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**Aspects of Employability of the Secondary School Agricultural  
Graduates (Case Study in Bié Province, Angola)**

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**Prague, 2014**

## **Declaration**

I hereby declare that this diploma thesis “The Aspects of Employability of Secondary School Agricultural Graduates in Angola” is a part of my own research under a coordination of my supervisor. Where any part of the whole work has previously been submitted for a degree or any other qualification at this University or any other institution and the information derived from the published and unpublished reports or documents of others has been acknowledged in the text and references.

**Prague, 17. 04. 2014**

Signature

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**Liudmila Helena S Saiovo**

## **Acknowledgments**

First and foremost I would like to thank God almighty for guiding me through this journey then to express here all my gratitude to my supervisor Petra Chaloupková, Ph.D. for her expertise, understanding, encouragement and advices. I would like also to express my gratitude to all those who participated in this study in particular the respondents which have filled the questionnaires. A special thank also to my parents especially to my mom Esperanca Nambuio for her support along all my studies, a big thank goes to Belmira Saiovo and to all my friends from the Czech Republic and also in Angola.

## **Abstract**

Angola has been promoting a set of policies and instruments aimed to create an enabling environment conducive for agricultural growth. After the peace ascension in the country, the importance of the secondary agricultural education has increased due to the need of qualified manpower which is essential to support the development of agriculture. In the scope of co-operation with the government of the Czech Republic was established in Angola, specifically in Bié, the secondary agricultural school “The Centre of Agricultural Education of Bié” (CEAB) in 2004. The CEAB project intended to contribute to the development of agriculture sector in Bié province through skills training of new agriculture experts and in turn generate new job opportunities for the young people. The CEAB started operating in 2004 and ended in 2009. After the project running 74 new graduates were placed in to the local labour market. The main purpose of this thesis was to analyse the employability aspects of these graduates in a way to find out the relevance of the training on their employability skills development and also to describe how well these graduates have succeed at the labour market. The study is intended also to provide an understanding at what extent the graduates are employed in agriculture and related sectors as compared to other sectors.

The study have found that the training provided at CEAB have contributed positively on the graduates employability skills development by confirming that it was fundamental to improve their employability aspects such: communication skills, team working skills, computer skills, ability to adapt to new situation and the sector specific skills. A positive impact was also related to the graduate’s integration in the labour market - as result showed 64% of them found job 1 year after the training completion. The study also found that the graduates engaged in agriculture are few and this have been linked to many factors such as limited opportunities of employment in agriculture, the poor working conditions, low wages and the lack of progression in agricultural sector.

**Key words:** education, training, employability skills, employment, human resource

## **Abstrakt**

Angola prosazuje řadu politik a nástrojů, jejichž cílem je vytvořit prostředí příznivé pro zlepšení situace v zemědělství. Poté co byl v zemi nastolen mír, význam středního zemědělského vzdělávání vzrostl v důsledku potřeby kvalifikované pracovní síly, která je nezbytná pro podporu rozvoje zemědělství. V rámci spolupráce s vládou České republiky byla v roce 2004 v Angole, konkrétně v provincii Bié, založena střední zemědělská škola pod názvem „Centrum zemědělského vzdělávání v provincii Bié“ (CEAB). Projekt CEAB měl přispět k rozvoji zemědělského odvětví v provincii Bié prostřednictvím nácviku dovedností nových odborníků v oblasti zemědělství a následně vytvářet nové pracovní příležitosti pro mladé lidi. CEAB zahájilo svou činnost v roce 2004 a skončilo roku 2009. Od spuštění projektu získalo 74 nových absolventů uplatnění na místním trhu práce. Hlavním cílem této práce bylo analyzovat aspekty zaměstnatelnosti těchto absolventů tak, abychom zjistili vliv jejich vzdělání na rozvoj jejich zaměstnatelnosti a také popsat, jak tito absolventi uspěli na trhu práce. Studie má poskytnout také výsledky průzkumu, v jaké míře jsou absolventi zaměstnáni v zemědělství a příbuzných oborech v porovnání s ostatními odvětvími.

Studie prokázala, že vzdělání poskytované CEAB přispělo pozitivně na vývoj zaměstnatelnosti absolventů potvrzením, že pro zlepšení jejich zaměstnatelnosti jsou zásadní aspekty jako: komunikační dovednosti, schopnost týmové práce, znalost práce na počítači, schopnost přizpůsobit se nové situaci a specifické dovednosti v tomto odvětví. Pozitivní vliv byl zaznamenán také v souvislosti s integrací absolventa na trhu práce – důkazem je 64 % absolventů, kteří našli zaměstnání do 1 roku po dokončení vzdělávání. Studie také odhalila, že absolventů, kteří se věnují zemědělství, je málo, což je důsledkem mnoha faktorů, jako jsou omezené možnosti zaměstnání v zemědělství, špatné pracovní podmínky, nízké mzdy, nebo nedostatek pokroku v zemědělství.

**Klíčová slova:** vzdělání, výuka, zaměstnatelnost, zaměstnání, lidské zdroje

## Abbreviations

<b>CEAB</b>	Centre of Agricultural Education in Bié
<b>CzDA</b>	Czech Development Agency
<b>DLIFLC</b>	Defense Language Institute Foreign Language Center
<b>EIU</b>	Economist Intelligent Unit
<b>FAO</b>	Food and Agriculture Organization
<b>FEWST NET</b>	Famine Early System Network
<b>FTZ</b>	Faculty of Tropical Agri-Sciences
<b>GDP</b>	Gross Domestic Product
<b>IFAD</b>	International Fund for Agricultural Development
<b>ILO</b>	International Labor Organization
<b>KPMG</b>	Klynveld Peat Marwick Goerdeler
<b>MDGs</b>	Millennium Development Goals
<b>MFA</b>	Ministry of Foreign Affairs
<b>MINAGRI</b>	Ministerio da Agricultura e Desenvolvimento Rural
<b>UN</b>	United Nations
<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>TVTET</b>	Technical Vocational Education and Training
<b>VT</b>	Vocational Training

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# 1 INTRODUCTION

The improvement of the country's human resource capacity represents a valuable prerequisite for the socio-economic development. Since, investing in knowledge and skills of people raises the productivity of economically vulnerable groups and thus reducing poverty (Johanson et al., 2004). For this reason, after the civil war in Angola the education became the most important investment towards the country's sustainable development (Angola-Today, 2013).

Considering, that agricultural activity represents the main source of livelihood of over 70% of the total population (FAOSTAT, 2013), the development of this sector is of crucial importance in terms of economic and social development of the country. However, due to the problems caused by the conflicts which consequently affected the formal education system (UNICEF, 2011); the lack of skilled human capital has acted as a barrier to the development of agriculture in the country, mainly in Bié province.

Bié province is considered as one of the regions with good potential for agriculture. However, due to problems caused by the war, it is still one of the regions with major problems of food insecurity in Angola. In the framework of cooperation between the government of Angola and the Czech Republic various development projects in the field of agriculture were established in Bié province. One of which was purposefully to support secondary agricultural education and training (MFA, 2013). This single project was implemented in 2004 and was named 'The Centre of Agricultural Education'. It was established in Kuito and served as the first secondary agricultural school in Bié province. The project was implemented by the Faculty of Tropical Agri-Sciences (formerly Institute of Tropics and Subtropics) under the coordination of the Czech University of Life Sciences Prague. The main aim of the project was to contribute to the renovation of the human resource for agriculture in Bié province by training of new agricultural experts (FTZ, 2007). According to the World Bank (2013), the agricultural education and training are vital in human resource development capacities necessary to empower rural people and increase agricultural productivity. In Bié province, the establishment of this secondary agricultural school did not only represent a source of human capital for agriculture but also as an opportunity of new graduates accessing the labour market. Similar to other African countries, evidences show that there is great pressure to incentivise the increase of the

human resource in agriculture within a country. However, there has been a lack of research to identify if the current high school agricultural graduates have the necessary skills to respond to the needs of the local market. The connection between the agricultural graduates and agricultural sector has been lacking and inadequate. Despite, the responsibilities that have been placed to the development projects toward Angolan development, little has been done on the evaluation of its impacts.

The main purpose of this thesis is to analyse the employability aspects of the graduates from secondary agricultural school “The Centre of Agricultural Education” of Bié province (CEAB). The analysis of the graduates employability aspects of the CEAB graduates is important to know how at what extent the methods and systems applied during the project running have brought significantly changes to the skills and competences development of the graduates and also to describe how well these graduates have succeed at the labor market. It extends also to explore the principal aspects of secondary agricultural education in Bié province in relation to the job opportunities for the students graduated in Agricultural Programs.

## **2 LITERATURE REVIEW**

In the current modern world, where knowledge is considered as the most important factor of production, the competence and skills of the human resource acquired plays an important role in the socio-economic progress of the countries. Therefore, developing the education, skills and ability of people helps in growth through the production and in turn helps to create the surpluses needed to raise living standards (ILO, 1997).

According to the United Nations, the human resource development represents the empowering of people by fostering the contributory capacities that they can bring to the improvement of their lives and to the society (UN, 2014). It has also been defined by International Labour Organization as a process of increasing the knowledge, skills, and the capacities of all the people in a society (ILO, 1997). Based on this, it becomes obvious that the societies or countries with weaknesses in terms of human resource capacities will find it difficult to progress beyond their economic and social development.

Many studies have suggested that the development of the human resource presents a major challenge to the agricultural development in Sub-Saharan countries particularly in Angola. Despite the recent efforts to overcome poverty, the lack of skilled workforce creates an obstacle to the development of the agricultural sector. Therefore, there is an ongoing need for strong national institutions with a focus on training future professionals with appropriate technical and functional skills (World Bank, 2013). Apart from education, it is also important to establish strong linkages between education and the labour market. According to the Young Professional' Platform for Agricultural Research for Development, in most of the countries there are very poor linkages between educational institutions and the labour market. (Percy-Smith et al., 2012).

### **2.1.1 Strengthening Employment through Vocational Agricultural Education**

The creation of policies aimed to increase the employment opportunities is an important issue, mainly in developing countries due to its direct connection to the improvement of poor people's living standards and poverty reduction. According to FAO, the rural employment is a key factor to achieving the challenges of food security and reduces poverty (FAO, 2013). However, the achievement of these challenges requires investing in the development of the workforce (FAO, 2012). It has become necessary to highlight the role of Agricultural Vocational Education and Training in this process, since for most

developing countries especially for Angola the agricultural sector does not only contribute to the economic development of the country but also participate as a main job creator. Therefore, through agricultural VTET programs many job opportunities would open for the young generation.

Slushier, Robinson and Edwards (2010) have considered the existence of vocational agricultural education course as necessary in assisting students to acquire the competencies needed to achieve employability in the labour market. According to Clement Segun Oni, techno-vocational training does not only provide recipients the opportunity to gain basic knowledge and practical skills but also skills needed for entry into the world of work as employees or as self-employed (Oni, 2013).

In Angola, specifically in Bié province the agricultural practice is the main source of livelihood of most of its population, thus the improvement of the technical agricultural education can give a new path to the agrarian sector. The reform of the Angolan education has been under implementation from 2004 (UK TRADE AND INVESTMENTS, 2013) with special attention to vocational agricultural education and Training. Despite the rapidly economic growth, the main source of employment of agricultural graduates is still the public sector, which has prompted the Ministry of Education to include entrepreneur knowledge to the secondary education curriculum in the current contest of educational reform (Ministry of Education, 2008).

