

LABOUR MARKET DEMAND FOR VOCATIONAL/TECHNICAL SKILLS IN IDENTIFIED PRIORITY SECTORS OF THE MOZAMBICAN ECONOMY



managed by:



funded by:



Acronyms	3
1. Introduction.....	5
Context.....	5
1.1 Selection of sectors	5
1.2 Scope / focus of the study	6
1.3 Methodology	7
1.4 Structure of the report	7
2. Agriculture Sector	8
2.1 Overview of the Agriculture Sector in Mozambique	8
2.2 Potential for agricultural growth in Mozambique.....	11
2.2.1 Agro-processing	11
2.2.2 Contract farming and supply to multinational companies	12
2.2.3 Crops with potential.....	13
2.3 Summary of opportunities and linked training needs in the agriculture sector	15
3. Forestry Sector.....	23
3.1 Overview of the Forestry Sector in Mozambique.....	23
3.2 Potential for growth of the Forestry Sector in Mozambique	25
3.3 Summary of opportunities and linked training needs in the Forestry Sector.....	27
4. Construction Sector.....	34
4.1 Brief overview of the Construction Sector in Mozambique	34
4.2 Potential for growth in the Construction Sector in Mozambique.....	38
4.2.1 Opportunities linked to the investment in natural-gas exploitation.....	38
4.2.2 Housing market / rural–urban migration and the emergence of an urban middle class	39
4.3 Summary of opportunities and linked training needs in the Construction Sector.	40
5. Tourism Sector	44
5.1 Overview of the Tourism Sector in Mozambique.....	44
5.2 Potential for the tourism sector in Mozambique	48
5.3 Summary of opportunities and linked training needs in the tourism sector.....	49
6. Conclusions.....	54
6.1 Employment opportunities.....	54
6.2 Changes needed in existing programmes and curricula.....	54
6.3 Need to develop a Labour Market Information System (LMIS) and strengthen networking	55
7. Bibliography.....	56

ACRONYMS

AGOA	African Growth and Opportunity Act
AIMO	Associação Industrial de Moçambique
ANEMM	Associação Nacional das Empresas Metalúrgicas e Electromecânicas
AU	African Union
AGOA	African Growth and Opportunity Act
BANP	Bazaruto Archipelago National Park
CCT	Comissão Consultiva do Trabalho
CEPA	Cambridge Economic Policy Associates Ltd
CIREP	Comissão Interministerial da Reforma da Educação Profissional
COG	Capital Outsourcing Group
COMESA	Common Market for Eastern and Southern Africa
COREP	Comissão Executiva para a Reforma da Educação Profissional
CPI	Centro de Promoção de Investimentos
CTA	Confederação das Associações Económicas de Moçambique (Confederation of Business Associations, Mozambique – represents the private sector in CCT)
DINATUR	Direcção Nacional de Turismo (National Directorate of Tourism)
DMO	Destination Management Organizations
DNPET	Direcção Nacional de Planificação e Estatísticas de Trabalho
DUAT	Direito de Uso e Acesso de Terra (Land Use and Access Rights)
ECA	Empresa de Comercialização Agrícola
EIA	Environmental Impact Assessment
EII	Employment Intensive Investment
FDI	Foreign Direct Investment
FIT	Free Independent Travellers
GDP	Gross Domestic Product
GLI	General Labour Inspection
GoM	Government of Mozambique
HRD	Human Resource Development
IAF	Inquérito aos Agregados Familiares
IESE	Instituto de Estudos Sociais e Económicos
IFC	International Finance Corporation
IGC	International Growth Centre
ILO	International Labour Organization
INATUR	Instituto Nacional de Turismo
INE	Instituto Nacional de Estatística
INEFP	Instituto Nacional de Emprego e Formação Profissional

INSS	Instituto Nacional de Segurança Social
IPEME	Instituto das Pequenas e Médias Empresas
ISPM	Instituto Superior Politécnico de Manica
ITC	International Trade Centre
LM	Labour Market
LMI	Labour Market Information
LMIS	Labour Market Information System
LMO	Labour Market Observatory
LNG	Liquefied Natural Gas
LWP	Let's Work Programme
MAI	Mean Annual Increment
MIC	Ministério da Indústria e Comércio
MICE	Meetings, Incentives, Conferences, and Exhibitions
MINED	Ministério da Educação
MMAS	Ministério da Mulher e Assuntos Sociais
MIS	Market Information System
MITESS	Ministério do Trabalho, Emprego e Segurança Social
MITUR	Ministério do Turismo
MSME	Micro, Small and Medium Scale Enterprises
NRS	National Reforestation Strategy
OTM	Organização dos Trabalhadores de Moçambique
PE	Professional Education
PIREP	Programa Integrado de Reforma do Ensino Profissional
SADC	Southern African Development Community
SHE	Safety, Health and Environment
SMME	Small-, Medium- and Micro-, sized Enterprises
SMPTD	Strategic Master Plan for Tourism Development
SSS	Sun, Sea and Sand
SWOT	Strengths Weaknesses Opportunities and Threats
S4E	Skills for Employment
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training
UNWTO	United Nations World Tourism Organisation
VC	Value Chain
VFR	Visiting Friends and Relatives
WEF	World Economic Forum
WTTC	World Travel and Tourism Council

1. INTRODUCTION

Context

JOBA, implementing the Skills for Employment Programme financed by DfID (UK Aid), is setting up an Employment Fund, which aims to reduce skills failures in Mozambique by linking specific areas of labour force supply with demand. It will catalyse and broker linkages between employers and non-state training providers to get young people, in particular females, into work. It will (co)finance innovative high quality training initiatives across a range of economic sectors that are geared towards promoting new experiences and best practices from within Mozambique and beyond.

In this context JOBA commissioned a desk-study of the labour market demand for skills in selected priority sectors of the Mozambican economy and in SMMEs operating in the country. The overall objective of this study was to identify skills needs and to provide relevant and current information about (future) skills and competencies needed in the identified sectors. This is related to a national Labour Market Information System (LMIS), of which the new Labour Market Observatory under the Ministry of Labour and Social Services will be the driver at national level. Both will contribute to an improvement of better linking demand and supply for skills, and as a result the employability prospects of young and female Mozambicans. As mentioned by Conticini (2015) in his report, having a LMIS is both a strategic objective in its own right but also a conducive strategy for improvement of TVET and employability outcomes. He illustrates in his report (2015; Figure 2) that the collection of information regarding training institutes, employment offices, including supply and demand for skilled human power, etc. are part and parcel of the Generation and Flow of labour market information (ILO in Conticini, 2015).

As inclusive growth has become a theme that increasingly resonates in policy debates and discourses between the government and development cooperation partners, an effective LMIS system is a vital tool that allows monitoring changes and trends in the employment status of the groups that are being targeted for inclusive growth like minorities, women and youth (Conticini, 2015). Analysis of the labour market demand for skills in identified priority sectors of the Mozambican economy and in SMMEs operating in the country will contribute to this monitoring of trends and, subsequently, timely and appropriate response.

1.1 Selection of sectors

The following sectors were analysed for the purpose of this study:

agriculture including agro-processing;

forestry including wood processing;

construction and building materials and tourism.

Industry/manufacture is covered in as far as agro-industry and furniture is concerned.

The main reason for the selection of these specific sectors is that they constitute important

contributions to the development of the economy e.g. by presenting a high potential for employment creation and/or a huge number of people are already involved in the sector (as for Agriculture). In Mozambique the Gross Domestic Product (GDP) remains driven by agriculture (mainly tobacco, sugar, cotton and cashews) accounting for 25% of GDP (in the first quarter of 2012), and by services (30% of GDP over the same period), which include construction and tourism (OECD, 2013).

1.2 Scope / focus of the study

The present literature study concentrates on barriers/constraints in the area of human resources and training issues in the selected sectors. It then elaborates on prospects for mitigating the negative factors by recommending practical / vocational training, mainly of short duration. Impediments in for example the legal, regulatory and institutional environment that affect the growth and development various sectors are out of the scope of the current study and therefore not included.

Around fifty percent of the Mozambican population is illiterate. Of these, close to 80% have no professional qualifications. According to the National Institute of Professional Training and Employment (INEFP 2007), 90% of those applying for their first job have not finished basic education. Among them, the majority (62%) has no work experience or qualifications (Maugeri 2015).

Although the government has supported the emergence of mid-level and higher education institutions there are concerns about the competency of their graduates. Not all of the training is of good quality and poor quality of training results in poor skills outcomes. Partially this is because of the low level of investment on teachers (Nhabinde 2012). In order to provide high-quality training, qualified trainers will be needed. JOBA, in (co)financing innovative high quality training initiatives will have to ensure that the provider has (sufficient) trainers with the required qualifications.

The pro-poor concept for training in Wiegel's (2015) report on the LNG exploitation in the North of Mozambique presents 3 scenarios. Trainees from either "subsistence, unemployed and informal" level are shifted (via training) into the formal (building construction) value chain (**inclusion**) or steps up low paid workers that already operate in the value chain to better paid "mestres" or foremen (**stepping up**). Specialized training can help focused workers to "**stepping out**" in a (construction) subsector with new and appropriate technologies, such as rural building, solar energy, etc. (Wiegel 2015).

It became clear from the analysed documents and reports that work ethics and life skills are equally important criteria for employers as technical knowhow and experience. Also are previous experience in form of internships, short-term placements and on-the-job training, key to finding suitable employment as well as creating an SMME.

1.3 Methodology

As mentioned, this study is a desk-study. The present report draws extensively on available documents and information contained in sector related reports, which are cited and referenced throughout this study. At times, statistics published by Mozambique national agencies and estimates from international agencies based on national data create an inconsistent and unclear picture of the industry. Evaluating such inconsistent data has constrained the contents of this report. However, wherever possible data have been crosschecked and assumptions been indicated where relevant.

Although efforts were made to be as comprehensive as possible, time was a constraint and thus the report does not pretend to be exhaustive.

1.4 Structure of the report

The structure of the report is as follows. The chapters following this introduction each describe one of the selected sectors (chapters 2 - 5). Each of these chapters contains, as part of its concluding section, a table with a set of recommendations with respect to skills development. The recommendations are based on the contents of the analysed documents as well as on the knowledge and professional experiences of the author who has worked and lived in rural as well as urban Mozambique for over a decade. Chapter 6 provides general conclusions and recommendations for all the selected sectors.

2. AGRICULTURE SECTOR

2.1 Overview of the Agriculture Sector in Mozambique

Mozambique has around 36 million ha of land suitable for agriculture of which around 5.4m ha is currently utilised, leaving 85% unused (CEPA IFC Agribusiness Mozambique Phase 1, 2015). However, in some prime areas for agriculture, like Manica province, there is already competition for land (Smart 2014). “It is widely claimed that there are millions of hectares of underused farmland and thus vast amounts of land available both for smaller Mozambican farmers and big plantation investors. This turns out not to be the case. There is already conflict over good farmland in Gurué, Manica province and elsewhere...” (Smart 2014). Lack of labour and implements to clear suitable land may play a role.

Mozambique is split into ten agro-ecological zones with diverse soil and climate characteristics offering scope for a wide range of crops to be grown (CEPA 2015a; InfoDev 2013). This offers a potential for diversity of crops and in some cases, like lychees and mangos, also different harvesting periods for the same crop, which is of interest when these are export crops.

The Agriculture Sector in Mozambique accounts for around 23 - 28% of GDP. A substantial part of the adult workforce is engaged in farming. As many as 80% of adults have been reported to be practising some form of agriculture (CEPA 2015a; InfoDev 2013) of which 60% women (InfoDev 2013). At present, over 95% of farming activity is carried out by small farmers. The median plot size in Mozambique is 1 – 1.2 ha (Smart 2014; InfoDev 2013). Many Mozambican (families) restrict themselves to cultivating approximately 1 ha because that is what a family manages to cultivate by using elementary tools like hoes. Mechanical ploughing capacity in Mozambique is still very low as there is an average 7,000 tractors in the entire country (Smart 2014).

Another characteristic is that people are involved in a number of different activities and value chains / crops at the same time. This forms part of rural livelihood strategies, taking into account, amongst others, risks and labour availability. For example, a farmer may be involved in several agricultural crops and several handicraft activities as a means of income diversification and also depending on the season (M4P / DFID 2008).

The most important crops for national food security are cassava, maize, rice and wheat. Cassava and maize are sourced mainly from domestic production, while Mozambique relies on imports for rice and wheat (CEPA 2015a). On the whole, Mozambique is a net importer of basic food commodities. However, even in years of poor harvests, substantial quantities of agriculture products are exported both formally and informally to neighbouring countries, notably Malawi. At the same time, given the large distance that separates surplus producing

regions (usually in the North) and structurally deficit areas (mainly in the South of the country), and consequently the substantial transportation costs, imports are required to cover domestic consumption needs (InfoDev 2013).

Besides the lack of availability, the poor quality of infrastructure services was also identified as a key constraint across a number of sectors, amongst which agriculture. In particular this concerns poor quality roads, low coverage of railway services, lack of port capacity and a lack / unpredictability of electricity supply (CEPA 2015a; InfoDev 2013). The existing rail network mainly links neighbouring countries with Mozambique's main ports. There is no available service that links either the north and south of the country or the main urban centres to agricultural production areas. Furthermore, most of the cultivating is based on rain-fed, low input, labour intensive agriculture. In case the crop fails due to weather or pests, the family has little to no income. The risk of crop-failure is seen as one of the main reasons that peasants are rather conservative, following traditional practices they know are most likely to produce something at the end of the season. This implies a certain level of reluctance to try out new crops and new ways of farming, except when certain (market) guarantees are given. One of the consequences is that the production levels are relatively low as well as stagnant (UN University-Wider, as cited in Smart, 2014). Most of agriculture activity is subsistence, with just sale of surplus if and when it occurs. As the land offers potential for expansion of agricultural activities it has the potential to be an important sector for employment (creation) (Smart 2014).

