

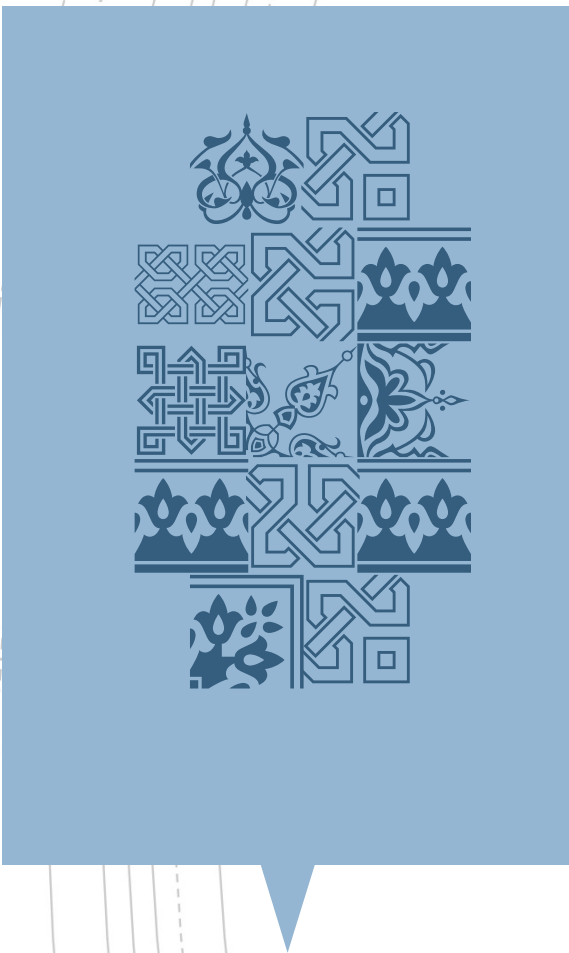
PQSC NEWSLETTER



SEPTEMBER 2022
EDITION



❖ In This Edition:



- ❖ **CHAIRPERSON MESSAGE**
- ❖ **BUILDING CONSTRUCTION PROCESS FROM START TO FINISH**
- ❖ **BUILDING A HOUSE – *HOW TO AVOID CONTRACTUAL DISPUTES?***
- ❖ **THE PQS AS EXPERT WITNESS AND MEDIATOR**
- ❖ **GLOBAL CHANGING ROLES OF QUANTITY SURVEYORS**
- ❖ **INFLATIONARY MARKET**
- ❖ **EVENTS**
 - PRESENTATION BY PQSC FOR MBA
 - LAUNCHING OF INFORMATIVE VIDEO ON QUANTITY SURVEYING PROFESSION



Chairperson Message

Dear Readers,

It is with great pleasure and satisfaction that the Professional Quantity Surveyors' Council (PQSC) presents this third issue of Newsletter – September 2022 Edition.

Topics chosen and why?

Many articles in this newsletter address the interests of the public at large and deal with simple situations which we encounter while constructing our own house or being involved in any other construction project.

Such issues if not addressed, may tend to increase the cost of the project or create unnecessary hassles. The topics encompass the following:

- Understanding the process of building a house step by step and how the QSs if involved, from inception to completion—may assist the Client in completing the project ***within budget and as per specifications.***
- How contractual disputes may be avoided during execution of the project, if only, a proper contract agreement is prepared. This again forms an integral part of the Quantity Surveying duties
- Understanding the causes of disputes and how QSs are involved in dispute resolution processes such as Litigation and Mediation
- The roles of Quantity Surveyors and how these roles have changed with technology and digitization. We also discuss the opportunities and challenges facing the profession.
- How the construction industry has been through waves of inflation since the year 2020 as the costs of construction materials have faced a dramatic escalation lately

Why PQSC?

At the PQSC, we are committed to creating an ambience for nurturing excellence in our profession by ensuring that professional ethics prevail and that requirements of the PQSC Act 2013 are being adhered to and disciplinary actions are being taken in cases of default.

Thanks to the great job undertaken by our members of the Registration Board, PQSC ensures that newly Registered Quantity Surveyors are confident and competent to face the challenges of the Quantity Surveying field.

QSs in the Banking sector

In view of promoting the role of Quantity Surveyors in the Banking Sector, PQSC gave a detailed presentation to the Mauritius Bankers Association (MBA) about the added value of having QSs on board. This highlighted ~~as~~ how QSs use their expertise and experiences to prepare the initial assessment report and drawdown reports, protecting both the financial institution and the developer especially for loan disbursements. Representatives of all banks were present and gave very positive and encouraging responses.

Awareness to students

The PQSC has launched its first informative video about the Quantity Surveying Profession, which may be of great help to school leavers who intend to pursue higher studies and choose a career path. This video, titled ***“Why opt for Quantity Surveying”***, is now available on the PQSC website.