### **2.1.2 Labor Market and Job Opportunities for Agricultural Graduates**

The recent trends in agricultural sector in most African countries have generated many questions about the relevance of available agricultural education and training. Despite the need of agricultural experts in the agricultural sector of several countries, many are the challenges that the high school agricultural graduates faces in the labour agricultural market. In recent years, Africa's economic growth has been quite impressive. However, strong economic growth has not always delivered corresponding benefits such as generating sufficient productive employment (Martins, 2013). Generally in low income countries, the agricultural labour market are still not well developed hence do not work appropriate to expectations. The main reasons for this are related to the peculiar production conditions surrounding agriculture which affect not only the labour market but many other market outputs (Smith, et al., 1991). Similar to the other African countries, the public

sector in Angola absorbs the majority of secondary agricultural education graduates (Vandenbosch, 2006).

Every year, large group of young people are enrolled in the labour force and agriculture is better positioned to absorb these workers, although farming does not often occur to policy makers as a solution to the challenge of job creation. Some factors such limited presence of direct investment and the unfavourable policy environment to agriculture have affected the performance of the food industry in different countries. This is so since, large change in the agrarian sector of countries does not only depend on improvement of its human resource but it also implies changes in the overall production conditions surrounding agriculture.

## **2.2 The Overview of Angola**

### **2.2.1 A Brief Description of the Country**

Angola is a country located on the west coast of southern Africa, with most of its territory situated between the parallel 4° 22' and 18° 02' parallels latitude south and medians 11° 41' and 24° 05' longitude east of Greenwich (FEWS NET, 2012). The Angolan territory extends over an area of 1,246,700 km<sup>2</sup> and 60% of this area consists of plateaus of 1,000 and 2,000 m with a dense and extensive river network. The country is bordered in the north with the Republic of Congo and Democratic Republic of Congo, in the east with Zambia and Namibia in the south (Portal Oficial do governo de Angola, 2011). The country is made up of 18 provinces which are: Bengo, Benguela, Bié, Cabinda, Cuando Cubango, Cuanza Sul, Cuanza Norte, Cunene, Huambo, Huíla, Luanda, Lunda Norte, Luanda Sul, Malange, Moxico, Namibe, Uíge, Zaire. Luanda is the capital and the most populated city in the country. Other major cities are: Huambo, Benguela, Lobito, Huila and Cabinda. The main existent ethno-linguistic groups are: Ovimbundu representing 37% of the population, Kimbundu 25% and Bakongo with 13%. Other groups include Chokwe, Lunda, Ganguela, Nhareca-Humbe, Ambo, Herero, and Xindunga (Jover et al., 2012). The official language is Portuguese, and approximately only 40% of the population can speaks it. The rest of the population speaks other languages such as Umbundu, Kimbundu and Kikongo (KPMG, 2012). Angola has a tropical climate that fluctuates according to region and season of the year (DLIFLC, 2011). The country has a vast wealth in natural resources among which include: petroleum, diamonds, iron ore, phosphates, copper, gold, bauxite and uranium (EIU, 2013). A vast water resource, fertile soils and good climatic conditions favourable

for agricultural practices and livestock production also constitute the major potentials of the country.

- **Economic Background**

Angola was a Portuguese colony until 1975 when the country became independent. 14 years after its independency, the country entered to civil war that lasted for 27 years. In a decade of political stability, Angola has achieved a prospering economy with one of the fastest GDP growth. Despite the advances in economy, the country still registers higher poverty rates. The population living below poverty line in 2009 was around 67.4% (World Bank, 2013). According to Human development Report, the country still stands out in list of countries with very low rates of social development with a HDI value around 0.508 (HDR, 2013). Therefore, poverty reduction still represents one of the biggest challenges that the country faces today.

The economic situation is improving thanks to the high rates of GDP growth registered in recent years. However, the major part of this growth has been attributed to the oil and gas sectors. The oil based economy has been highly susceptible to exogenous shocks caused by changes in oil prices (Vines et al., 2011). The share of the other sectors to the whole economy has been a little behind. Therefore, the improvement of the economic climate of the country is necessary to stimulate the development of other sectors. In this regard, agriculture has been one of the sectors with high comparative advantage.

- **The Agricultural Sector in Angola**

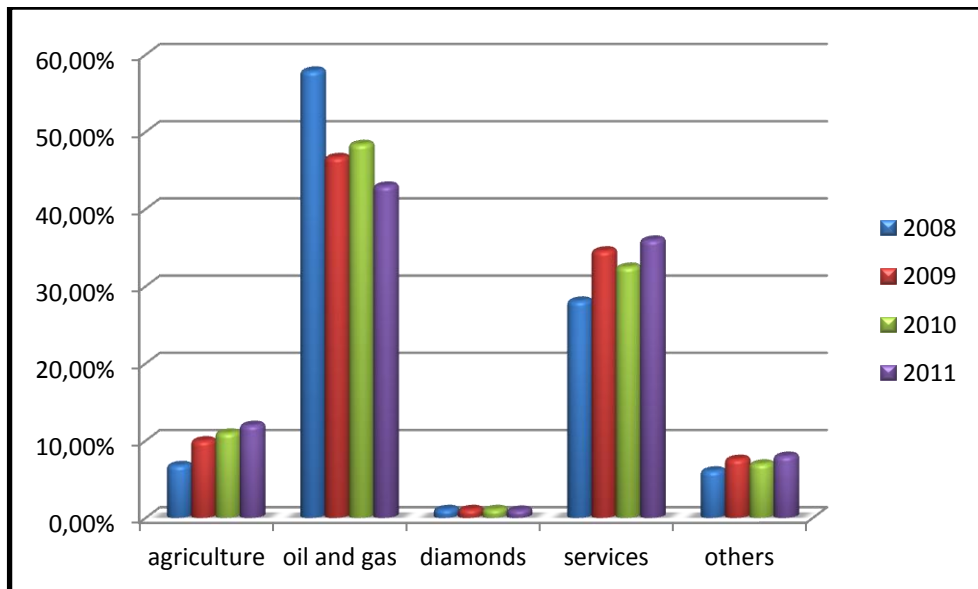
Angola is a country with favourable soil and climatic conditions for agriculture and in addition to that the agricultural sector presents itself as the sector with the largest active workforce of the country. Despite the importance of agriculture in the country, the performance of this sector has not been utilised to its full potential. The lack of information and knowledge about correct soil management practices and the use of other poor farming practices have resulted in the impoverishment of the land and consequently in to low productivity. The most affected by these problems are the small scale farmers in rural areas, who face great challenges to live at subsistence level.

In the past, the country was the world's fourth largest coffee producer, top exporter in sisal, sugarcane, banana and cotton. After the long period of war, the plantations and fields were abandoned and all infrastructures supporting agriculture were completely destroyed and the country has moved from self-sufficient in food production to a very poor situation of food

security (NEW AGRICULTURIST, 2009). The effects of these problems have led the country to become strongly dependent on imports.

Currently, the agriculture in the country is predominantly a family-based subsistence activity for millions of small-scale farmers which provide a livelihood for 85% of the rural population (UN, 2011). However, in recent years agriculture made some modest recovery by increasing its share on GDP from 6.8% in 2008 to 10% in 2011 (FAO, 2012).

The graph below, illustrates the trends in agricultural sector in comparison to the other economic sectors of the country. As it was mentioned earlier, there is a strong dependence to the oil and gas sector. Nevertheless, increase in the participation of the other sectors particularly the agricultural sector is seen.



**Graph 1. The main macro-economic indicator of the country**

**Source:** FAO, 2012

After a long period of stagnation in food production as a consequence of internal conflicts in the country, the agrarian sector has shown some growth. The recent increases in the production are encouraging but yields still are remarkably low (World Bank, 2007). While it is thought that the recent rises in the production are attributed to the improvement of the inefficiencies in the productive process, moreover this growth was mainly due to the expansion of cultivated arable land rather than productivity (IFAD, 2014).

In order to reverse the poverty situation that is still a big problem mainly in the rural areas of the country, the government have created several schemes to establish new and old cash crops and invest in small-holder production to boost food supply (Thompson, 2010). These

measures aim to incentivise the food production in the country and thus improve the problems related to food insecurity, that the country faces still today. However, there is not progress in whatever sector of the economy including the agricultural sector without skilled workforce and infrastructures which constitute the fundamental pillars to support the development of agriculture. In relation to that, the agricultural education has received a special attention in the recent years. Within new strategies of the government agricultural development include also policies for agricultural education development across the country.

### **2.3 Role of Agricultural Education in Angola**

Education plays a key role in the development of agriculture and to the other sectors of the economy. Successful cases of agricultural growth have shown that the development of the human resource in agriculture is fundamental to agriculture productivity. An example is that, growth in Indian agricultural sector has been attributed to the consorted efforts of available skilled human resource (Nanda et al., 2005).

After 27 years war in Angola, the educational system was seriously devastated and this affected other institutions which supported agricultural education. However, with a consolidation of peace in 2002, the improvement of the people's living standard has brought the education at the top of government planning programs once again. The agricultural education acts as an important tool to ensure the development of agricultural in the country. This provides professionals skilled which can support the agriculture development through extension, scientific research and entrepreneurship. For instance, it does not only represent an important tool to boost country's growth but also an important contributor in the creation of new job opportunities at different levels of the production. Since the increase of skilled workforce is fundamental to establish a favourable environment to attract investments of the private sector.

#### **2.3.1 The Secondary Agricultural Education in Angola**

The lack of higher agricultural institutions is still an obstacle to the country agricultural grow. This results in putting a great pressure to the existing secondary schools. Over few years the importance of secondary education have increased in Angola due to the need of qualified manpower needed to support the development of agriculture. Several other studies have highlighted the importance of the secondary agricultural training to African



countries, mainly for Sub-Saharan Africa. FAO also underlines that, secondary education still plays a decisive role in rural development and sustainable agricultural production (FAO, 1997).

The secondary agricultural graduates have constituted the major source of qualified agriculture workforce of the country and they automatically became responsible to respond to the high need of the market for all agricultural and related services. This has prompted the government to reform the former secondary agricultural education system by creating new educational policies and increasing the number of agricultural schools across the country. Within the scope to improve the capacity of agricultural human resource, the government has also relied on several development projects developed as part of the cooperation of Angola and other countries. Among which include the development projects implemented by the Czech Republic in the province of Bié.

Smallholder agriculture in Angola represents 90% of the total cultivation and only 10% is used for commercial agriculture (UN, 2011)<sup>2</sup>. More than ever the country needs to move from subsistence to commercial production, and thus give a new impetus to the sector. However, it is necessary to ensure that there is quality on the teaching methods, teaching staff, in the existing secondary agricultural schools. Ensuring the well functional learning and teaching method, the country can achieve competent and well skilled manpower. The enhancement of scientific research and technical knowledge in secondary schools also may facilitate the adoption of the more advanced technologies and also respond to the lack of skilled extension workers that the sector faces today.

- **Secondary Agricultural Schools In Angola**

Currently, the country has 5 new built secondary agricultural schools which started their operation since 2007 and the sixth operating since 2008.

- The Secondary Agricultural Institute in Malange
- The Secondary Agricultural Institute in Huambo
- The Secondary Agricultural Institute of Andulo in Bié
- The secondary Agricultural Institute in Kwanza-Norte
- The Secondary Agricultural Institute in Kwanza-Sul
- The Secondary Agricultural Institute in Uíge

These schools were constructed in different regions of the country and the provinces which were selected in the creation of these new agricultural schools were: Uíge Malange,

Cuanza Sul, Cuanza Norte, Huambo and Bié. They are all regions with a great potential for agriculture. Beside these new institutes that were built in 2008, two agricultural schools at secondary level already existed in the country, one in Huambo and the second in Huila. The Centre of agricultural Education of Bié was also a project focused in secondary agricultural training and was implemented from 2004 to 2009.

- **Characterization of the Secondary Agricultural Education System in Angola**

In the national education context, the agricultural secondary education is a part of vocational and technical learning system (Zau, 2007). This education program was established in the country to provide technical training and get the youth in to employment. The vocational program focuses on direct training for producers or training for individuals who support farmers and contribute to the post-production process (Jones, 2014).