Development of the agriculture sector in Mozambique has formed part of the government and the donor/partner agenda for many years. The long-term strategy focuses on improving food security and reducing poverty by supporting smallholders, as well as the private sector, governmental agencies, and nongovernmental organisations (NGO) to improve agricultural productivity, agro-processing activities, and marketing, while sustainably exploiting natural resources. However, reinforcing job creation and inclusive growth in agriculture may, according to certain international entities, require more focus on supporting growth-oriented entrepreneurs engaged in downstream business activities (such as processing) to develop competitive enterprises that effectively link into productive value chains (InfoDev 2013).

"With three quarters of Mozambicans still in rural areas, job creation must be rural. As the World Bank points out, "large farms' ability to productively employ labour is often very limited, much below that of small holder agriculture" (in Smart 2014). It is always assumed that bigger, mechanised farms are more efficient and productive than small farms. However, several decades of research show that for farming, there are few "economies of scale", and that smaller farms are as productive and efficient as large ones (Smart 2014). Yet, to enable them to better to seize the opportunities various skills would need to be scaled up.

Although agriculture is a source of livelihood of rural people in particular, their engagement in farming activities does not necessarily make them farmers. In order to promote the

creation of employment and reduce poverty more is needed than providing support to people having an occupation in working the land.

The one rural success as cited in Smart and Hanlon (2014) has been the growth of a group of small and medium commercial farmers, which had neither government nor donor support. Recent surveys show that there are 68,000 farmers with sales of more than 17,000 MT (US\$ 567) per year. Although they grow much of their own food, they produce primarily for the market, thus creating rural jobs and boosting the rural economy. This group has largely come up the two decades since the end of the civil war. Tobacco has been the biggest driver, followed by cotton, and farmers have developed with the support of large foreign trading companies. But many others have pulled themselves up by their own bootstraps and have become commercial farmers of maize, beans, oilseeds, cattle and vegetables. This group has been able to expand beyond the normal tiny farm, typically to 3-20 hectares, and is using fertiliser and other technology. These farmers have become the dynamic sector of the rural economy (Smart 2014)

Examples like the above one make it clear that it can take as long as a decade for farmers to make the transition to commercial farming. In Gurué it was found that this transition took seven years of regular, hands-on support, as well as a guaranteed market. But eventually it did work, and there are now emergent farmers producing e.g. soya (Smart 2014). This 'soya model' is based on a public-private partnership, with the public part coming first and the global public sector doing the heavy lifting; the private side slowly takes over only when it becomes profitable (Smart 2014). One of the essential elements is that there must be some level of mechanisation, with animals or machines, to make it easier to plough and expand cultivated area (Smart 2014). In order to introduce mechanisation successfully training on the proper use as well as maintenance and repair of implements and machines is necessary.

Smart and Hanlon present in their publication "Chickens and beers – a recipe for growth in Mozambique" (2014) that in Zimbabwe, "farming is seen as a good way to earn a living and, for an elite, agriculture was seen as a means of accumulation". They identify two main reasons to explain the difference between the two countries:

- (1) Farming is still hard work, but it is more modern as machinery or cattle is used for ploughing or ploughing services can be hired at an accessible price; fertiliser, improved seeds, and agrochemicals are available; and there are also assured markets for the produce.
- (2) Second, there are role models. People have friends and family who have turned their 6 ha into income earning farms that allow them to build a nice house and support their family in comfort. Farming in Zimbabwe need not be backward, and can be the equivalent of a good job. In rural Mozambique this is much less common, but is beginning to happen with small and medium commercial farming" (Smart 2014).

The main **cash crops** grown in Mozambique are tobacco and sugar, which jointly account for nearly 50% of the agricultural sectors export earnings (InfoDev 2013). Cotton is also an important cash crop. Tobacco and cotton are farmed by small and medium commercial

farmers, not big foreign owned plantations. Yet the jump from hoe farming to commercial farming is enormous and requires substantial support. For the farmer it means **mastering new technologies** and **learning how to be a businessperson**, able to calculate costs and profits, to manage labour, and to plan ahead. It requires capital or credit, a reasonably sure market, some sharing of risk, and **business and agricultural training** – little of which is available to small farmers in Mozambique (Smart 2014; bolding by the author).

2.2 Potential for agricultural growth in Mozambique

According to the World Bank, “the potential of agricultural growth to reduce poverty is four times greater than the potential of growth from other sectors.” (InfoDev 2013). As they concluded, investments in agribusiness can produce significant multiplier effects through their forward and backward linkages (i.e. previous and next phases in the value chain), generating demand for agricultural products and associated inputs and services, and creating on and off-farm employment (InfoDev 2013). Understanding value chains in general and the employment distribution along the chain in particular provides the necessary information to determine opportunities for employment generation (M4P / DFID 2008).

2.2.1 Agro-processing

The agro-industry sector is an important part of the agriculture sector as a whole. Food industries, beverages, and tobacco are estimated to account for about 70 percent of the overall structure of the manufacturing sector in Mozambique. Yet, processing activities are far behind opportunities offered by the potential diversified production (InfoDev 2013).

Existing databases (from IPEME, GAPI, INEFP) indicated that processing was taking place in all provinces, but on closer inspection, many enterprises were primary agriculture based and involved in basic on-farm post-harvest activities, such as drying and storage of commodities. There was very limited value addition based on differentiated value addition to primary production. With the exception of the provincial capitals and some other main cities, formal processing businesses are almost non-existent. Where they do exist, activities are informal (InfoDev 2013).

The level of agro-processing industry in Mozambique is primarily at the first stage of processing primary agricultural products. Mainly low-value adding activities are undertaken, such as washing and putting in a box, such as the following: removing fibres from the fibre or seed mix in a cotton gin; curing and baling tobacco leaves or processing one stage further to supply cigarette makers. The agricultural products processed for the domestic market—with the exception of oilseeds, maize, and wheat in certain cases—are processed in a very small scale and most of the time lack quality and the proper packaging to access more demanding markets. The percentage of the agricultural production that is processed is very limited because the number of processors is very small and those who do exist usually do not have large-scale operations—so, niche-processing opportunities are not taken to scale. Even in the domestic markets, with the exception of honey, it is very rare to see national products in outlets of main supermarkets in urban areas, which demand higher quality and better presentation to justify import substitution (InfoDev 2013).

In this context it is important to identify the gap between the quality demanded by the market (as expressed in formal or informal standards and grades), perception of quality by different actors along the chain and the current quality provided to the market. Following the analysis of the gaps, opportunities for upgrading knowledge and skills as well as technology can be identified and potential providers of services to make the necessary upgrading available and possible be mapped (M4P / DFID 2008).

As mentioned in the report Making Value Chains Work Better for the Poor (M4P / DFID 2008), there are a number of aspects in this upgrading that can be beneficial for the poor, namely:

- Who are the local innovators in the community that can serve as showcase to others within the community?
- What are the mechanisms present within the community to share, maintain and collectively develop skills and knowledge? Is the social capital present and are people willing to share it?
- Can the poor do it? Do they have the required knowledge and skills to understand the technology and to implement or operate it?
- Can the poor afford it? Is the investment requirement for the upgrading within reach of the poor?
- Can the poor copy it? When the technology is introduced to a select audience is it easy to copy? For example, do local construction workers have the capacity to build it or are seeds available?
- Can the poor access it? Are the necessary services in place and accessible to the poor?
- Is there enough level of organisation/collective action to disseminate experiences and guarantee quick absorption of upgrading?

2.2.2 Contract farming and supply to multinational companies

When contract farming works, it can give a boost to smallholders who want to become commercial farmers, because it provides them with: a guaranteed market, credit, inputs, technical support, and risk sharing. With little state support, this may be the only way forward. However, contract farming has only worked for export crops or for local crops with restricted markets, such as chickens and soya. There hardly been any contract farming for the main staple crops, maize and rice. These crops present additional matters like the problem of an unprofitably low price and “side-selling” (farmers sell rice or maize to other buyers and do not fulfil their contract) (Smart 2014).

Supplying to (big) companies may be an opportunity for farmers. Sutton (2014) proposes the establishment of training centres, both for “ ... general business capabilities and for specialised technical capabilities, and to provide both in-centre and on-site training, in both these areas, to a large number of qualified medium-sized local companies. The key aim of such training would be to bring these local companies to a level where they can qualify to

bid for supply contracts with multinational companies (Sutton 2014).

Finally, there is an opportunity for entrepreneurs in Mozambique in “catering, culinary arts and food processing” to service the mining industry (InfoDev 2013) and other mega-projects like the offshore gas industry in the north of the country (Sutton 2014). These projects employ considerable numbers of people who need to be fed. As an example, Rio Tinto serves 6,000 meals daily to their workers and staff, in the Tete area alone. As the mining industry continues to grow, the opportunities for food processing will grow with it (InfoDev 2013).

In case the local producers get well organised and can offer a continuous supply of fresh produce meeting high quality standards they could supply those firms. Besides growing the demanded products they will also have to increase their level of organisation. One (small) farmer cannot guarantee a continuous supply of fresh produce but a group of farmers could (if necessary applying staggered planting amongst themselves).

The presence of (leading) South African retailers such as Pick ‘n Pay, Shoprite, Nando’s and Spar, which have a growing presence across the borders and in the country, can also open new opportunities. In case of conformity with their quality requirements many are willing to consider sourcing the fresh produce locally. With some technical support, Value Chains can be made more accessible for the poor (M4P) and small producers may be able to benefit from these opportunities and enter the market.

2.2.3 Crops with potential

This section briefly presents some crops with potential. As, in general, Mozambican farmers have little or no experience with the production of these on a commercial scale, they will need to be trained in best practices for crop-growing and related areas mentioned above (see table 1 for details).

Bananas and other tree-fruits

Given the growth potential of the sector and the number of banana plantations in operation, there could be a number of opportunities. This could involve the development of new plantations and/ or the expansion of existing plantations. It could also involve exploring the scope for developing in- and out-grower schemes (CEPA 2015a).

There seems to be potential for Mozambique to develop further the tree fruits sector, like avocado and litchi, which is currently at only a nascent stage of development. Mozambique has a number of characteristics that should give it a competitive advantage relative to other countries in the region (CEPA 2015a).

Sugar

In Mozambique there are four commercial companies that dominate the sugar production, each with its own estate and mills. They work closely with smallholder cane growers. It is foreseen that the sector may receive further financial support to expand sugarcane cultivation in out-grower schemes, training of workers and strengthening smallholder cane-grower associations. The CEPA IFC Agribusiness study identified the barriers to entry for small processors in post harvest as a main constraint (CEPA 2015b).

Maize

A desk-based research (CEPA 2015a) suggests that the maize sector is very important for development impact and has scope to provide opportunities to work with private sector firms looking to invest in the sector. Others like Smart and Hanlon (2014) are in the opinion that maize remains only marginally profitable as a commercial crop. A number of programmes have been designed to try to increase smallholder productivity. For instance, Empresa de Comercialização Agrícola (ECA), a local start-up maize company received debt and equity investment which has enabled it to work with 900 smallholders. It has provided access to credit and inputs, provided extension advice and a guaranteed off-take for their produce (CEPA 2015a).

Rice

After maize, rice is the next most important grain. 72% of the rice is imported. Although Mozambique is suitable for rice cultivation, attempts (by private sector as well as government) to raise rice production in the country have been largely unsuccessful. Local rice has been unable to compete with imported rice as people had access to much cheaper imported rice. As imported rice is not subject to a duty these are (very) cheap compared to locally produced rice (Smart 2014).

Soybeans

Much of the potential for the soybean sector is based around the potential for import substitution, which would reduce spending on imports but would also make the domestic poultry sector more competitive. Feed costs are estimated as making up 75% of the costs in the poultry sector. Mozambique is currently reliant on imports to support demand. The lack of availability of high quality inputs (maize and soybean production), together with the high transport costs involved in trying to transport inputs from the main production areas in Niassa, contribute to the high costs of animal feed in Mozambique (CEPA 2015b).

The opportunity to develop domestic soybean production for poultry feed is considered to be very high, because demand for poultry is expected to increase by as much as 13% per annum in the coming years (CEPA 2015a). The development of a technological package of inputs (via donor interventions) has enabled a number of farmers to increase productivity; according to Smart and Hanlon (2014) profits of \$300 per Ha have been achieved by soybean farmers.

Other potential crops

Cotton, sesame, cashew, groundnuts, rice, tea, cassava, paprika and chillies, pigeon pea, pineapple, litchi (tree-fruits) (CEPA 2015a).

