



Annual Report

2019-2020



“Climb higher on the shoulders of past achievements- your task is not to fill old shoes or follow a well-trodden path, but to forge a new road leading towards a brighter future.”

His Majesty the King Jigme Khesar Namgyel Wangchuck

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Message from CHAIRPERSON

As an overseer and promoter of the construction industry, Construction Development Board (CDB) has actively taken part in the nationwide policy reforms, assisted the private sector within the construction industry to implement fair competition and acts as bridging organization to take the roles of coordinator, facilitator and enabler to develop construction industry.

According to National Statistical Bureau 2020, construction noted a negative growth of -14.66% in 2019 compared to 2018 which was -7.99%. The construction industry's contribution to the GDP growth was -2.11% points, it dropped by 0.82% compared to the previous year. The government executed construction projects accounted for 23.60%, whereas the private and public corporations executed construction projects accounted for 76.40%. In the year 2019, the gross value added to the industry was estimated at Nu. 20,465.42M compared to Nu. 23,753.15M in 2018. (Data source from National Accounts Statistics 2020, NSB)

After the detection of the first positive case of SARS-CoV- 2 in Bhutan, commerce, tourism and trade are the most impacted sectors and the construction industry is not an exception. In the midst of the COVID-19 pandemic, most of the construction projects were at halt due to restrictions on the foreign labor supply. During a quick assessment carried out by MoLHR, it was observed that the total demand for foreign workers was estimated at 35,567 as of June 2020 but the supply of foreign workers is short by 14,495 due to restrictions imposed. (Data Source from Economic Contingency Plan 2020)

On the other hand, most of the domestic workforce lost or were forced to leave their job. The unemployed workforce includes youth on unpaid leave and overseas returnees. There are a total of 21,921 unemployed youth. (Data source form Economic Contingency Plan 2020). Therefore, to match the demand for workers in the construction sector with the supply of workers, the Build Bhutan Project (BBP), one of the key components of the Economic Contingency Plan was initiated where CDB is one of the implementing agencies responsible for registration of specialized firms staffed by BBP registered construction professionals. Similarly, last year has seen CDB continue effort in professionalizing the management and leadership of private construction firms with integration of e-Tool with the electronic Government Procurement(e-GP), initiation of the registration for engineers, registration of survey

professionals, and continual enhancement of the CDB system with integration with the G2C services.

With these enhancements, the grip on the development activities are strengthened as the government implements the objectives of a Just, Harmonious and Sustainable Society through enhanced decentralization in the 12th FYP with an outlay of Nu. 310 billion. The next few years will also see the graduation of Bhutan from the Least Developed Countries in 2023. Therefore, CDB is consistently enhancing development and regulation with regard to quality of construction.

His Majesty the King, in his address to the nation on the 22nd March 2020, clearly mentioned that “our country is small with limited population and if the people and the government work together any challenges can be sailed smoothly. We have to be focused on our national objectives and must aim to bring normalcy as soon as possible so that we are ahead of the pandemic. We must work harder through this challenging situation”.

Therefore, keeping in line with the wisdom of the Golden Throne, I submit my enthusiasm in presenting the Annual Report 2019-2020 of the Construction Development Board. As Chairman, it is indeed a privilege to contribute the resources at my disposal in the development of the construction industry.

Tashi Delek



His Excellency Lyonpo Dorji Tshering
Chairperson, CDB



Message from Director's Desk

It is an honour to present the **third Annual Report** of the Construction Development Board (CDB) encapsulating the various undertakings and activities that were committed and delivered in multiple aspects in the development of the construction industry in the year 2019-2020. We consider it a privilege to have His Excellency's (Minister of Works and Human Settlement) experience and guidance in achieving CDB's vision in development and regulation of the construction industry.

Despite the adverse impact on the construction industry, CDB continued to provide timely service and professional development training to the contractors and procuring agencies. Further, the CDB system was also enhanced to integrate with e-GP, which is an online procurement system and G2C with intent to provide efficient service delivery. With upgrading and integrations, CDB services will be available on Prime Minister's eDesk.

Digitizing the construction regulation has enabled us to verify information received via e-tool from procuring agencies with regard to their projects as well as virtually monitor compliance by such procuring agencies and contractors to the contract. Analyzing the data from the CDB system indicates 40.20% out of 674 completed works having time overrun and 47.32% out of 674 works having cost overrun but further of works and 42.50% of works running into cost overrun after considering the works with change in designs and additional/change in scope.

The CDB's service delivery caters to 2514 contractors, 188 architects, 85 consultants and 1219 engineers engaged with contractors, 127 individual engineers registered with CDB and 5 surveyors registered with CDB. Employment of our youth is a national priority especially in the construction industry and therefore, we are working closely with stakeholders to find solutions in creating jobs and avenues in developing a skilled workforce by exploring mechanization and prefabrication technologies.

CDB organized a first ever forum on construction safety and invited stakeholders from relevant agencies working on improvement of OHS in Bhutan. A Memorandum of Understanding was also signed between the CDB and the Department of Labor, Ministry of Labor and Human Resources on enhancing OHS in the construction industry. In the month of October, an awareness and feasibility workshop was also conducted with the theme "Enhancing

collaboration and Efficiency using Building Information Modeling” amongst the consultants, government and private engineers, urban planners and designers.

Lastly, I would like to thank CDB Board members for their continued support and guidance, CDB officials and agencies for their input. The CDB family would like to urge everyone to be a responsible citizen and follow COVID 19 protocol from the Ministry of Health. Together we can break through this pandemic. Stay safe.

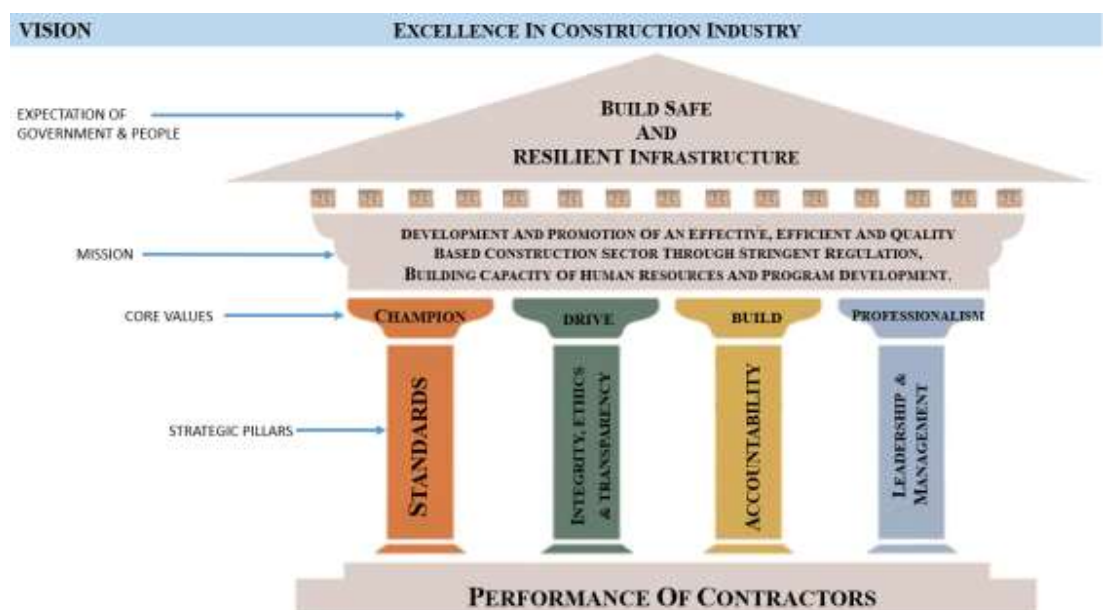
Tashi Delek



Phub Rinzin

Strategic Pillars for the Development of the Construction Industry

Strategic Pillars for the Development of the Construction Industry



"We have to live by the infrastructure that we build and it is our responsibility to build Safe and Sustainable Infrastructure for future generations"

Construction Industry plays an indispensable role in the Bhutanese economy from delivering economic infrastructure such as roads and bridges to enhance the connectivity and delivery of people and goods, thus increasing profitability of people and their trade. Similarly, social infrastructure improve access to the needs for the wellbeing of people, the community and contribute significantly to the accessibility of the Bhutanese people. Despite its imperative role, the industry suffers from a lack of coordinated approach to solutions between agencies and is slowly becoming the victim of compartmentalized working nature of construction stakeholder agencies and implementation issues arising from limited enforcement of rules, lack of standard operating procedures, collusion and overridden sense of ethics, faults within the tendering process

Strategic Pillars for the Development of the Construction Industry

and lack of a central agency to withhold the values and integrity required by the construction sector.

On a positive note, new technologies, machines and equipment's are gradually enhancing the efficiency of the sector, more people understand the requirement for improvements, more systems are being developed to improve regulation, more research and development activities are targeted with more coordination and collaboration between agencies being encouraged to address issues. Safety and quality are being made more prominent and activities to improve their scenario are being formulated, implemented and regulated by the agencies. Perception of the limitations in the construction sector is more pronounced than ever before.

Complementing this perception, it is imperative for every Bhutanese person, whether involved in the construction sector or not, to understand the necessity of the right to sustainable, resilient homes and public infrastructure.

The impact of climate change increases the risks imposed by substandard infrastructure to the people and the development of Bhutan. The location of Bhutan within the junction of the collision zone of the Himalayas in the Indo-Eurasian plate further stipulates greater unpredictability to disasters.

The Construction Development Board strives to achieve its vision of **"Excellence in the Construction Industry"** with regard to the expectations of the government and people for safe, resilient, high quality sustainable infrastructures by developing and promoting a quality based construction sector through strategic regulation and competent manpower, with capacity to enhance development of standards, inculcating a sense of ownership for integrity and ethics, enhance transparency and accountability and develop perception for effective leadership and management in construction sector

Strategic Pillars for the Development of the Construction Industry

stakeholders. CDB, however, acknowledge that the weight of achieving the strategic pillars is dependent entirely on the performance of contractors. As the agency with primary mandates to develop the professionalism, efficiency, integrity, technological and managerial capacity of construction firms and its reach extending into quality compliance in contract, materials and equipment, CDB's current capacity ought to develop with additional manpower empowered by appropriate skills, equipment's and tools and legal stance for efficient regulation.

Based on the above strategic pillars for development of the construction industry, the Construction Development Board inculcates the requirement to fulfill the following organizational strategic thrusts in order to achieve the aforementioned strategic pillars.

A well manned premier institution empowered by strong legal framework to effectively regulate the construction industry thereby promoting highest standards of transparency, accountability, leadership, ethics and integrity.

Endeavor towards construction of safe, green and sustainable quality infrastructure through stringent monitoring, capacity development and promotion of best practice technologies in the region;

Institute an effective performance management system of contractors to select the best construction firms to build high quality infrastructure.

STANDARD

Considering the importance of building Safe and High Quality, Resilient Infrastructure, it is imperative to have uniformity and standards in all spheres and process of works. Guidelines, specifications, codes and rules must channel the work flow while planning, design and drawings should have regulated benchmarks for appropriate and comprehensible implementation.

ACCOUNTABILITY/ ETHICS/ INTEGRITY/TRANSPARANCY

Leadership in the construction industry is crucial at this juncture of Bhutan's rapid development period, a lack of which leads to passive and gradual approaches to addressing issues and challenges such as time and cost overrun of projects, delivery of substandard and defective quality infrastructure, and the risks of lagging in innovation and adoption of new technology. Therefore, developing/promoting technical and managerial skills in the construction sector especially of the private firms is crucial to embark professionalism.

LEADERSHIP AND MANAGEMENT

The key success of building Safe and High Quality, Sustainable Infrastructure depends on ethics/Integrity and accountability of the construction professionals and contractors. It is essential for interventions to nurture fortitude of contractors and construction professionals to execute projects with accountability and integrity, driven primarily by an intrinsic urge to uphold the commitment to deliver highest quality infrastructure and sense of ownership. The construction Industry must own up to disseminate information to augment transparency and responsibility to the utilization of public/private funds.

A Brief History of CDB

CDB Core Value

Champion leadership, construction management, standards, ethics, integrity, accountability and transparency in construction industry.



Drive towards stringent regulations and enforcement in construction industry to enhance professionalism.

Build safe, sustainable and quality infrastructure.

- » Act as **promoter** as well as **regulator** of the Construction Industry
- » Act as **bridging organization** to take the roles of coordinator, facilitator and enabler to develop construction industry by mobilizing the efforts and resources of both public and private sector
- » Assist the **private sector** in undertaking more expansive part in the industry through business, technology and manpower development
- » Assist the **government** in obtaining increased returns on its investment through the promotion of an efficient and quality-based construction industry.
- » Ensure **fair and equal access** to the award of contracts as well as treatment in the execution of contracts
- » Provide **essential services** to construction industry and to act as a catalyst to fulfill the needs of the industry.

Roles and Responsibilities of CDB

Functions of CDB as per Manual 2007

Registration & Coordination

Registration of construction firms, construction personnel, conducting workshops for resolutions, enable environment for promotion of local firms, resolutions of disputes, promote public-private partnerships and monitoring and regulation of compliance

Technology Development

Promote Research and Development of effective construction quality and improve construction technologies / techniques and materials, recommend improvements to the practices of procurement and contract administration

Dispute Resolution

Facilitate dispute resolution in all stages of contract, maintain a panel of arbitrators and facilitate exposure and trainings, and review procurement decisions.

Data and Information

Collect and disseminate construction industry information and statistics, create database, promote information technology, and online access through a one window services for enhanced planning, monitoring and decision making.

Manpower Development

Promote and facilitate certification of construction related manpower, enhance local workers, conduct skills awareness programs, develop technical and managerial skill of private firms and training workshops for aspiring firm

Overseer of the Industry

Plan the direction of the construction industry in collaboration with relevant agencies, address pertinent issues and challenges, procurement grievances, contractual disputes, policy reviews and formulation of rules and regulations pertaining to the construction industry.