#### **2.4 The partnership between Angola and Czech Republic**

The history of cooperation between the two countries dates since 1975 when the Czech Republic was still a part of the former Czechoslovak Republic. In 2002, after the peace ascension in Angola, several opportunities of bilateral cooperation have emerged to the country among which we underline its closer cooperation ties with the developed world.

The Czech Republic has strengthened its cooperation ties with Angola since 2006 by providing a development assistance programme for Angola in different strategic fields such as:

- Education
- Agriculture

From 2006 to 2010, Angola was a part of a wider circle of priority countries for the Czech Republic's foreign development cooperation (CZDA, 2010). However, cooperation agreements between the Czech embassy in Angola and the Bié province administration had already been signed in 2004 by the local authority and the Czech ambassador (Reliefweb, 2006). The Czech Republic's development cooperation with Angola has set out agriculture and education as the main priority sectors and through this programme various agricultural educational projects at primary and secondary level were launched, with special regards to the 'Centre of Agricultural Education of Bié Province. The Centre of Agricultural Education of Bié was a part of development project created to support the capacity building of experts in the field of agriculture. More other projects supporting agriculture

and education were implemented by the Czech development assistance and the main focused area was the Bié province. The location of the Czech development projects in Bié province reflected to the reality that the province was the most affected during the long war period in the country.

Apart from these implemented projects, Angolan students have also been granted with Czech governmental scholarships. From 2004 to 2012, a total of seven students were enrolled on predominantly agriculture-related and electrical engineering programs in the Czech Republic (MZV, 2013).

#### **2.4.1 The role of Agriculture in Bié province**

Bié province has a long history at national level in terms of agricultural production. In the past, it was named the national granary by becoming the region with highest production of cereals in the whole country. During that time, Bié province had produced cereals for both domestic consumption and also for exportation. Currently, the production is mainly based on subsistence production. Bié has a population estimated at 2,562,263 (MINAGRI, 2012) of which 80% is peasant, dedicating itself to this type of agriculture. The main crops grown in the region are: maize, wheat, sorghum, soybeans, sunflower, potato, cassava, citrons and vegetables.

The provincial agricultural sector still experiences several deficiencies regarding the improvement of the production levels. The low yields in the production are caused mainly by the absence of specialized technical assistance and also the absence of infrastructures. This is so since most of agricultural labour force lives in the rural areas where the reconstruction of the main infrastructures is still insignificant, including the support to agriculture. The shortage of skilled technicians is one of the major challenges that this sector faces at present. The government has made efforts to improve the agricultural productivity in these areas by supporting the farmers with inputs and provide them with technical assistance. However, the number and the quality of skilled expertises do not cover all the exigencies of the province. Another barrier that arises is the accessibility of some areas.

In many countries of the world, the education that is acquired in the secondary school level have been recognized as crucial in the development of the job skills or of the ability of becoming a productive member of the society. The agricultural secondary level of

education in Bié province is of crucial importance to provide trained staff with necessary skills related to more advanced farming systems and technologies. The improvement of the capacity and quality of the agricultural education in Bié can also be useful in this process of revitalization of the agrarian sector.

#### **2.4.2 Establishment of the Centre of Agricultural Education in Bié province**

The Centre of Agricultural Education in Bié province was a project created in the framework of cooperation between the government of the Czech Republic and the Government of Angola in the field of education. It had focused on the province of Bié since it was one of the most affected by the war. At the time of its creation, the project became the first secondary agricultural school in the province, standing out as an asset to the province. For the youths who have studied there, they had opportunity to experience a different educational system.

The aim of the project was to establish the Centre of Agricultural Education, develop training and provide extension services for local farmer in Bié province. The courses provided there, included both general and agriculture subjects, applied research and consultant services to complement the integral part (FTZ, 2013).

In general the project was created to contribute to renovation and development of Angolan agriculture through education of future agriculture specialists and providing consulting services to local farmers and staff of governmental as well as non-governmental sector. The focus of the project was also to help in solving food problems and at the same time in generation of new job opportunities to the graduates. According to ILO (2011), educational and training programmes that aims to equip young with the skills requires by the local market are an important element in facilitating the transition of young people to decent work. The secondary agricultural school established in the framework of this project began operating at the beginning of 2004 and 74 students had graduated by the end of the project in 2009.

### **2.4.3 The analysis of the Employability aspects of the Graduates from CEAB Project**

The employability has been considered as economic factor of competitiveness, since it is related to the quality of the human resource which represents a fundamental requisite in the competitiveness of the industries. As have been highlighted in many studies, the employability refers to the structure of the education system in relation to its closer linkages with the labour market. It was also defined as a capacity to move into and within labor market and to realize the potential through sustainable and accessible employment (McQuaid and Lindsay, 2005).

Over the time, the contribution of schools in the professional development of individuals has become very important, given that they are crucial in training people with necessary skills and knowledge to enter and move across labor market. *“To be employed is to be at risk, to be employable is to be secure”* (Peter Hawkins, 1999)

The rise of knowledge and skills is crucial into agricultural workforce in Bié province. Therefore, the creation of educational projects such the Centre of Agricultural education of Bié which was mainly focused to agricultural training of the local workforce does not only contribute to the development of the human resource through knowledge transfer but it also bring new experiences from other countries which are essential to the renovation of the existing agricultural schools in the country. The analysis of the graduates employability aspects of the CEAB graduates is important to know at what extent the methods and systems applied during the project running have brought significantly changes to the skills and competences development of the graduates and also to illustrate how well these graduates have succeed at the labour market.

This may also provide a comprehensive analysis on the real situation of the local labour market in relation to the secondary agricultural graduates, by showing the linkages between agricultural graduates and the agricultural sector.

### **3 OBJECTIVES**

In today's information-based economy, it is important for the students to attain advanced skills needed to succeed after high school. This applies to everyone whether they are continuing their studies or joining the workforce and those that decide to combine both school and work (Bangser, 2008). The Centre of agricultural education in Bié province had been established to contribute to the renovation and development of agricultural sector in Bié province. This was done through skills training to contribute to new agriculture experts and in turn generate new job opportunities for the young people. Upon completion of the project in 2009, about 74 experts were placed on the local labour market.

The overall objective of this thesis is to analyse the employability success and employment opportunities for the graduates from this secondary agricultural school. It seeks to provide an assessment of the graduate's employment outcomes as a way of learning for the future agricultural education planning. In line with this overall idea, the thesis has the following specific objectives:

- To find out the relevance of the study program on the employability skills development of the graduate students of the secondary agricultural school,
- To analyse at what extent the graduates are employed in agriculture and related sectors as compared to other sectors,
- To determine the main characteristics which significant affect the employment success of the graduates.

#### **3.1 Hypothesis**

For a better development of the thesis problem the following hypothesis were formulated:

- The training program had significantly positive effects on the development of the student employability skills and competences, now all the graduates are employed.
- The graduates are all employed in the field of their training or related areas.
- The local labour market presents good job opportunities to the level of training of the graduates.

## **4 METHODOLOGY**

The following methodology was created to evaluate the employability skills and competences of the graduates from the CEAB in to the local labour market. This secondary agricultural school “The Centre for agricultural Education of Bié Province” was part of development projects implemented by the former Institute of Tropics and Subtropics in Bié province. The assessment was established to respond to the specific objectives mentioned above.

### **4.1 Research Design**

The data covered by this research was obtained through a survey on the skills and employment outcomes of the graduates from the Secondary Agricultural School of Bié province (The Centre of Agricultural Education of Bié), who completed their studies in the years between 2007 and 2009 when the project finished. This survey was conducted 4 years after the project completion. The study used a combination of both primary and secondary data.

#### **4.1.1 Primary data**

In order to increase the significance and effectiveness of the primary data, both qualitative and quantitative methods were used during the data collection and data analysis. Three different and comprehensive questionnaires were formulated for the focus groups. The first questionnaire was designed for the graduates (former students from the Centre of Agricultural Education of Bié), the second questionnaire was designed for the representatives of the Ministry of Agriculture in Bié and the third one was designed for the representatives of the Faculty of Life Sciences in Huambo. The questionnaire was administered to the graduates personally, except those currently residing outside Bié province who received it through e-mails. Phone calls were also made to clarify the questions. The interview with the representatives of the two institutions in the study, were performed personally based on the questionnaires designed for this purpose.

#### **❖ Questionnaires**

The questionnaires designed for the data collection from graduates was divided in 3 main parts, the first part contains information on their personal details, the second part asked the graduates to score their perception about the value and the quality of the course, it also contains questions on the skills or attributes that graduates believe they have acquired

during the training at CEAB and the last part looked to know on their current employment status, on the graduates' performance based on the competences and skills acquired during the training, their satisfaction with the training system, the main strengths and weakness of the learning method and at what extent they are employed in agriculture or related activities. The questionnaires directed to employers which in case of this research were representatives of the Ministry of Agricultural in Bié was designed to ask about the principal components of skills considered as the most important during the recruitment of new employees. In turn, the research questions directed to the representatives of the Faculty of Life Sciences in Huambo were based on get to know at what extent the graduates from the CEAB were prepared to perform in higher education, at what skills component they are better or worse.

#### ❖ **Secondary data**

The secondary data was collected from the reports and documents of the Ministry of Agriculture, Rural Development (MINADERP), Ministry of Education, Science and Technology of Angola, from the reports and documents of the project “Establishment of the Centre of Agricultural Education in Bié”, available Portuguese literature and other internet sources mentioned in the thesis.

#### **4.1.2 Data Analysis tools and Processing**

For a better interpretation and understanding of the variables included in the study and the relationship between each other, different methods and procedures were used during the data processing and analysis. Both qualitative and quantitative analyses were performed and the use of mixed methods aimed to cross-check the data and thus enhances the validity and reliability of the final results. The data processing was done by means of excel such as tables, graphic illustrations and expressive statistical tools as percentage, proportions and ratios.

#### **4.2 Target Group Selection**

The choice of the target group was based on the contribution that each target group can provide for the viability and effectiveness in achieving the objectives set by the thesis. The main focus group defined in the research were the graduates, thus all the 74 students who completed the secondary school in the CEAB were included in the study.



Given the shortage of skilled human resource for agriculture in Bié province, the employers in agricultural sector became most concerned about the graduates from the secondary school CEAB. Therefore, in this study the Ministry of Agriculture in Bié province has also been the focus of our research. Apart from the graduates, representatives of the Ministry of Agriculture in Bié province were interviewed. Being the only Faculty of Agricultural Education and Training in Angola, the qualification at FCA would be a destination of many of the students. An interview with members of this institution was also conducted. The table below shows the distribution of the main focus group included in the research.

**Table 1. The distribution of the main target group in the research**

Year of study completion	2007	2008	2009
Total number of graduates	17	32	25

#### **4.3 The Significance of the study**

The adjustment of country's secondary agricultural education system to the demands of the national labour market has been one of the major challenges facing by the country today. Despite the progress that the country has seen in recent years, the consequences of the long war period in the country, had strongly affect the research development in the country then this area of study has not been much explored. The present study aims to contribute to the research field as a part of the studies already carried out on this topic and serve as way of learning for the future planning. The results from this thesis provide information about this particular intervention in the agricultural education in Bié province and it can helps to better understand the current situation of the local agricultural labor market and develop the specific strategy and plan for secondary agricultural institutions.