Conclusion

As the Chairperson of PQSC, I wish to seize this opportunity to thank my team comprising the members of PQSC, members of the Registration Board and the different writers of this newsletter for their invaluable dedication and contribution to the Profession.

“Coming together is a beginning; keeping together is progress; working together is success.” – Henry Ford

Satyen Deepchand, Chairperson

Building Construction Process from Start to Finish



Understanding the process of building a house step by step can allow clients to keep track of the schedule, as the project progresses. The building construction has different stages like planning, designing, site preparation, foundation, column, beam, wall and slab construction, services, fixing openings, plastering, and finishing work. As such the Building construction process can be divided into two phases, i.e:

- A The Pre-Construction Phase
- B The Construction Phase.

A. Pre-Construction Steps (Phase I)

1. To Acquire the Plot of Land

While it is considered wise to select a land which has all of the desired facilities available, and is free from any issues, such as the presence of caves, steep level differences or underground rocks, yet in most cases, we have to deal with what we have available to us. Nevertheless, with the adequate advice, the right solution is accessible. The construction industry has kept the pace in our country and you can rest assured that there are reliable techniques and designs, well within our reach for any situation.

2. To Seek Technical Assistance

Once the plot of land is selected, you can move to the design stage whereby an Architect or a draughtsman, depending on the size of the development, may be appointed. For a building above 150m² you would require an Architect with respect to the building regulations in Mauritius. The Architect will prepare the plans as per the building requirements, number of rooms, flats or shops, based on your criteria and budget. He/she will consider all the regulations in place, sustainability issues and functionality to provide you with the adequate advice.

The input of a Structural Engineer will be needed for the details of the reinforcements, the concrete grade, the depth and type of the foundation and the thickness of the floor/roof slabs among other things. In some cases, Mechanical and Electrical Engineers may be solicited for their input on works related to Plumbing and Electrical.

3. Budget Estimate

This step is very often overlooked by many clients, as they entrust the whole pre-construction phase and construction phase to a Builder or, they wait for the completion of the building plan to request a quotation from a builder, per se. But the budget estimate is essential for a successful project, as it contributes to the following understanding:

- The feasibility of the project,
- The risks associated with the project and the modus operandi to manage those risks,
- Potential value engineering and value management of the project, thus cost savings,
- Cash flow forecast,
- Pre-approval for loans could be sought in advance, and

- The viability of phasing the construction process.

4. Building Permit

Before a builder can start work on site, the local government must approve the design and provide permits for everything from the zoning and grading (changing the contour of the land to accommodate your home and driveway) to the septic systems, home construction, electrical work, and plumbing work. Once the building permit is acquired, physical construction can begin.

The following documents should be provided to the relevant local authorities (Municipal Councils & District Councils) when applying for the building permit:

- The Contract for the land.
- Architect's drawings in 2D consisting of the site plan, location plan, the floor layout, the roof layout, the elevations, sections and other relevant details.
- Structural Engineer's details of the reinforcements and the concrete structure dimensions etc.
- Clearance from the CEB, CWA and Waste Management Authority.

5. Selecting a Builder

Traditionally, Mauritians have been procuring the construction of their houses through labour only management system. The owner would provide the materials and act as the Project Manager, and the labour-only contractor would construct the building according to the plans.

Lately however, clients are getting less involved in the construction process by appointing a Main Contractor to be responsible for the entire construction process including supply of construction materials and equipment. In this context, the track record of a Contractor should be investigated into before entering into a Contract, since Contractors with ample experience can better respond to common issues in projects. Care must also be taken to include all the work-related details, in clear wordings, in the contract documents.

The contract documents should cover layout and work details along with the payment methods, time scales, and costs. The conditions of the Contract should be thoroughly checked before signing a final deal. It is advised that the risks allocation should be understood by both parties, and provision for insurance policies to cover certain risks should form part of the Agreement.

B. Building Construction Steps (Phase II)

1. Site Preparation or Levelling

This work involves the clearing of the site, removal of roots and debris, site levelling and setting out.

2. Excavation

The ground is excavated with the help of excavating machines as per the building dimension specified in the drawings, to make way for the foundations of the building.

3. Foundation and substructure

The foundation of the building is the support of the building as it transfers the superstructure loads to the ground. The foundation will include the strip footing and the column bases on which the starter columns, ground beam and plinths, and masonry block work, (up to ground floor level) are constructed.

4. Ground floor Slab

Before proceeding with the casting of the ground floor, the internal areas and all excavated trenches are backfilled with hardcore materials, rocksands and soil. Then a damp-proof membrane is laid before placing the reinforcements. After fixing the temporary formworks along the sides of the ground floor slab, the concrete is poured.

5. Superstructure

The superstructure is the portion above the ground floor level of the building. The main components of the superstructure are columns, beams and masonry blocks.