CDB Board Members



*H.E Lyonpo Dorji Tshering
Zhabtog Lyonpo
Chairman*



*Aum Kesang Deki
Director General, DNP
MoF*



*Mr. Tenzin
Director General, DoR
MoWHS*



*Mr. Sonam Wangdi
Director, DoL
MoLHR*



*Mr. Karma Dupchuk
Director, DES
MoWHS*



*Mr. Phuntsho Namgyal
Director, DRE
MoEA*



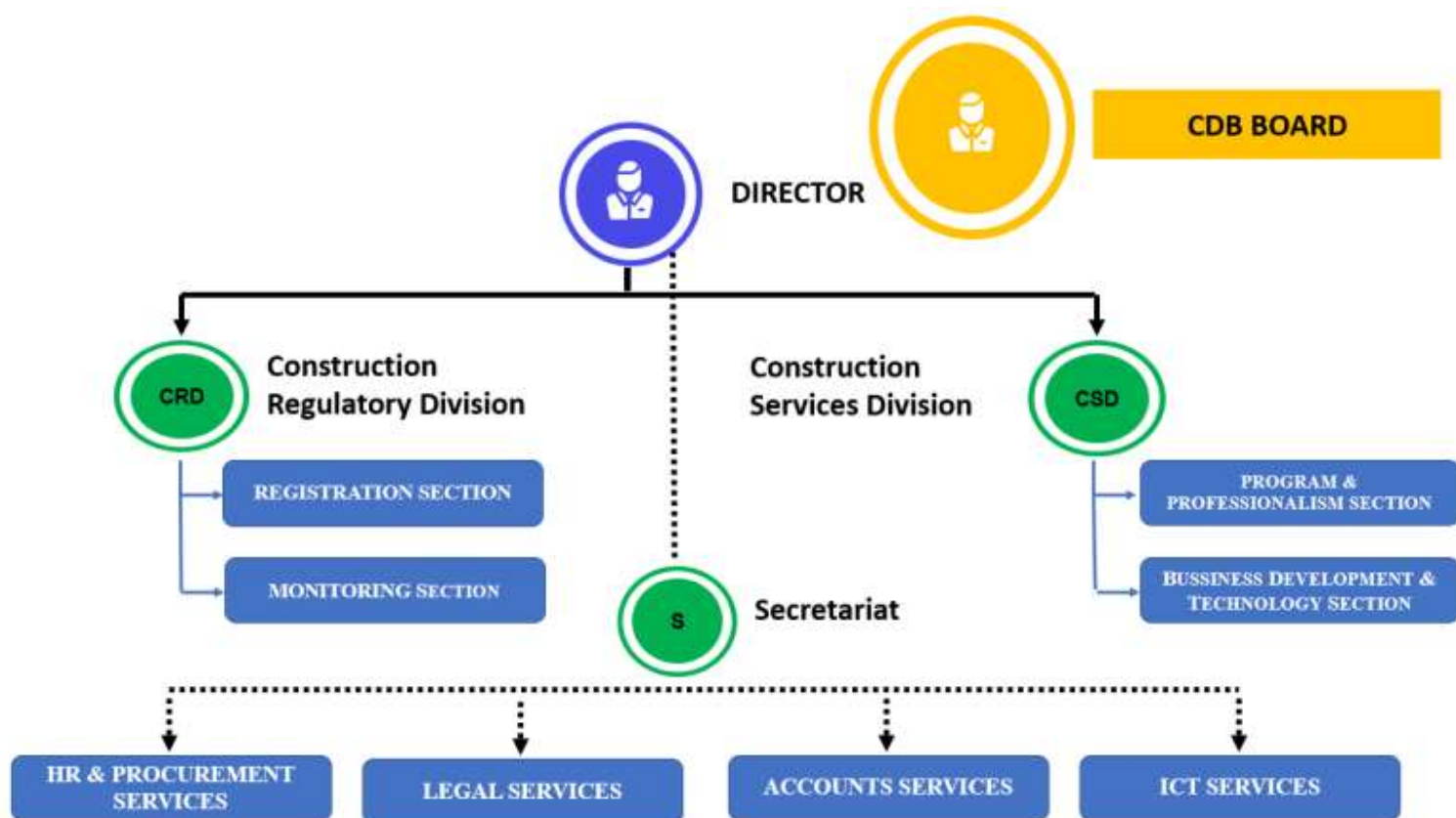
*Mr. Thinley Gyamtsho
President,
CAB*



*Mr. Tshering Yonten
Vice President,
CAB*

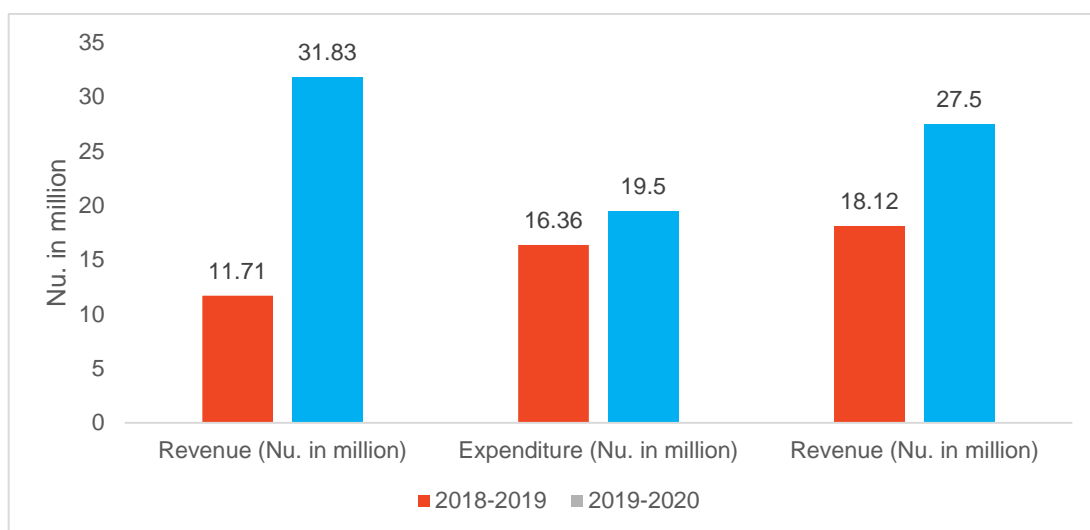


*Mr. Phub Rinzin
Director, CDB
Member Secretary*

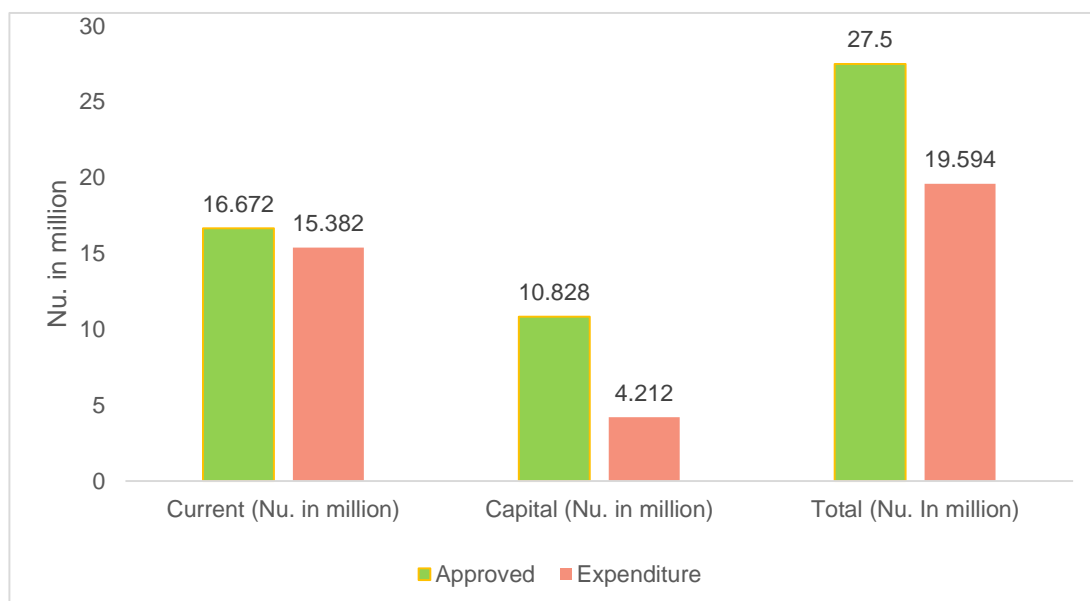
CDB Organizational Structure

Budget & Expenditure

1. Budget, Expenditure & Revenue



2. Capital & Current Budget



CDB Services

Registration

- » Registration of contractors
- » Registration of consultants
- » Registration of architects
- » Registration of specialized trade (from June 2019)
- » Registration of engineers (from June 2019)
- » Registration of survey and spatial science professionals (from June 2019)

ICT Services (e-Zotin)

- » **Online registration** - Online registration services provided by the Secretariat for Contractors, Consultants, Architects and Specialized Trades.
- » **e-Tool** - Online evaluation tool for procurement of civil works carried out by government procuring agencies.
- » **CI NET** - Interface for corporate, NGOs and donor funded projects to update work information.
- » **CRPS** - for managing contractors, consultants, architects and specialized trade.

Legal Services

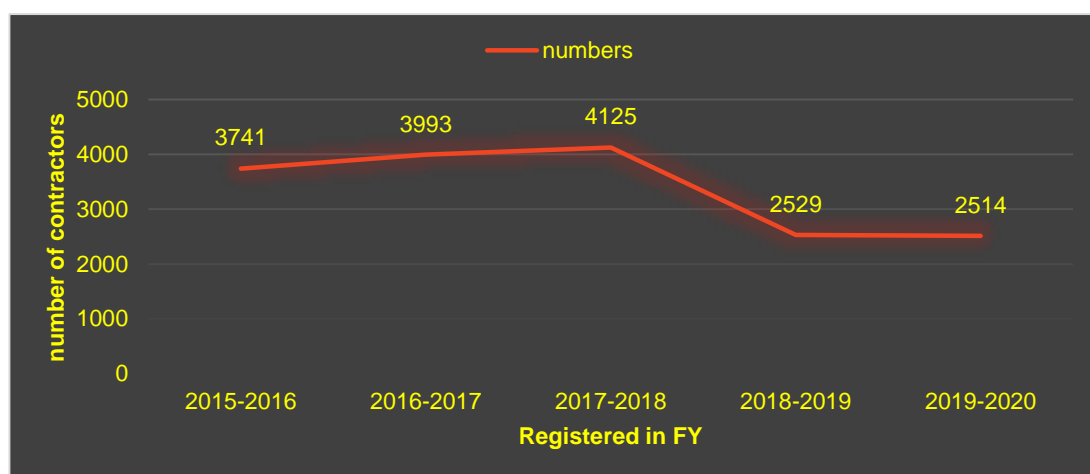
- » Grievance Redressal (facilitation of grievances in payment, human resource and equipment.
- » registration, transfer etc)

Capacity Development and Promotion Services

- » Trainings & Awareness programs
- » Construction Expo in collaboration with Construction Association of Bhutan
- » Institutional linkages
- » Construction technology and best practices

Registration trends

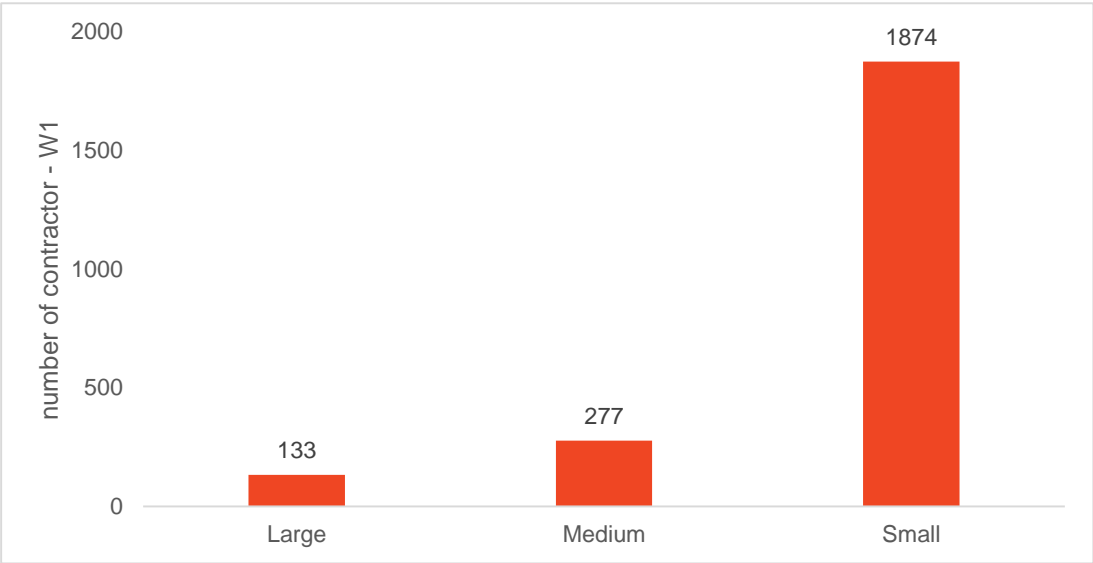
Contractors Registration



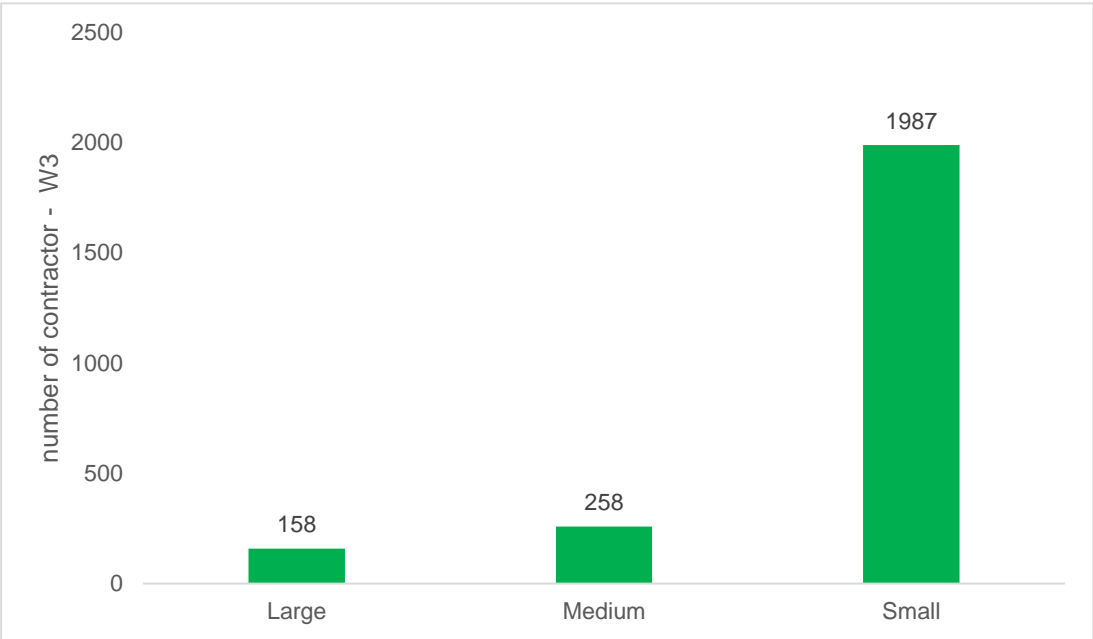
Contractors registered by Dzongkhag wise