2.3 Summary of opportunities and linked training needs in the agriculture sector

Table 1: Opportunities in the Agriculture Sector in Mozambique

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
Land availability and agro-ecological conditions		
Low level of cultivation (85% of arable land is unused)* presents a key opportunity, with significant agricultural potential given land suitability and climate.	Provide agricultural training, advice regarding suitable (soil and climate-wise) crops as well as marketability. The current offer (e.g. IAC, ISPM) is often, despite having practical components, still theoretically oriented. Furthermore, young people have to be persuaded that agriculture provided business opportunities	Qualification level 1 / 2 of NQF. Support practical agricultural training initiatives, including basic business skills and life skills, like at present done by Young Africa's Agri-Tech in Dondo, Sofala province.
Labour		
Big labour force in agriculture constitutes an opportunity in particular if work moral and attitude of (paid) farm labourers can be boosted. There are also opportunities for an upgraded labour force, which is familiarised with present-day requirements. The 'soya-case' as referred to earlier in the text is an example. The competitiveness between labour intensive and labour saving technologies needs attention. There is	Upgrading of practical skills in the whole value chain is needed: <ul style="list-style-type: none"> • Grow and harvest crops; • Knowledge on new varieties (short cycle varieties, varieties adapted to the specific soil and climate conditions, ..); • Competency to adapt the crop to the soil and other conditions; • Competency to identify demand and/or seize opportunities for contract farming (in case of commercial farming); • Post-harvest handling; 	Support opportunities (for young people, starters) to be induced in practise, e.g. the training model of Young Africa's Agri-Tech in Dondo, Sofala province. Both categories: level 1 / 2 as well as more advanced levels. Promote the establishment of training centres, both for " ... general business capabilities and for specialised technical capabilities, and to provide both in-centre and on-site training, in both these areas, to a large number of

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>potential for mechanisation, which may mean labour saving, but at the same time there is a huge potential labour force. An adequate equilibrium should be aimed for.</p>	<ul style="list-style-type: none"> • Processing. <p>Farm labourers should have a variety of skills so that they have ‘something’ to offer year-round, i.e. taking into consideration the seasonality of crops.</p> <p>Besides technical skills training to upgrade skills of labourers, the work attitudes need to be improved as well in order to increase the productivity. Furthermore, a combination with the increase of mechanisation (see next point) could make the job less arduous and thus more attractive.</p>	<p>qualified medium-sized local companies. The key aim of such training would be to bring these local companies to a level where they can qualify to bid for supply contracts with multinational companies (Sutton 2014).</p> <p>Promote training in basic business skills:</p> <ul style="list-style-type: none"> • Practical skills, like costing and pricing, cash-flow projections, marketing. • Strategic skills: when, how and where to sell; attractive business deals; organising themselves in order to negotiate better deals. <p>Both categories: level 1 /2 as well as more advanced levels.</p>
<p>Mechanisation</p>		
<p>Mechanisation and technologies, suitable for the conditions and context in Mozambique present an opportunity to expand the relative low level of mechanisation. At present there are around 7,000 tractors in the entire country (Smart 2014).</p> <p>Besides, there is a lack of repair and maintenance facilities. As there is a relative low level of</p>	<p>Available mechanisation and technologies (including irrigation) may have to be imported and have to be tested under local circumstances. Training in its use as well as in repair and maintenance will be needed.</p> <p>For emergent farmers and for contract farming companies lack of finance remains a bottleneck. Farmers cannot afford the fertiliser, pumps, motor cultivators and other</p>	<p>There would be potential for JOBA to support initiatives and training related to use, repair and maintenance of (small-scale) mechanisation. Besides, support local manufacturing and adaptation of technology</p> <p>Where possible, support access to finance, including ‘flexible’ schemes. Once more, also look into the incubation and franchise</p>

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>mechanisation, there is no interest in offering repair and maintenance skills. At the same time may farmers be reluctant to invest in mechanisation because they know that once it breaks down it will be hard to get it repaired and /or get the necessary spare parts (Smart 2014).</p> <p>Smart, Hanlon (2014) make mention of experiments with motor cultivators. These cost about one fifth of a tractor, and are cheaper in operation as well as maintenance. Besides, the maintenance of a walking tractor is easier than that of a tractor and can thus easier be 'localised'. As a motor cultivator uses motorcycle parts, it would be relatively fast to 'upscale' motorcycle mechanics to motor cultivator mechanics. This would reduce time lost and also create (local) employment.</p> <p>In certain circumstances use of animal traction may also be a solution.</p> <p>There is a potential to increase the area under irrigation.</p>	<p>essential items to become commercial farmers (Smart 2014; CEPA 2015a).</p> <p>Establishment of mechanisation centres for renting-out services, repair and maintenance may be a good solution as well as an opportunity for local job-creation. Start-up finance and an initial subsidy for the first couple of years may be necessary (Smart 2014). The mechanisation centres could offer maintenance and repair services, but also services like ploughing (for those who do or cannot invest in buying their own equipment). Besides, they could also offer a range of products, like fertilizers. It will be important that, one way or the other, they will have a year-round business (i.e. complementary seasonality of activities). Employees will need training and/or refresher courses to upgrade their skills. Besides, some will need business training in order to be able to run such a centre in a profitable way. Mobile service-providers could probably find enough business. Besides this solves the issue of (small) farmers having to transport their equipment (many of them do not have easy access to</p>	<p>system as introduced by Young Africa, which provides graduates a small fund for working capital.</p> <p>Support training in motor cultivator use (including adaptation, where necessary, of agricultural practices) (level 1 / 2).</p> <p>Support training in use of animal traction, as well as basic skills for animal keeping (level 1 / 2).</p> <p>Support training in motor-cultivator repair (level 1 / 2).</p> <p>Support training initiatives that will prepare people to set up a mechanisation centre:</p> <ul style="list-style-type: none"> • Management: technical skills, business skills incl. marketing; level 3 - 5. • Labourers, carrying out services at the farm like ploughing (tractor driving): level 1 / 2 • Extension workers: cropping practices, pest-control; ICT; both level 1 / 2 as well as 3 - 5. • Diagnosis and fixing of common breakdowns in farm equipment (e.g. tractors), including

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>Ministry of Agriculture has planned 19 new service centres, which could be taken as an example; but additional ones will be needed.</p>	<p>transport).</p> <p>Involvement in extension services may be interesting for young people. While youth seem generally averse to agriculture-based employment, incorporation of Information and Communication Technologies (ICT) and the distance from direct farm-based work may make extension services more attractive (UNCDF YSG 2015)</p>	<p>maintenance; both level 1 / 2 as well as 3 - 5.</p> <p>Irrigation technicians:</p> <ul style="list-style-type: none"> • Installation • Maintenance and repair (of the systems, pumps, etc.)
<p>Agricultural inputs</p>		
<p>Tackling the relative low use of fertilisers, pesticides, improved seeds resulting in a relative low productivity provide an opportunity for boosting productivity.</p> <p>Addressing the distortion of local input market due to government and donor programmes providing free inputs can also present an opportunity for further development of the (local) private sector</p>	<p>As the current quality and reach of public extension and agricultural research network is perceived as underperforming, improvement and expansion of the extension and agricultural research network could contribute to increased productivity. The private sector may enter here. For example, businesses with qualified people selling improved seeds, fertilizers and providing advice on crop-growing etc. Farmers will have to be convinced that (paid) advice is value for money (and this will only happen if the services are good and responding to the needs of farmers).</p> <p>Service centres (see above) may also opt to provide (paid) extension services. Or a link may be created with a training institute providing outreach</p>	<p>Promote private extension service training either in combination with agricultural service centres (see above) or stand-alone. Main training components:</p> <ul style="list-style-type: none"> • Agricultural practices, • Knowledge on different varieties and their suitability for local circumstances (drought/wet, short/ long growth cycle, ...), • Pest and disease control, • Marketing. <p>(level 3 – 5)</p> <p>Professional salespeople:</p> <ul style="list-style-type: none"> • Training in use of chemicals (pesticides, herbicides), • Extension related topics, • Marketing, • Communication skills.

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
	services to neighbouring farming communities.	(level 3 – 5)
Access to markets		
<p>Mozambique has significant potential as a major trade hub for both international and regional markets, given that it is a natural gateway to the Middle East, Asia and the Mediterranean while bordering South Africa, Malawi, Zambia and Zimbabwe. The country has 1,670 miles of coastline, with major rivers and deep-water ports.</p> <p>Membership of the Southern African Development Community (SADC) provides duty-free access to the 15 member countries, which represent an agricultural market valued over 3 billion USD. Mozambique is also a member of the regional block COMESA.</p> <p>The African Growth and Opportunity Act (AGOA) provides exports with favourable access to US and European market – though the preferences in place to EU markets are due to be removed gradually in coming years.</p> <p>Some supermarket chains like Shoprite have a policy</p>	<p>Access to Market information (prices, quality and standard requirements) can be significantly improved. This will assist farmers and businesses to take informed decisions. Knowledge of, and complying with regulatory requirements, standards etc. should be improved.</p> <p>Value-addition, which is low at present, thus losing the opportunity to reap benefits inside the country, should be increased.</p> <p>Reduce the inconsistency in amongst others, quality, packaging and standardisation. Besides farmers have to understand and comply with the requirement of (big) market players to have continuous supply.</p> <p>Improved services, such as packaging, bottling, and labelling, will contribute to more affordable prices. Many entrepreneurs are packaging themselves either at a considerably high cost, or using “recycled” jars and bottles. There is a possible opportunity here to assist with a centralized packaging plant or identifying affordable packaging solutions (InfoDev 2013).</p>	<p>Improve access to information on and training /courses in the following fields:</p> <ul style="list-style-type: none"> • Set up and maintain (i.e. regularly update) Market Information Systems (MIS). • Use and programming of technology like mobile phone systems to make MIS available and accessible at local level. <p>Training in value addition and market requirements (both levels):</p> <ul style="list-style-type: none"> • Marketing skills; • Value addition (for a variety of crops); • Knowledge on regulatory requirements (for internal as well as external markets); • Knowledge on standards, etc. • Sorting and grading; • Handling, packaging and labelling; • Measures to guarantee continuous supply (grouping; staggered planting, ...) • Good storage practices; • Handling during

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>to source local produce. For most entrepreneurs, this is their first time in being presented with such opportunities and they have no outlet to seek out information about industry processes, norms, standards, or compliance. Surveyed supermarket buyers expressed a willingness to source competitively priced, locally produced value-added products, which do not exist at the moment. The limited number of locally processed products does not comply with quality, consistency, packaging, labelling, and volume consistency required by supermarkets” (InfoDev 2013).</p>	<p>Farmers need more information on contract farming and be made aware of advantages and disadvantages. They also need to understand that it can only work in case both parties respect the contract conditions (so no side-selling etc.).</p> <p>In an environment where most of the enterprises are micro and informal it is still very difficult to invest in agriculture and agribusiness, to develop small and medium-size enterprises (SMMEs), and consequently, to create new jobs. This situation should gradually be mitigated.</p>	<p>transport;</p> <ul style="list-style-type: none"> • Contract farming in training. Invite guest-speakers, to provide information incl. bottlenecks (from both sides); • Advantages of transfer from informal to formal; • Etc.
Agro-processing		
<p>Agro-processing is still new in most of Mozambique. Few companies are aware of international standards, routes to market, and so on, simply because it was not an option less than two decades ago (InfoDev 2013).</p> <p>Potential of many value chains to support increased post-harvest processing, such as horticulture, animal feed, oilseeds, and nuts. Opportunities also exist</p>	<p>The main bottlenecks that have to be mitigated are the following:</p> <ul style="list-style-type: none"> • access to markets and supplies; • general business environment; • local potential to recruit staff; • quality <p>(InfoDev 2013).</p> <p>Identification and development of new products should be encouraged, e.g. organic products, niche</p>	<p>Support training in Agro-processing, including:</p> <ul style="list-style-type: none"> • Practical skills on processing; • Quality standards and how to control these; • Business skills; business skills training to pay attention to development of (bankable) business plans. • Customer-relations and networking; • Basic market research / feasibility studies

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>because of the potential offered by diversified production.</p> <p>It is expected that domestic demand will increase as a result of upcoming towns in e.g. mining areas like Tete.</p> <p>As (road) transport is expensive, there are some opportunities for 'bringing the processing to the produce / field. Dadtco mobile cassava processing units are an example.</p>	<p>markets, dried fruits</p> <p>In order to promote Agri-processing bottlenecks like lack of finance, expensive (road) transport have to be tackled.</p>	<p>(which new products can be feasible?)</p> <p>Training on both levels: 1 / 2 and 3 – 5 (for people with more responsibilities).</p>
Business incubation		
<p>Some business incubation is on-going. Agricultural business incubation is done by, amongst others: Young-Africa Agri-Tech in Dondo, ISPG in Gaza province, ISPM in Chimoio (not necessarily in the agricultural sector).</p>	<p>To enhance the success of business incubation, the quality, skills and competences of the managers and trainers, will need to be upgraded.</p>	<p>Promotion of business incubators offering practical training and advice. E.g. training of business incubator managers and trainers (level 3 – 5).</p> <p>Also training in how to be a businessperson, able to:</p> <ul style="list-style-type: none"> • Calculate costs and profits • Manage labourers • Plan ahead.
<p>Cross cutting issues:</p> <ol style="list-style-type: none"> 1. Gender and 2. Safety, Health and Environment 		
<p>A lot of the agricultural work is done by women, but they often do not get a fair share of the benefits. Besides, they have often</p>	<p>Tapping into the unexploited human capital of women, amongst others by ensuring their access to means of production.</p>	<p>Promote training of women. Adopt creative policies to ensure that women will be requested / allowed to participate in</p>

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>no or very little access (and control over) means of production.</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue.</p>		<p>training, e.g. bring your sister /wife/ neighbour. Ensure that facilities allow for participation of women in general and women with babies/young children in particular (day-care facilities, sanitation facilities, etc.).</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue</p>

Table adapted from CEPA IFC Agribusiness Mozambique Phase 1 (2015)

* this is contested by others, like Smart, Hanlon (2014) (see above, see section ...)

level 1 / 2 is basic (operational) level;

level 3 – 5 is more advanced (may include some theory but still very practically oriented).

E.g. a motor cultivator mechanic supervisor will need advanced level whilst the mechanics may have basic level.

3. FORESTRY SECTOR

3.1 Overview of the Forestry Sector in Mozambique

As the aim of this report is to analyse where and how job-creation could be stimulated by and for skills development, the focus of this section is on the exploitation of either natural or planted forests. In Mozambique there are approximately 7 million hectares of available land with potential for forest plantations. But “... it is believed that a larger total area (including smaller contiguous areas) would be available for planting” (MINAG 2007, in Unique 2015).