6. The Lintel Over Door and Window Gaps

The lintel is constructed on the door and window to support the masonry work over it. After that, further masonry work is done.

7. Floor Slab or Roof Structure

The formwork is fixed to the soffit and the sides of the RC floor/roof slab resting on the RC columns and beams. Over the slab's formwork, reinforcement is tied, as per the detailed drawing, before concrete is poured, vibrated and compacted as per the Structural Engineer's recommendation.

8. Door Window Framing and Fixations

This step involves the supply and fixing of the Door and window frames as per specifications and drawings.

9. Electrical and Plumbing

Nowadays buildings are constructed with a clean finish in which electrical and plumbing works is not in evidence. They are concealed in the walls and slabs and are not visible after the finishing work is carried out. The point and pipe ends are left out such that later they can be fixed with the electrical fittings and plumbing fixtures.

10. Exterior Finishing

This work will include external plastering and finishing work. External cladding (stone or timber) or Marmoran finishes can also be done to enhance the elevation of the house. However, an assessment of the durability of those finishes and the associated maintenance costs would be recommended prior, to preclude unpleasant experience.

11. Roof Finishing

On top of the RC roof, waterproofing system is laid to prevent any leakage through the slab. It may be noted that a 10 years guarantee is provided by the specialist contractor in charge for this work.

12. Internal Finishing

Internal walls may be plastered with a smooth finish, and flooring may be done with tiles or other materials based on the choice of the clients. To prevent abortive works or delay, it is advisable that the client decides well in advance, and make appropriate timely order of the finishing materials (whether timber, tiles, vinyl etc...).

Subsequently, internal walls are painted or textured while in wet areas, wall tiles are normally preferred.

13. Woodwork and Fixture Fittings

At this point, major part of the construction work is completed. Built in furniture work can be started, while electrical fittings, switchboards, and plumbing fittings are completed.

14. Painting Work

The purpose of house painting is to give our house a long life with adding colours to enhance the house aesthetics. The painting work not only adds colours to the building but also protects the structure from all stain, mud, sunlight, rain, dirt, etc. You should therefore choose your paint accordingly.

Conclusion

The above steps are basic steps for the construction of a house with flat roof in RC Concrete and masonry blocks. Whatever the type of construction you may be involved in, just be aware how to break down the process. Become conversant with the materials and finishes available on the market, along with the suitability of those materials for the region you are constructing the project. Above all, always feel willing and comfortable asking for advice and guidance from a Quantity Surveyor, on the project's cost management.

Building a house - How to avoid contractual disputes?



Introduction

Embarking on a housing project for an individual is not just building a house but a dream. Often one will build a house only once in his lifetime and this could be an exciting and pleasant experience or might as well be a nightmare. So, one should be very careful while embarking on such engagements to avoid nasty surprises.

The building construction process has been explained in detail in this newsletter with references made on disputes resolution as well. The objectives of this article are to highlight on shortcomings in the contractual arrangements that often leads to disputes while engaging on contracts for small dwellings, and how to avoid them for a successful and hassle-free delivery. It might be helpful for those drafting such contracts and also for their client engaging in the contract. It is recommended that such contracts, be drafted by someone knowledgeable, and based on field of study and competence, Quantity Surveyors are the right professionals for such contractual tasks.

Essentials of a contract for a small housing project

In principle a contract can be in written form or oral (words of mouth) as well. Though oral contracts are easier to implement they are not advisable under the Civil Code for big projects but rather for small undertakings whereby the risks involved is minor and manageable. It is always recommended to enter into a written contract with all essential terms and conditions defined, agreed and incorporated.

Contracts can be tailor-made or based on a standard form contract which parties can customise to suit their requirements. Since a few years, the Construction Industry Development Board (CIDB) has issued a specific form of contract which is suitable for small residential units and can be downloaded from the website of the CIDB.



Below is a list of documents which are essential for a proper contract to be entered into between a client and a contractor:

1. An agreement with all terms and conditions.
2. A formal offer from the builder with the project cost being clearly defined.
3. A formal acceptance from the client in writing.
4. Bill of Quantities, stage payment schedule or any form of financial arrangement.
5. Schedule of Rates if there is no Bill of Quantities.
6. Project drawings including architectural, structural and services (electrical, plumbing, etc if available).
7. Specifications outlining the standard norms for Construction.
8. Any other documents necessary for the performance of the contract.