Dzongkhag	Large	Medium	Small	Registered	Total
Bumthang	2	9	62	0	73
Chukha	19	26	203	1	249
Dagana	0	3	74	0	77
Gasa	0	0	16	0	16
Haa	0	7	53	0	60
Lhuentse	2	6	41	0	49
Mongar	4	19	73	0	96
Paro	10	17	124	1	152
Pemagatshel	3	9	62	0	74
Punakha	3	6	85	0	94
Samdrup Jongkhar	4	13	105	1	123
Samtse	3	12	109	0	124
Sarpang	13	27	143	2	185
Thimphu	89	87	413	12	601
Trashigang	6	13	118	0	137
Trashiyangtse	5	11	81	0	97
Trongsa	1	6	75	0	82
Tsirang	1	1	61	0	63
Wangdue Phodrang	4	10	81	3	98
Zhemgang	2	8	54	0	64
Total	171	290	2033	20	2514

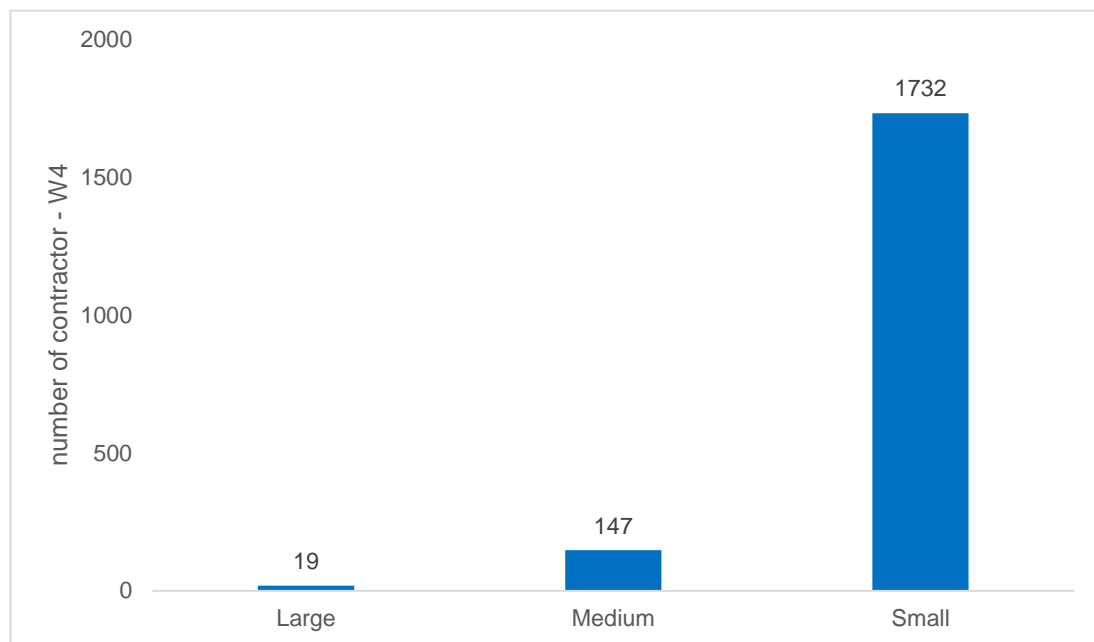
Nos. of Contractors registered by work category [W1]



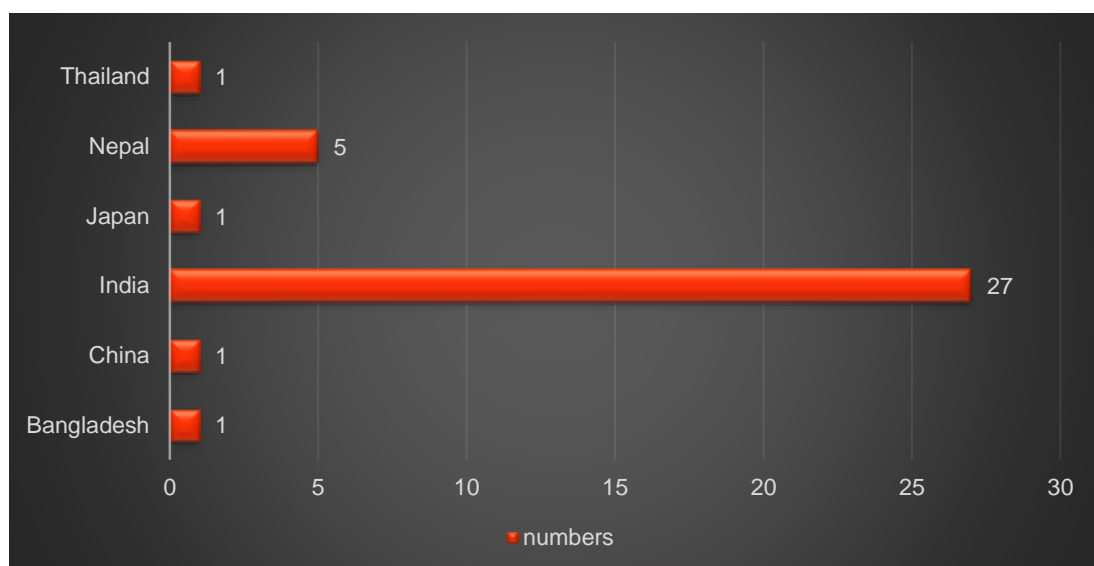
Nos. of Contractors registered by work category [W3]



Nos. of Contractors registered by work category [W4]



Nos. of Non-Bhutanese contractors

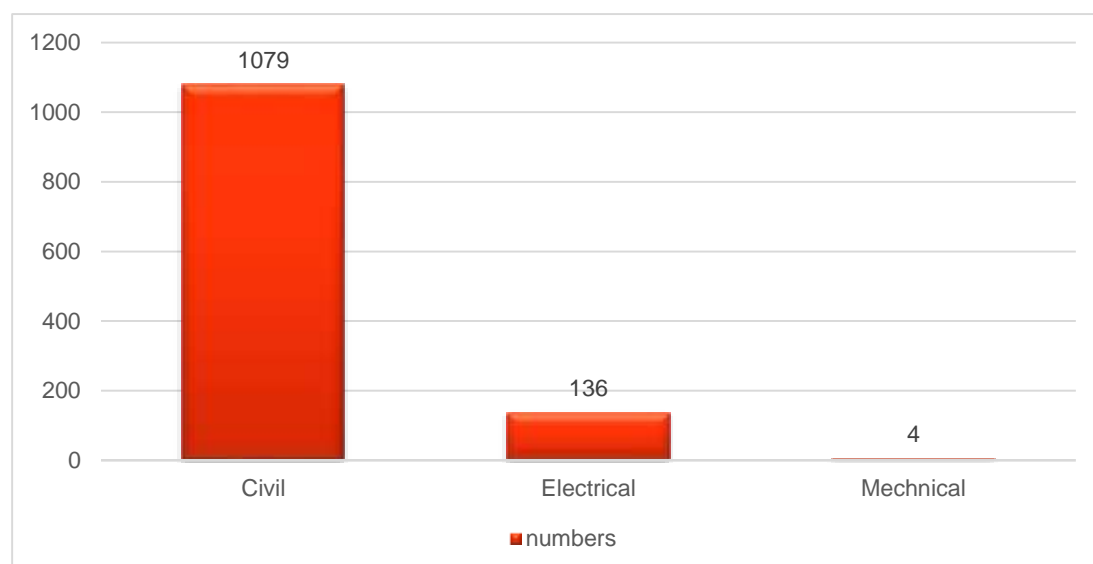


Nos. of Engineers registered

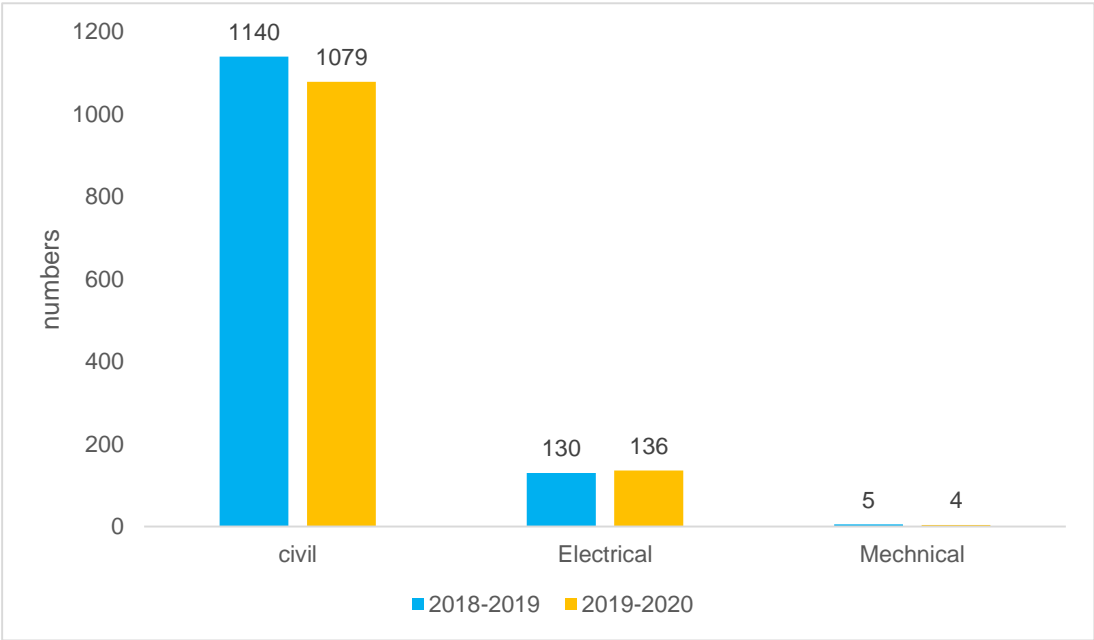
Civil		
	<i>Graduate</i>	<i>Diploma</i>
Bhutanese	459	469
Non-Bhutanese	82	69
Total	541	538
Electrical		
Bhutanese	67	69
Non-Bhutanese	0	0
Total	67	69