The biophysical conditions for establishing plantations in Mozambique are good, but not excellent, land costs are moderate, but the operational costs tend to be high when compared with other timber producing countries (Unique 2015).

One of the goals of the National Reforestation Strategy (2009) of the Government of Mozambique (GoM) is to increase commercial forest plantation area from its current area of 60,000 hectares to 1 million hectares in 2030 (in Unique 2015). The strategy suggests the creation of 250,000 jobs, based on a ratio of one worker per 4 ha of planted area. Some consider this as a relatively high figure even when assuming the use of low skilled manual workers. When taking the international figure of one worker per 20 ha planted (Blid, 2014 in Unique 2015) as a basis, the potential number of jobs would be in the area of 50,000.

However, to date, there is a serious lack of trained manpower and managerial capability. Education and training in forestry technology, entrepreneurship, business management and marketing is deficient (Sutton, 2014). Blid (2014 in Unique 2015) observed that the typical forest worker in forestry companies in Niassa is a local unskilled farmer, with no previous work experience. By improving the skills of the workforce, increasing their productivity and reducing the absentee rate (estimates are 20 – 25%), the relative labour costs can be decreased, resulting in an increase of the international competitiveness (Unique 2015).

Despite the fact that there is political will, land suitable for forest plantations, and growing timber markets – the lack of significant investments into forestry indicates that the investment climate for planted forests has not yet been sufficiently developed. Only a few companies, like Portucel, Lúrio Green Resources (Nampula) and Rift Valley (Niassa) have invested or are planning to invest considerable amounts in commercial forestry plantations in Mozambique so far (Unique 2015).

Portucel Mozambique is a company that is developing a US\$ 3.5 billion investment in central and northern Mozambique. The company has DUATs totaling 356,000 hectares in Manica and Zambézia provinces. Portucel intends to plant Eucalyptus trees on approximately 220,000 hectares of this land to produce wood pulp for export. It will also generate energy, to operate the plant and to supply the national grid. The plantation landscape follows a

mosaic model that intersperses plantation blocks with homes, agricultural fields, high value conservation areas, community woodlots and other community land uses (source: Portucel via S4E). By 2021, when the first large blocks of Eucalyptus are ready for harvest, Portucel expects to create 6,500 full time jobs through service providers, including tree harvesting and log transport (Portucel info).

Almeida et al.(Unique 2015) found in their study that forest companies replaced most of the manual work with mechanized work, which requires more skilled labour than available locally. The reduction of manual work reduced local jobs, potentially creating situations of insecurity for local communities. However, the same authors state that the trade-off between mechanization by implementing up to date technology and job creation is evident” (Unique 2015). Investment protocols may require the use of manual work rather than the mechanised labour, which would offer an incentive for investment into skills development.

The domestic market is dominated by natural forest timber. It has some niche markets like railway sleepers and electricity poles. The market is characterised by a high level of informality (e.g. energy wood) and there are no big industrial consumers like pulp mills or board industry. Forestry SMMEs are usually led by individuals with limited business management expertise and experience (Nhancale et al. 2009 in Unique 2015).

Another part of the domestic market is carpentry and furniture making. The main domestic producers are roadside carpenters who source wood from unchecked providers and sell their products at lower prices. As a consequence, demand for sustainably produced carpentry works is relatively low (Machado Mendes 2015), undermining a sustainable production of timber.

Traditionally the country is a net exporter of railway sleepers. At present, the domestic market is also strong, with the production of sleepers currently being the main activity of several concessionaries. In 2014, Mozambique exported over USD 1.1 Million of these products, mostly to South Africa (87%). Imports were valued at USD 42,000 in the same year, coming from South Africa (Machado Mendes 2015).

Mozambique is well located and has sea-access/ ports, which facilitate access to international markets. Geographically it is also well-positioned. However some essential infrastructure, like (all-weather) roads, is lacking, which makes access to forest sites practically non-existent. The railway access is well developed in some regions like east – west to the Nacala port. However, it is insufficient in the case of long distance transport, i.e. from plantation sites to export facilities ports. Although the existing ports have improved loading facilities the utilisation fees are claimed to be high (making the export relatively expensive) (Gulke, 2015; Nutto 2015). There is a link to employment in the logistics and transport sector here.

Forest plantation investments have the potential to boost rural development and to create jobs. Large forest companies could promote the development of SMEs through their integration in value chain development, including service providers and out-growers. Investments in forest plantations also have the potential to substitute forest product imports as well as support the diversification of exports (Unique 2015). Likewise, a diversification of production into Non Timber Forest Products, such as fruit tree seedlings, natural oils and honey, can be a way forward to the creation of local employment (Machado Mendes 2015).

3.2 Potential for growth of the Forestry Sector in Mozambique

The fast growing construction industry and the expansion of the electricity grid and telephone lines are the largest consumers of timber in Mozambique. Currently, the domestic timber supply is not sufficient to cover these growing demands. In 2010, wood product imports (including paper and books) were estimated at USD 68 million (2.3% of the imports), while in 2011 wood product imports were estimated at USD 85 million (Instituto Nacional de Estatística 2015 in Unique 2015). These figures reveal the potential of the domestic market to supply a variety of wood products and reduce the reliance on imports (Unique 2015).

Forest plantation establishments require substantial, long-term investments. The global prices for the establishment of a forest plantation covering land preparation, plantation and maintenance activities until the first revenues is within the range of USD 2,000 and 4,000 per hectare (without considering the costs for land). However, the costs figures collected for the study from Siteo et al. (Unique 2015) turned out to be considerably higher. In practical terms the cost might be higher than expected for various reasons. First, the complexity of procedures for land access, the time required for issuance of the environmental license, the insecurity of land, and the proportion of effectively “plantable” area, sum up to a higher cost than initially estimated (Unique 2015).

According to Grulke (2015), the production costs per unit are relatively high due to biophysical conditions, the lack of silvicultural knowledge and technology (low MAI), as well as the lack of skilled labour and operations technology (resulting in high operational costs).

A World Bank report (2015; in Unique 2015) states that the costs of registering agricultural land amounts to more than 36% of the property value, while these costs amount to less than 2% for the majority of the other countries (amongst others Uganda, Brasil) covered by their study. These findings indicate the relatively high administrative costs of accessing land in Mozambique.

Furthermore, the lack of skills, professional forestry service providers, and labour regulations all tend to increase the cost of forest operations. In the absence of these skills and expertise in locally operated companies, large-scale forest companies hire these services from neighbouring countries (Unique 2015).

Forest plantation investments have the potential to boost rural development and to create jobs. Large forest companies could promote the development of SMEs through their integration in value chain development, including service providers and out-growers (Unique 2015). Forecasts are that, over the next years, the plantation forestry sector in Mozambique will expand rapidly, thanks to the on-going and planned investments of the forestry companies. This can result in the creation of skilled jobs in forestry management, land clearing, tree harvesting, transport, wood processing and ancillary sectors, provided that the offer will be there (source: Portucel via S4E).

Besides this and taking into account the market size and also the potential for raising income and generate jobs at the local level, FAO found that the most promising opportunities lie in the value chains of furniture, railway sleepers, honey, and natural oils (Machado Mendes 2015).

Mozambique has a huge opportunity in the production of quality furniture made from precious and first class wood. As long as this furniture is made with high crafts skills and quality design, it can be one of the best ways to add value to the Mozambican wood (Machado Mendes 2015).

Production of furniture for tourism lodges and hotels is a market opportunity as it adds authenticity to the tourism offer in the country. Procuring Mozambican sustainably produced wooden furniture to supply schools and other state institutions also presents and opportunity (Machado Mendes 2015).

In particular for the companies located close to where the Mozambican Railway Company (CFM) infrastructure is being built or rehabilitated, such as the Beira – Tete railway line, the production of railway sleepers is an opportunity (Machado Mendes 2015).

Mafurra is an integral part of the traditions and generation of revenues of Mozambicans living in Gaza and Inhambane. There continues to be great interest in the production of Mafurra oil, which could be further exploited by for example SMEs (Machado Mendes 2015).

Marula is a highly valued ingredient for natural cosmetics in the international market. Preparatory work on the establishment of a marula oil processing facility (in Chigubo) was carried out (Machado Mendes 2015). In case the results are positive, facilities could also be started up by e.g. SMMEs in other districts.

The **Baobab** produces an edible fruit pulp, which is rich in vitamins and minerals. Secondary commercialisation uses include the pressing of the Baobab seed for oil, used in cosmetic applications. The high anti-oxidant levels in the fibres have applications within the tea sector. In Mozambique, the commercialization of Baobab has started in 2013 and operations have moved swiftly to the point whereby the first export sales are expected to start from 2015 (Machado Mendes 2015).

In general, many of these oils are used in health food and cosmetics, industries that have been growing fast over the last decades. In addition, the cosmetics industry is highly concentrated and willing to pay for sustainably produced oils. The health food industry also needs sustainable supplies of these products (Machado Mendes 2015).

3.3 Summary of opportunities and linked training needs in the Forestry Sector

Table 2: Opportunities in the Forestry Sector in Mozambique

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
<p>Potential for forest plantations</p> <p>Biophysical conditions for establishing plantations in Mozambique are good. Land costs are moderate, but the operational costs tend to be high (Unique 2015).</p> <p>The National Reforestation Strategy (NRS, 2009) of the Government of Mozambique (GoM) aims to increase commercial forest plantation area from 60,000 hectares to 1 million hectares in 2030 (in Unique 2015).</p> <p>Local forest plantations have the potential to substitute forest product imports as well as support the diversification of exports (Unique 2015).</p>	<p>Seize opportunities by offering the required skills training in order to benefit from growth potential in forestry sector making use of provisions of existing strategies like the NRS, improving skills of labour force, substitute for imports and diversify exports (by augmenting number of different products).</p>	<p>Basic knowledge about Eucalyptus and plantation forestry - training has to be field based – using existing plantations and other facilities.</p> <p>(Refresher) training and upgrading of skills in forestry (all levels).</p> <p>Courses / training on</p> <ul style="list-style-type: none"> • General knowledge about the forestry sector • Tree planting • Pre-harvest planning • Eucalyptus agronomy • Nursery management • Seedling production • Forest products • SMME operations <p>Logistics training:</p> <ul style="list-style-type: none"> • GIS operation • Fleet management / logistics • Safe vehicle operation • Chainsaw operation • Tractor driving (incl. R&M) • Operation of bulldozers

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
		(incl. R&M) <ul style="list-style-type: none"> • Truck driving (and R&M)
Labour		
<p>Labour costs in Mozambique seem to be competitive, but low salaries are not necessarily seen as an advantage (Unique 2015). The low* productivity per working hour, mainly due to unskilled workers, high absence rate, low mechanization rate, offer opportunities for improvement.</p> <p>There is a potential to train the unskilled forest workers</p>	<p>As some companies intend to increase the mechanization level in the plantations and use third party provision of services for some activities (Unique 2015) opportunities should be seized via training-offer in order to enhance the workforce.</p>	<p>Support training of workers in various basic skills related to forestry:</p> <ul style="list-style-type: none"> • General knowledge about the forestry sector, types of trees and their specific characteristics, plantation forestry, etc. • Tree planting • Eucalyptus agronomy • Nursery management • Seedling production • Chainsaw operation • GIS skills • Heavy plant operation • SMME operations for chainsaw gangs <p>Training has to be field based – using existing plantations and other facilities. Work ‘ethics’ and ‘culture’ should be an integral part of the curriculum.</p>
Management		
<p>Strengthening of management capacities of SMMEs in the forestry sector can improve their performance.</p> <p>There is potential for SMMEs, including service providers and out-growers, through the promotion by large forest companies of their integration in the value chain (Unique 2015).</p>	<p>Forestry SMMEs are usually led by individuals with limited business management expertise and experience (Nhancale 2009 in Unique 2015).</p> <p>Mitigate the lack of skills of forestry SMMEs via training in, amongst others, business management.</p> <p>Use of GPS facilitates getting to the</p>	<p>Training in Business Management skills for SMMEs (level 3-5) including development of basic business plans, financial planning, cash-flow projections, etc.</p> <p>Support short courses in topics such as forestry operations, stakeholder engagement, geographic</p>

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
	correct locations; this is a useful skill for service providers with contracts to harvest Eucalyptus blocks.	<p>information systems, spatial planning and other topics (all levels).</p> <p>Also training in</p> <ul style="list-style-type: none"> • Contractor management (level 3 - 5) • Spatial planning skills including map reading, landscape planning and the use of GPS devices.
Mechanisation, technology and service provision		
<p>Comparison with Uganda shows that Mozambique can improve on the relatively low level of mechanization and limited availability of skilled workers and thus reduce costs and increase its international competitiveness (Unique 2015).</p> <p>Technical support in various topics related to technology use and service provision has the potential to improve the performance of the sector (Nhantumbo and Macqueen 2013)</p> <p>A certain level of mechanization and skills is also regarded as a contributory factor to safe and ergonomic working conditions, in particular when it comes to harvesting which involves high-risk activities (Unique 2015).</p>	<p>Seize the opportunity that some forestry companies want to increase the mechanisation level in the plantations and use third party provision of services for some activities (Blid 2014 in Unique 2015).</p> <p>The trend for mechanization has created a demand for skilled and trained machine operators (Unique 2015)</p> <p>The trend for increase mechanisation will result in and increase of ancillary jobs for mechanics, caterers, saw mills (SMMEs) and carpenters.</p>	<p>Support all types of training (starters as well as refresher /upgrading) in forestry-related machinery operation / machine operators as well as maintenance and repair (all levels).</p> <p>Training in topics including</p> <ul style="list-style-type: none"> • Pre-harvest planning • Management of small-scale harvesting contractors • Post-harvesting coppice (wood) <p>Support technical vocational training in the following areas (at all levels):</p> <ul style="list-style-type: none"> • Mechanised weed control • Chain saw operation • Fire fighting • Road, small bridge and earthen dam construction • Saw mill operation • Bulldozer operation