Terms and conditions essential for the contracts

Before entering a contract both parties should agree on terms and conditions necessary for the due performance of the contract. Though each contract is specific, a list of the general terms and conditions which might be relevant to most contracts for such developments is as follows: -

1. Contract price - agreed either as a rate/m² or a fixed sum;
2. Completion time agreed and defined - Date of start and completion to be clearly specified;
3. A penalty clause for late delivery - A fixed amount for each day of delay;
4. Terms of payment - Either an agreed amount per stage of construction or assessed at a weekly, fortnightly or monthly basis;
5. Rights and remedies on defaults either by Employer or Contractor - Parties must be aware what recourse they have in the event a party is at fault;
6. Mechanism for dispute resolution - Parties must be aware how disputes will be addressed and resolved; and
7. Any other terms agreed between parties for due performance of the contract

Shortcomings in contractual arrangements - How to avoid them?

Today, though parties do enter some sort of written contracts, contractual disputes do arise and years are spent in court cases by the parties. This is mainly due to shortcomings in their contract which affects its performance.

I have personally been involved in many of disputes and based on my experience, a list of common shortcomings which often leads to disputes or affects the performance of such contracts is provided below:

1. Contract not been prepared by knowledgeable person - Contracts been prepared by persons of practically very little or no contractual knowledge;
2. Contract not based on standard forms of contract and drafted in an irrational manner - Often important terms and conditions are missed out;

3. None-comprehensiveness of contract - Not all essential terms and conditions included
4. Terms and conditions often one side - This gives an advantage to one party
5. Terms and conditions manipulated - Most of the time in the advantage of one party

I will now elaborate on a few very common shortcomings which account for most of contractual disputes in the industry or contribute to the non-performance of the contract, as listed hereunder:

(i) Front loading in contracts

Front loading is very common in many contracts whereby the terms of payment are manipulated to the advantage of one party. Usually, it occurs in contracts based on stage payment provisions whereby the amounts for stages at the start of projects are grossly over-estimated and does not reflect the real value of the work done for these stages. This has commonly been seen in contracts which have been prepared by one party with the other party ignorant about such manipulations.

It has also been observed in many contracts, that contractors over-estimated the amount for the initial stage payments to obtain exaggerated payments at early phases during project execution. Basically, after only a few stages, in most cases up to casting of suspended slabs, they recover maximum amount of money through the contract, which grossly exceeds the actual amount of work done at that stage.

There is a very common sign when such fraudulent act occurs as well. One will see a contractor performing at a reasonable pace and be on schedule until he receives the payments for the stages which have been grossly over-estimated. Then works on site will gradually slow down until a point where there is hardly any activity on site. In such circumstances, most clients do commit the very common mistake of terminating the contract. This indeed is a blessing to the contractor allowing him to get rid of the contract, with overpayments already effected for actual work done. It is often after terminating the contract that the client realises that he has grossly over-paid the contractor, which, however, was in line with the conditions of their contract.

To avoid such fraudulent acts, it is very important to have the terms of payment vetted by knowledgeable persons and adjusted according to the actual value of each stage payment.



(ii) Non-inclusion of penalty clause

Very often we see contracts not mentioning any clause of penalty for delays in delivery. Normally most standard forms of contracts do have provisions for such clauses but sometimes they are deliberately excluded to the interest on one party. In other contracts, which are not based on standard forms, such terms are simply not considered.

This allows the contractor to take all his time to perform and often projects are substantially delayed beyond reasonable time of delivery. This can cause client to be exasperated without any recourse to remedy and often leading to deadlock situations.

(iii) Non-inclusion of payment terms

Normal standard forms of contract do allow for proper terms of payments but sometimes we see these clauses deliberately excluded. In absence of such clauses, contractors tend to overclaim for work executed and also tend to claim more frequently than normal payments are made. Also, clients find themselves in situations whereby they have overpaid the contractor and the latter deliberately slowed down construction activity. Finally, clients get exasperated and are inclined to terminate the contract, to the benefit of a contractor who has been overpaid.

(iv) Absence of provisions for settlement of disputes

Standard forms of contract normally do have a defined mechanism to resolve disputes which starts with the simplest way up to the most complex ones. In absence of such mechanism the only right to remedy rests on litigation which is the costliest and time consuming. In principle litigations takes several years and the matters are dealt by persons who, in some cases, have limited knowledge of construction contracts and Contract administration procedures, thus leading to frustrating awards.

If a contract allows for proper dispute resolution mechanism, the concerned parties can have recourse to less costly and time-consuming process to their choice, rather than going through the process of litigation.

(v) Ambiguity in terms and conditions

A very common example is the ambiguity in the interpretation of the contract sum for a contract based on cost per meter square with the computation mechanism not specified. Each party tends to interpret the value in its own way in the absence of a clear definition. Contractors have the tendency to compute slab area while a rational way would be using the gross floor area. Eventually this often ends up in dispute and deadlock situations. Therefore, all such ambiguities have to be eliminated by proper drafting of the contract and this can only be achieved by knowledgeable persons.