Source: cdb data

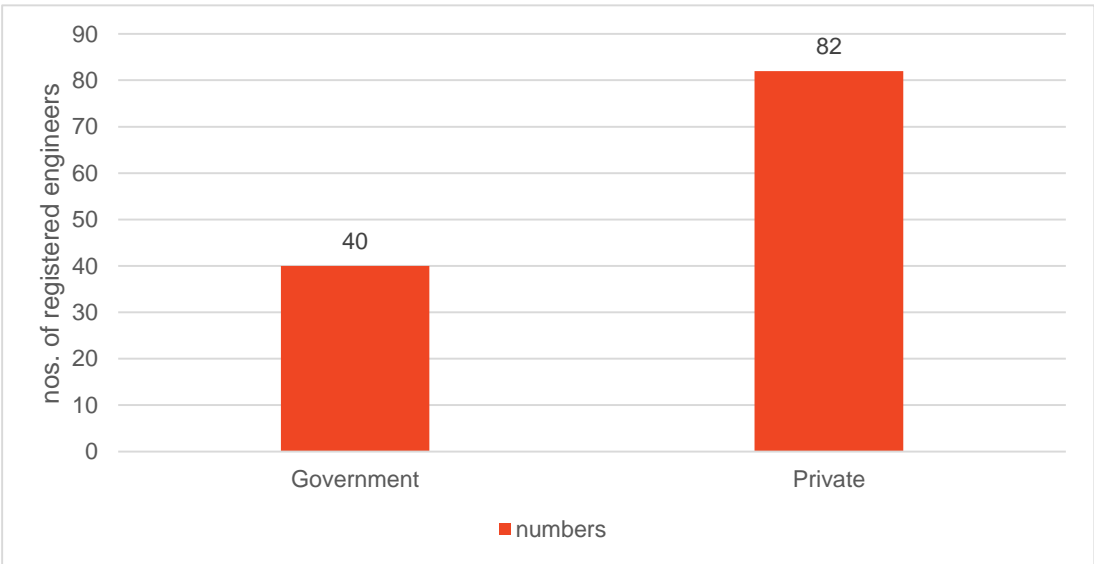
Nos. of Engineers registered

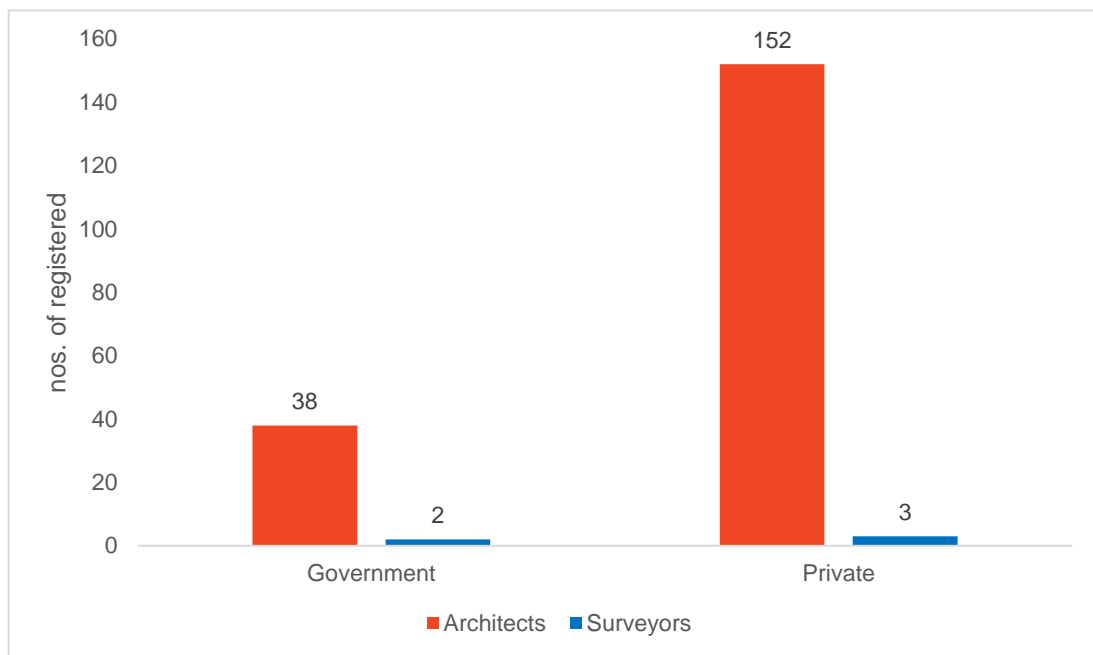
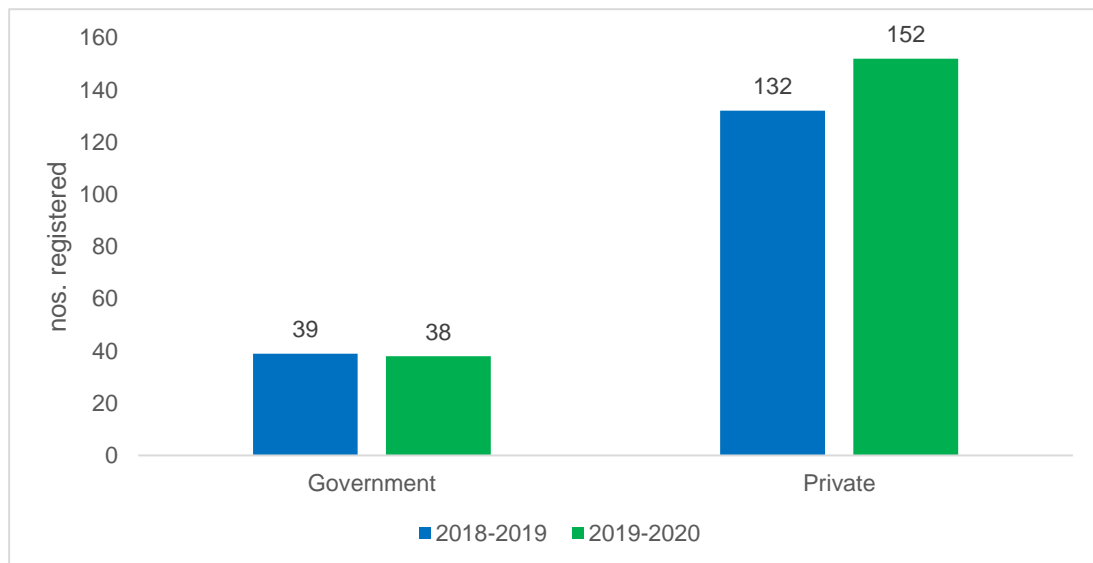


Trend of Engineers registered



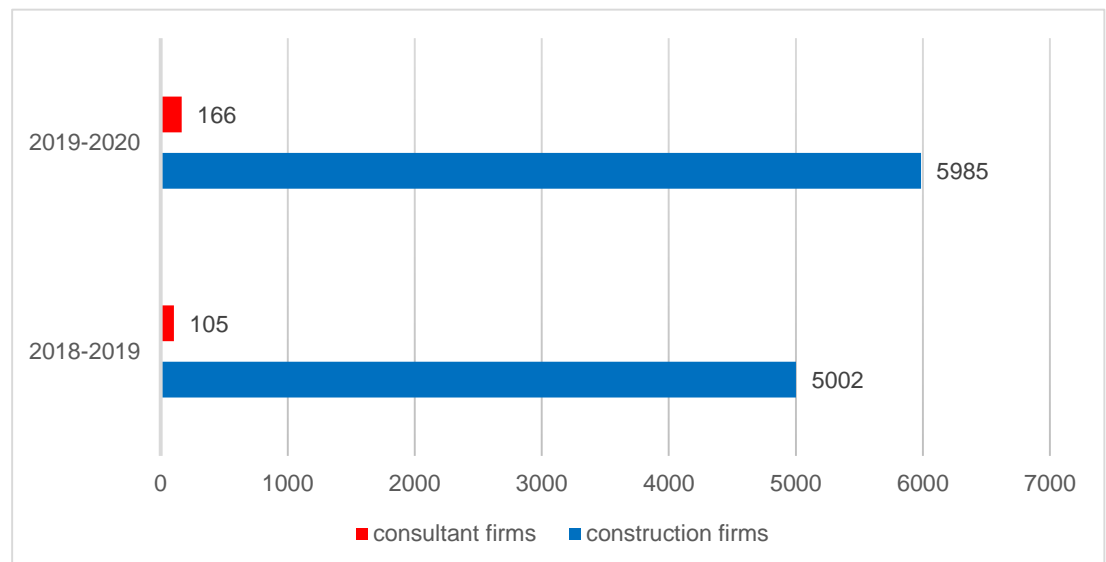
Nos. of Individual Engineers registered

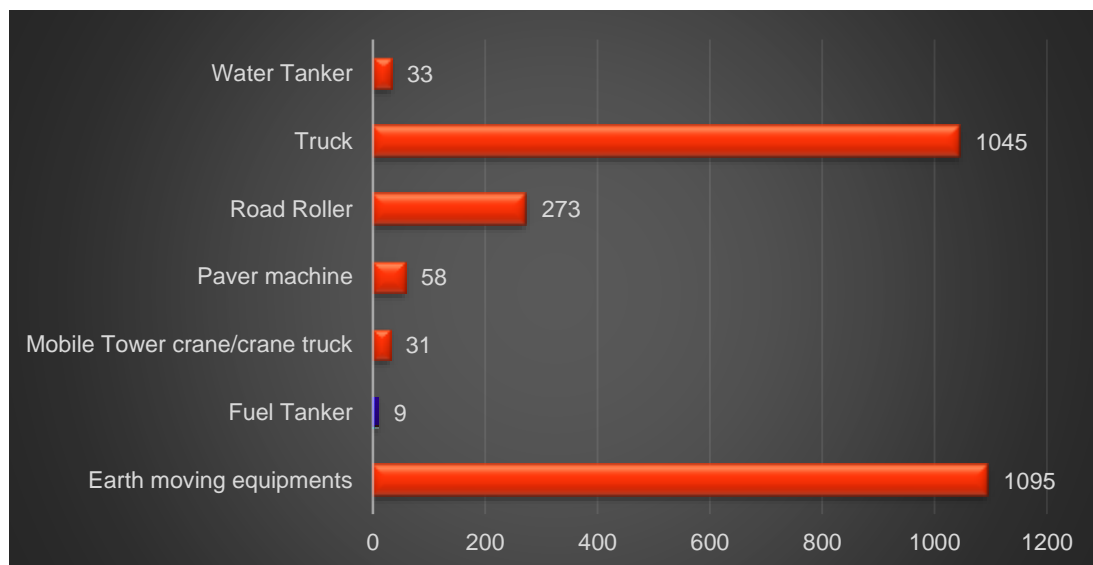
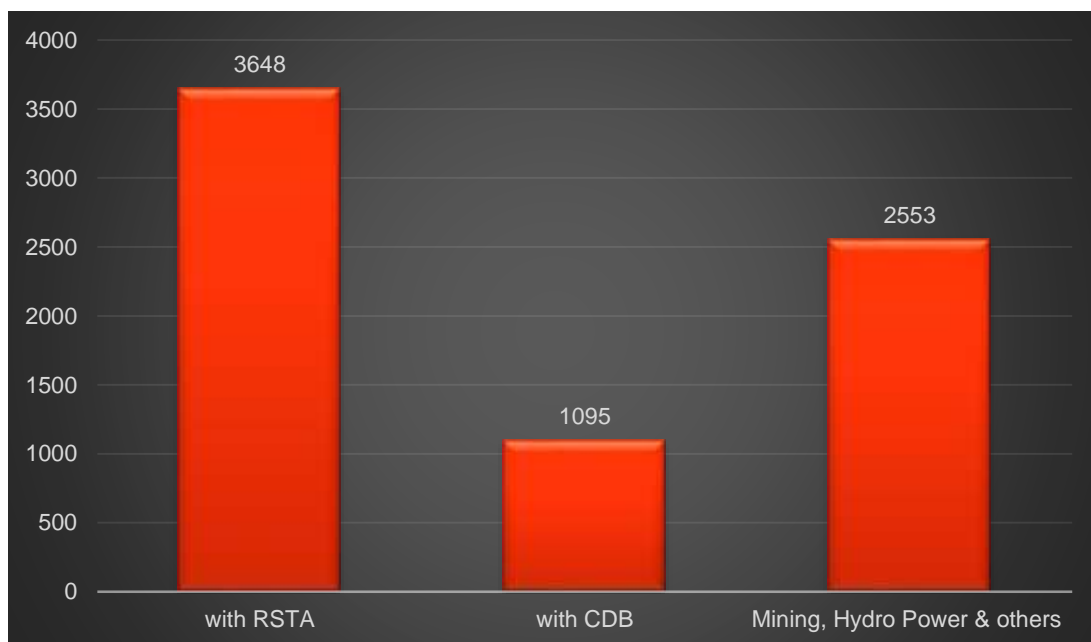


Nos. of Architects & Surveyors registered**Trend of Architects registered**

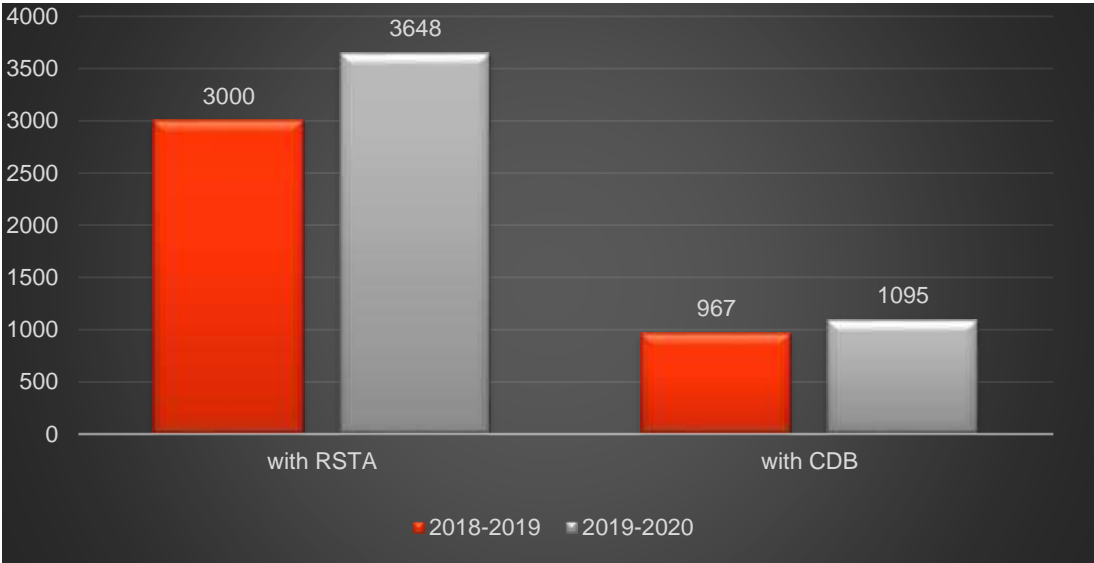
Employed of other professionals in the firms

	Construction firms	Consultant firms	Total
Accountant/ADM/Manager/MD/Messenger/OA/PO/Liaison Officer	852	12	864
Architect	7	45	52
Site Supervisor	3564	1	3565
Mechanical Engineer	4	0	4
Driver/operator/Blaster	12	1	13
Environment and Social/Geologist	0	12	12
Lab Technician /Carpenter/ Plumber/ Electrician	56	0	56
Project Manager	198	0	198
Survey Engineer/Surveyor	11	20	31
Project/Site Engineer	1281	75	1356
Total	5985	166	6151

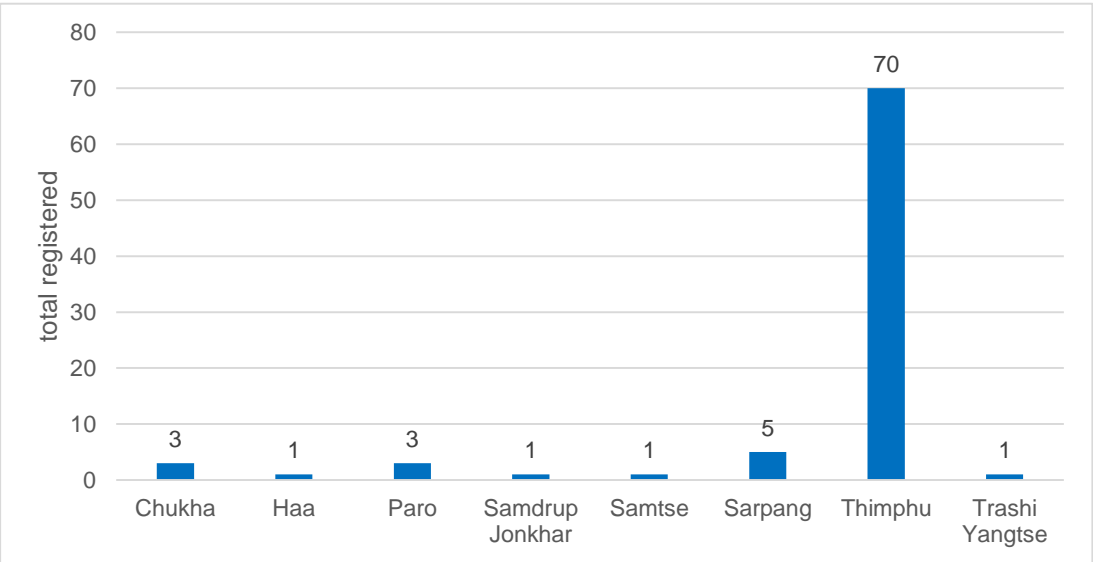
Employment trend in Construction Industry

