



Annual Report 2020-2021





“If the King, government and the people continue to work hand-in-hand with dedication, perseverance and fortitude, we still have every opportunity to further strengthen our country and achieve greater prosperity for our people.”

~ His Majesty The Druk Gyalpo ~

Annual Report 2020-2021

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Message from CHAIRPERSON



The greatest impact of the pandemic in the construction is the massive reduction in the economy of the nation.

The construction industry noted further negative growth of -20.64 % in 2020 from a negative growth of -14.66 percent in 2019. The industry's contribution to the Gross Domestic Product (GDP) was -2.39%, in 2020 and -2.11% in 2019. The government construction accounted for 38.04%, while the private and public corporations accounted for 61.96% of the sector's Gross Value Added (GVA) in 2020. The industry constituted 9.50% of the GDP in 2020, of which 5.89% was from the private and public corporations and 3.61% share was from the government. The share of the sector dropped by 1.96% in 2020 from 11.46% recorded in 2019. The GVA of the sector for the year 2020 was Nu. 16,301.90 million compared to Nu. 20,465.42 million in 2019. (Data Source from National

Accounts Statistics 2021, NSB)

In the recent years, the occurrence of rampant accidents at construction sites has raised concerns for all the agencies. According to the Annual Health Bulletin published by the Ministry of Health, The work related injuries recorded in the year 2020, was 1,299 and in the year 2021, was 14,146. Thus, the increased numbers in the work related injuries clearly indicates the lapses of safety measure in the workplace, lack of advocacy and lack of stringent monitoring. To mitigate this issue the Construction Development Board (CDB), initiated with Occupational Health and Safety (OHS) training to the contractors and specialized firms in collaboration with Construction Association of Bhutan (CAB). CDB in close consultation with Ministry of Labour and Human Resources (MoLHR), JICA and CAB drafted Construction Safety Supervisor Training course outline. The outline will be a reference document to raise awareness about the existing OHS legislations of the country, introduce the concept of OHS and skill the construction safety supervisor to ensure work place safety.

CDB is consistently enhancing research and development thereby encouraging advocacy and implementation with regard to quality of construction, occupational health and safety and use of various construction technologies to encourage participation of our youth in the construction sector.

I submit my enthusiasm in presenting the Annual Report 2020-2021 of the CDB. 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



After joining the Construction Development Board (CDB) as a Director, in the month of May 2021, it is an honour for me to present the Fourth Annual Report.

CDB is undertaking various initiatives during the pandemic in close consultation with relevant agencies in regulation and building the capacity of the Bhutanese contractors, construction professionals and consultants. CDB has assisted the government in obtaining increased returns on its investments through timely service delivery and virtual professional development training to the contractors.

As the construction industry is prone to work related hazards and occurrence of rampant accidents at construction sites in recent years, competent health and safety has remained a huge concern for all the agencies. To mitigate these issues, CDB along with the Construction Association of Bhutan conducted training for safety personnel and drafted the Construction Safety Supervisor Training Course Outline. The OHS training for a safety supervisor for the construction site is in pipeline.

The Annual Report 2020-2021 covers the various programs undertaken to develop and regulate the construction industry including data and information verified and analyzed.

The CDB provides services for registration of contractors, consultants, specialized firms, architects, engineers, surveyors and specialized trade. The promotional and regulatory mandates also ensure employment generation in the construction industry.

Lastly, I extend my sincere gratitude to CDB Board members for their continued guidance and wisdom, CDB officials for their hard work and agencies for necessary collaboration. The CDB family would like to urge everyone to be a responsible citizen and follow COVID 19 protocol. Together we can break through this pandemic. Stay safe.