Conclusion

To conclude, I would say it is of prime importance to have a contract between two parties properly drafted with all necessary terms and conditions agreed and included. This will undoubtedly eliminate the risks of contractual disputes and eventually ensure proper performance of the contract.

Now, the technicalities in advising parties and agreeing on specific terms and conditions, require certain professional skills and competence. Bearing in mind how often disputes arise in construction projects, I would recommend all those entering such contracts to solicit the advice of a knowledgeable person to ensure a proper performance of their contract and minimise the risks of unnecessary disputes.

Veerprakash Sadeo (Vice Chairperson)

The PQS as Expert Witness and Mediator



As a PQS I have acted in numerous cases as an Expert Witness over the last 12 years. I believe the duty of any

Expert Witness is to be truthful as to fact, honest and correct as to opinion, and complete as to coverage of relevant matters. My oral evidence in court whether Intermediate or Supreme Court (Commercial) has always been independent, objective, and unbiased.

Understanding the causes of disputes leading to litigation are as important as solving them.

Disputes are not uncommon in the construction world. Common causes of construction disputes include contract administration failures, changes in scope, incomplete or incorrect design information, and when projects are awarded based on price and not quality. In the latter circumstance it may happen that the budget is underestimated and often the execution programme is unachievable, leading the project to failure before it even begins.

Many of us may relate with the following example. Indeed, in early 2020 I had a potential Client who came to see me after she had an issue with the Contractor who left the construction site at foundation stage. She wanted to build her 5000 ft² house for Rs 5 m. She insisted that the house must be completed within her budgeted amount even though the house had 6 ensuite bathrooms with high specifications and elaborate wooden stairs.

Issues related to Construction Contracts

In all their numerous forms and types, whether standard or bespoke, they are intended to administer and manage the execution of a project. The contract aims to ensure that the project's works are delivered in accordance with the agreed scope, within budget and

within the agreed timeframe. I have experienced all of them from verbal contracts to one page contracts. Poorly prepared documents are a real cause of most construction disputes. The documents provided by the Employer at the tender (bidding) stage should, at the very least, include:

- conditions of contract (general and particular conditions);
- specifications;
- drawings;
- schedules, such as Bills of Quantities, Schedule of Rates, etc.;
- Employer's requirements (scope of project works).

Construction contracts require the parties to give timely notices of events and claims. Contracts also provide a procedure for the evaluation and assessment of these claims and for awarding additional time and/or costs if entitlement can be demonstrated. If it is not possible for the parties to reach an agreement, the contract will also provide dispute-resolution mechanisms that allow the parties to engage in formal proceedings, whether these are in the form of litigation, arbitration or any other alternative dispute-resolution procedure (e.g. mediation).

Defects

Defects are one of the major causes of dispute and construction litigation. Construction defects range from complex foundation and framing issues, which threaten the structural integrity of the buildings, to aesthetic issues such as improperly painted surfaces and ingress of water around windows.

All parties to a construction project have the same objective: **complete the project to a high standard, on time and within budget**. Efficient performance will minimise disputes and ensure that good relationships are maintained. Managing construction projects to prevent disputes is about getting the job done and getting it done well. Yet, certain Clients do not engage the services of a PQS at the beginning of a project but only when problems arise and usually end up paying expensive legal fees.



Planning

Careful planning and good performance by all parties are prerequisites for the success of any construction project. Planning and performance are essential for all phases of a project, from the Employer's concept (or dream) through to completion and handing over the works. It is essential for the Employer to allow its team enough time to prepare the necessary documents, ensuring that they are well thought through and, more importantly, that they are complete. As such, several years ago, I had a Client from the UK who took 8 months to decide whether to engage a QS for renovating his 6000 ft² bungalow, relaxed in a hotel for 10 days and on the eve of his departure engaged the Professional team. His brief was in a one-line sentence: "*The bungalow should be the talk of the town*". The Architect took the brief seriously and came up with a Rs 7 M renovation package. Unfortunately, the project ended up in a dispute as the Client had only a budget of less than Rs 2 M.

Mediation Process

After spending a decade in litigation matters, I decided to experience Mediation and acted as a Mediator in 2021.

Mediator Opening Statement

After all the parties were seated at a table, the Mediator introduced everyone, explained the goals and rules of the mediation, and encouraged each side to work cooperatively towards a settlement. As the Mediator, I further explained the Mediation process which consists of 5 stages and which comprised of an Introduction; Opening Statements; Information gathering, Negotiations; and finally, Settlement.

- I emphasized that the main focus was on solving problems in an economical manner

and explained the cost and time of a litigation process, given my experience as Expert Witness in numerous cases over a decade. I clarified that Mediation is less formal than a trial or arbitration.