Major construction equipment registered by construction firms for compliance**Number of Earth moving equipment registered**

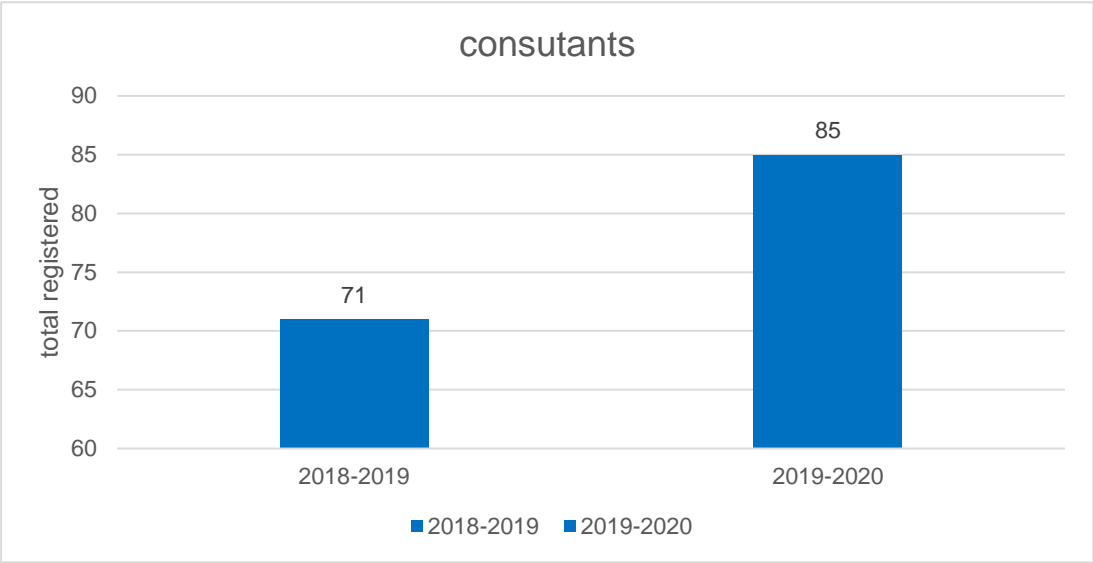
Trend of Earth moving equipment



Nos. of Consultant firms registered



Trend of registered Consultant firms



PROMOTION AND PROFESSIONALISM

Induction and Refresher's course for Contractors

The Program and Professionalism Section under CDB in pursuit of promoting a robust and vibrant construction industry conducted 10 batches of mandatory Refresher's Course and 6 batches of Induction Course for new aspiring contractors. Besides, enhancing the professional capacity of contractors, the training also notably facilitates in boosting development and promotion of an efficient, effective, quality-based construction industry, contributing to healthy and competitive growth. The training is a three days program for large and medium class contractors and two days program for small class contractors conducted at the College of Science and Technology, Phuentsholing.

The integrated training program is uniquely designed to impart basic knowledge and skills in various construction field management aspects like Risk Management, Quantity Surveying and Quality Assurance, management and control, Occupational Safety and Health, project scheduling and are also familiarized to Construction development Board registration and regulatory procedures, procurement rules and regulations and aspects of contract administration including arbitration. Various stakeholders including the Anti-Corruption Commission and Government Procurement and Property Management Division, Department of National Properties, Ministry of Finance are involved in imparting the modules.

The following modules were developed in liaison with the College of Science and Technology, Royal University of Bhutan since 2016 with two rounds of revision in 2018 and 2019.

Module 1

New Point Based system
Procurement Rules and Regulation 2009
Standard Bidding Document
E-Tool

Module 2

Project Management aspects
Planning and Scheduling
Estimation and Quality Control

Risk Management

e-Zotin

Arbitration

Mechanization

Module 3 for large and medium class contractors

Quality Assurance, Planning & Control

Occupational Health & Safety in Construction Industry

Impact of Point Based System & Compliance Monitoring

Code of ethics for contractors and engineers

e-Zotin (online registration), Introduction to e-GP

Process & Functions of Independent Review Body (IRB) & Debarment

Emerging trends in construction industry (Mechanization/material)

Project management using MS project planner

Module 3 for Small class contractors

Bill of quantities (BOQ), rate analysis and specifications with examples

Practical group exercise on Time, Cost, Resource planning & scope management

Quality Assurance, Planning & Control

Storage & stacking of construction materials and book keeping

Code of ethics for contractors and engineers

Occupational Health & Safety in Construction Industry

Induction course details

Batch	Period	Target Participants	Nos. of participants	Venue
1	6 th Jan – 7 th Jan 2020	New contractors	47	CST, Pling
2	8 th Jan – 9 th Jan 2020	New contractors	50	CST, Pling
3	10 th Jan – 11 th Jan 2020	New contractors	63	CST, Pling
4	13 th Jan – 14 th Jan 2020	New contractors	67	CST, Pling
5	15 th Jan – 16 th Jan 2020	New contractors	52	CST, Pling
6	17 th Jan – 18 th Jan 2020	New contractors	51	CST, Pling
		Total	340	

Mandatory Refresher's course details

Batch	Period	Target Participants	Nos. of Participants	Venue
1	26 th Aug – 28 th Aug. 2019	Large & Medium Class	34	CST, Pling
2	29 th Aug – 30 th Aug 2019	Small Class	56	CST, Pling
3	31 st Aug – 1 st Sept. 2019	Small Class	60	CST, Pling
4	21 st Oct – 23 rd Oct 2019	Large & Medium Class	53	CST, Pling
5	24 th Oct – 25 th Oct 2019	Small Class	67	CST, Pling
6	26 th Oct – 27 th Oct 2019	Small Class	64	CST, Pling
7	28 th Oct – 29 th Oct 2019	Small Class	59	CST, Pling
8	20 th Jan – 22 nd Jan 2020	Large & Medium Class	60	CST, Pling
9	23 rd Jan – 24 th Jan 2020	Small Class	74	CST, Pling
10	27 th Jan – 28 th Jan 2020	Small Class	84	CST, Pling
		Total	611	

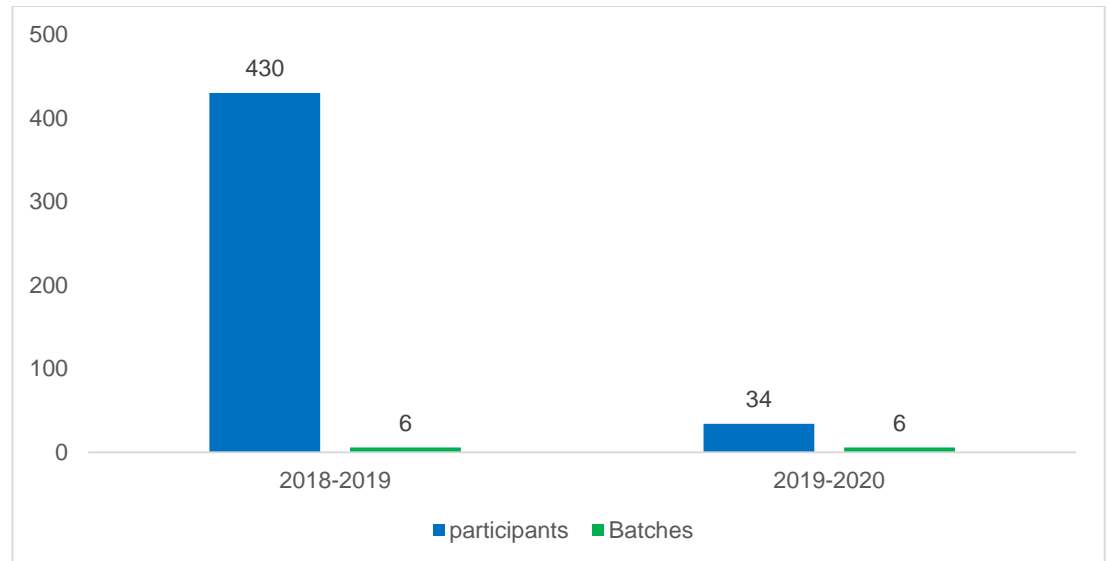
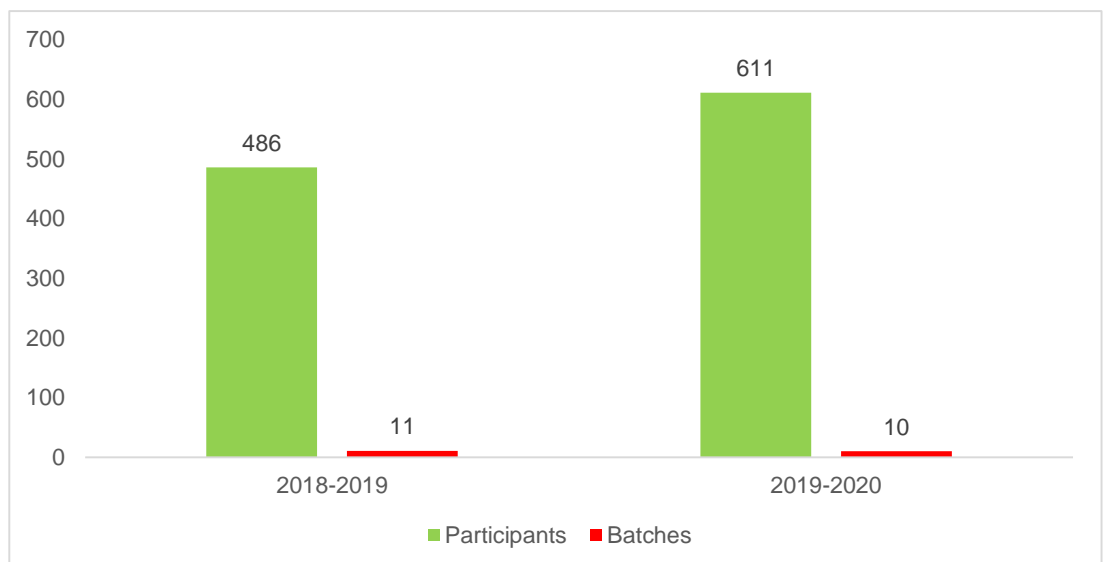
e-Tool and CiNET training

As indicated by the CDB Manual 2007 “To ensure fair and equal access to the award of contract” with development of Online Construction Industry Information (CiNET) in 2009 and online evaluation tool (e-Tool) in 2011, the use of the e-Tool has significantly benefitted procuring agencies by reducing the time taken to conduct the evaluation manually and providing easy access to contract information. The role of e-Tool focal person has been of paramount importance during evaluation as they are responsible in making clarifications and input of correct project information and details and appraisal of tender matters to the Tender Committee. Also, they are entrusted with feeding in the details of performing and non-performing contractors impacting the bidder’s eligibility in the future tenders.

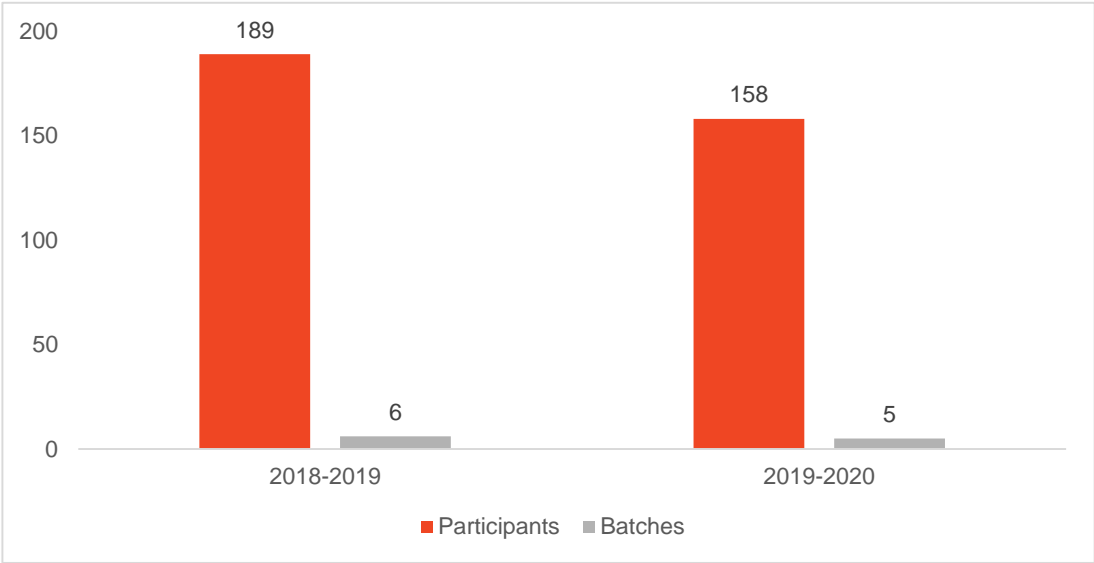
Considering the critical role played by e-Tool focal person in the respective agency for procurement of civil works and carrying out fair and uniform evaluation process, the secretariat has conducted training on e-Tool and CiNET annually for the procuring agencies. The ICT Services conducted 5 batches of e-Tool and CiNET with a coverage of 158 focal person(s) and interested e-Tool users of procuring agencies in Bhutan this year.