#### **4.4 Limitations of the study**

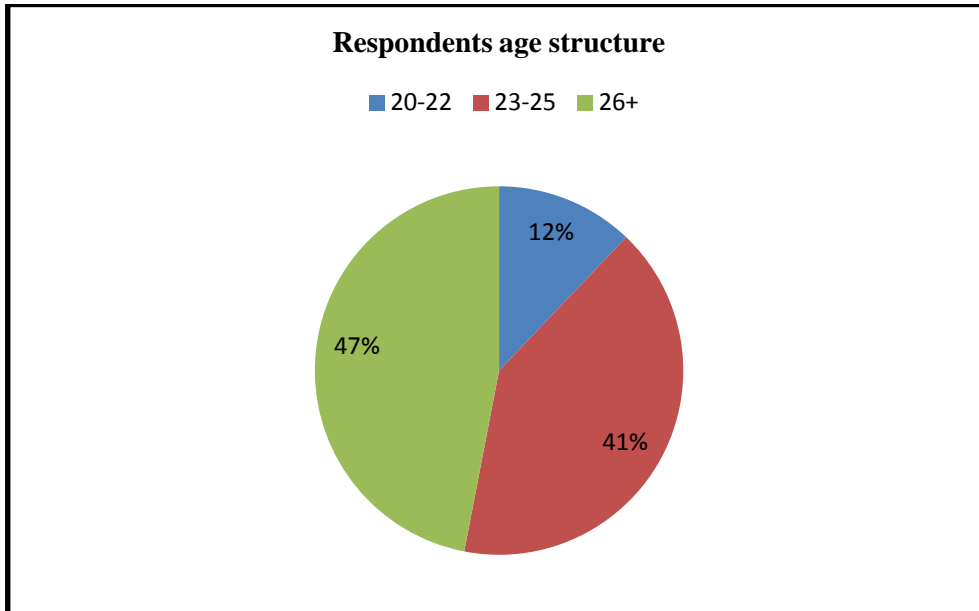
- ❖ Any research study which is undertaken for academic purposes will always require review of relevant literature (Greener, 2008), however some difficulties in accessing relevant data, available literature to the topic were found for the present study. Some limitations in research area of the country, problems on accessing the data both from the Ministry of Education and from the Ministry of Agriculture were found during the study.
- ❖ Problems to get feedback on the questionnaires from some graduates were experienced during the research. These setbacks were registered mainly to those respondents currently living outside of Bié province.

## **5 RESULTS**

This chapter aims to present the findings of the research conducted in Angola, specifically in Bié province between months of August and September of the year 2013. The content of this section covers the findings on the employability outcomes of graduates from the agricultural education training project provided in Bié province from 2004 until 2009. The first part of the results, presents the findings about the graduates' feelings and perceptions on the value and quality of the course. Subsequently, the preceding subchapters will present the findings of the impact of the training on the employability competences and skills of the graduates.

### **5.1 Sample characteristics**

After the project completion (The centre of Agricultural Education of Bié) in 2009, 74 students had graduated in total and the findings of the survey covered about 90 percent of the students that graduated from the institution. Within the total number of respondents, 25 % were female of age between 22 – 28 years and the remaining 75% were male of age between 23 – 35 years. In total 17 which corresponds to 100% of the students graduated in 2007 were interviewed, 27 corresponding to 84% of those graduated in 2008 were also covered by the research and the remaining 22 (87%) of graduates were from the year 2009. Apart from the graduates, the director for academic affairs from the Faculty of Life Sciences of Huambo was interviewed. From the Ministry of Agriculture in Bié province, the director from the department of human resources and more other representatives of this institution were interviewed. The graph below describes how the graduates were distributed according to the age.



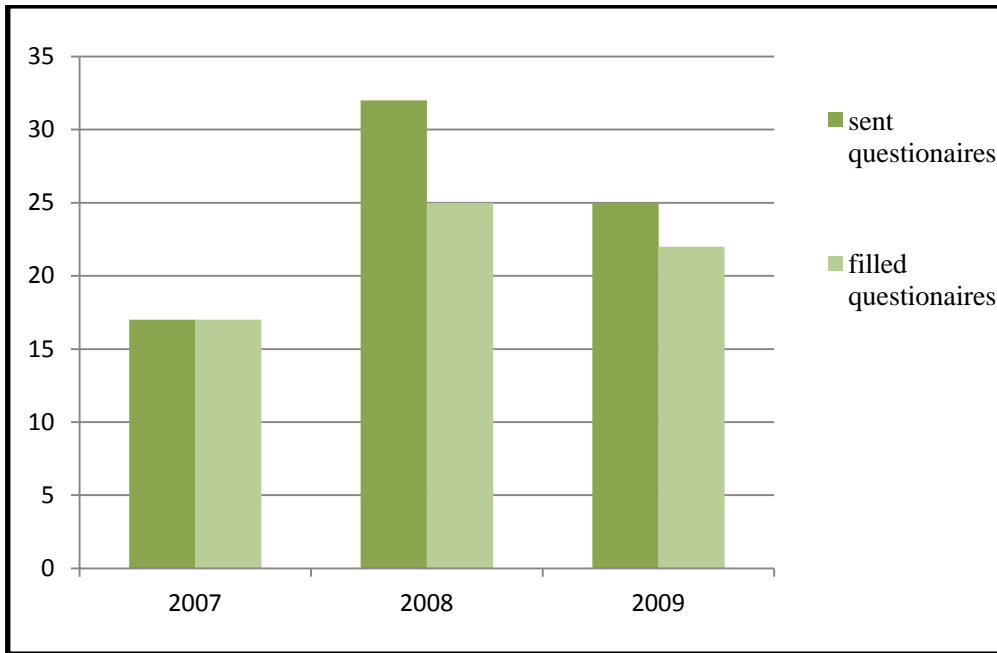
**Graph 2. Age structure of the respondents**

As was mentioned above graduates from the years 2007, 2008, 2009 were the principal focus group of the study. In the following table we can observe the distribution of respondents according to the year of the studies completion.

**Table 2. The percentage of graduates by study year completion**

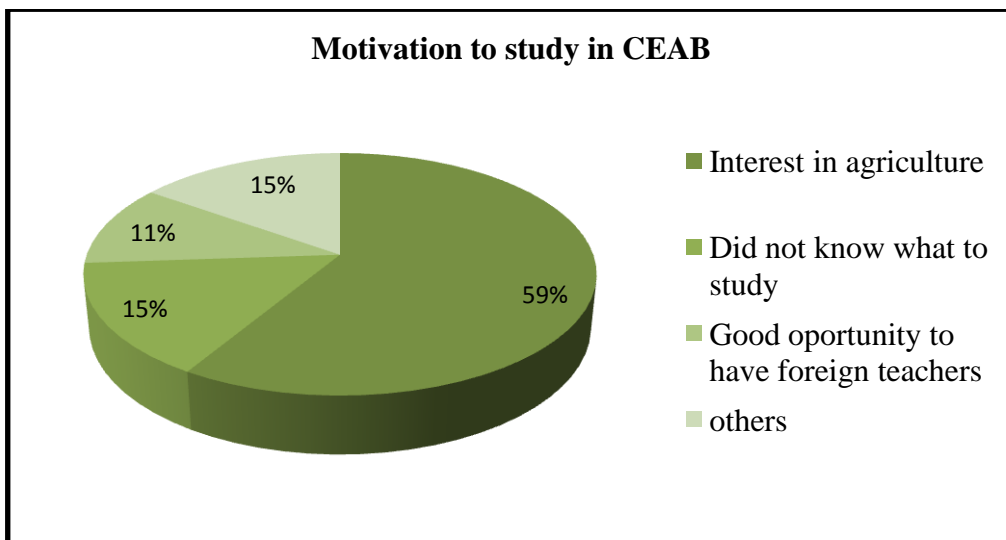
Year	Graduates	Percentages/year
2007	17	100%
2008	27	84%
2009	22	87%

In the graph 3 we can see the number of all graduates from each year comparing to the real number that have filled the questionnaires.



**Graph 3. Comparisons of graduates per year to the real number of respondents**

The respondents were also asked about the possible reasons that had driven them to choose this course. The findings review that the majority of them had interest in agriculture. As we can see in the graph below almost 60% of the respondents said that their choice for the course was driven by their interest in agriculture



**Graph 4. The Motivations of the Graduates for this Course**

From the motivations mentioned above, some other reasons were pointed by the respondents. The table below shows other reasons which had driven the choice of graduates for this particular course.

**Table 3. Other motivations to study at CEAB**

<b>Other Motivations</b>
I have decided to study due to suggestion of parents or friends
I did not have any other alternative that time
All other institutions already were full
Because I heard people talking good about this school

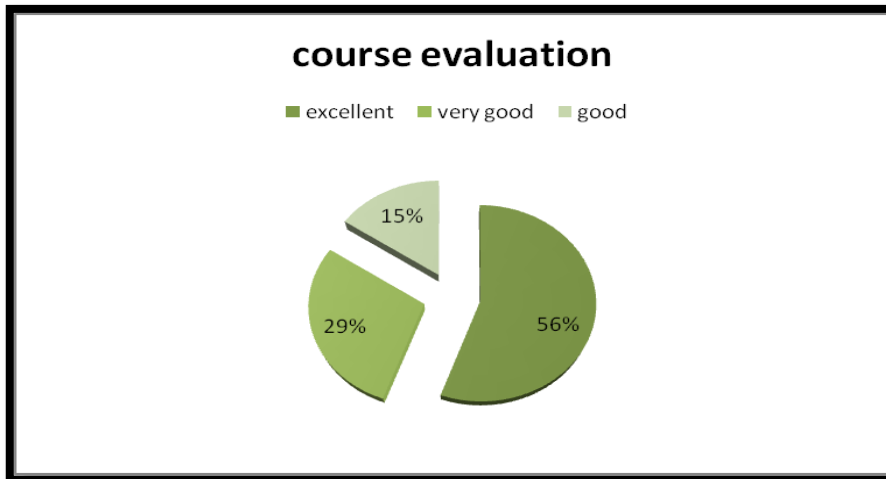
## **5.2 The Graduates Perception on the Quality and Value of the Education and Training Provided at CEAB**

The following findings are directly linked to the first objective of the thesis which is to evaluate the relevance of training on the development of employability skills of the graduates from the Centre of Agricultural Education of Bié.

Although at first sight the interest in agricultural field has not been the motivation of almost 40% of respondents to join this study program as shown in the results above in graph 2, the results indicate that there is a very positive perception of the graduates about the value and the quality of the course provided by the CEAB. According to the survey, all of the respondents have acknowledged the importance of agricultural training and its contribution to the country's agricultural sector development.

Regarding the graduates perception about the quality of the training at CEAB, the findings showed that 56% of the respondents have classified the training provided as excellent, 29% as very good while the remaining 15% of the respondents have classified it as good. No negative evaluation was found in relation to the graduate's perspective about the quality of the studying methods provided by this institution. On the contrary, all of them believe that the education and training acquired during their studies in CEAB had contributed significantly in the development of their abilities and competencies.

The following graph shows the evaluation of the course from the graduates view point.



**Graph 5. Evaluation of the training from the graduate view point**

### **5.2.1 Graduates employability skills**

The labour market is based on competition where only individuals who have well developed skills and competencies will manage to establish strong linkages with the employers and be able to continue employed. One of the objectives of the training provided at CEAB was to ensure skills development in the way that the students undergraduates were expected to develop a certain range of abilities or attributes that are fundamental for employability. Usually there are several skills that the employers are looking for when recruiting new employers and these skills vary from employer to employer according to the demands of performance in a particular job. However, some of these specific skills are almost always present among the most sought by the employers. In this study 5 of the most refereed in most of the studies were observed.