- I stated that I would observe neutrality throughout the meeting.
- I then introduced the attendees, a Builder Works Contractor and a Plumbing and Electrical Contractor. I also explained their presence in the meeting being that the Main Contractor was unwilling to make good the snags himself but agreed to settle the amount incurred.
- I stated that the Main contractor was fully briefed about the snags list before scheduling the mediation meeting, as he had the opportunity to discuss same and all facts were duly minuted.

Main Contractor Opening Statement

- The Main Contractor gave a brief about the defective works namely tiling works and stated that he sent his workers to complete the grouting works and other defective works.
- The client denied that the works had been completed to his satisfaction.

Client Opening Statement

- The Client explained the major inconveniences to live in a house with incomplete and defective works. He further mentioned that the construction stage lacked supervision, and that the Main Contractor was rarely seen on site to supervise the works.
- The Client mentioned about the poor plumbing works and the foul smell emanating from the toilets which was making the life of his family, especially the children, difficult. This was further elaborated by his wife.

A settlement was however reached after completion of the 5 stages of the Mediation Process within 3 hours.

Vikram Jeetah PQS, Reg No.021

BSc (QS) (Natal), MSc (Project Management) UoM, MBA (Wits Univ.), CPLC (Wits Univ.), MRICS, MAMBA(UK), MAQS(RSA).

Global changing roles of Quantity Surveyors



Since its formal development in the 18th century, the quantity surveying profession has undergone a series of transformation worldwide. The role of the Quantity Surveyor (QS) has changed significantly, particularly with the modern digital era promoting new challenges and opportunities complemented with optimism about its future.

Evolution of construction

The construction and property sectors have evolved over time and the Quantity Surveying profession has followed the pace. QS plays a crucial role in a project while working closely with the project stakeholders in order to provide the best service and value for money. This ensures that the finished product matches with the requirements of cost, time and quality criteria. Similarly, there has been a drive to deliver sustainable infrastructure using renewable resources. The concept of sustainability has steered QSs to expand their expertise as cost advisors. QSs have embraced new roles in the fields of renewable energy, low carbon technologies and energy management, for example, carrying out life cycle cost appraisal, advising on long term value of innovative and energy efficient materials, including their economic viability, and aiding in the choice of most effective option for a sustainable design.

Traditional quality assurance in the delivery of services has remained imperative. QSs have to deal with expectations of added value during the design and construction process in addition to downsized budgets, and tighter funding from clients.

Technological and digital age revolution

Technology and the recent digital age revolution

have made a tremendous impact on the work of QSs. “MasterBill”, “CATO”, “Buildsoft” brands of software, among others, are still being used for production of Bills of Quantities and in other QS tasks. The recent trendy IT Software such as “BIM”, “Revit”, “CostX” including measurement Software such as “Planswift” have become a commonplace throughout the construction industry. New Quantity Surveying technologies and applications continue to surge compelling QSs to look for the most useful tools to automate tasks, reduce time and costs thereby boosting productivity. These IT processes have speeded up the traditional tasks such as production of Bill of Quantities, measurement, estimating whilst improving efficiency and enhancing performance. For example, in Building Information Modeling (BIM), cost estimating has been made much simpler due to BIM’s ability to link cost information and quantities to building models.



Those Softwares have allowed QSs more time to work on other high value tasks. In fact, they have gone beyond the traditional cost and contract management duties by developing niches in the areas of procurement, dispute resolution, whole life costing and loan monitoring in banks. On the other hand, some have embarked in other areas such as Quantity Surveying software development and BIM technologies etc. Therefore, QSs can redefine their roles by delivering their services within the best available time to the expectations of stakeholders and the society at large. Given that IT processes will develop further, QSs will always be here to stay as cost and contract management experts since there will always be a need for someone to analyse and interpret the aspects of quantification, measurement, valuation, pricing, cost control and planning etc. of construction works, independantly.

Plethora of roles for QSs

Today, QSs cannot be universally defined. They have expanded their roles and offer a multitude of services in the construction and property industry. The Quantity Surveying profession was little known till the 90s. During the last thirty years, QSs have mushroomed and spread over all the continents due to the increase in the number of tertiary education courses being delivered, and extensive demand in the world employment market. It has now become a common job title.

On the other hand, they have seized the opportunity to expand their engagement in the industry and reach strategic positions. They are well established in the fields of subcontracting, claims management, construction law and dispute resolution, procurement management, investment appraisal, tax advisory, construction auditing, commercial management, value engineering etc.

They are employed in various sectors of the employment market. QSs have also joined insurance companies and banking institutions. In so doing, they have improved upon their set of skills and knowledge bases.

The transforming/evolving of the many roles assumed by QSs have also shown that they can adapt and grow to shoulder new responsibilities in their performance of duties.