e-Tool & CiNET training details

Batch	Period	Target Participants	Nos. of participants	Venue
1	21 st – 22 nd Oct 2020	Interested e-Tool users & Focal person(s)	30	CST, Pling
2	23 rd – 24 th Oct 2020	Interested e-Tool users & Focal person(s)	31	CST, Pling
3	25 th – 26 th Oct 2020	Interested e-Tool users & Focal person(s)	29	CST, Pling
4	28 th – 29 th Oct 2020	Interested e-Tool users & Focal person(s)	35	CST, Pling
5	30 th – 31 st Oct 2020	Interested e-Tool users & Focal person(s)	33	CST, Pling
		Total	158	

Training trends for Induction course**Training trends for Refresher course**

e-Tool & CiNET training



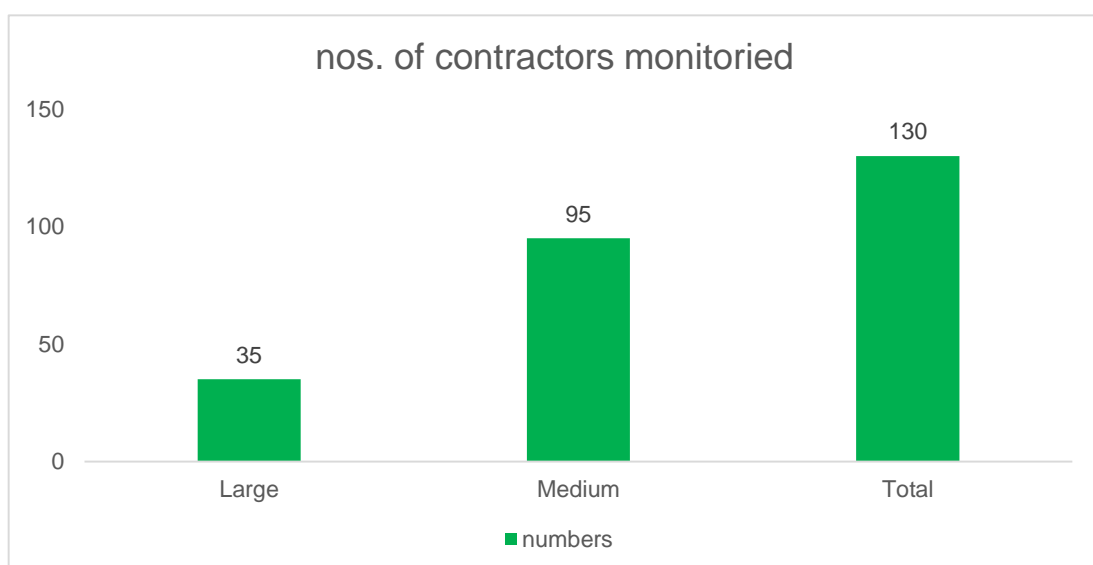
MONITORING

As an overseer of the construction industry, a key area for the development of construction is through CDB's mandate to regulate the construction industry through compliance monitoring. Compliance monitor ensures that construction firms are professional and conduct their commitments to projects and clients' requirements as well as fulfill minimum requirements according to class and category. Construction firms are strategically and regularly monitored for compliance to registration commitments.

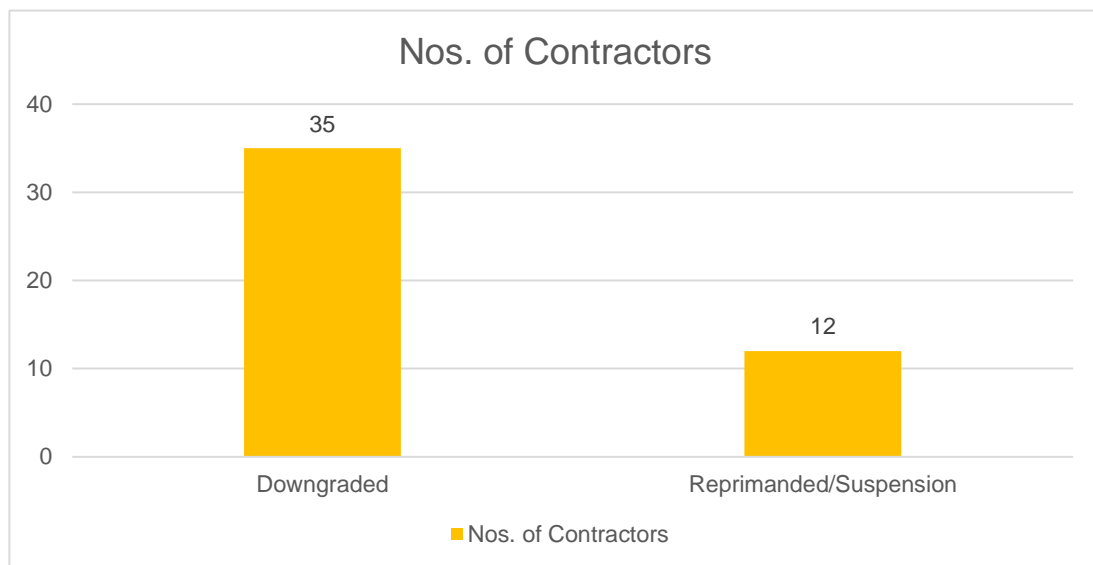
Depending on the category and class of the contractors, the requirement are cross checked and verified. In case of defaulters, relevant actions including downgrading, suspension and other regulatory measures are taken according to the Monitoring Guidelines and the decision of Monitoring Committee, Construction Development Board.

Office Establishment Monitoring of the Contractors

Office establishment monitoring comprises of monitoring of contractor's office set-up, human resources and registration requirement. All Large and Medium class contractors are obligated to maintain office setup in their registered Dzongkhag and employ the human resources as committed during registration/renewal. Administrative actions including downgrading to lower class/category and suspension are taken upon noncompliance.



Administrative Actions Taken



Note: For details of administrative actions taken, refer Annexure 1 and 2

Ongoing Site Monitoring

The monitoring team of CDB randomly monitor/inspect ongoing construction sites on the compliance to fulfillment of the Human Resource (HR) and equipment requirements as committed in the contracts of projects. The compliance monitoring of project committed resources includes verification and monitoring of contractor obligations to deploy the committed resources to the work site as per the contract.

Contractors also have the responsibility to have good construction management practices at site. The monitoring team checks the compliance of both contractor and the procuring agencies to the contract documents.

With limitations in Human Resource, the monitoring team could only monitor 67 ongoing works out of 602 works awarded through e-Tool. The 67 sites in different parts of the country are indicated in the graph below.

Major observations of site monitoring

Major Observations from site monitoring

Out of 31 large class construction projects monitored, 4 projects were completed. The observations from remaining 27 sites indicated;

14.81% equals to 4 project sites do not have a proper project office establishment.

33.33% equals to 9 sites did not have project informatory sign boards.

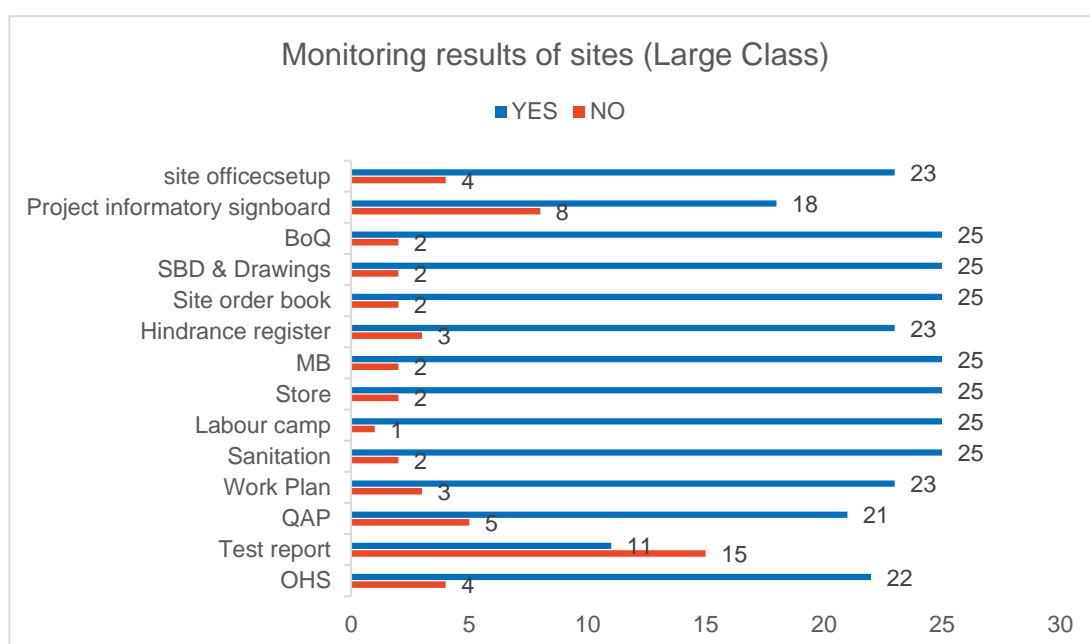
14.82% equals to 4 sites did not have work plans.

22.23% equals to 6 sites did not use quality assurance plans.

11.11% equals to 3 sites did not maintain hindrance register records.

Out of 63 committed human resources, only 46 were deployed

Out of 46 deployed human resources, 24 were replaced



Out of 30 Medium class construction projects monitored, 7 projects were completed. The observations from remaining 23 sites indicated;

52.18% equals to 12 project sites do not have a proper project office establishment.

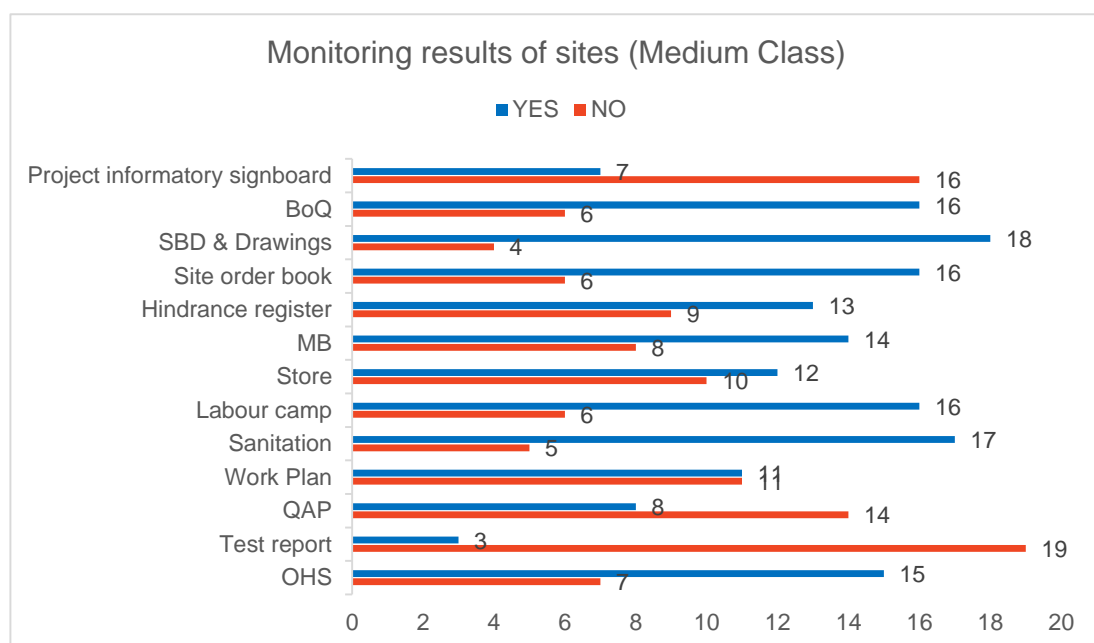
69.56% equals to 16 sites did not have project informative sign boards.

51% equals to 12 sites did not have work plans.

66.22% equals to 15 sites did not use Quality Assurance Plans

Out of 60 committed human resources, only 37 were deployed

Out of 37 deployed human resources, 13 were replaced



	Large Class	Medium Class
Total no of HR committed	63	60
Fulfillment (deployed)	46	35
Replaced HR	24	13
Non fulfilment	17	23

Pictures from Monitoring



CDB monitoring Team verifying registration requirements of large & medium class contractors. Office Establishment monitoring ensures genuine and fair access to award of contract.

(Right): Project Informatory Boards are important aspects of dissemination of information regarding specific projects for the general public. During monitoring this year, it was found that 11 out of 23(47.8%) construction sites of medium Contractors had a signboard and 18 out of 27(66.67%) construction sites of large contractors had installed a project informatory boards.





*CDB Monitoring Team Verifying
Deployment of the committed resources at
site. Contractors are required to deploy the
committed resources at the site to build
infrastructures of standard quality in
stipulated time.*



RESEARCH & TECHNOLOGY DEVELOPMENT

Observations for works awarded in e-tool

No. of works awarded and total amount in the three class

Class	Large	Medium	Small	Total
No of works	172	248	895	1315
Total Amount (Nu. million)	6260.70	1826.26	1563.14	9650.10

No. of works awarded and total project cost (Dzongkhag wise)

	No. of works	Amount (Nu. in million)
Bumthang	17	134.70
Chukha	115	946.70
Dagana	71	306.45
Gasa	36	185.96
Haa	43	190.47
Lhuentse	58	162.76
Mongar	48	521.40
Paro	45	343.41
Pemagatshel	89	617.35
Punakha	77	498.13
Samdrup Jongkhar	114	947.97
Samtse	93	1052.50
Sarpang	71	887.96
Thimphu	63	854.25
Trashigang	96	551.65
Trashiyangtse	62	197.91
Trongsa	50	349.98
Tsirang	75	404.29
Wangdue Phodrang	60	187.66
Zhemgang	32	308.66
Total	1,315	9650.16

In total, 1315 works were awarded in 2019-2020 amounting a total cost of the projects to Nu. 9.650 billion.

