



TOWARDS THE INCLUSION OF SMES IN MOZAMBIQUE'S NEW ECONOMY

A MARKET SYSTEM ANALYSIS OF THE BUILDING CONSTRUCTION SECTOR IN CABO DELGADO, MOZAMBIQUE

This paper summarises the findings of the market system analysis of the building construction sector in Cabo Delgado, Mozambique. The analysis was conducted by Cardno Emerging Markets consultants, Mr Wolfgang Wiegel and Mr Avencio Matenga, and commissioned by the United Nations Joint Programme in Mozambique and the ILO lab programme. To request the full report please contact: thelab@ilo.org

THE UNITED NATIONS JOINT PROGRAMME AND THE LAB

With support of the Sustainable Development Goals Fund (SDGF) the United Nations Joint Programme was created in November 2014 to seek ways to contribute to the creation of more and better jobs in local economies of Mozambique where large-scale extractive industry investments (EI) take place.

The objective is to ensure that the local labour force has access to employment opportunities and that national SMEs have access to business opportunities in the core value chains surrounding EI projects.

In this context, the UNJP has partnered with the ILO Lab – an action research initiative aimed at testing ways to better monitor and measure employment outcomes through market systems development – to conduct a MSA of the building construction sector in the province of Cabo Delgado, Mozambique.

INTRODUCTION

The Cabo Delgado Province in Northern Mozambique has a population of approximately 1.8 million inhabitants. It is expected that massive investments in the liquefied natural gas (LNG) sector of up to \$54 billion will take place here between 2016 and 2024, leading the small town of Palma to expand considerably with a projected need for the construction of 10,000 new houses in order to accommodate workers involved in the LNG industry.

The construction of new housing, led by multinational companies Anadarko and ENI, is expected to attract approximately 15,000 workers (25 % skilled; 57% semi-skilled and 18% unskilled) while, at the same time, it represents a new opportunity for local and regional small and medium sized enterprises (SMEs) to benefit from this either as sub-contractors or suppliers.

Despite these opportunities, SMEs still face a series of constraints that inhibit their effective inclusion in the bidding and subcontracting processes. Their exclusion is linked to a number of market system failures and constraints, to the current setup of the companies and the overall situation of the sector. In response, The United Nations Joint Programme in Mozambique (UNJP) is looking for measures to support the inclusion of local and regional construction companies, in order to expand and improve employment in the sector and to increase value added within the construction market system.

METHODOLOGY

In the effort to look for solutions the UNJP conducted a **Market Systems Analysis (MSA)** of the building construction sector in the Cabo Delgado province. This includes the analysis of the core functions in the building construction value chain and in the wider market system comprised of supporting functions, and the rules and regulations surrounding the core value chain.

The analysis, which entailed primary and secondary research, including a workshop with key stakeholders to validate the findings, identified the key underlying constraints that inhibit SMEs from improving their competitiveness and productivity, thereby from contributing to the creation of more and better jobs. Focusing on market-based opportunities, which play on both the incentives and capacities of public and private players to bring change, the analysis proposed feasible interventions that can lead to systemic change.

I. THE CONSTRUCTION INDUSTRY IN CABO DELGADO

In Mozambique, construction has experienced a reduced GDP from 2006 to 2011¹; however, with the expected LNG sector boom this will dramatically increase its share to an estimated 20% contribution in 2020².

¹ See The Business Year – Mozambique (2013)

² IMF (2013)

Table 1. Classification of construction companies

Class	Upper bound project amount (in thousand Meticaís)	Minimum capital (in thousand Meticaís)
1	2,000	20
2	3,400	50
3	10,000	150
4	20,000	500
5	60,000	1,500
6	200,000	5,000
7	+ 200,000	10,000

Source: Boletim da República, 11th June 2009

There are approximately 271 construction SMEs in Cabo Delgado.³ Construction companies need to be licensed by the government according to the “*Regulamento do Licenciamento da Actividade de Empreiteiros de Obras Públicas de Construção*” to participate in public project tenders. Companies are classified into seven classes, wherein 79% of companies are class 3 and can participate in tender values of up to 10 million Meticaís, while only 4% are class 7 and can participate in projects of up to 200 million Meticaís.