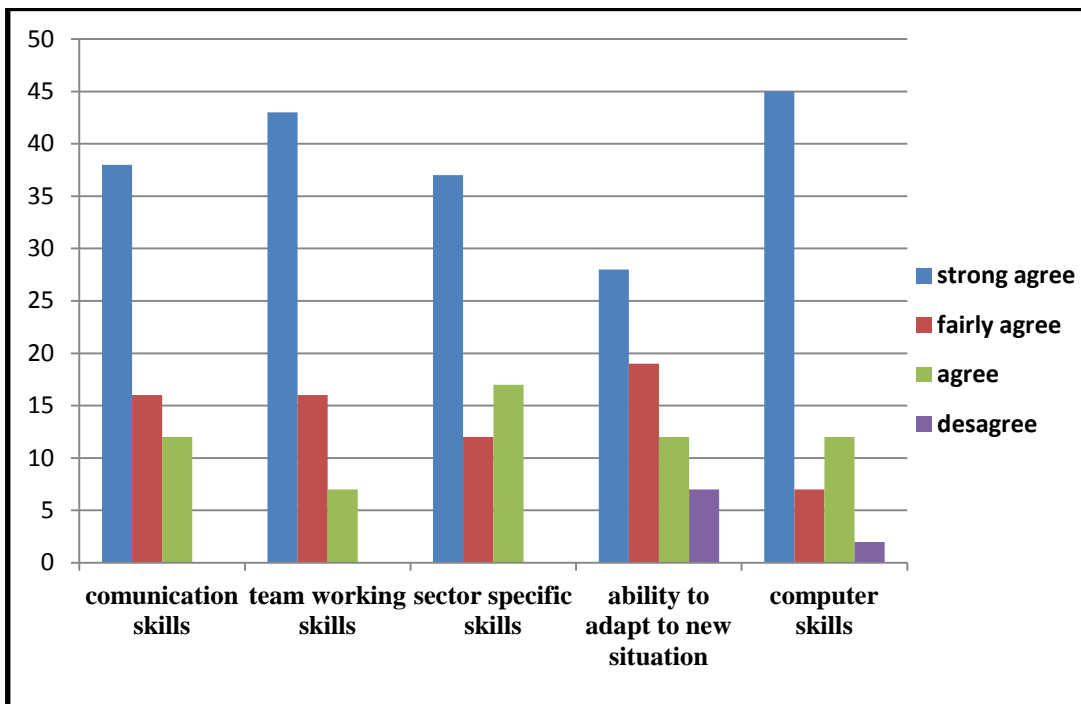
- ❖ **Communication skills**
- ❖ **Team working skills**
- ❖ **Ability to adapt to new situation**
- ❖ **Technology/ computer skills**
- ❖ **Sector specific**

The final results of the study indicate that the studying method provided in CEAB has improved and expanded the graduate's knowledge at different skills component including: Communication skills, sector specific skills, adaptability to new situations team working abilities and computer skills. The results in figure 2 show the level of agreement among

respondents regarding to the employability skills developed during their training in the CEAB

**5.2.1.1 Do you think that the studies at CEAB have helped you to develop some of these employability skills**

This question was particularized to observe and know the perception of the students regarding to the employability skills that they believed had improved during their studies at CEAB, they were asked to evaluate from this with grading from 1 (strongly agree) to 5 (strongly disagree). The results presented in graph 6 below indicate the level of agreement between the graduates concerning all the skills component included in the study was definitely very high. It was also found that, few of them disagree that their ability to adapt to new situation had improved during the training at CEAB. A clearer illustration can be seen in the graph below.



**Graph 6. Graduates perception of the skills provided by the training**

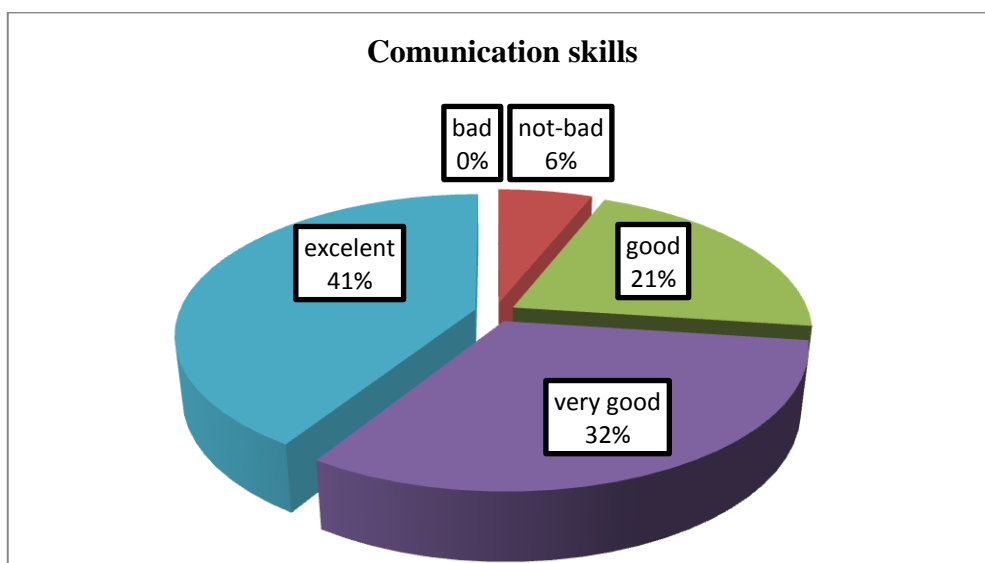
**5.2.1.2 How do you evaluate your employability skills acquired during yours studies at CEAB**

**❖ Communication Skills**

The ability to pass information, express ideas, thoughts and knowledge transfer has a very important distinction in the quality of both labour and in interpersonal relations. For this research the graduates were asked to score in a scale of 1 (excellent) to 5 (bad). Evaluation



of their communications skills after the training and the results in graph 7 shows that more than 41% of them have scored it as excellent, while the other 32%, 21% and 6% have ranked as very good, good and not-bad respectively. Most of the students have pointed out that during their studies at CEAB they have improved a lot in their abilities to communicate with wide range public and this was mainly incentivized by the good relation with teachers and by the school curriculum which included things such as presentations, group and team work activities at school.



**Graph 7. Graduates communication skills score**

When asked to compare their communications abilities before and after the training at CEAB 57% ranked as much better while the remaining 33% as better. None of the respondents revealed absence of improvements after passing to CEAB.

❖ **Sector-specific skills**

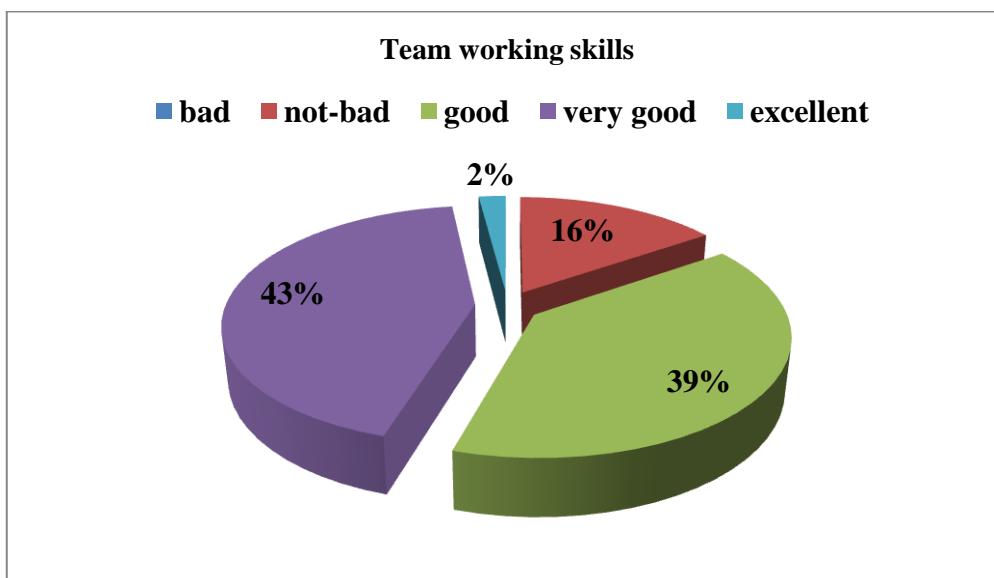
When asked to evaluate their knowledge and skills within their specific area of study after the completing of training in CEAB, more than 50% of them have scored it as excellent, while the other 29%, 15% and 6% have ranked as very good, good and not-bad respectively. The numbers above do not only represent that both theoretical and practical learning methods were usefully to the development of the specific sector knowledge but also shows that they are satisfied with the level of knowledge provided on agriculture field. They also indicate that before their studies in CEAB no one had been trained on agricultural or related field.



**Graph 8. Sector specific skills**

❖ **Team Working**

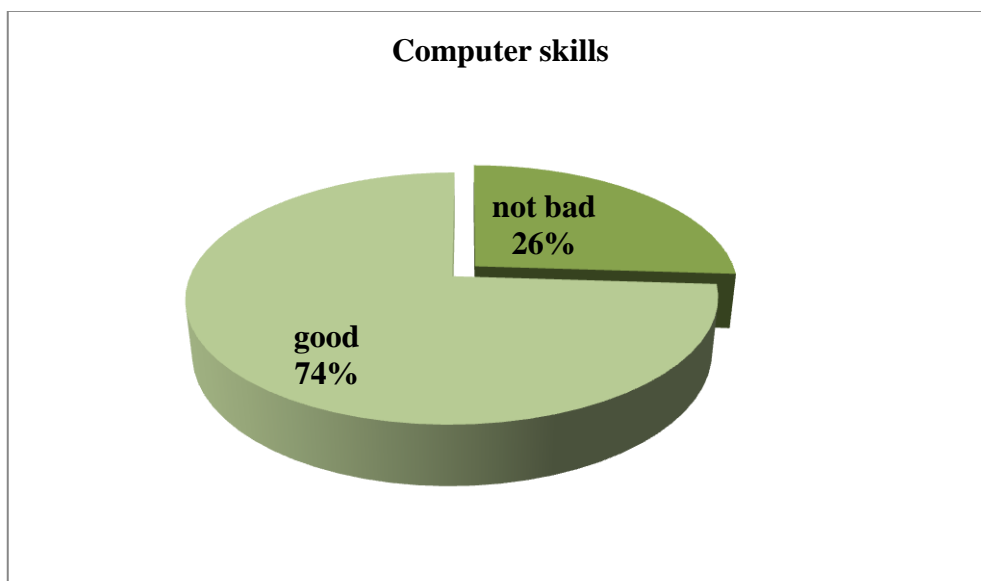
Nowadays, to know how to work in teams is essential feature for getting an opportunity in the labour market. Most of the employers want to recruit workers that communicate to each other and work together for the development of the company or organization. Based on the survey with graduates, the findings reveal that they had significant team work improvements during 4 years of studying in the centre of Agricultural Education of Bié then, 43% of the graduates ranked their abilities in working in team as very good, while other 38% as good and the remaining 15% and 2% as not-bad and excellent respectively. The graph below shows the classification of the respondents regarding to this specific skills.