Samdrup Jongkhar had the highest number of works awarded at 114 works amounting to Nu. 947.97 million. However, Samtse executed the highest amount of project amounting to Nu. 1.052Billion,

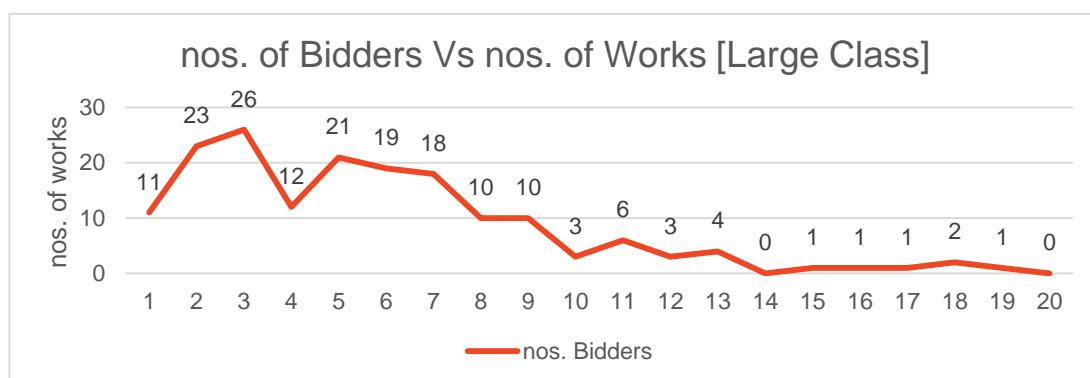
Bumthang Dzongkhag awarded the least number of works with upto an amount of Nu. 134.70 million.

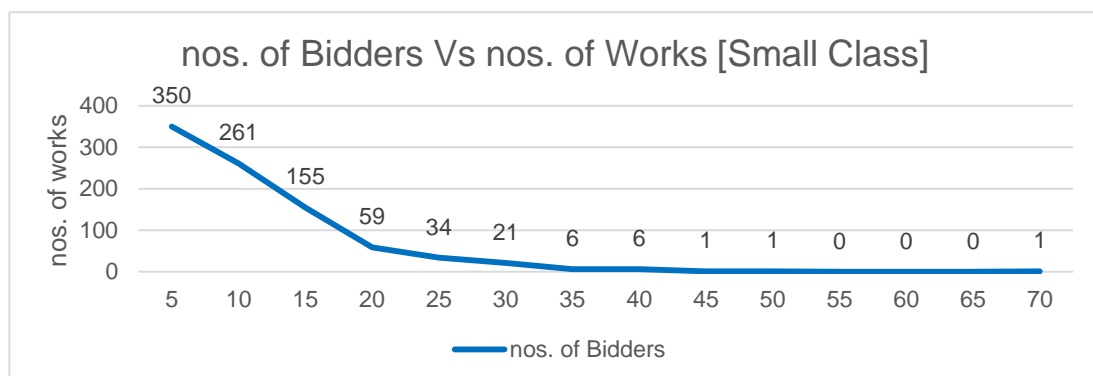
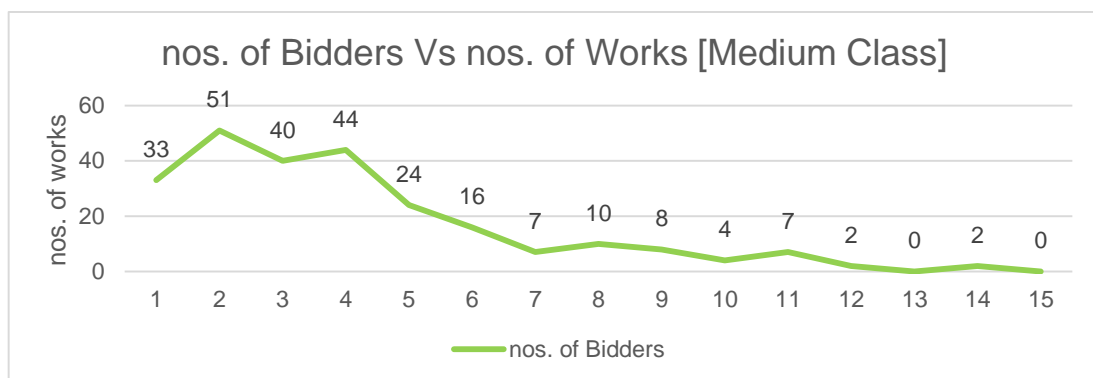
Bidder Participation

Following were the findings compiled from the Evaluation Report of works executed by Large and Medium Contractor's evaluated and awarded through e-Tool:

Bidder participation in tenders for works on e-tool

Class	No. of works awarded in e-Tool	No. of bidders participated	Average no. of bidders for each work	Max. bidders participated	Min. Bidders participated
Large	172	983	6	19	1
Medium	248	1016	4	14	1
Small	895	7444	8	67	1





Qualification of Bidders during the technical evaluation stage

The evaluation system for bidders' selection is a two-stage evaluation process. In the 1st stage (Technical evaluation), a firm need to obtain at least 65 points out of 100 in order to qualify for the 2nd stage (Financial & preference score evaluation). Only qualified bidders are taken to 2nd stage of evaluation.

Respective procuring agencies designs the HR & equipment requirement to suit their projects which is reflected in the bidding data sheet of the tender document.

The table below shows that on average 28% of bidders gets disqualified during the 1st stage of evaluation.

Bidder Qualification in tenders for works on e-tool

Class	No of works awarded in e-tool	No of bidders participated	No of bidders qualified for 1st stage	No of bidders not qualified 1st stage
Large	172	983	704(72%)	279(28%)
Medium	248	1016	591(58%)	425(42%)

Point Base System application

Point base system is applicable for works executed by large and medium construction firms. The advantage of the Point Base System is that the bidders are in position to determine whether they would qualify the 1st stage of evaluation since the required HR & Equipment along with point allocation is clearly mentioned in the bid document.

Number of bidders disqualified in the 1st stage indicates:

- » Lack of professional knowledge to analyze the bid document before bidding;
- » Not updating work status on time with CDB; or
- » Non-availability of required resource and technical capacity with the bidders

Compared to FY 2018-19 the number of bidders disqualified for 2nd stage has increased from 12% to 28% for Large class

Works awarded below and above government estimate

On average, 89.73% of all works was awarded below the government estimate.

The average quoted price of the winning bids are 19.46% below government estimate.

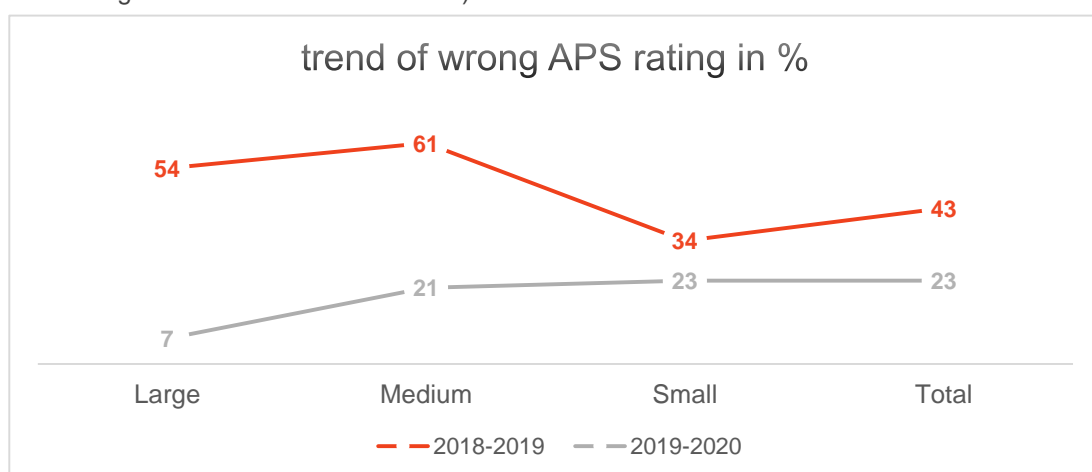
Class	No of works	No of bidders participated	No. of works awarded below govt. estimate	No. of works awarded above govt. estimate	Max quoted price above govt estimate %	Min. quoted price below govt estimate %	Average quoted price %
Large	172	983	159	13	10.17	-35.04	-14
Medium	248	1016	215	33	23.21	-44.06	-14
Small	895	7444	841	54	40.1	-9.82	-19
Total	1315	9443	1,215			100	-16

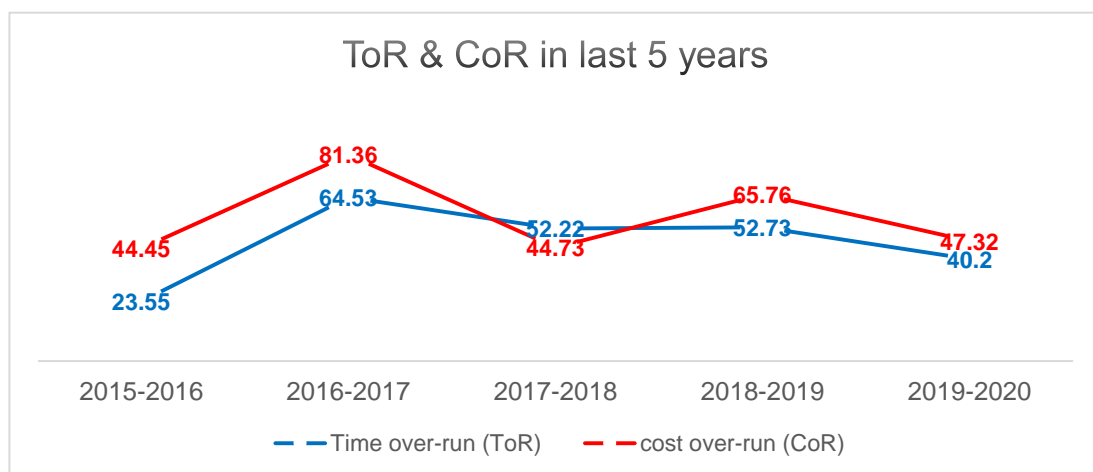
Discrepancy in Average Performance Score Rating (APS) of contractors

The Average Performance Score (APS) rated by the Procuring Agency after completion of the work for the contractor is one of the main parameters calculated during the technical bid evaluation for any future bid, they participate. The APS rated by the Procuring Agencies generally differentiate between the performing and non-performing contractors in terms of 'timely completion of works' and 'quality of work' they have delivered. Despite informing Procuring agencies, after findings in the previous Annual Report, of the discrepancy, on compilation and analysis of work completion data for this year's report, it was still observed that the APS ratings are still with discrepancies. The table below indicates that 43% of 220 work are rated wrongly despite having time overrun. Such non-compliance will miscalculate the bidder's technical capacity and their performance scores resulting into unfair bidding process and unethical practices.

Class	Works rated full score (30/30)	Works with time overrun but rated full score	% of works rated wrongly
Large	30	8	7%
Medium	68	14	21%
Small	447	105	23%
Total	545	127	23%

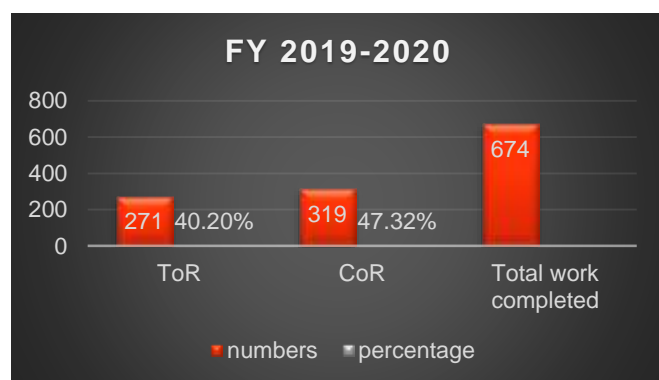
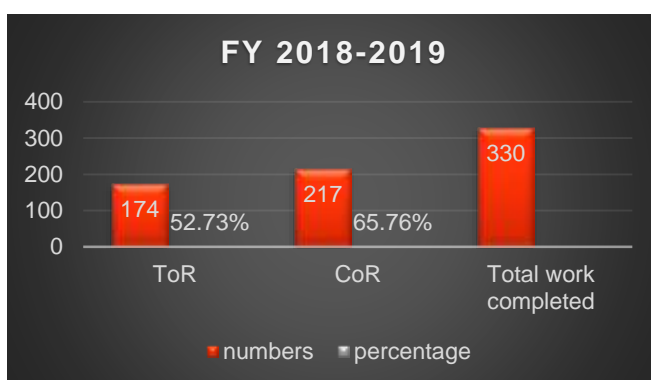
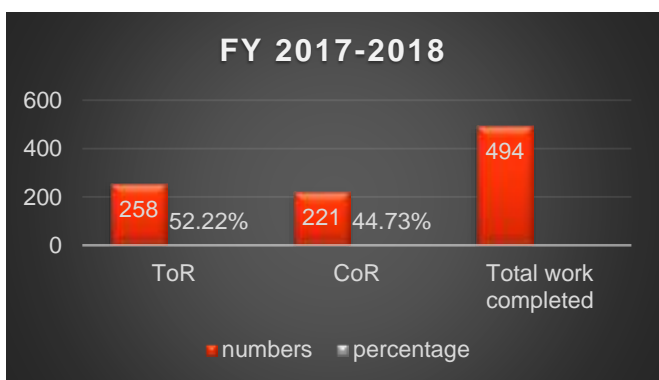
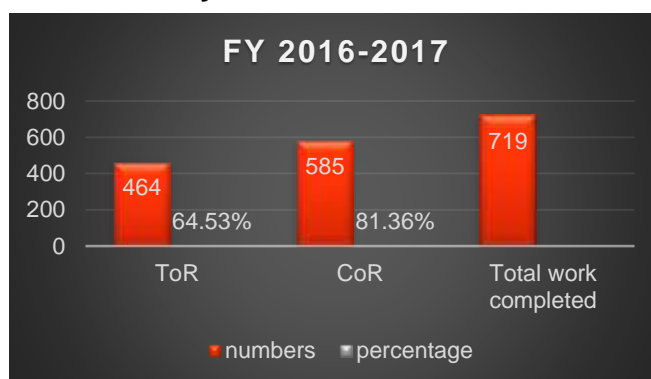
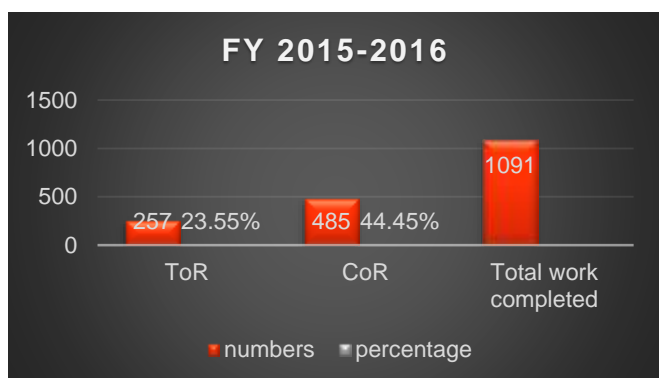
(Disclaimer: The finding is from the analysis of data updated/provided by e-tool focal person of various agencies in the e-TOOL/CiNET)





The analysis found that Complications in the construction process arise in the project implementation phase. In an analysis project within the percentage time and cost overrun has decreased compared to the FY 2018-2019. During the FY 2019-2020, the number of works completed was recorded as 674, with 271 projects running into time over run and 319 projects having cost overrun. The study and the data compiled from the procuring agencies indicates that some of the main reasons for time and cost overrun were improper planning, design changes, deviation from the drawings and specifications, change in location, lack of budget, typing error by the e-tool focal person, quantity variation were the drawbacks of procuring agencies. Slow work progress and non-deployment of committed resources and complacency, financial mismanagement were drawbacks of the construction firms.