Around 90% of the total construction market is linked to Government contracts, which creates competitive pressure. Class 7 companies experience less competition as only five companies are competing with each other, whereby class 3 companies face more competition for public tender contracts. Most companies are located in the Pemba area, working in different areas of construction, including buildings, roads, and water infrastructure.

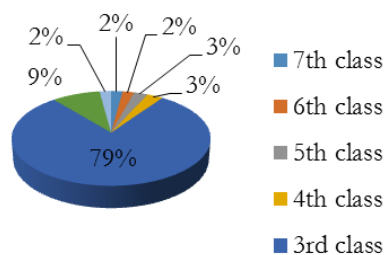
The construction industry is represented by a construction industry association, which is not very effective at its current performance and organisational level. Construction companies expressed the urgent need for better sector representation and service provision, as they do not feel prepared for being subcontracted, mainly due to the lack of knowledge about project requirements and standards.

II. THE BUILDING CONSTRUCTION MARKET SYSTEM

The building construction market system is displayed in Annex 1. This illustrates the opportunities for SMEs to be included, primarily as direct/indirect subcontractors and suppliers.

The main demand side **actors** are: clients (private sector or government); customers and users of the building construction. The main supply side actors are: design engineers and architects; construction companies (Tier 1 and Tier 2 contractors or subcontracted companies); material suppliers, construction material firms, equipment rental companies and importers/distributors of basic supply.

Figure 1. Class allocation of construction companies



III. SECTOR STRUCTURE AND PERFORMANCE

DEMAND SIDE

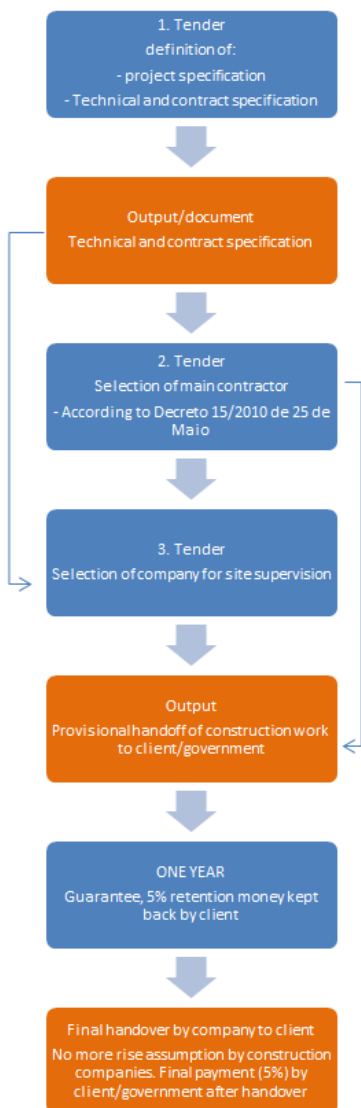
GOVERNMENT

The most important client is the government which provides 90% construction projects, mainly in infrastructure of hospitals, schools, roads and water supply. This requires a registration system for SMEs to participate in tendering procedures.

The government uses standardised tendering procedure for construction companies and services providers. According to the decree governing this process, each government department must count with a *Unidade Gestora de Aquisicoes* (UGEA), which will manage all tendering procedures and information. However, more complex building and infra-

³ See Direção Provincial de Obras Públicas, Habitação e Recursos Hídricos (2014)

Figure 2. Tender process



structure projects financed by national funding are governed by the Ministry of Public Works.

Information on the average number of annually published tenders and size of projects could not be retrieved. Government representatives stated that no central statistics are available that would cover all tender activities at the local, regional, district and national level. Furthermore, no information is available on ‘who’ and ‘which class of companies’ won the tenders.

Companies’ opinions regarding the openness of the tendering process differ according to the size and class of construction firms. Large class 6-7 companies consider the applied system open to all and fair, according to their maximum ceiling of project sizes related to the class rating of the companies. Smaller class 3-4 companies claim that requirements of the system exclude small companies due to the high costs and compliance associated with bidding.

PRIVATE CLIENTS

As a result of the large expected investments in the LNG projects it is projected that more foreign investors and construction companies will come to Mozambique. From 2016 onwards, Anadarko and ENI (main contractors) will lead the construction of houses, and are likely to consider local SMEs for smaller subprojects such as the housing construction project in Palma and other general infrastructure projects.

