been outlined by Denzau & North (1994) and is at the same time also a personal feature that could affect the transfer of knowledge, experiences and skills. The following research question has been designed illustrated in section 4.2 to investigate the influence of personal features on the transfer of knowledge, experiences and skills:

➤ To what extent do personal features affect the transfer of knowledge, experiences and skills according to the high skilled Chinese and Ghanaian ICT migrants?

The outcomes derived from this study showed that the high skilled Chinese ICT migrants consider language proficiency and time constraints as personal features that affect the transfer of knowledge, experiences and skills. On the other hand, the high skilled Ghanaian ICT migrants acquire instead of transfer knowledge, experiences and skills. In this situation, the Ghanaian participants in this study didn't raise personal features that affect this acquisition process. Nevertheless, the outcomes of this study could be used as starting point in future research. A question that arises is for instance; do high skilled Ghanaian ICT migrants give the same answers regarding the personal features when they interact more than three months with the high skilled Chinese ICT experts in China? In contrast to the high skilled Chinese ICT migrants who interact more than years with Ghanaians if you are taking the date of arrival as starting point. Furthermore, this study acknowledged also that cultural norms are part of the national culture. In this context, a cultural norm is for instance that for Ghanaians it is not common to continue with their work in the weekends. In contrast to the Chinese, it's common for them to work in the weekends as illustrated by quotes in this study. However, these cultural norms are only one element of a national culture. The limitation of this study is that only one element of the national culture has been investigated. Only the existence of this cultural element has been discovered but not how it affects the transfer process. Future research is required to investigate also the remaining national culture elements, like ideologies and values, and its effect on the transfer process. Lastly, with the outcomes of this study also the research objectives could be reviewed. Overall this study has demonstrated that Chinese-Ghanaian high skilled migration exists, which contributes to a better understanding of the concept of South-South migration. Additionally, this study also showed that high skilled Indians and Korean migrants have entered Ghana. Besides, the transfer of knowledge,



experiences and skills is to a large extent one sided as confirmed by this study. In this situation, especially Ghana as country benefits of the outcomes of the high skilled migration. Also knowledge, experiences and skills have been discovered in this study, while more research is required to be able to make a complete list of the different types of knowledge, experiences and skills.



#### 9. Discussion

The findings of this study are not only valuable for further academic research, but also for the provision of advice, like policy recommendations. As already explained in the chapter 4 this study has investigated two components, like the motives of high skilled Chinese and Ghanaian ICT migrants for migration and also the transfer of knowledge, experience and skills. As described in chapter 5 the motives of high skilled Chinese ICT migrants to migrate are respectively; exploring a new cultural environment, developing a career abroad and compensations for transportation. As already discussed by Awumbila et al. (2008) Ghana has to deal with a phenonomen of high skilled emigration of people. The high skilled Chinese ICT migrants in this case are able to complement this shortage in the ICT sector. Therefore it is necessary to get an understanding why this Chinese group decided to migrate to Ghana. As explained by Quartey (2009) there is no clear migration policy that regulates the flows of high skilled migrants. There are initatives but these are not effective and are coordinated and implemented by various different Ghanaian ministries. Additionally, Quartey (2009) highlighted that due to the importance of high skilled migration a new policy framework is desirable. In this perspective, new policies are required and should focus especially on the improvement of work conditions and employment opportunities according to Quartey (2009). The findings of this study are complementary, developing a career abroad as motivation to migrate fits with employment opportunities. For your understanding, when more high level jobs will be available in Ghana, then it is for high skilled Chinese ICT migrants more attractive to settle down in this African country. When these high level jobs are available for the Chinese group then it will become likely that a majority of them will no longer consider Ghana as temporary destination. Also encouraging new ICT firms to settle down in Ghana would be beneficial, because then high skilled Chinese ICT migrants have also an opportunity to continue their career within a similar ICT firm. Furthermore, also exploring a new cultural environment is a signficant driver to migrate to Ghana according to the high skilled Chinese ICT migrants. However, a cultural environment is deep-rooted and also created by the local people themselves. Therefore, the introduction of a new policy should not be intended to contribute to this cultural environment. An alternative is that a new policy should be introduced for foreigners, like high skilled Chinese ICT migrants, with the aim to explore the Ghanaian cultural environment more easily. To make this feasible, the Ghanaian government should introduce a institution, in China this institution is known as the Shanghai