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
		<p>Besides, training in basic business skills (especially to do with accounting and marketing), and compliance with certification standards (level 3 - 5).</p> <p>Logistics training:</p> <ul style="list-style-type: none"> • Fleet management / logistics • Safe vehicle operation • Tractor driving (incl. R&M) • Operation of bulldozers (incl. R&M) • Truck driving (and R&M) <p>Training for ancillary support services:</p> <ul style="list-style-type: none"> • Small machinery mechanics • Heavy equipment mechanics • Welding • Electricians • Catering • Brick making
<p>Access to markets for timber products</p>		
<p>Domestic timber markets are currently increasing, which provide a good opportunity for the sector. The fast growing construction industry and the expansion of the electricity grid and telephone lines are the largest consumers of timber. Currently, the domestic timber supply is not sufficient to cover these demands (Unique 2015). There is a potential to gradually</p>	<p>There continue to be opportunities in the production of railway sleepers for the domestic and regional markets (Machado Mendes 2015).</p> <p>People / potential buyers of carpentry products should be made aware of the downside of buying products from unchecked providers and the positive contributions they make by buying</p>	<p>Training in the following areas:</p> <ul style="list-style-type: none"> • Carpentry using eucalyptus wood as well as other types of wood • Business training, including costing and pricing, business plan development, • Marketing of products including demand analysis, using sourcing

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
<p>substitute the imports by local production. The same goes for the production of railway sleepers (Machado Mendes 2015).</p> <p>The increase in the building activity has meant a concurrent rise in the imports of builders' joinery and carpentry works. There is an opportunity to gradually substitute these imports with domestic production.</p> <p>Other markets (market outlets) that could be further exploited are the value chains of furniture and non-timber products like honey, and natural oils (Machado Mendes 2015) (see below).</p> <p>Furniture</p> <p>There is an opportunity for Mozambican companies to gradually take over the import of wooden furniture.</p> <p>Production of furniture for tourism lodges and hotels is a market opportunity. Procuring Mozambican sustainably produced wooden furniture to supply schools and other state institutions is also an opportunity.</p>	<p>from checked sources.</p>	<p>from sustainable sources as a selling-point, supply for specific markets like tourism establishments (and their specific requirements).</p> <ul style="list-style-type: none"> Client relations (how to attract new clients and how to keep them, etc.). <p>Sourcing issues should be an integral part (disadvantages of sourcing from informal / unchecked suppliers).</p> <p>Training for the construction sector: builders' joinery and carpentry works.</p>
<p>Access to (consumer) markets for non-timber products</p>		
<p>Natural Oils</p> <p>As there continues to be great interest in the production of Mafurra oil (Machado Mendes,</p>	<p>The natural oils industry is growing and thus demand for these oils increasing.</p> <p>The training of a skilled labour</p>	<p>Natural oils production and sale:</p> <ul style="list-style-type: none"> Technical training: processing, how to

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
<p>2015) this presents a good opportunity.</p> <p>Marula is a highly valued ingredient for natural cosmetic oils in the international market (Machado Mendes, 2015) and can, as such, be a good opportunity for employment creation.</p> <p>Baobab gives an edible fruit pulp, rich in minerals. Pressing of the Baobab seed gives oil, used in cosmetic applications. Further expansion of and production for the export present opportunities.</p> <p>There continue to be opportunities in honey production for the domestic and regional markets, provided concerted efforts are made into improving quality and raising awareness of domestic consumers to the benefits.</p>	<p>force pool is a priority. Existing arts and crafts schools are currently not working to the industry's requirements of carpenters and other mid-level professional staff (Machado Mendes, 2015).</p> <p>Honey production Use of modernised hives increases the production per hive and, usually, makes the beekeeping less complex and (depending on the circumstances) feasible for 'close-to-homestead' beekeeping which is more convenient for women.</p>	<p>produce good quality, etc.</p> <ul style="list-style-type: none"> • Operation of processing machinery, including repair and maintenance <p>Honey Training in:</p> <ul style="list-style-type: none"> • Manufacturing of quality hives and accessories • Beekeeping <p>All of the above training should include (to various levels):</p> <ul style="list-style-type: none"> • Accounting and book keeping • Business skills • Packaging and labelling • Marketing
<p>Cross cutting issues:</p> <ol style="list-style-type: none"> 1. Gender and 2. Safety, Health and Environment 		
<p>Women are under-represented in the forestry sector as well as in trades linked to wood-work. Some positive experience regarding preference for women in seedling production.</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue.</p>	<p>Interest women for jobs in this sector. Often the argument that the work is (too) heavy is used but physical force is not necessary for all forestry sector related jobs. Besides, neither all women automatically disqualify when it comes to this criteria nor do all men automatically qualify. Worldwide positive experiences with women operating heavy plan equipment. Some employers may be reluctant</p>	<p>Training locations should cater for women, in particular young mothers / women with young children by providing facilities like day-care and adequate toilet facilities. Day-care facilities should also be accessible for fathers with young children.</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue</p>

Opportunities	How to capitalise and/or develop identified opportunities?	Recommendations for S4E / JOBA
	to select women for vacancies; cases should be made available and the sector should have contacts of women already working in the sector that can be contacted.	

* Often the costs per hectare are used to compare costs, but the unit cost of produced timber is of real interest for investors (Almeida Siteo et al.)

level 1 / 2 is basic (operational) level;

level 3 – 5 is more advanced (may include some theory but still very practically oriented).

4. CONSTRUCTION SECTOR

The construction sector can be classified into the three segments, namely: building materials, civil construction (like roads, dams, houses, harbours, etc.) and heavy construction¹. In this section the main attention is given to the first two segments, as they are the most relevant for the Mozambican economy.

4.1 Brief overview of the Construction Sector in Mozambique

From the late 1990s onwards, the **construction** sector in Mozambique has been expanding, representing an important source of employment, especially in the main cities. Still, the share of the sector in gross value added remains quite small at 2.5% versus a world average of 5% (Maugeri 2015).

While Mozambique has had an average growth rate of 7% in the last decade, the construction industry has been expanding at an even higher rate (Maugeri 2015; Sutton 2014). The up-going trend in the construction sector is expected to continue, in part because of major new projects in the offshore gas industry (Sutton 2014).

The estimated share of the construction sector in the GDP was around 2.5 in 2014 (Sutton 2014). This rate is still low compared to the share of the **construction** sector to the GDP in developing countries, which ranges from 3 to 6%.

The Ministry of Public Works and Housing (MOPH, present denomination MOPHRH) reports a total of 2,493 formal companies in the construction sector in Mozambique in 2014. One-third of these are class 4 or above, i.e., medium to larger size (Maugeri 2015). This categorisation is according to their size, and their technical and financial capacity. Following ACIS (2008 in Maugeri 2015), contractors are registered and licensed to bid for public works contracts of different categories based on a minimum capital requirement.

According to MOPH figures in 2014 there was a total of 184 formal companies in the building materials industry in Mozambique. Of these, 57% have 1-9 full-time employees and 33% 10-49 employees. Medium-sized firms (50-299 full-time employees) account for only 7% of the total and large firms (300 employees and above) for no more than 2%. This suggests relatively greater structural weakness in the building materials sector compared to

¹ **Construction** is the process of constructing a building or infrastructure. Construction differs from manufacturing in that manufacturing typically involves mass production of similar items without a designated purchaser, while construction typically takes place on location for a known client (<https://en.wikipedia.org/wiki/Construction>). Heavy construction is construction requiring the use of large machinery, such as cranes or excavators (<http://www.dictionaryofconstruction.com/definition/heavy-construction.html>)

construction services – both in terms of number of firms and size distribution. In **building materials** only 9% are medium and or large, i.e. 91% are small and micro (Maugeri 2015). In Mozambique almost all large construction companies produce their own supplies.

The construction sector in Mozambique comprises both formal and informal operators. However, it is within the housing market (family sector) where informal operators are dominant throughout the entire value chain (Nhabinde 2012). In both the construction and the building materials sectors the majority of firms are micro or small/medium-sized which combined with their lack of experience makes it very difficult for them to successfully compete with foreign competitors, such as South African, Portuguese or Chinese construction firms (Maugeri 2015).

In Mozambique there is a big gap between the larger, mostly foreign owned firms, and the medium and small-sized domestic companies. The former enjoy the advantages of business links to foreign investors and markets. Domestic firms, on the other hand, demonstrate a range of weaknesses, including low product credibility, lack of certification, technology and qualified labour, and limited access to credit. This has led to an overall failure of the domestic industry to meet the growing demand from the construction sector, with contractors covering the supply gap with imports (Maugeri 2015; Sutton 2014; Nhabinde 2012).

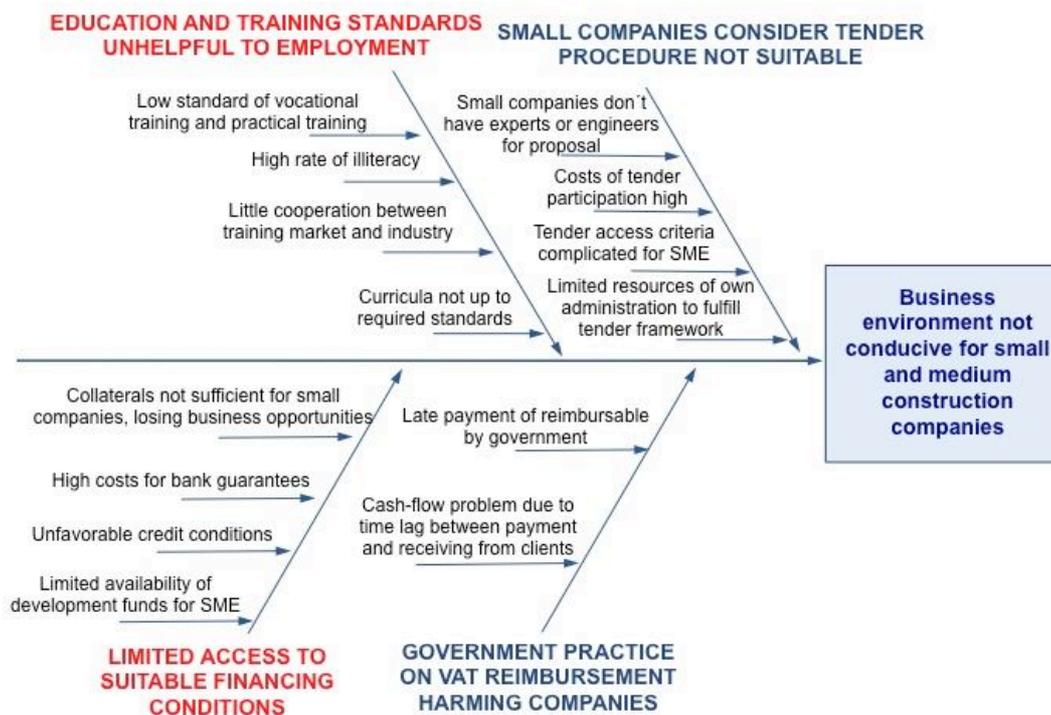
International companies investing in Mozambique apply their own due diligence processes to ensure that working and quality standards, required certificates and documents are provided by the local contractors. In this sense, they prefer to engage with other large companies as they are required to comply with international quality standards, an attribute not currently present in local SMME (Wiegel 2015).

SMME in the construction sector face various problems. Due to their size and related issues they have little market power and are in no position to gain large projects from international companies. Other constraints they encounter are cash flow limitations; low cross-margins due to hidden costs in the process; limited access to accessories and higher quality building material; lack of well qualified, experienced and motivated workers; missing information about subcontracting opportunities in general and the potential around the LNG project in particular (Wiegel 2015).

The formal market for project developers, building materials, equipment rental firms, and contractors tends to be more competitive for projects requiring reduced amounts of project finance, including demand for housing projects, construction of small scale industries in both rural and urban areas, and public services at the district level. It is also within this market segment where the majority of indigenous contractors are found as well as more intensive use of locally generated building materials and project developers (ANEMM, 2000 and Lopes, 2006 in Maugeri et al. 2015).

As the figure shows, the business environment is, in general, not very conducive for small and medium construction companies.

Figure 2: Business environment for SMMEs



(Wiegel, 2015).

There is a significant geographical concentration of firms in the construction sector in the Maputo province, while in building materials there is also a strong presence in the provinces of Sofala and Nampula. However, outside those three provinces there are relatively fewer firms, at least in the formal sector (Maugeri 2015).

In the building materials sector, over 60% of employees hold only a primary school certificate (ANEMM, 2000, AIMO, 2010). According to Lopes (2006 in Novella Maugeri et al. 2015), the same percentage holds for employees among contractors and only 9% had finished secondary school (Maugeri 2015).

While unskilled labour is in excess supply, contractors report considerable scarcity of mid-level managers, project directors, supervisors, and head-masters for building, carpentry, metal work, electricity, welders and water pumps (Lopes, 2006 in Nhabinde 2012; Sutton 2014; Maugeri 2015). The figure below illustrates the issues linked to the lack of a skilled and capable labour force.

Figure 3: Lack of skilled and capable labour force



(Wiegel, 2015).

Besides a few private training providers, the National Institute for Employment and Professional Training (Instituto Nacional do Emprego e Formação Profissional - INEFP) remains the largest (public sector) training school for short training courses (3-4 months). INEFP offers training courses for several trades, also for bricklayers, painters, electricians, plumbers, and carpenters (Wiegel 2015).