International companies apply their own due diligence processes to ensure that working and quality standards, required certificates and documents are provided by the local SMEs. 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 SMEs. The information policies of international companies related to core business, standards and potential subcontracting projects are restrictive.

In order to address the lack of professional human resources, a few of these companies have set up several training and social development programmes. Other individual housing projects are, to a large extent, implemented by small informal construction firms. Clients contract individual specialist services or day labour when required.

SUPPLY SIDE

BUILDING CONTRACTORS - LARGE INTERNATIONAL CONSTRUCTION COMPANIES

As mentioned, international companies will act as main contractors to the government for the housing project in Palma, fulfilling the requirements local and regional SMEs are not capable of achieving so far.

BUILDING CONTRACTORS - NATIONAL BUILDING CONTRACTORS

There are 271 construction companies registered in Cabo Delgado province. Their estimated output capacity or total number of employees is unknown. This is partly due to

the fact that companies do not have to provide such information to association or to a government statistics office.

The steady growth of national production capacity of cement can be an indicator of the rapid growth rate of the construction sector in the country with large demand from infrastructure projects and much lower demand from building construction. Analysts state that present levels of cement production are still low in comparison to the booming national construction sector. The production capacity of the five currently largest cement factories in the country is not sufficient to satisfy the total consumption. As a result, large amounts are still imported from South Africa, China and India, as well as others.

This is also the situation in Cabo Delgado where cement is both resourced nationally and from abroad. Exact numbers are not available, although companies stated that the cost of purchase is similar. The largest cement factories in the country are CS Cimentos, ADIL Cement, and Maputo Cement and Steel.

RELATED AND ALLIED SERVICE PROVIDERS AND DESIGN ENGINEERS

These include companies specialized in rental of heavy machineries and equipment. Such companies are located mostly in Maputo and in areas where large investments take place (e.g. Nacala-Porto, Tete, Maputo, and eventually Pemba). A small number of equipment rental companies are active in Pemba.

The individual engineering market is not very developed. Most of the companies (at least from class 3 upwards) have one engineer employed who is responsible for design work but also for the bid proposal management. Companies reported that in exceptional cases external freelance engineers are asked to prepare tender proposals. It is likely that the LNG investment and new infrastructure in Palma will trigger the market for engineering services in the region.

PROBLEMS CONSTRUCTION SMES FACE

Problems facing construction SME's are multiple and vary according to the size of the company. 93% of all registered companies are class 1-4 rated with little market power and in no position to gain large projects from international companies.

The main constraints they face 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.

SUPPORTING FUNCTIONS

VOCATIONAL EDUCATION AND PRACTICAL TRAINING

The *Instituto Nacional do Emprego e Formação Profissional* (INEFP) remains the largest and comparably best organised training school for short training courses (3-4 months) in the

region. INEFP offers training courses for several trades, also for brick layers, painters, electricians, plumbers, and carpenters.

Current demand for training in construction trades is low. INEFP state that the reasons for this are that construction work is not very popular, and young people often aim for office jobs. Companies complain about the lack of available experienced, motivated and well-qualified workers. These complained that the work of trained young workers in many cases is low and insufficient.

INEFP cannot offer more courses due to financial constraints and insufficient room and equipment. Also, the training sector has not adjusted its curricula to the requirements of the gas project in Palma and to the practical training requirements demanded by companies.

FINANCIAL SERVICES PROVIDERS AND ACCESS TO FINANCE

Access to finance and to suitable financing conditions for SMEs are very limited. Insufficient collaterals of companies, high interest rates between 13-15% per annum and restricted offers for long term credit are limiting factors. High costs of bank guarantees, about 5-7%, which are required for participation on public tenders, impede participation of small companies.

Often bank employees are not informed about financing packages for the commercial sector and priorities are large companies. Bank branches are not able to take credit decisions as all processes related to credit lines and finance schemes are centralized in the head offices in Maputo.

ASSOCIATIONS AND REPRESENTATIVE ENTITIES

At the provincial level, the sector is represented by the *Associação dos Empreiteiros* which is affiliated with the *Federação Moçambicana de Empreiteiros*. Associations are weak and companies would like to see stronger representation and lobbying at the political level, a more pro-active service minded approach to promoting business and to play a stronger role as a public and private communication platform. It was commented that representatives of associations do not show sufficient leadership in lobbying with other stakeholders and actors in the construction sector and are not sufficiently representing all members in the sector, often focusing on developing their own business first.