**Graph 9. Team working skills**

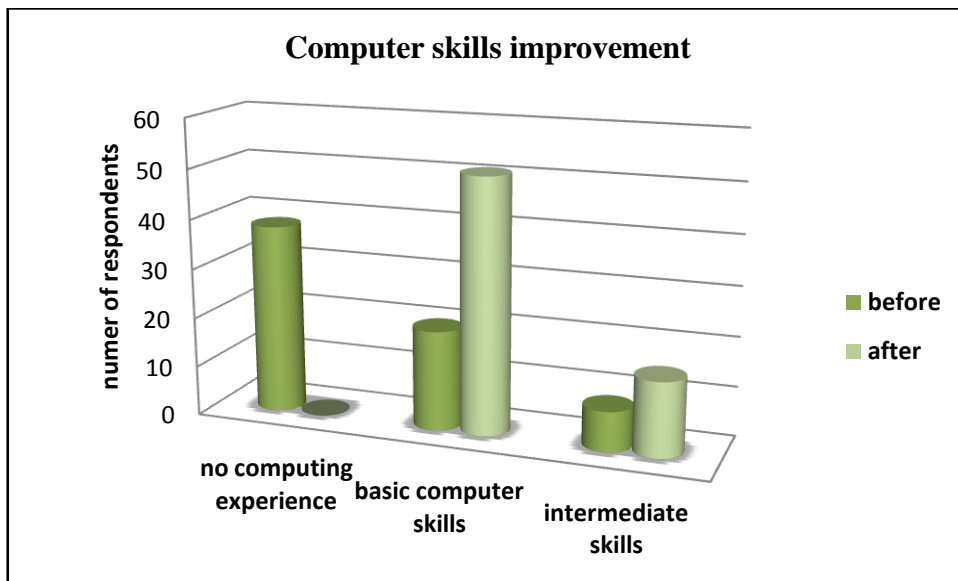
### ❖ Computer skills

Abilities in working with computers are today one of the most valuable skills in the workplace. Employers foresee that the future employees may need to manage a certain computers programs during their performance in the job. Therefore, basic computer skills can make big difference when it comes to employment. Currently, almost all jobs requires basic understanding of computer hardware and software, it applies especially to word processing, spreadsheets and emails (MYRESUME, 2011). The findings of the research show that 74% of the graduates have ranked their computers skills acquired during the training in the CEAB as good while the remaining 26% scored it as not-bad. Although the scores on this specific skill component have not been much higher as compared to the previous ones, from the point of the graduates it have represented one of the most valuable skills that they have acquired at the CEAB. For most of them they had been their first lessons in computer management there. The following graph shows the graduates scores on computer management.



**Graph 10. Evaluation of computer skills of the graduates**

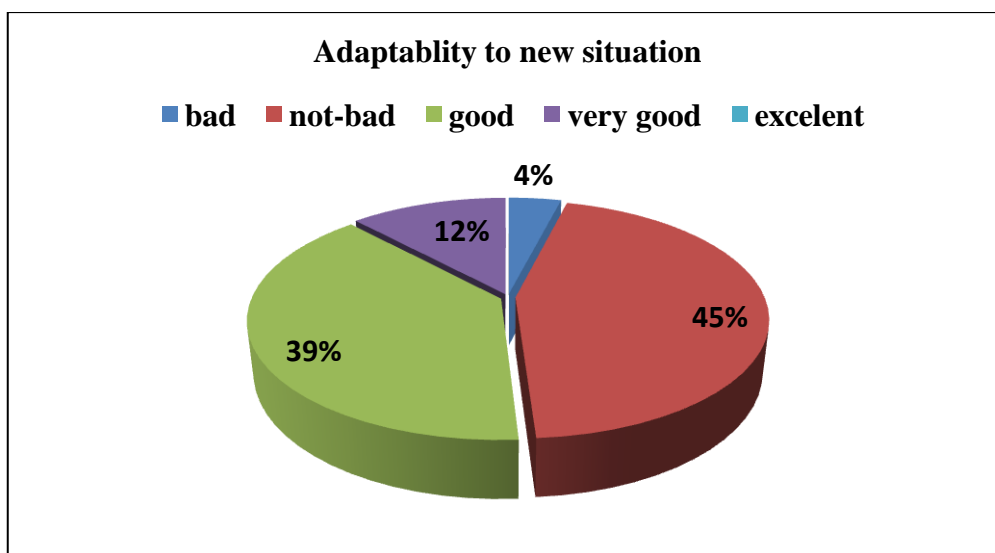
It was mentioned many times by the graduates that in addition to the agricultural knowledge, the computer skills were one of the most valuable skills component acquired during the training. To better understand at what level the training was critical to the improvement of computational abilities of graduates, a comparative evaluation between before and after the training was held. The graph below presents the graduates scores on their computer skills before and after the training completion in CEAB.



**Graph 11. Comparison of graduate’s computer skills before and after the training**

**❖ Ability to adapt to new situations**

More than 40% of the graduates have indicated that after the training, their abilities to lead with new situations were not bad, while 39% have ranked it as good, the other 12% as very good and the remaining 4% said bad.



**Graph 12. Ability to adapt to new situation**

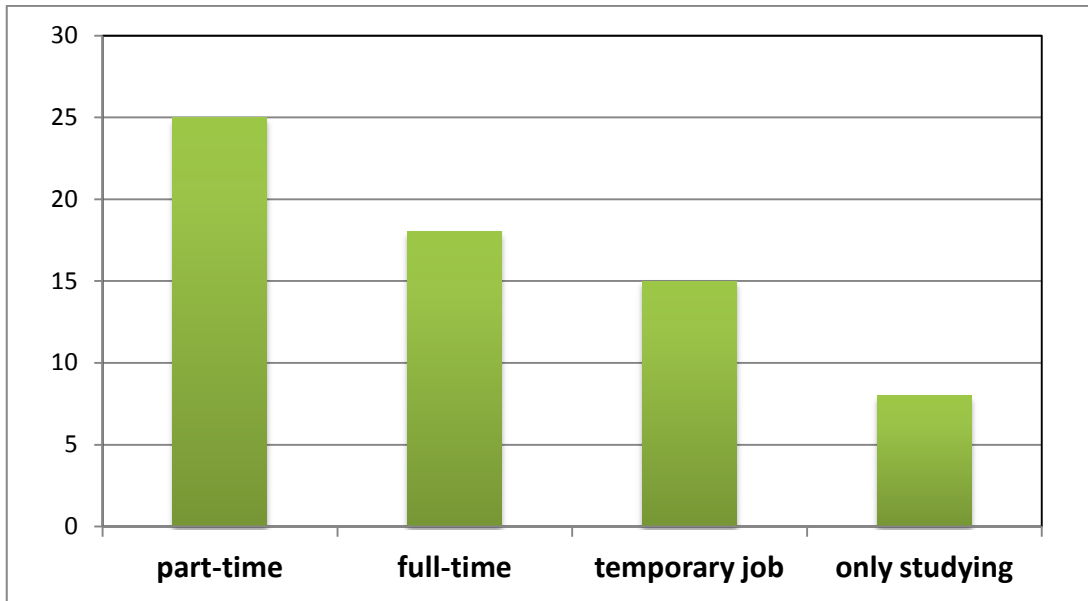
### **5.3 The Integration of the CEAB Graduates to the Local Labour Market**

The establishment of the Centre of Agricultural Education of Bié province did not only have the main objective to contribute to the capacity building of the personal needed to support the agricultural sector in Angola specifically in Bié province but was also created to provide students with necessary knowledge skills to succeed in the labour market. This second part of the research was designed to find out if the experience of studies in the Centre of Agricultural Education of Bié province made some differences into the current graduates' employment outcomes.

#### **5.3.1 Current employment status of the graduates**

There have been many definitions around the concept employment, and according to ILO employees are considered as all those workers who hold the type of job defined as paid employment jobs (ILO, 2003), it applies to those having a part-time, full-time or temporary job. However, for the individual to be able to enter the labour market, needs to be trained with the skills and competencies required for the performance of the duties as an employee. Usually the education and training are the means by which those skills and competences suppose to be transferred to the undergraduates. Nevertheless, the schools not always can offer the necessary knowledge and skills to the graduates to enter the labour market.

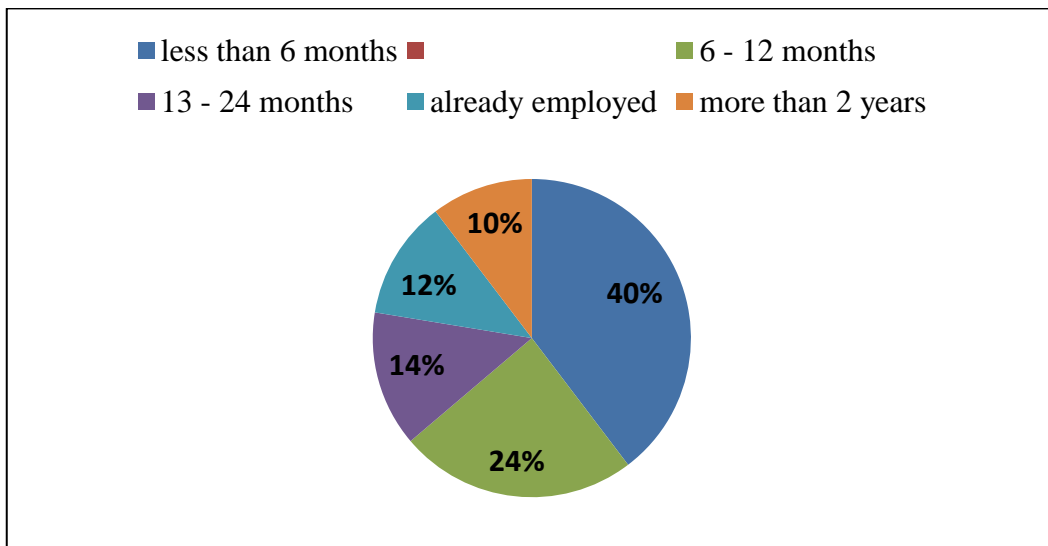
The research with the graduates from the CEAB have reported that 4 years after the project running more than 88% of the respondents were employed in full-time, part-time or temporary jobs and only about only 12% were involved in studies. The following graph illustrates the different employment status of the graduates during the research.



**Graph 13. Current employment status of the respondents**

**5.3.1.1 How long the graduates have looked for a job after the training**

The graduates were also asked to report how long they have been looking for a job after their high school training and most frequent period mentioned was less than 6 months. However, for those who continued studies at the University, they reported that most of the job opportunities that the local labour market offered did not allow them to combine both studies and work. It clarifies why some of the respondents had difficulty to find job after their secondary education.



**Graph 14. Interval of time needed to find job**

The graph above describes how long the graduates have been looking for a job after their graduation.

According to the survey, it was found that the majority of respondents who completed the training in 2007 were more involved in stable jobs (full-time). This proves that, as long they are in the labour market, the more they became engaged in full-time jobs. On the other hand, from those who completed their studies in 2009, the numbers shows that they are more involved in part-time or temporary jobs this is because most of them are combining studies and work. The table below shows the variation of the employment status of the respondents by each particular year.

**Table 4. Comparison of the Graduates' Employment Outcomes from different years**

	Graduates total	Full-time Employed	Part-time employed	temporarily employed	Unemployment rate/year
2007	17	8	4	2	18%
2008	27	5	13	6	11%
2009	22	5	8	7	9%

In terms of employability of the graduates, numbers also shows that there is some variation with regard to the level of unemployment for the different observed groups. However, it does not reflects to the quality of education that graduates from different years received along their studies, since 100% of graduates observed in the study that are currently unemployed are involved in higher education. Therefore, they cannot be considered as disabled of employability competencies and skills. On the other hand, the results show that all the respondents engaged in part-time and temporary jobs, they are combining work and studies together. It shows that there is an apparent tendency of the graduates to achieve the higher education level and this trend has been linked mainly to factors such as low wages standards for secondary school graduates.

### **5.3.2 Graduates involvement in agriculture and related fields**

Due to the low presence of entrepreneurship in agriculture in Bié province, the main employers of graduates in agricultural field are the public sector. Therefore the part of the research focused to access what are the main skills that the employers look for in the recruitment of the new workers was only held with representatives of the Ministry of Agriculture in Bié province. In the following list are described what skills component are distinguished among the candidates in the recruitment of the new employers.

- **Ability to Communicate**
- **Ability to work in group**
- **Flexibility**
- **Agricultural knowledge**

All these skills' components are considered as crucial to perform in the areas that the local sector presents major weakness in terms of skilled workforce.

- **Extension work**

The improvement of the food security and the living conditions of the population appear in the various guidance of the Government of Bié province to the Poverty Reduction Strategy, and fall into this program, the rehabilitation of production capacity through extension services provided to farmers. According to local authorities, the lack of technicians to support the work of agricultural extension is still a problem for the industry.