Opportunities and Challenges

The world is changing rapidly especially with the COVID-19 pandemic and war situation, thereby greatly influencing the Quantity Surveying profession and the roles of QSs per se. QSs are expected to offer value-added services, innovate and learn to survive in a dynamic marketplace. They are challenged to offer the best and wider range of services in a more efficient manner, through sustainable practices. The changing landscape of the construction and property industry also requires that current QSs, as well as future QSs, should be proactive to foster change instead of merely coping with developments.

Employers, clients and property developers have become more knowledgeable and hence more demanding and selective in what they want from QSs, primarily for cost advice and cost control, the more so with the current global price escalation.

They should be actively involved in utilizing, developing and promoting the use of digital automated quantities, in addition to harnessing future artificial intelligence and machine learning technologies as toolkits. They should maintain and develop expertise in their core competencies, invest in technology, diversify and broaden the range of services they offer, as well as, plus engage in continuing professional development in order to maximise opportunities. They have to continue to build new niches and break up into new areas.



Optimism for future

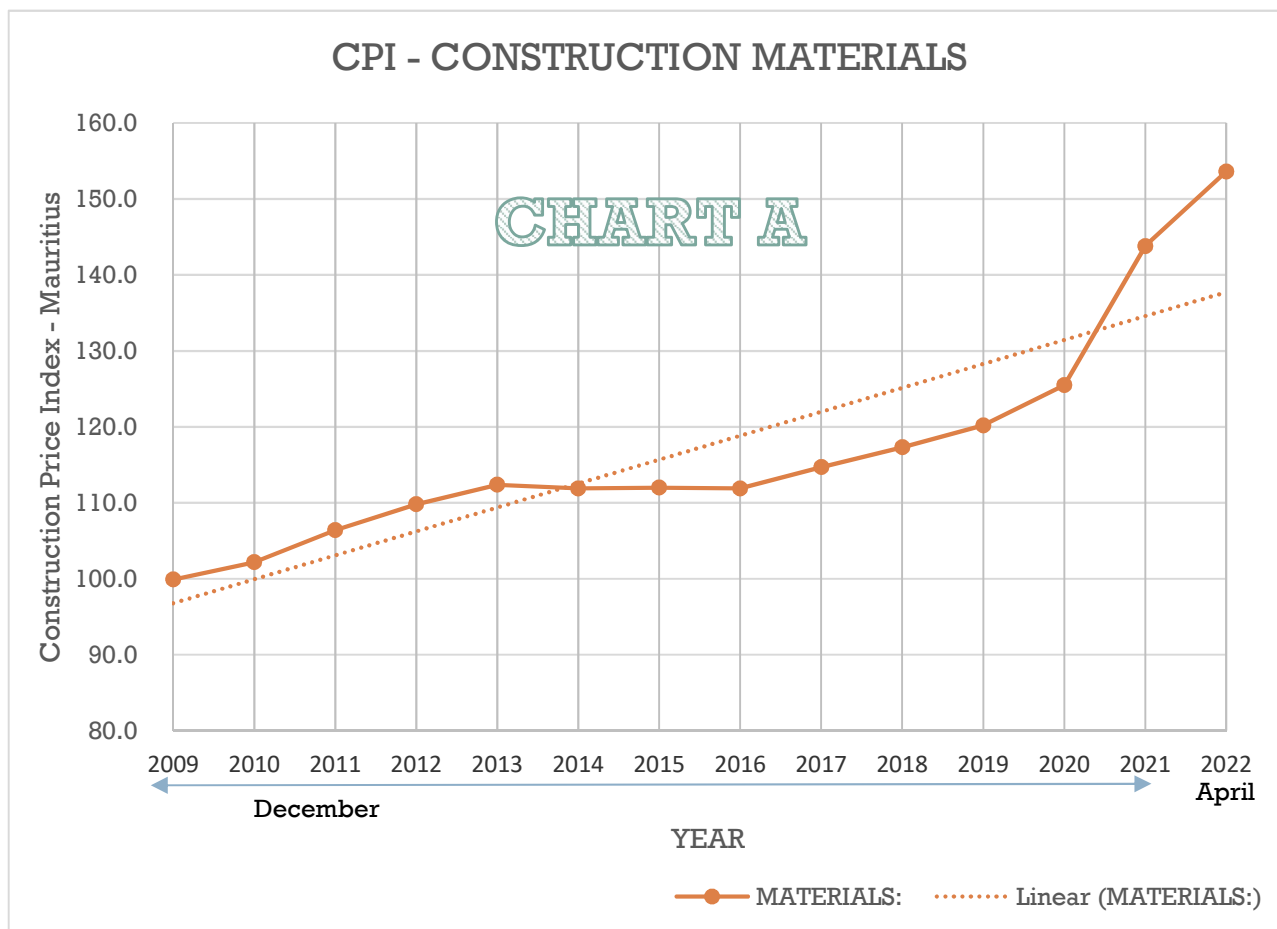
The future success of QSs relies heavily on their adaptability and willingness to evolve in an advancing industry, as the world keeps transforming. The roles of QSs will develop further to keep up with the modifying market conditions worldwide and to fill the gaps across diverse industries. But, their traditional core skills and competencies will remain sought, due to the undeniable fact that QSs have proved to perform multitude roles in the different sectors of the world economies.