RULES AND REGULATIONS

Companies consider the way VAT is handled by government to be one of the main constraints in terms of adversely effecting cash flow, as referred to the reimbursement delays due to the bureaucratic procedures of the National Tax Authority (NAT).

The representative of the tax authority commented that two main problems relate to VAT reimbursement: unclear VAT reimbursement claim process by companies, often

not aware of the correct procedures; and frequent liquidity problems of governments for timely payback of VAT because VAT payments are used for other budget lines.

The government often exceeds the maximum 90 days stipulated by law. However, since the contractor issues the voucher, the VAT has to be paid in advance. This often creates cash flow problems for SMEs.

The government requires an advance payment of income tax for entrepreneurs. The basis of gross profit calculation is the last year and the first six months of the current year. In the event that the company does not reach forecasted profits by the end of the year, the National Tax Authority does not always return the excess income tax payment and the company takes the hit (tax rate: 30-40% income tax on profits).

IV. CONSTRAINTS AND OPPORTUNITIES IN THE MARKET SYSTEM

A constraints analysis was performed to find the key underlying issues in the functions, rules and regulations restricting improved working conditions within the sector. For each core constraint, the associated systemic causes are identified in Table 2.

Table 2. Constraints analysis and their systemic causes in the building construction sector

Constraints	Systemic causes of constraint
Companies have cash flow problems	<p>High (self-induced cost of doing business)</p> <ul style="list-style-type: none"> • High costs for banking procedures (bank guarantees and interests) • Repeated need to bring competent workers from central/south Mozambique • Low productivity, labour and process related • Non-conductive public laws (workers legislation, high costs of tender participation) <p>Unsuitable financial conditions from banks</p> <ul style="list-style-type: none"> • Collateral requirements are too rigid for SMEs • Unfavourable credit and bank fee conditions • No alternative credit lines for credit programmes in the financial market <p>Unfavourable payment conditions</p> <ul style="list-style-type: none"> • 30 days due date of payment not respected by clients • VAT reimbursement practice • Companies do not use ICT facilities • Missing dissemination platform
Lack of skilled and capable manpower	<p>Lack of efficient 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 • Insufficient pressure by private sector and industry toward training landscape <p>Low professional quality of graduated workers</p> <ul style="list-style-type: none"> • Admission standards are low • Outdated and basic curricula • Lack of investment in practical learning equipment <p>Trained workers do not match companies demand</p> <ul style="list-style-type: none"> • Insufficient practical experience after finishing training course • Low worker's motivation and working culture

Constraints	Systemic causes of constraint
	<ul style="list-style-type: none"> • Outdated curricula, often not covering company's demand
<p>Institutional fragmentation and low degree of organisation and coordination between private and public sector</p>	<p>Public and private sector have no common cooperation and information platform</p> <ul style="list-style-type: none"> • Private construction sector does not trust public sector • Top-down administrative structure does not foresee cooperative platforms • Companies have not yet realised the benefit of P&P platforms for improvement of business environment <p>Weak association of construction companies</p> <ul style="list-style-type: none"> • Not sufficient proactive approach by companies • Market for business services is underdeveloped • Insufficient financial resources of association due to low membership <p>Traditionally, construction companies do not cooperate</p> <ul style="list-style-type: none"> • Unawareness of benefits for cooperation and cooperative spirit • Considering competition as a threat to own business • Little trust between entrepreneurs and in the business community
<p>Low degree of inclusion in large projects of international companies</p>	<p>No application of international standards</p> <ul style="list-style-type: none"> • Not ISO 9001 certified • Low adherence to OSH Standards • Applicable standards not known to local industry <p>Low general competitiveness of local companies</p> <ul style="list-style-type: none"> • Limited application of standards • Low worker's professional standard • No investment in new technologies <p>Insufficient information available</p> <ul style="list-style-type: none"> • No information dissemination procedure • Not much contact with international companies • Companies do not use ICT facilities • Missing dissemination platform
<p>Business environment not conducive for construction SMEs</p>	<p>Education and training standards unhelpful to employment</p> <ul style="list-style-type: none"> • Low standard of vocational training and practical training • High rate of illiteracy • Little cooperation between training market and industry • Curricula not up to required standards <p>SMEs consider tender procedure not suitable</p> <ul style="list-style-type: none"> • Small companies do not have experts or engineers for proposal • Cost of tender participation is high • Tender access criteria is complicated for SMEs • Limited resources of own administration to fulfil tender framework <p>Limited access to suitable financing conditions</p> <ul style="list-style-type: none"> • Collaterals are not sufficient for SMEs • High costs for bank guarantees • Unfavourable credit conditions • Limited availability of development funds for SMEs <p>Government practice on VAT reimbursement harms companies</p> <ul style="list-style-type: none"> • Late payment of reimbursable by government • Cash-flow problem due to time lag between payment and receiving from clients