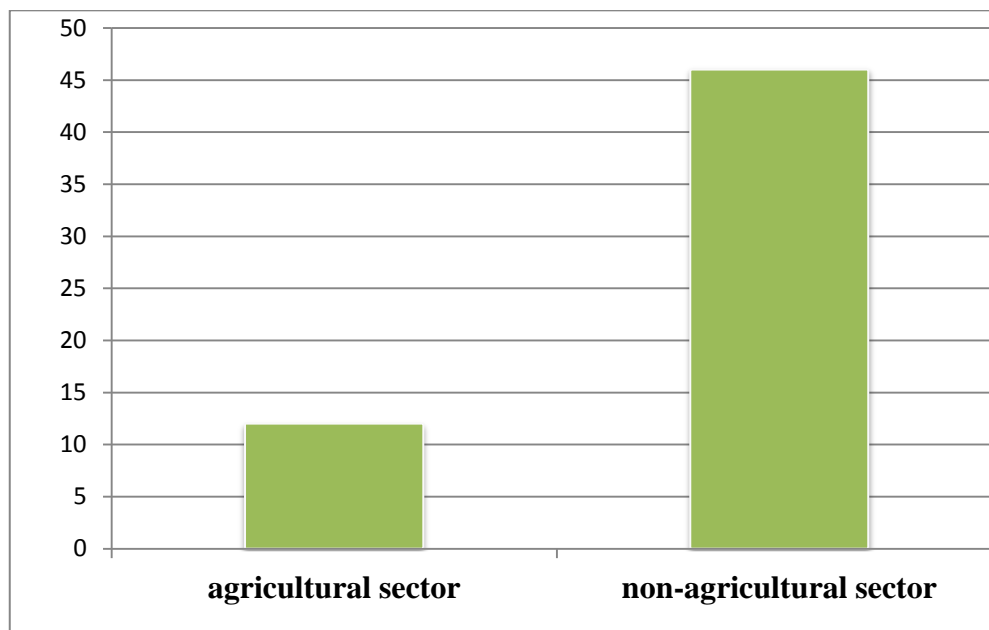
- **Research work**

The area of research also is another field that is experiencing difficulties in terms of skilled technicians since for a good job of extension it is necessary to have skilled technicians in the field of research. However, the research field in Bié province ranges from the lack of infrastructure to the shortage of skilled professionals. Currently a research centre has been built in the province and will be necessary technical specialist for this area.

Despite the lack of skilled workforce needed to support the development of agricultural development in Bié province the agrarian sector still has not been the major source of employment of the of graduates in agricultural education. When asked if the CEAB graduates were performing in the field with their secondary training only 18% of the respondents said that were involved in agriculture, the remaining 88% were not working in agricultural sector. The graph below presents the number of respondents involved in



agricultural or related fields as compared to those who were not involved in agricultural field.

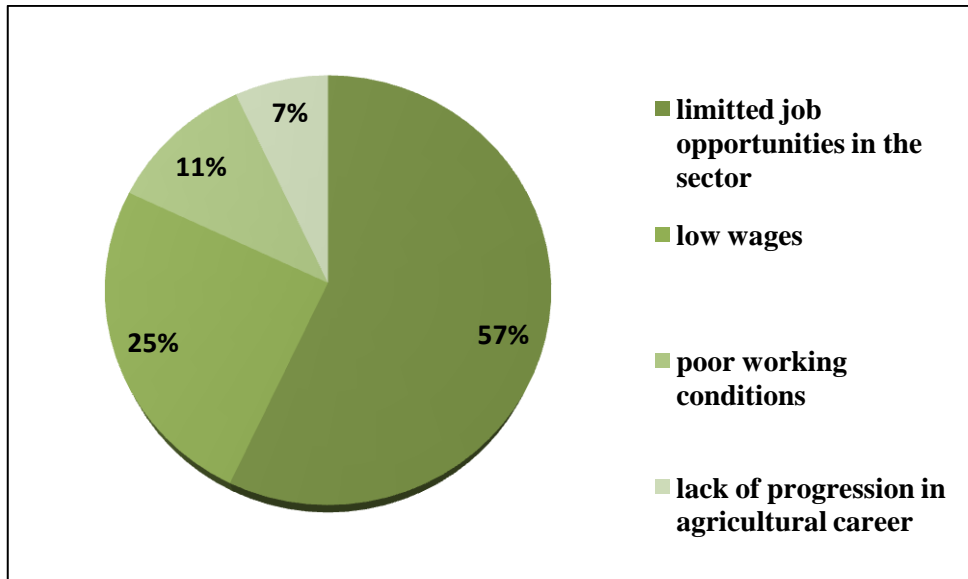


**Graph 15. Graduates involvement in agriculture**

These results may be negative to the agrarian sector but on the other hand they show the capacity of graduates to adapt through the real circumstances of the local labour market.

Based on that numbers, the respondents were asked about the real reasons that have led them not to work in agricultural field and pointed out to many factors such: limited opportunities of employment in agriculture, the poor working conditions, low wages and the lack of progression on this field where appointed by the respondents. A high number of respondents pointed out that the local labour market does not have many chances of employment for agricultural graduates. As was many times mentioned by most of the respondents, to find employment after the training was not difficult for them, the only problem that they faced is to find a job in agricultural field.

The following graph, describes the main factors that have constituted barrier on graduates employment in agricultural field.

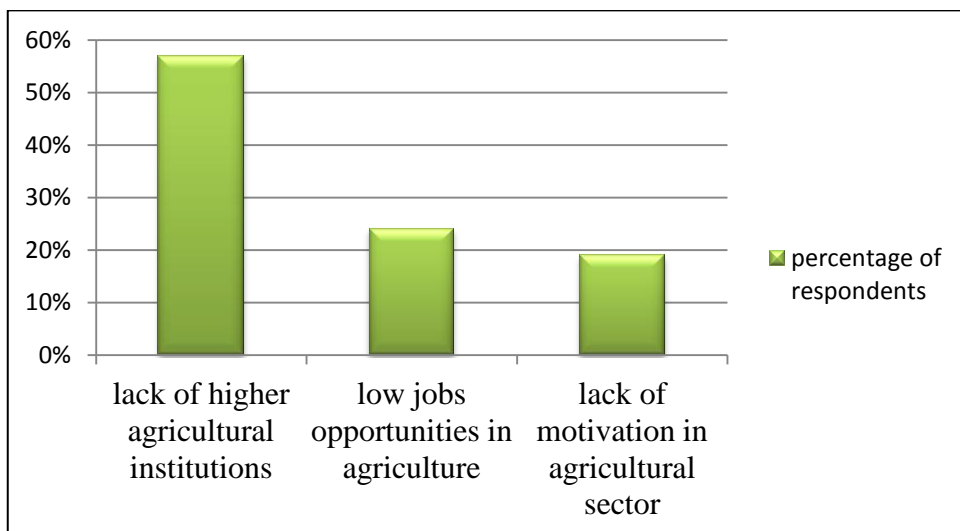


**Graph 16. Barriers for employment in agriculture**

#### **5.4 The Integration of the CEAB graduates in to the High School Education**

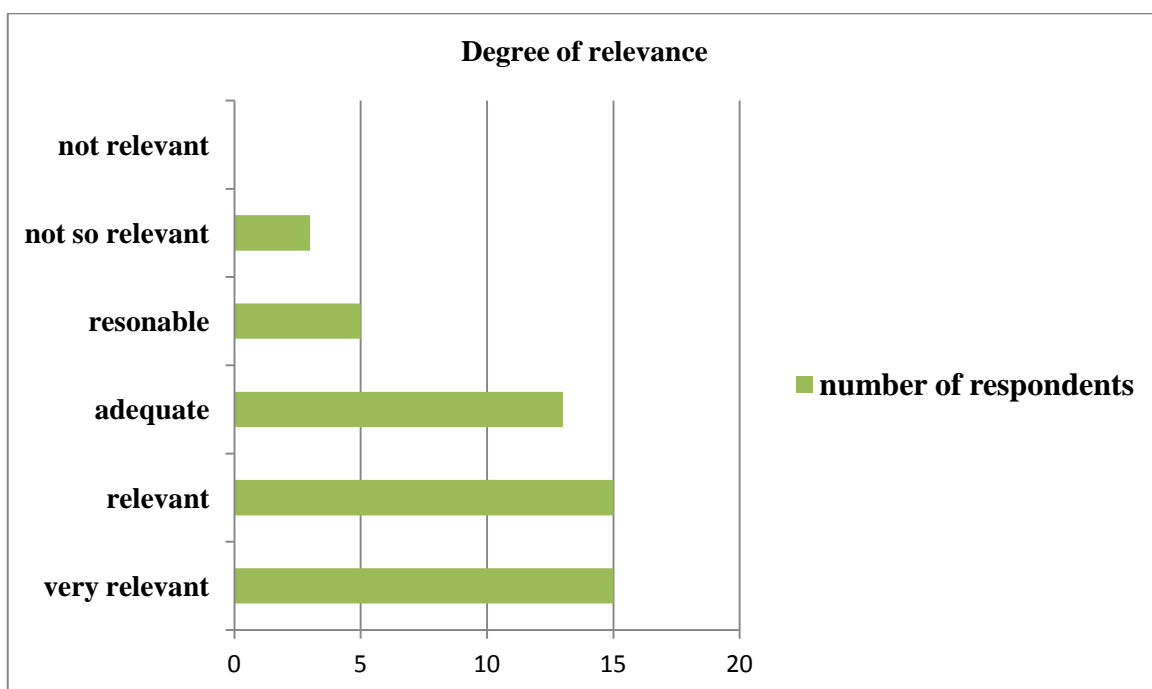
As part of the research, the graduates were asked to describe if they were or had been studying into some higher school institution after their studies at CEAB, and the results shows that currently only 22% of the respondents covered by the research were never involved in any higher educational program. While the remaining respondents said that have been or are still studying higher education. However, from those doing University degree only 27% are studying agriculture. When asked to describe the main reasons why the majority of them were not studying agricultural higher education 57% pointed out the lack of higher agricultural schools in the region, while the other 24% have mentioned the low job opportunities in agriculture and other 19% a lack of motivation in the agrarian sector.

The graph below shows the main reasons why the CEAB graduates did not continue studying agricultural education at higher education.



**Graph 17. The reasons why some graduates are not continuing agricultural programs**

The respondents were also asked to make an evaluation about the relevance of the knowledge and skills acquired at the secondary school training to the current training program. The interval of the evaluation was from 1 to 6 in which 1 was set as very relevant, 2 as relevant, 3 as adequate, 4 not so relevant and 5 as reasonable and 6 not relevant. The result is presented in the following graph.



**Graph 18. The relevance of the secondary school training to the current program**

#### **5.4.1 The Performance of the Graduates at the Faculty of Life Sciences in Huambo**

From the graduates that continued their studies in agricultural field, all of them were or are studying in the Faculty of Life Sciences of Huambo which belongs to the regional Jose Eduardo Dos Santos University. According to the interview conducted with representatives of the FCA, it was found that almost all 11 graduates trained by the project at the CEAB who have enrolled to this institution from 2008 until 2009, have completed their studies in desired curricular time which is of 4 years. After 2009 more other 2 graduates from the CEAB enrolled to FCA and these two students are expected also to finish their studies in 4 years of which during the time of the research they were already in the last year. When asked to evaluate the performance of the students, in scale from 1 to 5 the institution was ranked as 2 which represents very good. Regarding the question about what have been the main areas where the students from the CEAB have presented more difficulties, the director of human resources of the institution highlighted the subjects of mathematics and physics. However, despite these deficiencies in some subjects, the graduates were able to quickly adapt to the new educational system. Besides the specific sector knowledge acquired during the training at secondary school, the results shows that more other extra skills acquired during the training at secondary education were fundamental to their adaptation in the higher education system.