The current interest for training in construction trades appears to be low. INEFP states that the reasons for this are that construction work is not very popular with youngsters and that they often aim for office jobs (Wiegel 2015).

As the quality of trained young workers, coming from the training centres and schools is, in many cases, considered low and insufficient companies often prioritize older and more experienced persons (Wiegel 2015) without formal training.

Also, the training sector has not adjusted its curricula to the requirements of specific projects like the LNG in Palma and to the standards and practical training requirements demanded by companies (Wiegel 2015).

In Mozambique, as well as the region, the most important client for construction work is the public sector, providing 90% of the projects in the construction industry (Wiegel 2015; Nhabinde 2012), followed by private investors. The main public sector investments are in infrastructure of hospitals, schools, roads and water supply.

The government of Mozambique has attempted to involve the private sector in the process of building a qualified labour force. One of the measures was for the new investment code to prescribe fiscal incentives for companies investing in training. Yet, so far the results have been limited, with companies reluctant to train even their own labour-force (AIMO, 2010 in Maugeri 2015; Nhabinde 2012), let alone unemployed youth and school leavers. This is partly due to the constraints related to the flow of information regarding training opportunities for domestic businesses (Maugeri 2015).

4.2 Potential for growth in the Construction Sector in Mozambique

The growth outlook of the Mozambican construction industry is one of the strongest across Sub-Saharan Africa. While the country has sustained an average growth rate of 7% in the last decade, the construction industry has been expanding at an even higher rate (Maugeri 2015).

The construction industry holds great potential for broad based growth, employment generation, capital formation, and technological absorption and development. Through its backward and forward linkages, it may generate structural change (Bakar 2009; Ofori, 2005 in Maugeri 2015; Nhabinde 2012).

The construction industry potentially generates demand for a variety of industrial segments which make up the construction materials sector – ranging from raw materials (crushed rock, sand, wood), intermediate inputs (cement, bricks, steel), building components (hydraulic and electrical materials and equipment, frames) and finishing elements (glass, paints, varnishes) Furthermore, alongside the industry, there are important economic clusters that develop over time, ranging from financial, insurance and brokerage services, to maintenance and repair activities (Maugeri 2015).

Finally, the construction industry is critical to the well-being of significant parts of the population. For one, it is historically a very important employer in most countries, even under more modern and more productive construction methods. Moreover, it is instrumental in teaching new job skills to workers, many of whom had previously been farmers and petty traders (Maugeri 2015).

4.2.1 Opportunities linked to the investment in natural-gas exploitation

Since 1992, Mozambique has spent huge amounts on building and repairing roads, enlarging harbours and rehabilitating railways. Commercial and residential real-estate construction

has grown in response to rural–urban migration combined with the emergence of a middle class in urban areas. Since a number of years, Mozambique is also experiencing increasing demand for heavy construction works in railways, roads, airports, ports, dams and production facilities in response to major investments in coal and natural gas (Maugeri 2015; Sutton 2014).

It has been predicted that Mozambique will rank fourth in the world for natural-gas reserves behind Russia, Iran, and Qatar. The consequent inflow of Foreign Direct Investment (FDI) into the country will fuel a construction boom, combining high demand for public infrastructure with an increase in demand for housing by an upcoming middle class. These trends provide ample opportunities for the construction industry to eventually participate in the highly profitable hydrocarbons value-chain. The building materials sector could also significantly benefit from the boom, as some materials –such as cement and ceramics- can be produced very efficiently when a stable and cost efficient supply of natural gas is available (Maugeri 2015).

Mozambique has also been experiencing a growing demand for heavy construction works (railways, highways, airports, ports, dams, production plants, etc.) due to the requirements of large investments being undertaken in the country. Those investments, especially the megaprojects operating in the natural resources sector (gas, coal, heavy sands), hold great potential for developing the heavy construction subsector. To the extent that a number of new megaprojects are expected to start operations within the next decade or so, heavy construction will be an important component of growth in Mozambique (Nhabinde 2012).

Estimates determine that between 14,000 – 15,000 workers will be required for the preparation of housing infrastructure and the housing construction around the LNG project, whereby construction of 10,000 houses are taken as a basis. These numbers were stated by various sources, but have not yet been officially confirmed by government, the vocational training service sector or Anadarko/ENI (Wiegel 2015; Maugeri 2015).

4.2.2 Housing market / rural–urban migration and the emergence of an urban middle class

The housing market plays a fundamental role for fostering economic development. It is the backbone for sustained growth for local entrepreneurs as it is less demanding in terms of construction resources, costs and finance (Nhabinde 2012).

Mozambique’s recent gains in economic and social conditions brought significant opportunities to the country’s construction and building materials industries. Mostly driven by rural-urban migration, combined with the emergence of the middle class in urban areas, urbanization is putting additional pressure on housing (the deficit is estimated to be approximately 2.5 million units - Sutton 2014 in Maugeri 2015) and construction material imports, as well as on the demand for social infrastructure (Nhabinde 2012; Sutton 2014).

4.3 Summary of opportunities and linked training needs in the Construction Sector

Table 3: Opportunities in the Construction Sector in Mozambique

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>Human capital / resources – qualified workers</p>		
<p>Modern construction methods, using heavy equipment and tools meant to make labour far more productive offer opportunities. Also, new materials and construction systems present opportunities. Construction is booming and the building materials sector (cement, iron glass, etc.) has the opportunity to make better use of this.</p> <p>Current practices in the building industry involve increased reliance on iron and steel structures. Local indigenous contractors and labour-force can seize the opportunities when better mastering the technologies available. (Nhabinde 2012).</p> <p>Qualifications and motivation of local labour, due to insufficient training and lack of focus resulting in low productivity, can be improved (neighbouring countries already have higher productivity) (Wiegel 2015).</p>	<p>The changes in construction methods, using other types of equipment, materials and construction systems require better-trained labour. As and when local qualified labour is available they will be contracted; also because expat labour is often more expensive (because of additional costs).</p> <p>Better and intensive cooperation between training providers and companies is essential. Finally, the system will allow graduates to “step out” into other subsectors (e.g. specializing in solar energy fitting, introduction of higher technology levels in electrical installation, etc.). Upgrading will, as a result, improve chances to be hired by large national or international companies (Wiegel 2015).</p> <p>Many youngsters are not interested but by providing more and better information, in particular about the job opportunities they may change their mind.</p>	<p>Training for labourers in:</p> <ul style="list-style-type: none"> • Basic construction skills • Modern construction methods • Use of (modern) equipment and tools • Modern/different types of materials (like e.g. steel) • Adult literacy and numerical skills • Work / professional attitudes <p>(all levels)</p> <p>Also support skills development in:</p> <ul style="list-style-type: none"> • Entrepreneurship and • Work / professional attitudes • Basic notions of computer-use (for level 3 – 5)

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
<p>SMMEs</p> <p>Although the most frequently cited limitation of construction firms' economic activity is 'low demand', in reality, the construction boom provides opportunities for the national construction industry.</p> <p>In principle, the development of the offshore gas industry offers major opportunities, for the development of indigenous SMMEs in the construction sector; the first major beneficiary of offshore gas development is the construction sector (Sutton 2014).</p>	<p>When good quality and priced building materials are available locally they can find an outlet. Local suppliers can increasingly tap into this market.</p> <p>SMME construction companies can qualify for sub contracting in bigger contracts. This also offers an opportunity to increasingly master skills and qualify for more complex construction works.</p> <p>Promote 'on the job training' schemes that integrate domestic and international companies</p>	<p>Management skills:</p> <ul style="list-style-type: none"> • Business skills, marketing and networking • Customer relations and communication skills • Basic computer knowledge (user) • Planning (time, labour force, financial) <p>Technical skills:</p> <ul style="list-style-type: none"> • Knowledge and use of modern materials like steel, glass, aluminium <p>Part of these skills should be strengthened via 'on the job training'</p>
<p>Training facilities and offer</p>		
<p>There are opportunities to increase the number of training (facilities) as well as the quality and adequacy (i.e. responding to the demand of the labour market).</p> <p>Training could and should be rather demand than supply oriented.</p>	<p>Increase efficiency of training facilities</p> <ul style="list-style-type: none"> • Little forward planning • Low demand for training in construction business • Lack of investment in training facilities (out of the scope of this study) <p>Increase professional quality of graduated workers</p> <ul style="list-style-type: none"> • Admission standards are low • Out-dated and basic curricula • Lack of investment in practical learning 	<p>Training on, amongst others, the following topics:</p> <ul style="list-style-type: none"> • Planning • Promotion and marketing ('how to sell your –training-product') • Curriculum review and development including an adequate balance between theory and practical lessons/ training • Customer relations (how to keep in touch with the labour

Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
	<p>equipment (out of the scope of this study)</p> <p>Improve match between trained workers and companies demand</p> <ul style="list-style-type: none"> • Insufficient practical experience after finishing training course • Low worker's motivation and working culture • Out-dated curricula, often not covering company's demand (Wiegel 2015). 	<p>market, i.e. future employers)</p> <p>Upgrading of trainers of training providers and of the foremen in the companies (Wiegel 2015), amongst others in:</p> <ul style="list-style-type: none"> • Planning • Promotion and marketing ('how to sell your –training-product') • Curriculum review and development including an adequate balance between theory and practical lessons/ training • Customer relations (how to keep in touch with the labour market, i.e. future employers)
<p>Cross cutting issues:</p> <ol style="list-style-type: none"> 1. Gender and 2. Safety, Health and Environment 		
<p>In principle women can work in the construction sector and to a certain extent they do (although often mainly in the lower-paid support jobs). As constructing is booming they can seize the opportunity to find a job.</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue</p>	<p>Women should be assisted to overcome this idea that construction jobs are for men. Role-models like women active in the construction sector could have a role in this. Also career guidance and coaching specific for girls and young women to assist them to make choices that will increase their chances to find a (good) job including in the construction sector.</p>	<p>Training offered should pay attention to social and gender issues and create a conducive learning environment for women and men alike.</p> <p>Life skills development, (e.g. attitudes in work environment, hygiene and safety in the workplace.</p> <p>Inclusion of Safety, Health and Environment as cross-</p>



Opportunities	How to capitalise and develop identified opportunities?	Recommendations for S4E / JOBA
		cutting issue

5. TOURISM SECTOR

Tourism is a labour-intensive sector that integrates skills at all levels throughout the sector. It is linked to a diversity of other sectors, such as transport, agriculture, food and beverage, financial services, construction and craft-making (GoM 2004).

According to the UN Commission for Sustainable Development's Agenda 21, tourism absorbs more women and unskilled labourers than other sectors, and is economically significant in the vast majority of low-income countries. It is particularly important for women, as employment in the tourism sectors is more flexible than traditional or agriculture sectors, and there is an expanded "informal sector", allowing for economic activity consistent with family life. With the absorption of untrained and unskilled workers, there is a huge opportunity for training and upgrading of skills and capacities which creates possibilities to move to better jobs (UN Commission for Sustainable Development's Agenda 21 in USAID, GoM 2004).

As mentioned in the Government of Mozambique Strategic Plan for Tourism: Tourism is a very important economic catalyst, as visitors spend money directly in hotels and outside of hotels, generating direct and indirect employment and revenues throughout an economy. Tourism impacts the construction industry, agricultural industries, craft-making and traditional cultural attractions, banking, fishing, manufacturing, insurance, telecommunications, medical, security and retail services. It also make mention of the fact that Tourism is an agglomeration of sectors and therefore creates opportunities for small businesses and the informal market throughout the economy.

5.1 Overview of the Tourism Sector in Mozambique

Mozambique has several interesting tourism destinations and its key strengths lie in the quality of its beach product, the exotic ambience and cultural profile of the country and in its wilderness areas with high bio-diversity. Mozambique is one of the few countries that can offer the diversity of beach, eco-tourism and cultural products (GoM 2004). Yet, to date the sector has not yet grown to its full potential. Tourism's direct contribution to the GDP is relatively small: 3.2% in 2013 (WTTC 2014). In comparison, tourism's share of GDP is about 6.9% on average in Sub-Saharan Africa, 8% in South Africa, and 10.2% worldwide (IFC 2006b).

However, as downstream spending and secondary economic impacts of tourism on the greater economy including gains through local spending of tourism wages are often underestimated or not included in the accounting of the tourism economy the total impact on the country's economy may be higher than this (Batey 2014). Estimates on the direct employment created by the tourism sector vary widely, from around 35,000 - 40,000 workers (Vignati 2009; Batey 2014), 56% of which were women (Batey 2014)

to 273,000 (WTTC 2014)². The estimated average spend per trip was 230 USD for foreign travellers and 140 USD for domestic travellers (Batey 2014), up from around an average of 100 USD reported in 2009 (INE in Vignati 2009).

Based on available data³ since 1992, international tourist arrivals to Mozambique have almost doubled from around 240,000 in 1999, to around 470,000 by 2004, before increasing sharply to just under two million visitors by 2008 (an annual growth rate of about 13%). This rapid growth peaked in 2009 after which the sector has experienced a sharp decline in arrivals and has been in decline from that time (Batey 2014; IFC 2006a).

The majority of international visitor arrivals in Mozambique are regional. On average, Mozambique attracts 6 times fewer intercontinental travellers than the rest of Africa. The share of intercontinental travellers of total arrivals is approximately 10% in Mozambique compared to approximately 60% for the rest of Africa (IFC 2006a). South Africa accounts for the bulk of Mozambique's regional traffic with a share of 46% of all visitors to Mozambique. An estimated +90% of the leisure market originates in South Africa (IFC, 2006a).

Mozambique's tourism **demand** is largely based on its biodiversity, unique cultural heritage and the relative under-commercialization of its natural assets. Due to its proximity to South Africa, Mozambique currently captures a significant portion of its international leisure market share as an add-on destination for visitors to South Africa. Besides, a considerable number of tourists originate from RSA and travel by road to Mozambique. However, Mozambique is increasingly being seen as a stand-alone destination for world travellers with a preference for environmentally-responsible tourism (Batey 2014).