V. RECOMMENDATIONS FOR INTERVENTIONS TO STIMULATE SYSTEMIC CHANGE

Based on the findings of the Market System Analysis contained in Table 2, a set of interventions with their corresponding market system facilitation activities are outlined below:

INTERVENTION 1: CONTRIBUTE TO A NEW VOCATIONAL TRAINING SYSTEM

This includes career guidance and curricula development based on market demand that includes new and green technologies, vocational training (including entrepreneurship), job placement and life skills development.

INTERVENTION 2: INITIATE A COOPERATION AND INFORMATION PLATFORM WITH CHAMBERS AND ASSOCIATIONS

Support the organisational development of the *Associação dos Empreiteiros de Cabo Delgado* and strengthen the associative structure for the construction industry, fostering a cooperative spirit across the construction market system and helping develop a market for BDS. Strengthening of the association requires training in leadership and institutional management, and support to initiate web based services and information for members about business opportunities, financial programmes, among others.

INTERVENTION 3: EXECUTE AN ASSESSMENT OF SME FINANCE PROGRAMMES AND ACCESS TO FINANCE

Many companies did not have sufficient information about existing financial programmes and others complained about local bank branches not being aware on the availability of programmes. The assessment should include all major business banks, government and available permanent or temporary financial programmes as well as credit options for SME from other sources.

INTERVENTION 4: SUPPORT FOR A TRAINING CENTRE IN PALMA

Contribute to the investment of a downsized INEFP training centre in Palma, but based on an overall upgrading of training curricula on traditional construction and new technologies. Options are: government seeking cooperation from international and large national companies for a joint effort to create an investment pool. Another option is to request a small part of the regionally created income tax for temporary investment (public/private joint investment).

INTERVENTION 5: SUPPORT THE DEVELOPMENT AND INTRODUCTION OF AN UPGRADED CURRICULA FOR CONSERVATIVE BUILDING CONSTRUCTION AND FOR NEW PROFESSIONAL PROFILES AND TECHNOLOGIES

Improvement of new curricula content, promoting new learning concepts and providing Training of Trainers for new and green technologies in line with Mozambique's green economy roadmap (2015-2020)⁴.

INTERVENTION 6: INITIATE AND FACILITATE THE CREATION OF A REGULAR FORMAL COMMUNICATION MECHANISM BETWEEN ANADARKO, ENI, OTHER INTERNATIONAL COMPANIES, INEFP AND SELECTED COMPANIES TO PROVIDE PRACTICAL TRAINING

This mechanism would evaluate training requirements and curricula content, fulfilling international and specific standards that are required by multinational companies, such as Anadarko. Better-trained construction workers will on the

⁴ See Green economy at Rio + 20 declaration: www.static1.1.sqspcd.com

longer-term support local construction companies' efforts to be subcontracted by large international firms. Better-trained workers will also improve their chances and value in the building construction market.

INTERVENTION 7: INTRODUCTION AND MARKET DEVELOPMENT OF GREEN INITIATIVES AND NEW TECHNOLOGIES

To initiate a market development campaign for introduction of solar energy and solar water heating in housing construction in the Palma housing project, but also for market development of general housing in the region in cooperation with selected local or international BDS providers. A “new-tech & green construction” showroom in Pemba in cooperation with interested class 6 or 7 local construction companies as key partners can create demand among clients and construction companies. The showroom can contain several new building technologies and be a focal point for R&D in the sector. As for an option at the Palma housing project, government, being the tender authority would need to be involved in any such discussion at the early stage.