## **6 DISCUSSION**

The development of employability skills and competences of the students is nowadays well recognized as one important part of the learning methods in many countries of the world. As it was refereed many times in the literature review, these components are crucial in the development of sustainable careers for the undergraduates. It applies for both secondary school graduates as well as for higher school graduates.

One of the main reasons of the low agricultural productivity in Bié province is the lack of skilled technical assistance in the sector. This makes it obvious the need to ensure the qualified secondary agricultural education in ways to create an environment favourable to provide skilled and competent manpower necessary to support the agricultural growth. However, apart from the agricultural knowledge is also important to ensure other employability skills necessary to develop the future carrier of the undergraduates. According to the Brunel University of London, enhancing the existing skills and developing new ones will make a significant contribution to the further personal skills development required by graduate recruiters (Brunel University London, 2013).

The analysis of the employability aspects of the graduates from the CEAB was developed to provide an understanding about the impact of the training to the development of the graduates' employability skills and competences. It extended also to know how these graduates have succeeded into the labour market.

Although the agricultural specialization had not been the interest of all the students as a first choice in applying to this study program, the results of the survey have showed that all of them have recognized the quality and value of education acquired at the CEAB.

It was mentioned by most of the respondents that the quality of all practical and theoretical learning methods used in the institution has contributed significantly in the development of the personal skills and attributes. The results shows that all the graduates agree that the training provided in CEAB have reflected to them positively in many employability aspects such: communication skills, team working skills, computer skills, ability to adapt to new situation and to the sector specific skills. In accordance with the survey, the respondents confirmed that the training have impacted positively in the development of some of their employability skills. From their scores on their employability skills after the training, the communication skills, team working and the agricultural specific skills were the best evaluated by the respondents. However, it is important also to highlight that

computer skill was many times referred to by the respondents as one of the most valuable skills acquired during the training. The results showed that before their training almost 40% of the graduates did not have experience with computers and after the training their computer skills transcended to a basic level. It shows that the education program at CEAB fulfilled its objectives. The basic level computer skills acquired allows them to have access to jobs where they are needed and in addition graduates have a certificate of informatics which shows their scoring skills in different branches of Microsoft Word, Excel, PowerPoint and Publisher. Based on these findings we can confirm that the training was fundamental in the improvement of the graduate's employability skills. A study impact of vocational training project in Malawi also reported that training was critical to improve the employability skills of the participants. The results of this project further highlight that individuals invited to this training program self-reported increase on their level of expertise (Cho et al., 2013).

The transition of agricultural graduates to the labour market in the developing countries is a problem that several graduates face after completion of education. In Angola, it is all about organization, actually the market demands more qualified hands however, the agriculture sector itself does not attract the young graduates. Low salary, bad working conditions in terms of infrastructures and also lack of a certain linkage between agricultural schools and farmers.

The CEAB intended to contribute to the development of agricultural human resource capacity in Bié province. The results showed that the graduates engaged in agriculture are few, due to the fact that most of them decided to work in other sectors with better working conditions and relatively higher salaries and study university instead of working in agriculture. However, the employment outcomes of the graduates are positive; all of them are working in different branches activities of the country: Some are teachers; others are doing administrative work and also serving the army. It is interesting to see that in almost all branches of activities there one or two students from that school. In Bié province, it is expected that in the next 10 years some higher positions might be occupied by students who passed CEAB courses independently of their new careers. The success of the student from this school (CEAB) is seen when compared to other students coming from other schools. Students from other agriculture schools take about two years to find jobs or even just to get to university while, students from CEAB got job in nine months average and get

to university in least than the one year. According to Keogh, Russel – Roberts (2009) the participation on the study abroad program means mainly developing the personalities of students and a better chance for them to get a job. In contrast to this statement, our results showed that it is not necessary to go abroad to have quality education, it was clearly seen in CEAB that if foreigner qualified teachers should go to certain country and teach the students there instead of having a limited number of them going abroad. Projects such this one (CEAB) should be encouraged to exist, as it gives more opportunities to other students with average score grades. On another hand the integration of CEAB into high schools education was boom, about 90 % of them who enters University were given scholarship all thanks to the background received from CEAB. The reason why some graduates continue with their studies in agriculture field is the fact that they do believe in future. The country is developing and the future of the country will one day relay on agriculture.

The education on agriculture in Angola is a matter of transforming theory into practices; graduated students should have where to go after schools. If no agribusiness developed the country would always rely on outset resources and the graduates in agriculture will always try to find better job in other sectors of economy.

## **7 CONCLUSION AND RECOMMENDATIONS**

The CEAB established by the Czech University of Life Science Prague under the Faculty of Tropical Agri-Sciences proved that the qualified hand from out-site can be helpful to develop the agricultural sector in Angola in terms of human resource. The results of this study showed that is crucially bad to ignore qualified people. The success of the graduates was attributed to the quality of education they got from that school. The differences with others students can be seen in the job opportunities even in the sector they were not trained in. The demand of job opportunities in agricultural sector will increase; however, the young generation does not tend to apply for job in agricultural sector due to low salary and bad working conditions.

Agriculture education is seen to fulfil one the requirement of MDGs which is poverty reduction through education until 2015. These goals are to be found in Angola in very long way to go, as the predictions might be until 2030. This paper shows clearly that, educating people is not the last stage of development, it is also important to think of employability. This is the last level in which INPUTS are converted into OUTPUTS. The agriculture training in CEAB was not just a subjective discipline and knowledge it was objectified to a certain goal which results are seen and palpated. Anyway, this thesis is not to be the last resources for analyzing the performance of these students to get job. Other research is recommended but this time with different specific objectives. In another hand, it is recommended to focus on employment skills that the market demands. The skilled graduates should be directed to the field they are skilled in; the main contrast should be avoided in the sense to prevent unprofessional personnel to be where they should not be. Finally, it is good to push the local government to develop a system of agriculture education which tends to develop the employment skills that the country need.

### **Recommendations**

The analysis of the agricultural graduates from the Centre of Agricultural Education in Bié was developed to provide an understanding about the impact of training on the employability of the graduates in a way to find out the relevance of the training on their employability skills development and also to describe how well these graduates have succeed in the labour market.

It is important that in all areas of education, the institutions prepare students in order to succeed in their future careers, thereby enhancing their employability skills. An example to



follow is the training provided by the CEAB which according to the results it was critical to prepare students for their future careers. However, negativity was the disconnection between the graduates and the agrarian sector. This result sounds quite negative to the development of agriculture in Bié province, since for the improvement of agrarian productivity the industry needs technicians specialized in agriculture. The study revealed that the main factors that constraints the adherence of the graduates to the agrarian sector o are directly linked to lack of employment opportunities in the sector, which contradicts the constant appeals of the sector for more skilled workforce. For this reason there are some recommendations described in the following steps:

- It is recommended a special attention to be given from the local government on the impact of projects like these that can serve as an example for new projects at the level education and employment.
- Based on the results of this study, it is recommended more joint-working arrangements across the policy makers to ensure coherent policy design for development of the local agricultural sector.
- The creation of policies to promote the expansion of the private sector is also recommended in order to ensure an environment for starting up new enterprises. This will boost the agribusiness and consequently rise the demand for more people specialized in agricultural field.

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## 9 Appendices

Map of Angola-Bié province



Source: RNA, Angola



source: Pagina Global, 2012

**Students activities during the project Running**



Source: Projects ITS



**Czech University of Life Sciences**  
**Faculty of Tropical Agri-Sciences**

The survey aims to assess the impact of the project in the field of education, implemented from 2004 to 2009, in Bié province. The same project had been embedded in the framework of cooperation between Angola and Czech Republic in the field of education, which was implemented by the Institute of Tropics and Subtropics today called Faculty of AgriSciences in Kuito-Bié/ Angola under the coordination of the Czech University of life Sciences of Prague, in Kuito. The assessment aims to find out the main aspects of Employability of the Graduates from the Centre of Agricultural Education of Bié.

**Age:**

20-22

23-25

26+

**Sex:** male

male

**1. Why did you choose to study at CEAB (Agricultural Centre of Education in Bié)?**

- a) Because i was interested in studying agriculture
- b) I didn't know what to study
- c) It was a good opportunity to study with foreign teachers
- d) Other ( please specify)

**2. Do you think that the studies there were difficult?**

- a) No
- b) Yes
- c) Same like others secondary' schools in Bié province
- d) Same as other secondary' schools in whole Angola

**3. How do you evaluate the training at the agricultural Centre of Bié province?**

- a) Excellent

- b) Very good
- c) Good
- d) Poor good
- e) Not good

**4. I have finished my secondary degree at CEAB in:**

- a) 2007
- b) 2008
- c) 2009

**5. Do you think that the training provided at the Centre of Agricultural Education have helped you to develop some of the following employability skills? in a scale from 1 (strongly agree) to 5 (strongly disagree) evaluate each component of skills**

Skills component	Strongly agree (1)	Fairly agree (2)	Agree (3)	Disagree (4)	Strongly disagree (5)
Communication skills					
Team working skills					
Ability to adapt to new situations					
Computer skills					
Agriculture specific skills					

**6. How would you evaluate your employability skills after the training at CEAB?**

Skills component	excellent (1)	Very good (2)	Good (3)	Not bad (4)	really bad (5)
Communication skills					
Team working skills					
Ability to adapt to new situations					
Computer skills					
Agriculture specific skills					

**7. Comparing yours skills before and after the training how would you evaluate each component of skills**

Skills component	Mauch better (1)	better (2)	Good (3)	Not bad (4)	Really Bad (5)



Communication skills					
Team working skills					
Ability to adapt to new situations					
Computer skills					
Agriculture specific skills					

**8. What was your following step after finishing secondary degree in CEAB?**

- a) I continued studying at the University
- b) I started to find work
- c) I immediately started working
- d) I started working and also continued studying

**9. Current employment status:**

- a) Employed fulltime
- b) Employed part-time/ studying
- c) Employed temporarily
- d) Employed and looking for employment
- e) Only studying

**Section for those who are still studying**

**10. (Students) comparing the skills acquired during your studies at the CEAB, how would you evaluate your performance at the current studies?**

- a) Very relevant
- b) relevant
- c) Adequate
- d) Not relevant

Would you recommend this course to your friends or colleagues?

Yes  no

**11. If still studying put here the place and name of the institution**

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Have you continued your studies at the same specialization as your previous training?

Yes       no

If not, what were the reasons to change your career?

- a) Lack of motivation in the sector
- b) Lack of universities or higher schools at the region
- c) More opportunities in the other sectors
- d) Others (please specify)

### **Section for the employees**

**12. Where are you employed**\_\_\_\_\_

**13. Please specify your type of employer**

- a) Public sector
- b) Private sector
- c) NGO
- d) Self-employed
- e) Other (please specify)

**14. How long have you been looking for a job after completing the training in CEAB?**

- a) Less than 6 months
- b) 6-12 months
- c) 13-24 months
- d) More than 36 months

**15. What are the difficulties that you found when you were looking for a job?**

- a) Employers are not interested in my area of specialization
- b) lack of working experience
- c) The employers are not interesting on my degree of qualifications
- d) There are limited opportunities of employment in my area
- e) Others (please specify)

**16. If the current one is not the first job why have you left the previous one?**

- a) Because i wanted to experiment new challenges
- b) Because i have found employment in my area of specialization
- c) Poor wage

d) Poor working conditions

**17. Are you working now in the area of your training?**

Yes                       No

**(If not to question 17), why did you change your career?**

- a) Due to the lack of good working conditions
- b) Poor wages
- c) Lack of progression on this career
- d) others (specify)

18. (Workers) Comparing the skills acquired during your studies at the CEAB, how could you evaluate your performance at current or previous work?

- a) Excellent
- b. Very good
- c. Good
- d. Poor good
- e. Not good