With the exception of Malawi, which has relatively limited tourism resources in comparison to Mozambique, all other countries sharing borders with Mozambique are within the top 10 African tourism destinations. This is an asset in itself, but it also shows that Mozambique is still underutilizing its tourism resources compared to its regional neighbours (IFC 2006a).

Of all tourist arrivals in Mozambique in 2003, the majority were business travellers. In total almost 70% of tourists are motivated by specific personal (Visiting Friends and Relatives – VFR) or business ties. The remaining of the tourists visit Mozambique with the primary purpose of leisure, recreation and holidays. In neighbouring countries the leisure segment accounts for upwards of 70% of tourists (IFC 2006a).

Statistics indicate that leisure spending accounted for about 56% of total tourism spending

² Part of this huge difference may be explained by a difference in definition; WTTC clearly states the definition, the other report does not make specific mention of it.

³ Statistics on tourism published by Mozambique national agencies and estimates from international agencies based on national data create an inconsistent and unclear picture of the industry.

in Mozambique with business spending accounting for 44% (WTTC in Batey 2014). In neighbouring countries the leisure segment accounts for upwards of 70% of tourists, indicating that Mozambique's leisure market potential appears not to be fully realized. Equally the percentage of leisure travel does not appear to have increased significantly within the sector's overall growth, indicating that there are constraints adversely affecting the uptake of Mozambican leisure tourism (Batey 2014).

The dominance of business and VFR tourists has implications for the distribution of tourism products. Both are Free Independent Travellers (FITs) that organize and customize their trips through purchases of individual products rather than tour-packages. In contrast the leisure segment is predominantly sold through professional customization of expensive and exclusive tour packages reserved for the high-yield market (IFC 2006a).

The South African market is one of the most important and closest source of tourists, from outside of Africa, for Mozambique. Mozambique is one of the top outbound destinations with a 25% increase in South African tourist visits from 276,100 in 2001 to 335,426 in 2003. About, 90-95% of these visitors travel by road, making the self-drive tourism market one of the largest sources of tourism in Mozambique (IFC, Volume II, 2006).

The tourism supply in Mozambique is centred on two key market segments, Business and SSS (Sun Sea and Sand) leisure (Batey 2014). In 2010 there was a total of 4,736 tourist establishments in Mozambique of which 1,269 were accommodation, 3,340 were restaurants and bars and 127 were travel agencies (National Directorate of Tourism, 2011 in Batey 2014). The Directorate indicated that the country's tourism sector provided 37,550 beds in 2010 (Batey 2014). Most of the offer is concentrated in the Southern part of the country.

The Government of Mozambique (GoM) is promoting the tourism sector. In 2001 a Ministry of Tourism (MITUR) was created for this purpose, followed by the adoption of a Tourism Policy and Implementation Strategy in 2003 (Republic of Mozambique, 2003 in Batey 2014). GoM sees tourism as a priority area in which additional investment may create the jobs. As most developing countries have increased market shares in international tourism this expectation is reasonable and sensible (IFC 2006a). In 2004 a Strategic Plan for the Development of Tourism in Mozambique (2004 – 2013) was developed.

The Government's Action Plan for the Reduction of Absolute Poverty also makes particular reference to the role of tourism in stimulating demand for locally produced goods, thereby contributing to wider employment opportunities and to appreciating the importance of creating a culture of 'domestic tourism' as a strategy in increasing the overall income from tourism (GoM 2004)

However, the development of the sector and attraction of increasing numbers of tourists has not always been an easy ride. As international travellers increasingly seek value for money destinations in the wake of the economic crisis, Mozambique's leisure products have,

since around 2009, begun to experience a sharp decline in market position and occupancy rates (Batey 2014).

Besides, there are other reasons for the decline / stagnancy in the number of tourist arrivals. A cross-country comparative exercise on tourism competitiveness undertaken by the World Economic Forum (WEF 2007 in Jones 2007) places Mozambique in 119th out of 124 places, falling behind prospective peers such as Tanzania (80th), the Gambia (84th) and Zambia (94th). Among the reasons for Mozambique's low ranking are the prevalence of malaria, the poor quality of human resources/services and the low level of development of its underlying natural and cultural resources (Jones 2007). In general there are poor skill levels within the tourism industry (IFC 2006a).

Beyond the border travellers face sections of poor quality roads, regular reported harassment by traffic police and poor driving conditions with little or no rescue services. These factors would appear to have a greater influence on travellers visiting Mozambique as their regional self-drive destination. In addition exchange rate fluctuations against regional currencies and the high cost of living in Mozambique also make Mozambique a significantly less attractive destination to regional travellers than in previous years.

Constraints such as travel difficulties, cost, and perceived poor levels of service, corruption and harassment have likely contributed to the decrease in uptake of Mozambique's tourism sector (Batey 2014). Furthermore the visa requirements make obtaining a visa comparatively expensive and time-consuming. There are few direct connections and the airliner LAM is considered expensive and quite unreliable. Besides, several connections are via Johannesburg, an airport that has reportedly a relative high incidence of lost/stolen luggage, as well as pilferage (IFC 2006a).

Mozambican tour operators, besides being quite few in number there are also matters regarding the quality and promptness of the services offered, which reduces their competitiveness. Some of these are:

- Poor and slow services
- Limited understanding of market requirements
- Inability to secure competitive discounts from hotels and airlines. Weak coordination curtails ability to optimize product pricing and participate effectively in sales promotion campaigns

(IFC 2006a)

While the renewed conflict may be a factor affecting the tourism sector it does not seem to be the primary cause of the decline of the tourism industry. Coverage of the incidents is mainly limited to regional press (95%) and the articles largely claimed travel remained safe for tourists. Five European countries had listed travel warnings to their citizens, although security companies listed crime and kidnapping above conflict in terms of risk factors for travellers (Batey 2014).

Regional press coverage would have the highest impacted on the self drive, regional tourist demographic which accounts for an estimated 30% of inbound tourism. As explained, the renewed armed conflict does not seem to account for the overall downturn in tourism in Mozambique it is equally clear that it has had an impact on certain tourism destinations and certain market segments. Should the conflict in the centre and north of the country continue or escalate, it has the potential to become a primary and defining factor in the collapse of the industry national wide (Batey 2014).

Within the bigger picture, continuing conflict does not represent the greatest threat to tourism. Given the extent and magnitude of the identified constraints affecting tourism and the resulting downturn in performance reported prior to the conflict, there are clearly more systemic issues plaguing the industry that require attention and intervention (Batey 2014).

5.2 Potential for the tourism sector in Mozambique

The tourism sector has the potential to create a multiplier effect up and downstream the value chain (Batey 2014). The tourism sector is labour intensive and the indirect contribution to the rest of the economy through linkages to other industries can be quite significant depending on how well integrated tourism is with the rest of the economy (IFC 2006a). There is also a lot of scope to involve SMMEs and for pro-poor (M4P). The main factors are:

- Customers come to the product, which provides considerable opportunities for linkages (e.g. souvenir selling) to emerging entrepreneurs and small, medium and micro-enterprises (SMMEs);
- Tourism is a diverse industry, which increases the scope for wide participation of different stakeholders and businesses, including the involvement of the informal sector;
- Tourism can be more labour intensive than other industries such as manufacturing. In comparison to other sectors, a higher proportion of tourism benefits (e.g. jobs and informal trade opportunities) go to women.

(DFID 1999; Ashley, Roe and Goodwin, 2001 in Batey 2014).

Tourism can have some additional benefits for the poor, namely (WTO 2004 in Batey 2014):

- Employment of the poor in tourism enterprises
- Supply of goods and services to tourism enterprises by the poor or by enterprises employing the poor
- Direct sales of goods and services to visitors by the poor (i.e. in the informal economy)
- Establishment and running of tourism enterprises by the poor - e.g. small-, medium- and micro-, sized enterprises (SMMEs), or community based enterprises (in the formal economy)

(Batey 2014).

Another area, which still presents opportunities for Mozambique is the Meetings, Incentives, Conferences, and Exhibitions (MICE) tourism. Global MICE tourism is growing at around 10% annually. The opportunity for Maputo to participate in this market arises from the fact that over 50% of world meetings and conferences rotate worldwide (IFC 2006a).

As mentioned by IFC (2006a) MICE (business) tourism in Maputo faces intense competition – particularly from South Africa and its other neighbours. Unlike leisure tourism where Mozambican and South African tourism products are complementary, MICE products in Maputo will compete directly with other established destinations like Johannesburg, Cape Town, Arusha, Nairobi, and so on. As such, competition is expected to be generally more intense for MICE tourism than any other tourism product in the country.

In addition to the already mentioned points that need attention in order to strengthen the tourism sector, there are a number of issues directly linked to the (lack of) training and capacity building (the table below provides suggestions for areas of training and skills development).

In general, there is no systematic approach to a tourism skills development programme. There are some technical vocational education training programmes in place, but these programmes are not adequately tuned to the needs of the private sector, and their scope is too limited to meet the broader needs of the service providers along the entire tourism value chain (IFC 2006a). Besides, there are no nationally accredited standards or curriculum for tourism training. Hotel-Escola Andalúcia (Maputo) has been closed for a number of years now and to date there is no alternative. This makes that operators need to train staff on the job (Batey 2014). Staff productivity is low as reflected by a staff of 3 employees per room, instead of 1.5-2 (international average). Low wages are offset by low productivity levels. Inefficiencies at the supervisory staff level, most of which are Mozambican locals have also been reported (IFC 2006a). Skilled labour (e.g. bi or multi-lingual tour guides, translators, designers, curators, and so on) will become even scarcer as tourism demand increases (IFC 2006a).

5.3 Summary of opportunities and linked training needs in the tourism sector

Table 4: Opportunities in the Tourism Sector in Mozambique

Opportunities	How to capitalise identified opportunities?	Recommendations for S4E / JOBA
Niche markets / specialised tourism products		
Potential to further develop niche tourism products (MICE, Nature based, cultural tourism) (Batey 2014). Bush beach linkages for tourism routes (Kruger National Park - Limpopo - Banhine – Zinave – Vilanculos) (Batey 2014).	Offer specialised products, aiming to capture a certain type of tourists, capitalising the specific opportunities and comparative advantages that the country offers. Training of (preferably local) people for tour guides, hospitality services, tour operators.	Training of people in tourism sector: <ul style="list-style-type: none"> • Marketing and communication; • Customer relations • Networking skills; • Website development; • Business management skills;

Opportunities	How to capitalise identified opportunities?	Recommendations for S4E / JOBA
	Also training for general service providers like taxi and tchopela drivers.	<ul style="list-style-type: none"> Languages (modern European, mainly English, Chinese) (level 3 – 5).
Tourism related officials etc.		
<p>There is space to reduce the levels of corruption (often perceived by visitors as being high)</p> <p>Seize the opportunity to increase the level of tourism awareness & expertise amongst tourism related officials (Batey 2014).</p>	<p>Provide and publicize clear information for visitors of entry/exit requirements and train immigration and airport staff to understand how to handle tourist expectations at entry/exit points (IFC 2006a)</p>	<p>Integrate tourism related topics in the training/ curriculum for customs officers etc.</p>
Tourism establishments (construction etc.)		
<p>Several goods and services for accommodation development and operation are still mainly sourced from the RSA (IFC 2006a). There is an opportunity to source them increasingly at national level.</p>	<p>Sourced for more than 90% from the RSA</p> <p>Architects Interior Designers Furniture/Fittings & Equipment Senior Management Advertising and Sales</p> <p>50-90% sources from RSA</p> <p>Quantity Surveyors Contractors Skilled Labour Transport Quality food supplies</p> <p>Sourced locally</p> <p>Unskilled Labour Some consumables Some building materials (IFC 2006a)</p>	<p>The goods and services sourced for more than 90% from RSA concern mainly longer duration training and the role of JOBA in this may be limited.</p> <p>Via the support of specific courses / training to upgrade workers already involved in the tourism industry they can move on to jobs for better qualified people. E.g.</p> <ul style="list-style-type: none"> Business skills; Marketing; Hospitality issues; Language skills. <p>Training for food suppliers:</p> <ul style="list-style-type: none"> Logistics of food conservation, preparation, etc.