INTERVENTION 8: SUPPORT THE SETTING UP AND EXECUTION OF AN UPGRADING PROGRAMME TO IMPROVE COMPANIES' PROCESS MANAGEMENT AND QUALITY SYSTEMS

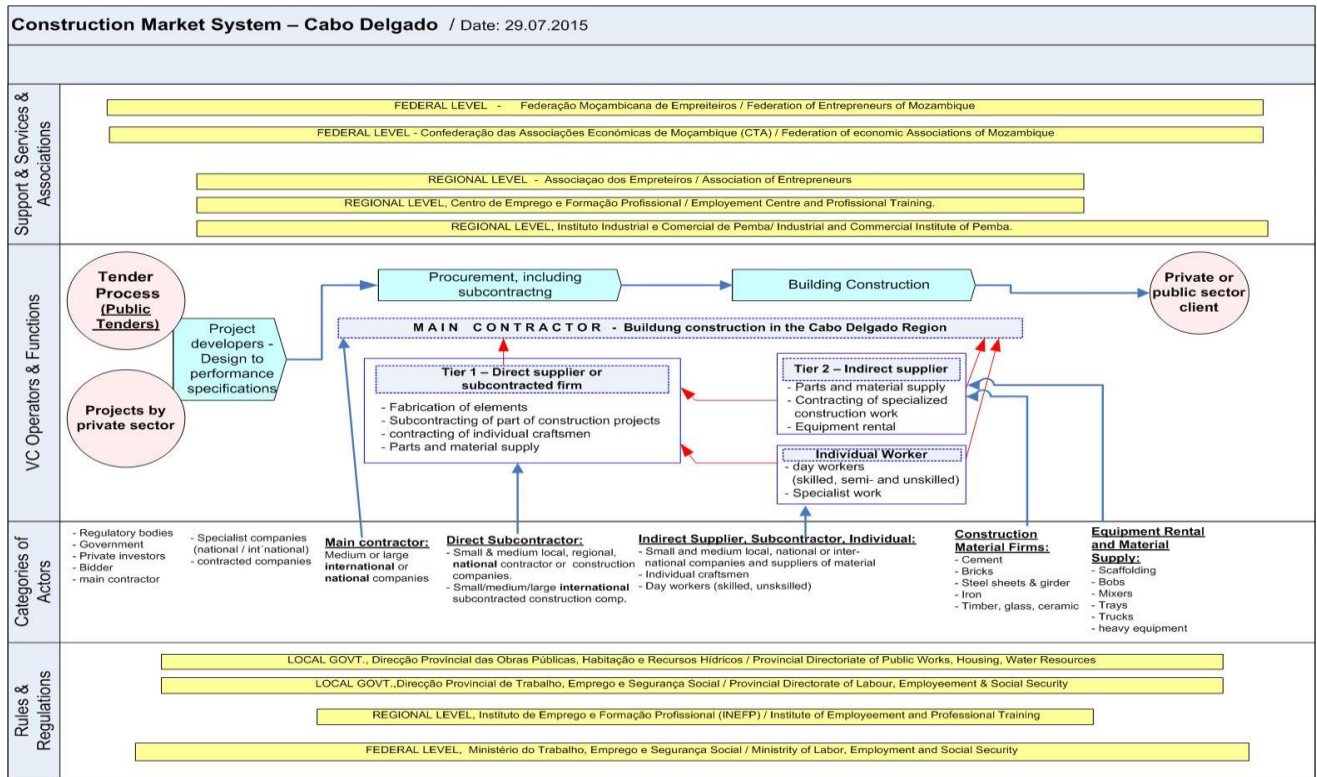
Introduction and certification of ISO 9001, and strengthening of competitiveness: The introduction of a formalised systemic company process consultancy program for medium sized companies from class 4 – 7 can create demand by class 1-3 companies to grow and upgrade to a higher class in order to be included in the training and process consultancy programme. The programme would contain crucial elements to help increase the company's national and international competitiveness: international standards, financial management, cost calculation concepts, OHS, stepping-out to new technologies.

INTERVENTION 9: SUPPORT THE CREATION OF A ONE-STOP SHOP INFORMATION NETWORK FOR THE CONSTRUCTION SECTOR

Initiated, mentored and monitored by donors, a web based all-embracing database about standards and rules and regulations for the construction sector to be implemented. The one-stop-shop can be coordinated and managed by the association or a building sector cooperative.

VI. ANNEX

Annex 1. The building construction market system in Cabo Delgado



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