International College of Culture (SICC), to facilitate the Chinese group with exploring this cultural environment. This institution could organize for instance cultural visits and cultural events to make the Ghanaian culture common for them. Moreover, this study has also focused on the group of high skilled Ghanaian ICT migrants. The phenonomon of multiple groups moving between nation-states is also defined as transnationalism, which was introduced in the 1990s in the field of Migration Studies (Koslowski, 2005, pp. 1-5; Vertovec, 2009, p. 13). As already outlined in chapter 5 the motives of high skilled Ghanaian ICT migrants to migrate to China are the invitations received from the Chinese government and the compensations, like scholarships. Also China has some challenges in the near future regarding the supply of high skilled personnel in China as outlined by Warner (2013). China has introduced initatitives to attract high skilled persons, like the provision of scholarships derived from the 'China African Human Resources Development Fund'. However, a policy that regulates high skilled migration is still missing according to OECD (2012). Taking the findings of this study in consideration, then these findings showed that the high skilled Ghanaian ICT migrants stay temporary in China for maximum three months. Therefore, a new policy framework has to be introduced by China that is aiming on the provision of scholarships and/or loans in the long term and to support foreigners, like high skilled Ghanaian ICT migrants, with exploring the labor market. Next to the motives of both groups to migrate, also the transfer of knowledge, experiences and skills has been investigated in this study. The high skilled Chinese ICT migrants transfer knowledge about firm strategies, transfer their experiences with ICT equipment to Ghanaian colleagues and are intended to improve communication skills of these Ghanaian colleagues. The high skilled Chinese ICT migrants are all operating in the private sector in this study. This means that the transfer of knowledge, experiences and skills within these Chinese ICT firms could not be regulated by the Ghanaian government. Next to this, this study illustrated that the installation of ICT infrastructure is still progressing, which is also a main objective of the ICT4AD policy to expand this ICT infrastructure. However, as described in the ICT4AD policy the final aim is to become a knowledge based society. Therefore, attention should be paid to enhancing the level of knowledge of Ghanaians and enhancing the experiences of Ghanaians with ICT equipment. This could be realized when new policies are introduced. This new policy could impose the high skilled Ghanaians who already have acquired this knowledge to train fellow citizens. A multiplier effect will follow required to become a knowledge based society as defined in the ICT4AD policy. On the other hand, findings of this study illustrated that the



high skilled Ghanaian ICT migrants basically acquire instead of transfer knowledge, experiences and skills in China. The high skilled Ghanaian ICT migrants acquire knowledge about technical equipment/applications and skills regarding developing a business plan. The introduction of a new migration policy in China is needed that facilitates the application procedure for a permanent stay in China. Nowadays the high skilled Ghanaian ICT migrants acquire knowledge, experiences and skills. A scenario is that high skilled Ghanaian ICT migrants return to China with the intention to stay there permanently to fill in the gap of human capital that arises in the coming years. However, it is important that Ghana should solve in the first place their emigration problems of high skilled persons. Regarding the personal features that influence the transfer of knowledge, experiences and skills, the high skilled Chinese ICT migrants highlighted that language proficiency and time constraints are affecting this transfer process as outlined in chapter 7. Time constraints as personal feature is something that could be solved internally within the Chinese ICT firms. The English language proficiency of these high skilled Chinese ICT migrants could be improved when China and also Ghana introduced a policy that includes an English language test. Therefore intensifying the cooperation between both countries is needed, signing new bilateral agreements will be a step in the right direction. The last time that bilateral agreements between both countries were signed is almost ten years ago during the Beijing Summit 2006.



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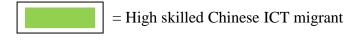
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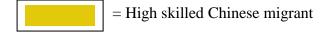


#### 11. Appendix

**Table A: List of Chinese participants** 

	Name: (Obtained) University Degree:		Profession:		
1	Collin	Bachelor Business Administration	Marketing officer		
2	Donald	Master Computer Science and Information Technology	Head of carrier software & core network		
3	John	Bachelor of Law	Commercial/Contract Manager		
4	Kalan	Bachelor Civil Engineering	Commercial Manager		
5	Martin	Bachelor Trade and Business	Financial Advisor		
6	Robert	Master Computer Science	Sales Manager		
7	Mr. Wang	-	Project Manager Unisplendour Software System (UNIS)		
8	Kimberly	Bachelor Business Administration	Human Resource Specialist		
9	Sabine	Bachelor Marketing	Information Security Manager		
10	Caroline	Master Chinese Classical Literature	Junior Lecturer, University of Ghana		