Opportunities	How to capitalise identified opportunities?	Recommendations for S4E / JOBA
		<ul style="list-style-type: none"> • Packaging and handling • Marketing skills • Customer relations • Business skills, in particular pricing and costing
Local agents / tour operators		
<p>There is space for more local tour-operators as well as more tourism entertainment products and ancillary services (guided tours, diving, fishing,). Besides a low offer/ existence, most of the ancillary services are offered by non-Mozambicans and there is potential to create employment for nationals.</p>	<p>Encourage workers at e.g. tour-operators to start their own business as they have already a minimum level of experience. A tourism operator is not necessarily a big enterprise, it can start as a small business of a few people.</p> <p>Furthermore, develop a training programme for potential and current ancillary services providers that require knowledge of special technology and compliance with regulations (e.g. diving, deep sea fishing) (Batey 2014).</p>	<p>Training for future/potential tour operators:</p> <ul style="list-style-type: none"> • Business skills • Specific knowledge regarding the tourism sector • Customers relations and network building • Marketing • Languages (modern European, Chinese) <p>Training in ancillary services:</p> <ul style="list-style-type: none"> • Dive instructor: diving but also knowledge regarding marine biology, etc. • Boatman (ride a boat but also have basic knowledge of dive-codes, maintenance of boat, dive and fishing equipment, first aid, etc.)
Staff in tourism establishments		
<p>Sector can tap into a huge potential labour force in general and women in particular.</p> <p>The generally low level of</p>	<p>Improve skills and competencies of people in various areas in order to be able to respond adequately to the requirements of the sector and to the specific</p>	<p>Skills training in:</p> <ul style="list-style-type: none"> • Hospitality • Housekeeping skills • Restaurant and cooking • Hotel management and logistics

Opportunities	How to capitalise identified opportunities?	Recommendations for S4E / JOBA
<p>education of locally recruited staff, and lack of experience of working in service industries could and should be enhanced.</p>	<p>expectations of the tourists.</p> <p>Establish a systematic skills development programme for tourism industry:</p> <ul style="list-style-type: none"> • Augment curriculum and improve training in TVET (IFC 2006a). • Encourage set-up of hotel schools like the previous Hotel-Escola Andalúcia. 	<ul style="list-style-type: none"> • Languages (main European languages, Chinese, ...); • First aid
<p>Community inputs</p> <p>Current level of engagement of communities in tourism value chain is limited and there is potential for enhancement. In this way the increasing international trend in demand for nature based, inclusive tourism can also be tapped into.</p> <p>Engaging the communities provides potential for job creation at local level in general and for women in particular. Part of these jobs require basic skills levels attainable for people that missed out on formal education. At the same time it can contribute to solve issues of harassment of tourists.</p>	<p>Encourage local SMME to supply products and services to tourist establishments.</p> <p>Develop community based products and services like craft, guided tours to cultural sites, nature sites, ...)</p> <p>Provide support for handicrafts, including by setting up centres that provide both training and selling opportunities (2006a).</p>	<p>Training for (future) SMME:</p> <ul style="list-style-type: none"> • Business skills • Customer relations • Marketing • Product development (market analysis, costing and pricing) (level 3 – 5) <p>Training for tour guides:</p> <ul style="list-style-type: none"> • Presentation skills • Planning skills • Languages • First aid • Basic business skills • Marketing (how to sell your service) (level 1 / 2, level 3 – 5) <p>Short training courses in crafts that are specific for the region / country:</p> <ul style="list-style-type: none"> • Crafts training • Basic business skills • Basic marketing skills (level 1 / 2)
<p>Support services and supplies</p>		
<p>Opportunities for</p>	<p>Offer good quality alternative</p>	<p>Training in installation,</p>

Opportunities	How to capitalise identified opportunities?	Recommendations for S4E / JOBA
<p>alternative energy sources as power supply is often irregular, also to promote green tourism. To promote this local installation as well as back-up support services have to be promoted / strengthened.</p> <p>There is potential for good technical support services (e.g. electricians).</p>	<p>energy sources and promote them as green alternatives. As this may take time to take off there will still be a demand for installation, maintenance and repair of generators</p>	<p>maintenance and repair of e.g. solar power systems (level 3 – 5).</p> <p>Training in installation, maintenance and repair of generators (level 1 / 2).</p> <p>Training in electricity: Installation, repair, maintenance (level 1 / 2 as well as level 3 - 5).</p>
<p>Cross cutting issues:</p> <ol style="list-style-type: none"> 1. Gender and 2. Safety, Health and Environment 		
<p>In comparison to other sectors, a higher proportion of tourism benefits e.g. jobs and informal trade opportunities, go to women. On top of this, tourism can be more labour intensive than other industries such as manufacturing (DFID, 1999; Ashley 2001 in Batey 2014).</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue.</p>	<p>Encourage women to make use of the (job-) opportunities. When offering training, women should explicitly be invited to participate.</p>	<p>For all courses and training offered, ensure that women are participating; if necessary put a quota.</p> <p>Inclusion of Safety, Health and Environment as cross-cutting issue</p>

level 1 / 2 is basic (operational) level;

level 3 – 5 is more advanced (may include some theory but still very practically oriented).

6. CONCLUSIONS

6.1 Employment opportunities

The four selected sectors are offering important opportunities for employment. The agriculture sector, one of the main sectors of the country's economy, presents opportunities in production to substitute imports of e.g. food crops and chickenfeed. There are further opportunities for SMMEs along the value chain in for example mechanization centres and extension service. Furthermore, there are opportunities in food/agro-processing.

Both the timber and non-timber sub-sectors present opportunities that can be exploited for, amongst others, job creation. Training is an important component in materialising the potential. The construction and building materials sector offer significant opportunities in both employment and SMMEs. The tourism sector offers opportunities for employment particularly in hospitality and catering jobs but also in areas like tourist entertainment / activities.

6.2 Changes needed in existing programmes and curricula

Existing training programmes and curricula are mainly in public institutions. They are not fully addressing the different elements required to capitalise on the opportunities within the most promising economic sectors. Besides often being too theoretical and not sufficiently adapted to the present market needs, most training / courses also lack skill in e.g. in conceptualizing business ideas, marketing and other elementary business skill and they lack strong linkages to the industry.

Furthermore, around fifty percent of the Mozambican population is illiterate. Of these, close to 80% have no professional qualifications. According to the National Institute of Professional Training and Employment (INEFP 2007), 90% of those applying for their first job have not finished basic education. Among them, the majority (62%) has no work experience or qualifications (Maugeri 2015). The training offer has to take this into account and adapt the offer to, on the one hand the labour-market demand and, on the other hand, the capabilities of the trainees.

More attention is also needed for the establishment and development of SMMEs; opportunities exist, but relatively few people are capable to seize them and/or are prepared to accept the risk.

From the document analysis it also became clear that much more attention is needed for the fact that training should not be a purpose in itself. In the end the objective of training is to get people into a job and thus it should be demand driven. During the training attention should be paid to this transition from training to work and it should be made an integral part

of the training. Some ways of doing this are practical lessons at the workplace, internships, visits to firms and inviting potential employers to give guest-talks.

The command of soft skills is also very relevant in this context. Most ‘graduates’ (i.e. those that have concluded training or a course) lack soft skills, like e.g. work attitudes, punctuality, problem solving. These skills are not so easy to teach in the short term. They can, however, be developed through (on the job) coaching and specific training, thus requiring industry linkages.

Besides, there is a need to transform training into an inclusive-training, paying attention to the specific needs of women, youth and people with special abilities and building on what they are able to do, instead of excluding because of what they are unable to do.

In general, the technical education and vocational training has been slow to respond to changing labour market demands, especially in the formal sector. The slow pace of reform aggravates the mismatch between the labour supply and the changing needs of the labour market.

6.3 Need to develop a Labour Market Information System (LMIS) and strengthen networking

There is also an underdeveloped LMIS. As a consequence there is, amongst others, an information gap in decision-making processes related to a whole range of policies key to employment creation. Furthermore it results in an inadequate fine-tuning of the training offer and the needs of the labour market. Labour market research, including the tracking of graduates as well as networking is not yet part of the current set-up of training institutes. By putting in place a proper LMIS as proposed by Conticini (2015) in his LMIS study, mismatches between demand and offer of labour can be reduced substantially.

7. BIBLIOGRAPHY

Baines, R., Story, S., Edwards, E., Ingledew-Gale, J., Rafael, A., (2015) **Scoping study for Agribusiness Incubation Model(s) for Mozambique**. The Royal Agricultural University, Cirencester, Gloucestershire, UK. Prepared for the Foreign and Commonwealth Office, the UK Department for International Development and the beneficiary CEPAGRI.

Batey, E. (2014) **Economic cost of conflict in Mozambique; assessing the economic impacts of renewed conflict on the tourism sector**. USAID, Mozambique Support Program for Economic and Enterprise Development (SPEED). Maputo, Mozambique.

Cambridge Economic Policy Associates Ltd – CEPA-IFC (2015) **Mozambique – Agriculture and rural development NLTA (P153476)**, Phase 1; Second draft. World Bank Group.

Cambridge Economic Policy Associates Ltd – CEPA-IFC (2015) **Agribusiness country diagnostic – Mozambique**, Phase 2 v.2 Draft Acct Changes; World Bank Group.

Cardno Emerging Markets (EA) Ltd – changing the future (2015) **Market Systems Analysis of the Building Construction Sector in Cabo Delgado Province**. Prepared for International Labour Organisation

Conticini, A., (2015) **Establishing an effective labour market information system in Mozambique**. A discussion paper; UK AID. Maputo, Mozambique.

DANIDA (2011) **Business development profile Mozambique**

<http://www.google.co.mz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwjU9auCsMXLAhUHVhQKHRldBl8QFggiMAE&url=http%3A%2F%2Fmozambique.um.dk%2Fda%2F~%2Fmedia%2FMozambique%2FDocuments%2FContent%2520Danish%2FDanida%2520Business%2FBusiness%2520Development%2520Profile%2520Mozambique.ashx&usg=AFQjCNFZRhunZ-jlYrvIXWNVfD5I9j5cFQ&bvm=bv.116954456,d.bGQ>

DFID – UK department for International Development (2005) **Making Market Systems Work Better for the Poor (M4P). An introduction to the concept**. Discussion paper prepared for the ADB-DFID ‘learning event’ ADB Headquarters, Manila.

DFID (2008) **Making Value Chains work better for the poor. A tool book for practitioners of Value Chain Analysis**. UK department for International Development, London, UK.

DFID (2014), **S4E Business Case and Annexes**. Maputo, Mozambique.

Fonds Africain de Développement (...). **Projet: appui à la promotion de l’emploi des jeunes et des femmes (PAPEJF)**. Sénégal. Rapport d’évaluation du projet.

Government of Mozambique (2004) **Strategic Plan for the Development of Tourism in Mozambique (2004 – 2013), Volume I**. Maputo, Mozambique.

Grulke, M. (2015) Barriers for investments in planted forests in Mozambique. Powerpoint presentation, workshop Maputo.

IFC (2006) **The tourism sector in Mozambique: a Value Chain Analysis**; volume I.

IFC (2006) **The tourism sector in Mozambique: a Value Chain Analysis**; volume II.

InfoDev (2013) **The Agribusiness Innovation Center of Mozambique: Developing Value Adding Market- led Post-harvest Processing Enterprises in Mozambique**. InfoDev, Finance and Private Sector Development Department, the World Bank. Washington, DC.

Jones, S., Ibrahimo, H. (2007) **The Economic Contribution of Tourism in Mozambique -Present and Future-**. Conferência Inaugural do IESE “Desafios para a investigação social e económica em Moçambique” 19 de Setembro de 2007. Conference Paper no. 18.

Machado Mendes D. (2015) **Policy Note on Natural Forest Value Chains**. Final Version. FAO – TCI Africa

Maugeri, N., Nhabinde V., Quintella R. (2015) **A Strategy and Policy Framework to Support the Development of the Construction and Building Materials Industries in Mozambique**. IGC Mozambique and National Directorate of Construction Materials, Ministry of Public Works and Housing. Mozambique.

M4P (2008) **Making Value Chains Work Better for the Poor**. A Toolkit for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID). Agricultural Development International: Phnom Penh, Cambodia.

Nhabinde, V., Marrengula C.P., Ubisse A. (2012) **The Challenges and the Way Forward for the Construction Industry in Mozambique**. Revised version (Revision undertaken by Claudio Frischtak, Pedro Camarinha and Alberto Cruz).

Nutto, L. (2015) **Improving business climate for planted forests**. Powerpoint presentation Interim workshop Maputo.

OECD (2013) **Investment Policy Reviews: Mozambique – Executive Summary and recommendations**; preliminary version. <http://www.oecd.org/daf/inv/investment-policy/IPR-Mozambique-Oct2013-Summary.pdf>

Pompa, C. (2013) **Literature Review on the Impact of Business Incubation, Mentoring, Investment and Training on Start-up Companies**. EPS PEAKS – Economic and Private Sector Professional Evidence and Applied Knowledge Services; Overseas Development Institute.

Republic of Mozambique (2015) **Preparation mission; proposed agriculture and natural resource landscape management project**; draft; Aide Memoire.

República de Moçambique (2004), **Plano Estratégico para o Desenvolvimento do Turismo em Moçambique (2004-2013)**, MITUR, Maputo, Mozambique.

Smart, T., Hanlon J. (2014) **Chickens and beer – a recipe for growth in Mozambique**.

SNV (2009) **Estudo da cadeia de valor do turismo da cidade de Maputo: recomendações para o turismo pro-pobre. Resumo Executivo**. Netherlands Development Organisation –SNV, Maputo, Mozambique

Sutton, J. with the assistance of Jeque Pimpão A., Simione F., Zhang Q., Zita, S. (2014) **An enterprise map of Mozambique**. Published by the International Growth Centre.

UNCDF YouthStart Global (YSG) (2015) **Youth economic opportunities report**; Inception phase — Youth economic opportunity ecosystem analysis; Mozambique Country Report.

UNIQUE forestry and land use in cooperation with Malinovski Florestal, Siteo A., Nutto L., Grulke, M. (2015) **Assessment of the Investment Climate in the Mozambican Planted Forest Sector**. TA Project: Improving the Business Climate for Planted Forests. Client: World Bank. Freiburg and Maputo.

USAID (...) the potential of the tourism sector in Mozambique to impact poverty.
http://www.tipmoz.com/library/resources/tipmoz_media/cat3_link_1115667462.pdf

Vignati, F. (2009) Estudo da cadeia de valor do turismo na cidade de Maputo: recomendações para o turismo pro-pobre. SNV-Netherlands Development Organisation, SNV, Maputo.

Wiegel, W., Matenga A. (2015) **A market system analysis of the building construction sector in Cabo Delgado, Mozambique**. Cardno Emerging Markets consultants. Commissioned by the United Nations Joint Programme in Mozambique and the ILO LAB (market systems development for decent work) programme

WTTC - World Travel and Tourism Council (2014) **Travel & Tourism economic impact 2014, Mozambique**. London, U.K.