Time and Cost Overrun Observations for previous years and current financial year



Factors causing Time overrun

Change in design	Additional/Change in scope	Delay by contractor
25%	66.6%	8.3%

Factors causing Cost overrun

Change in design	Additional/change in scope	Change in BOQ items/quantities
10%	85%	5%

Time and Cost Overrun after desktop monitoring

The information on works completed between July 1st 2019 to June 30 2020 using e-tool and CiNET were verified for the time and cost overrun of the works. Respective procuring agencies were asked to submit justifications for the overrun from which actual overrun in cost and time was analyzed. All Procuring Agencies were contacted and instructed to update their justifications for the overruns and their contribution to causing the overrun were analyzed.

Cost Overrun after Desktop Monitoring

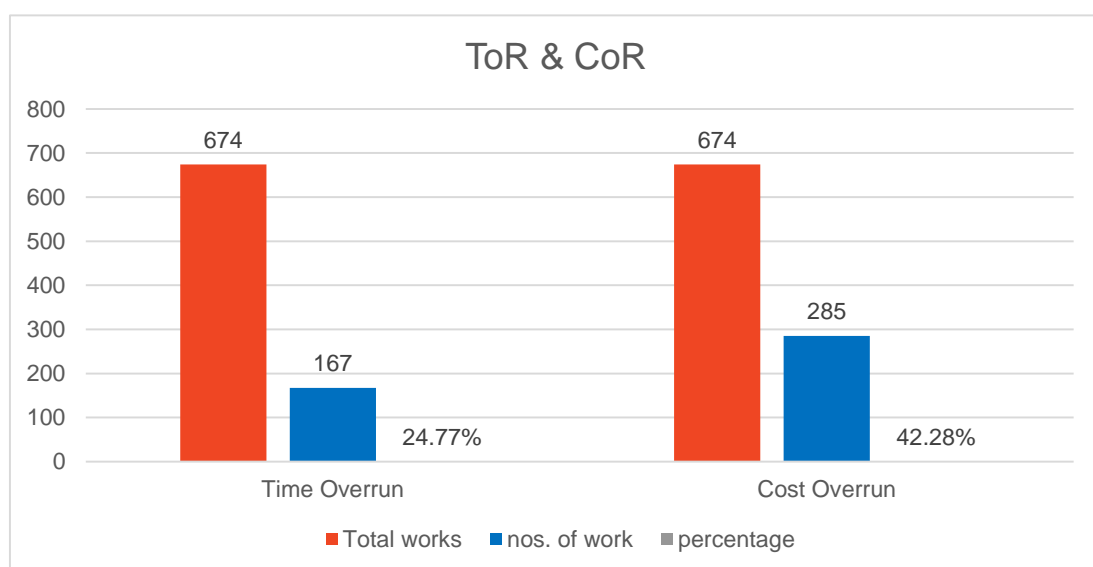
From the previous table on cost overrun, out of 674 completed works, considering only cost implications caused by change in design, the actual cost overrun was analyzed to be evident only in 285 works amounting to percentage of 42.28%

Time Overrun after Desktop Monitoring

Similarly, the actual time overrun was evident only in 24.77% of the total works equivalent to 167 out of 674 works considering that only the works with change in design and with delays by the contractor were taken into account.

Factors causing

1. Additional work awarded by Procuring Agencies
2. Change in design
3. Delay in procuring materials at site
4. Change in location of project
5. Delay in procuring materials at site



CDB at a Glance



70th Board Meeting – 3rd July 2019



*“INTERNATIONAL CONSTRUCTION
BUSINESS FORUM – 1st Aug. 2019
Conducted by Construction Association of
Bhutan in Collaboration with Construction
Development Board*



One day forum was conducted by Mr. Salvador P. Castro, FIDIC Contracts International Trainer and Mr. Christiaan Frederik, Expert in Dispute Avoidance and Adjudication covering in brief the contract books of FIDIC and international contractual dispute resolution mechanisms.



"Launching of Ethical Code of Conduct for Contractors 2019" – 1st August 2019

6 Principals in the code:

1. Honesty in carrying out responsibilities;
 2. Compliance with laws and regulations;
 3. Respect for the individual and community;
 4. Importance of quality, skills and standards;
 5. Importance of safety, health and welfare; and
 6. Importance of environmental preservation
-





*[refresher course for contractors]
26th Aug. – 1st Sept. 2019*



“CONSULTATION OF CONSTRUCTION DEVELOPMENT BOARD BILL” – 5th Sept. 2019 at MONGGAR & 9th Sept. 2019 at GELEPHU



*“CDB Officials visit to Philippines Overseas Construction Board
17th – 19th Sept. 2019”*



*“CDB Officials visit to Bangkok:
22nd – 29th Sept. 2019”*



*e-Tool training at CST, Pling
20th – 22nd Oct 2019*





*Refresher course at CST, Pling
20th – 25th Oct 2019*





“Awareness and feasibility study workshop entitled “Enhancing Collaboration and Efficiency using Building Information Modeling (BIM)” –
28th Oct. 2020



First Editorial Board Coordination
Meeting for CDB construction
Journal - 4th Dec. 2020



CDB Officials visit to Construction Industry Development Council for a Collaboration Workshop on National Construction Industry Database and Vishwakarma Awards, New Delhi – 18th -19th Dec. 2020



*Refresher course at CST, P/ling
6th - 20th Jan. 2020*



Signing of Memorandum of Understanding between the Construction Development Board and the Department of Labour, Ministry of Labour and Human Resources in the implementation and enforcement of Occupational Health and Safety Aspects.

31st Jan. 2020



Mr. Tashi Wangdi, CID no. 10805001726 - Winner of CDB logo design competition.

17th March 2020

Civil Service Awards & Promotions



*Mr. Tshering Nidup
recipient of silver medal
[20years in Service] - 11th Dec. 2019*



*Mr. Leki Dorji
[outstanding employee of the year]*



*From L-R: Mr. Budhi Man Shingdan, Ms. Yeshe Choden, Mr. Tshering Nidup, Mr.
Karma Singh Tamang _Promotion*

Annexure

Annexure 1: Contractors down-graded

Sl #	Firm Name	CDB#	Class	Administration taken	Dzongkhag	Date
1	Bumzang Construction	4449	L	Downgraded to Medium	Punakha	18/12/2019
2	D.K Construction	4102	M	Downgraded to lower class in W4	Punakha	18/12/2019
3	PUNA Construction	5388	M	Downgraded to lower class.	Punakha	18/12/2019
4	CHADO T Construction	7399	M	Downgraded to lower class in W4	Punakha	18/12/2019
5	JAMANG Construction	1102	M	Downgraded to lower class.	Wangdue	18/12/2019
6	DHEJUNG Electrical Engineering Works	1315	M	Downgraded to lower class.	Wangdue	18/12/2019
7	DRUK PHUENSUM Construction	1361	M	Downgraded to lower class.	Wangdue	18/12/2019
8	SHA SAMPHEL Construction	1402	M	Downgraded to lower class.	Wangdue	13/12/2019
9	M.T.K Construction Private Limited	1634	M	Downgraded to lower class.	Wangdue	18/12/2019
10	TERBUM Construction	2070	M	Downgraded to lower class.	Wangdue	18/12/2019
11	DRUK KHUENPHEN Builders	2875	M	Downgraded to lower class.	Wangdue	18/12/2019
12	GOENPO Construction	3222	M	Downgraded to lower class.	Wangdue	18/12/2019
13	D.KAN'S construction	3226	M	Downgraded to lower class.	Wangdue	18/12/2019
14	TSHERING PEMO Construction	3652	M	Downgraded to lower class.	Wangdue	13/12/2019
15	NGALA RETSHEL Construction	3839	M	Downgraded to lower class.	Wangdue	18/12/2019
16	RUBJIB PASSANG NORPHEL Construction	6409	M	Downgraded to lower class.	Wangdue	18/12/2019
17	NEHEMIA Construction	6528	M	Downgraded to lower class.	Wangdue	13/12/2019
18	APPLE Builders	7370	M	Downgraded to lower class.	Wangdue	18/12/2019
19	UGYEN JIGMI Construction	8153	M	Downgraded to lower class.	Wangdue	24/12/2019
20	RELDRI Construction	4340	M	Downgraded to lower class.	Dagana	18/12/2019
21	SWASTIKA Construction	7992	M	Downgraded to lower class.	Tsirang	18/12/2019
22	P.K Construction	1814	M	Downgraded to lower class.	Tsirang	18/12/2019
23	K.N Construction Private Limited	1358	L	Downgraded to lower class.	Sarpang	24/12/2019
24	K.RANGRIK Construction Private Limited	3061	L	Downgraded to lower class.	Sarpang	24/12/2019
25	ZAMKAR Construction Private limited	7846	L	Downgraded to lower class.	Sarpang	13/12/2019
26	TENZIN GELEG Construction Private Limited	1416	L	Downgraded to lower class.	Sarpang	24/12/2019
27	DECHEN Construction	1899	M	Downgraded to lower class.	Sarpang	18/12/2019
28	NINGTOP Construction	3574	M	Downgraded to lower class.	Sarpang	24/12/2019
29	JANGKHURUNG Construction	4730	M	Downgraded to lower class.	Sarpang	18/12/2019
30	SOLMONY Construction	6045	M	Downgraded to lower class.	Sarpang	24/12/2019
31	BUMZANG Builders	7093	L	Downgraded to lower class.	Sarpang	13/12/2019
32	SOMU Construction	7169	M	Downgraded to lower class.	Sarpang	24/12/2019
33	PHUNTSO PHUENSUM Construction Pvt. Ltd	6700	L	Downgraded to lower class.	Sarpang	18/12/2019
34	DRAMYEN Builders	5800	M	Downgraded to lower class.	Trongsa	03/06/2020
35	KARMA Construction Pvt. Ltd	1786	L	Downgraded to lower class.	S/jongkhar	19/03/2020

Annexure 2: Contractors (Reprimand letter issued or suspended)

SI #	Name of firm	CDB #	Class	Administration Taken	Dzongkhag	Date
1	Lotus Private Limited	5814	L	Temporarily suspended	Wangdue	
2	GELEP Construction	4238	M	Temporarily suspended	Wangdue	19/12/2019
3	PELDruk Builders	5621	M	Temporarily suspended	Wangdue	19/12/2019
4	KHAMBU Construction	5654	M	Temporarily suspended	Wangdue	19/12/2019
5	LHAYUL NORBU Construction	5180	L	Temporarily suspended	Tsirang	
6	TASHI NORPHEL Builders	4693	M	Temporarily suspended	Sarpang	
7	PALDEN JAMTSO Construction	6119	M	Temporarily suspended	Sarpang	19/12/2019
8	YOEDSEL Construction	8442	M	Temporarily suspended	Sarpang	19/12/2019
9	LHANAM PELMO Construction	5740	M	Temporarily suspended	Sarpang	19/12/2019
10	JAMTSO Construction	2145	L	Issue noncompliance order to apply for location change and visit the firm office in Thimphu	Si/Jongkhar	19/03/2020
11	RIGSAR Construction Private Limited	2435	L	Temporarily suspended	Trashigang	26/03/2020
12	MENTSANG Construction	3133	M	Temporarily suspended	Trashigang	26/03/2020

Annexure 3: Desktop Monitoring

Sl. No	Procuring agency	No. of ongoing works	No. of works not updated as completed	Date of assessment and letter sent
1	Trongsa Dzongkhag Administration	92	65	21/01/2020
2	Zhemgang Dzongkhag Administration	53	31	22/01/2020
3	Pemagatshel Dzongkhag Administration	55	7	23/01/2020
4	Samdrup Jongkhar Dzongkhag Administration	84	6	23/01/2021
5	Trashigang Dzongkhag Administration	42	4	23/01/2022
6	Trashiyangtse Dzongkhag Administration	53	18	23/01/2023
7	Lhuentse Dzongkhag Administration	81	9	23/01/2024
8	Mongar Dzongkhag Administration	26	11	23/01/2025
9	Bumthang Dzongkhag Administration	15	9	23/01/2025
10	Thimphu Dzongkhag Administration	36	19	24/01/2020
11	Paro Dzongkhag Administration	30	14	24/01/2020
12	Haa Dzongkhag Administration	38	10	24/01/2020
13	Chhukha Dzongkhag Administration	47	10	24/01/2020
14	Samtse Dzongkhag Administration	135	69	24/01/2020
15	Gasa Dzongkhag Administration	31	7	24/01/2020

Management & Annual Report Committee Information

Management & Annual Report Committee Information

Management Team:



Mr. Phub Rinzin
Director



Mr. Tsheten Dorji
Chief, CRD



Mr. Tandin Norbu
Offtg. Chief, CSD

Annual Report Committee



Mr. Ambar Mongar
ICT



Mr. Budhiman Shingdan
CRD



Mr. Tshering Nidup
CRD



Mr. Tandin Norbu
CSD



Ms. Yeshi Choden
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