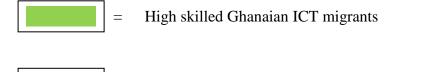






**Table B: List of Ghanaian participants** 

	Name:	<b>Profession:</b>	Company/Institution:		
1	Dr. Somuah	Interim Chief Information Technology Officer	University of Ghana Computing Systems		
2	Honourable Kofi Attor	CEO	Ghana Investment Fund for Electronic Communications (GIFEC)		
3	Mr. Akiti	Assistant Technical Officer	(GIFEC)		
4	Mr. Amoah	Marketing Officer	Ghana Trade Fair Company (GTFC)		
5	Mr. Johnson	Staff member at the department Policy, Planning, Monitoring and Evaluation.	Ministry of Communications, Ghana		
6	Mr. Mensah	Representative of the staff	Ministry of Trade and Industry (MTI)		
7	Mr. Ofosu-Ampong	ICT Officer	Ghana-Korea Information Access Centre		
8	Mr. Takyi	Technical Manager	GIFEC		
9	Mr. Yahaya,	Telecommunications Management professional and Policy Director for Planning, Monitoring and Evaluation	Ministry of Communications, Ghana		
10	Mr. Yikimpa Chigabatia	IT Manager	University of Ghana Computing Systems		





High skilled Ghanaian with an ICT related job position

## High skilled migration in the field of ICT China-Ghana

MOTIVATIONS OF HIGH SKILLED CHINESE ICT MIGRANTS TO WORK IN GHANA AND THEIR CONTRIBUTION TO LOCAL ICT DEVELOPMENT. A CASE STUDY OF HIGH SKILLED CHINESE OPERATING IN THE ICT SECTOR IN ACCRA METROPOLITAN ASSEMBLY, GHANA.

As part of my study at the Centre for Migration Studies, University of Ghana, Legon, I am here to get an understanding of the topic mentioned above. This survey is a valuable tool to achieve this. I kindly ask you to participate in this survey. The outcome of this survey will only be used for academic purposes and will not be used for any other purposes. Confidentiality of your identity is guaranteed.

THANK YOU VERY MUCH FOR YOUR COOPERATION.



	0	Male			
	0	Female			
2.	. Year of birth:				
	•••••				
3.	Marital	status:			
	0	Single			
	0	Married			
	0	Divorced			
	0	Separated			
	0	Widowed			
	0	Unknown/ no answer			
4.	Highes	t level of education attained:			
	0	Associate Degree			
	0	Bachelor Degree			
	0	Master Degree			
	0	Doctoral Degree			
	0	Other,			
I nis		Tocuses on your stay in Omana, including the			
to go	abroad	focuses on your stay in Ghana, including the cl. The objective is to get an understanding of yccra Metropolitan Assembly, Ghana.			
to go	abroad	l. The objective is to get an understanding of y			
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to go movi	abroad ng to A When d	I. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?			
to go movi	when o	l. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?			
to go movi	when o	did you arrive for the first time in Ghana?  In the objective is to get an understanding of years.  In the objective is the objective is the years.  In the objective is the objective is the years.  In the objective is	our motivations for		
to go movi  5.	When o	I. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?  ong have you been in Ghana?  you been to another African country for work before you have.	our motivations for ou arrived in Ghana?		
to go movi  5.  6.	When o	did you arrive for the first time in Ghana?  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.  In the objective is to get an understanding of year Metropolitan Assembly, Ghana.	our motivations for ou arrived in Ghana?  nove to Ghana (1 = most		
to go movi  5.  6.	When of the How loss of the Ho	I. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?  ong have you been in Ghana?  you been to another African country for work before your yes, No  rate the factors that have influenced your decision to mant factor and 6 = least important factor i.e. 1-6).  New cultural environment	our motivations for ou arrived in Ghana?		
to go movi  5.  6.	Have y  Please importa	I. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?  ong have you been in Ghana?  you been to another African country for work before you been to another African country for work before you been to another African country for work before your decision to mant factor and 6 = least important factor i.e. 1-6).  New cultural environment Career opportunities	our motivations for ou arrived in Ghana?  nove to Ghana (1 = most		
to go movi  5.  6.	Have y  Please imports	I. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?  ong have you been in Ghana?  you been to another African country for work before you yes, No  rate the factors that have influenced your decision to not factor and 6 = least important factor i.e. 1-6).  New cultural environment Career opportunities Local facilities (leisure/shopping/entertainment)	our motivations for		
to go movi  5.  6.	Have y  Please importa	I. The objective is to get an understanding of y ccra Metropolitan Assembly, Ghana.  did you arrive for the first time in Ghana?  ong have you been in Ghana?  you been to another African country for work before you been to another African country for work before you been to another African country for work before your decision to mant factor and 6 = least important factor i.e. 1-6).  New cultural environment Career opportunities	our motivations for ou arrived in Ghana?  nove to Ghana (1 = most		



1. Gender:

. . . . .