They will still play their usual key role at the design and construction stage. There will always be a dedicated independent expert to perform the tasks of quantification, measurement, estimating, cost planning, valuation, analysis of costs amongst others, after being academically and professionally trained to do so.

There is no specific direction that can be predicted for the future roles. However, the title of "Quantity Surveyor" will still be reflective of the unique duties being carried out. No doubt, QSs have made their mark globally bearing in mind their vast contribution to various industries of the world economies.

Inflationary Market

The Construction Industry has been through waves of inflation since the year 2020 as the costs of construction materials knew a dramatic escalation, as demonstrated in Chart A below.



From 2009 to 2019, the increase in Construction Price Index (CPI) for materials as a whole, in one given year, never overshoot 5%. However, one cannot but notice that this threshold was defied as from 2020, reaching a spectacular 18.3% increase in one year. And from December 2021 to April 2022, a new upsurge of 9.8% has already been registered. Table A below shows the percentage costs' increase for different construction materials from December 2019 to April 2022.

	% Increase of Construction Materials' Costs		
TABLE A	December 2019 to December 2020	December 2020 to December 2021	December 2021 to April 2022
Hardcore (remplissage)	5.3%	3.0%	0.3%
Cement	12.7%	9.8%	12.9%
Aggregate	7.6%	3.2%	0.5%
Block	9.0%	5.6%	0.0%
Steel bars (armature)	4.8%	57.7%	19.0%
Timber (Joinery)	9.6%	11.1%	41.2%
Aluminium openings	0.0%	22.8%	18.4%

Yet, the recent waves of inflation is not an unprecedented dilemma for the construction industry, as it did happen in the past. Indeed, during the period 2005 to 2008, Construction Materials' Costs Index did backfire, attaining up to 23% increase between December 2007 and December 2008. As can be shown in Table B below, the percentage increase in costs for different materials that happened between December 2005 to December 2008, is not hitherto different in perspective from recent event, though different in impact. As such, despite the peak in materials' costs, the repercussion on construction costs of buildings generally and bid competitiveness, in the years 2005 to 2008, was subdued to some extent by significant influx of expatriate labour in Mauritius and because of limited number of projects on the market. Also, it is good to note that during the period 2005 to 2008, Mauritians had higher purchasing power than today's reality will allow.

	% Increase of Construction Materials' Costs		
TABLE B	December 2005 to December 2006	December 2006 to December 2007	December 2007 to December 2008
Hardcore (remplissage)	0.0%	0.0%	0.0%
Cement	19.3%	25.5%	18.7%
Aggregate	17.9%	7.4%	31.1%
Block	11.0%	12.3%	28.6%
Steel bars (armature)	34.6%	55.1%	61.3%
Timber (Joinery)	20.4%	23.2%	30.1%
Aluminium openings	N/A	N/A	N/A

Of course, the construction industry is proving itself extremely adaptable in responding to the difficult time, like it did in the past. Delivery of most housing and infrastructure construction projects is still being sustained in the face of the inflationary market, and above all, construction projects have not halted in our Country.

Nevertheless, in this time of uncertainties, we have to be open-minded and inquisitive. We might be compelled to reinvent the whole system and probably aim at doing more with less. We cannot just continue to rely on cheap labour policy to absorb risks. We must be ahead by integrating value engineering, technologies, flexibility around timescale for better access to resources, and waste management. **We are all in this together, so let's get to work and stop the panic.**

Note:

The data presented in Chart A, Table A and Table B above has been computed using information available on the National Statistical Offices' Website <https://statsmauritius.govmu.org> on Construction Price Index

EVENTS

☀ Presentation by PQSC for MBA



Photographs from the presentation held on the 19th July 2022 for the Mauritius Bankers' Association by the PQSC.

The presentation was structured on the role and importance of Professional Quantity Surveyors in the banking sector.

The Chairperson provided contents and figures to the MBA to support the PQSC version on the works that should fall under the responsibility of a Professional Quantity Surveyor, all in accordance with the PQSC Act 2013.

☀ Launching of INFORMATIVE Video on Quantity Surveying Profession



Photoshoot in preparation for the launching of Informative Video on the Quantity Surveying Profession.

The PQSC has taken the initiative, through its subcommittee chaired by Mrs D. Seechurn (PQS), to launch a video on "Quantity Surveyor's roles" for students and the public at large. The video is now available on the PQSC Website and can be viewed on the 'Enrol and Register' section of the home page. The video title is "[Why opt for Quantity Surveying](#)".