Provision of accommodation

The next section will focus on the ICT development in Ghana. The objective is to identify your contribution in this development.

- 9. Please select the department(s) of your ICT company in which you are operating:
  - Research & Development
  - o Supply Chain
  - o Marketing
  - o Sales
  - o Engineering Delivery
  - o Technical Services
  - o Others,.....
- 10. At work moments arise that you have a conversation with a Ghanaian colleague, like to share information (knowledge, experiences and skills). To what extent are these conversations affected by the following issues:

	Not at all	To little extent	To some extent	To a moderate extent	To a large extent
Age differences	0	0	0	0	0
Gender differences	0	0	0	0	0
Verbal communication	0	0	0	0	0
Written communication	0	0	0	0	0
Differences of national culture	0	0	0	0	0
Differences in experience level	0	0	0	0	0
Lack of time	0	0	0	0	0
Lack of trust	0	0	0	0	0



### Table C: Data derived from the questionnaire filled in by the high skilled Chinese (ICT) migrants

Number:	1	2	3	4
Name:	Collin	Donald	John	Mike
Gender:	Male	Male	Male	Male
Year of birth:	1982	1980	1984	1991
Marital status:	Married	Married	Married	Single
University degree (obtained):	Bachelor	Bachelor	Bachelor	Bachelor
First arrival Ghana:	2013	2012	2009	2013
Length of stay in Ghana (in years):	1	2	5	1
Other African country:	No	Yes	No	No
New cultural environment:	Important	Very important	Unimportant	Somewhat unimportant
Career opportunity:	Very unimportant	Very unimportant	Important	Very important
Local facilities:	Very unimportant	Somewhat important	Somewhat unimportant	Somewhat important
Individual freedom:	Important	Important	Important	Important
Weather conditions:	Very unimportant	Very important	Unimportant	Important
Provision of accommodation:	Very unimportant	Somewhat unimportant	Somewhat unimportant	Very unimportant
Department:	Marketing	Sales	Others	Engineering
Age differences:	Not at all	Not at all	Not at all	Not at all
Gender differences:	To little extent	To little extent	Not at all	To little extent
Verbal communication (English):	To little extent	Not at all	To some extent	Not at all
Written communication:	Not at all	Not at all	To little extent	Not at all
National culture:	To little extent	To a moderate extent	To a moderate extent	Not at all
Level of experience:	To little extent	To some extent	To a moderate extent	Not at all
Lack of time:	To Little extent	Not at all	To some extent	Not at all
Lack of social trust:	To a moderate extent	To some extent	Not at all	To little extent
High skilled Chinese ICT migrant				
High skilled Chinese migrant				



Number:	5	6	7	8
Name:	Samuel	Kimberley	Sabine	Caroline
Gender:	Male	Female	Female	Female
Year of birth:	1985	1982	1989	1984.0
Marital status:	Single	Single	Single	Married
University degree (obtained):	Master	Bachelor	Bachelor	Master
First arrival Ghana:	2011	2012	2013	2009.0
Length of stay in Ghana (in years):	3	2	1	5.0
Other African country:	Yes	Yes	Yes	No
New cultural environment:	Somewhat unimportant	Somewhat important	Important	Important
Career opportunity:	Very important	Very important	Very important	Very important
Local facilities:	Very unimportant	Somewhat unimportant	Unimportant	Somewhat unimportant
Individual freedom:	Unimportant	Important	Very unimportant	Somewhat important
Weather conditions:	Important	Very unimportant	Somewhat unimportant	Unimportant
Provision of accommodation:	Somewhat important	Unimportant	Somewhat unimportant	Very unimportant
Department:	Sales	Others	Others	Others
Age differences:	Not at all	Not at all	Not at all	Not at all
Gender differences:	Not at all	Not at all	Not at all	Not at all
Verbal communication (English):	Not at all	To a moderate extent	To a moderate extent	To little extent
Written communication:	Not at all	To some extent	To some extent	To some extent
National culture:	To little extent	To a moderate extent	To some extent	To little extent
Level of experience:	To little extent	To a moderate extent	To a moderate extent	To some extent
Lack of time:	To some extent	To a moderate extent	To Little extent	To some extent
Lack of social trust:	To some extent	To a little extent	To a moderate extent	To a moderate extent
High skilled Chinese ICT migrant				
High skilled Chinese migrant				