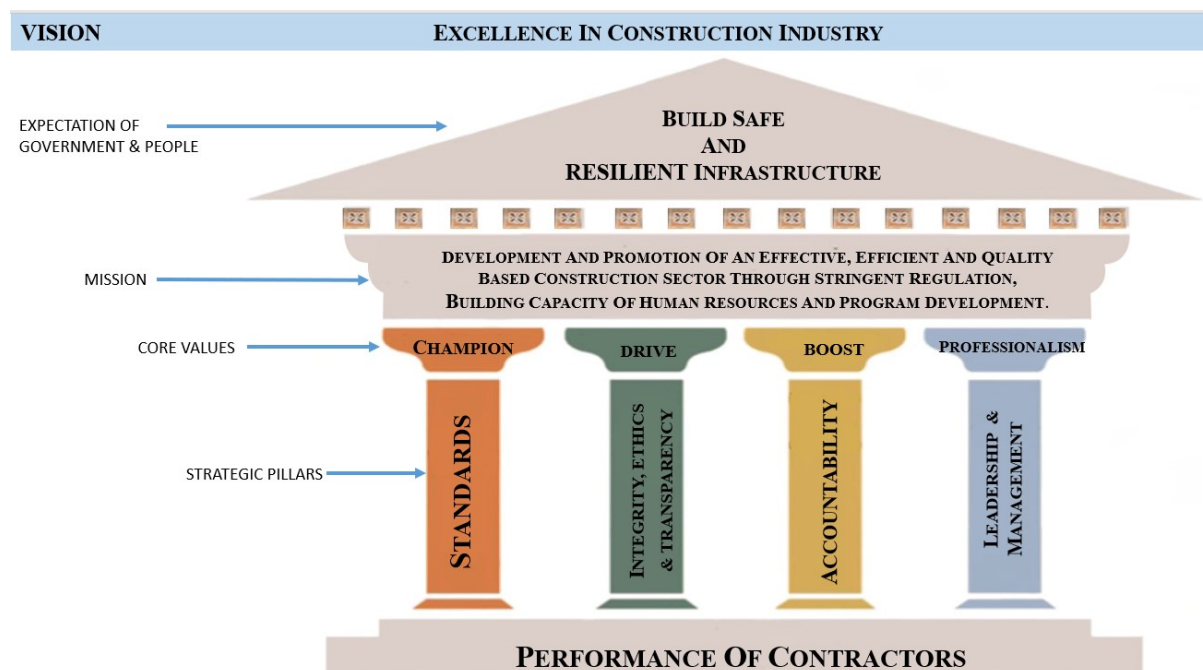
Tashi Delek!

A handwritten signature in blue ink, appearing to read 'K. Sonam', with a stylized flourish at the end.

Karma Sonam
(Director)

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 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 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 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 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.

Leadership and Management

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.

Accountability, Ethics, Integrity & Transparency

The key success to 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.

CDB Core Values

Champions

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

Drive

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

Boost

safe, sustainable and quality infrastructure.

Roles and Responsibilities of CDB

- » 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.

Functions of CDB

Overseer of the Industry

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

Registration & Coordination

Registration of construction firms, construction personnel, conducting workshops for resolutions, enable environment for promotion of local firms, 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

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

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.

CDB Board members



Aum Kesang Deki
DG DNP MoF



H.E Lyonpo Dorji Tshering
MoWHS, Chairman



Mr. Tenzin
DG DoR MoWHS



Mr. Sonam Wangdi
Director DoL MoLHR
[till 15-10-2020]



Mr. Karma Dupchuk
Director DES MoWHS



Mr. Phuntsho Namgyal
Director DRE MoEA



Mr. Tshering Yonten
Executive Director CAB



Mr. Phub Rinzin, Director
Member Secretary [till April 2021]



Mr. Thinlay Gyamtsho
President CAB



Mr. Karma Sonam, Director
Member Secretary [from May 2021]

CDB Board initiatives

Details of board meetings held

Sl #	Board Meeting details	Date	Board members attended	Board members absent
1	72 nd BM	9 th July 2020	8	1
2	73 rd BM	6 th Nov. 2020	6	3
3	74 th BM	5 th Feb. 2021	6	3

Note: Mr. Phuntsho Namgyal Director, DRE, MoEA joined as a new CDB Board member from July 2020 while Director Mr. Mewang Gyeltshen resigned from the Board from July 2020.

Some of the important initiatives undertaken from Board Meetings

72nd Board Meeting:

- » Launched mobile APP for monitoring.
- » Instituted Construction Grievance Redressal Forum (CGRF) for resolution of construction issues.
- » Interim verification of Non-registered Equipment (NRE) of contractors delegated to CAB for renewal of CDB Registration certificate.
- » APS rated by site engineer which is checked by supervising Engineer to be countersigned by the Head of Tender Committee of that agency.

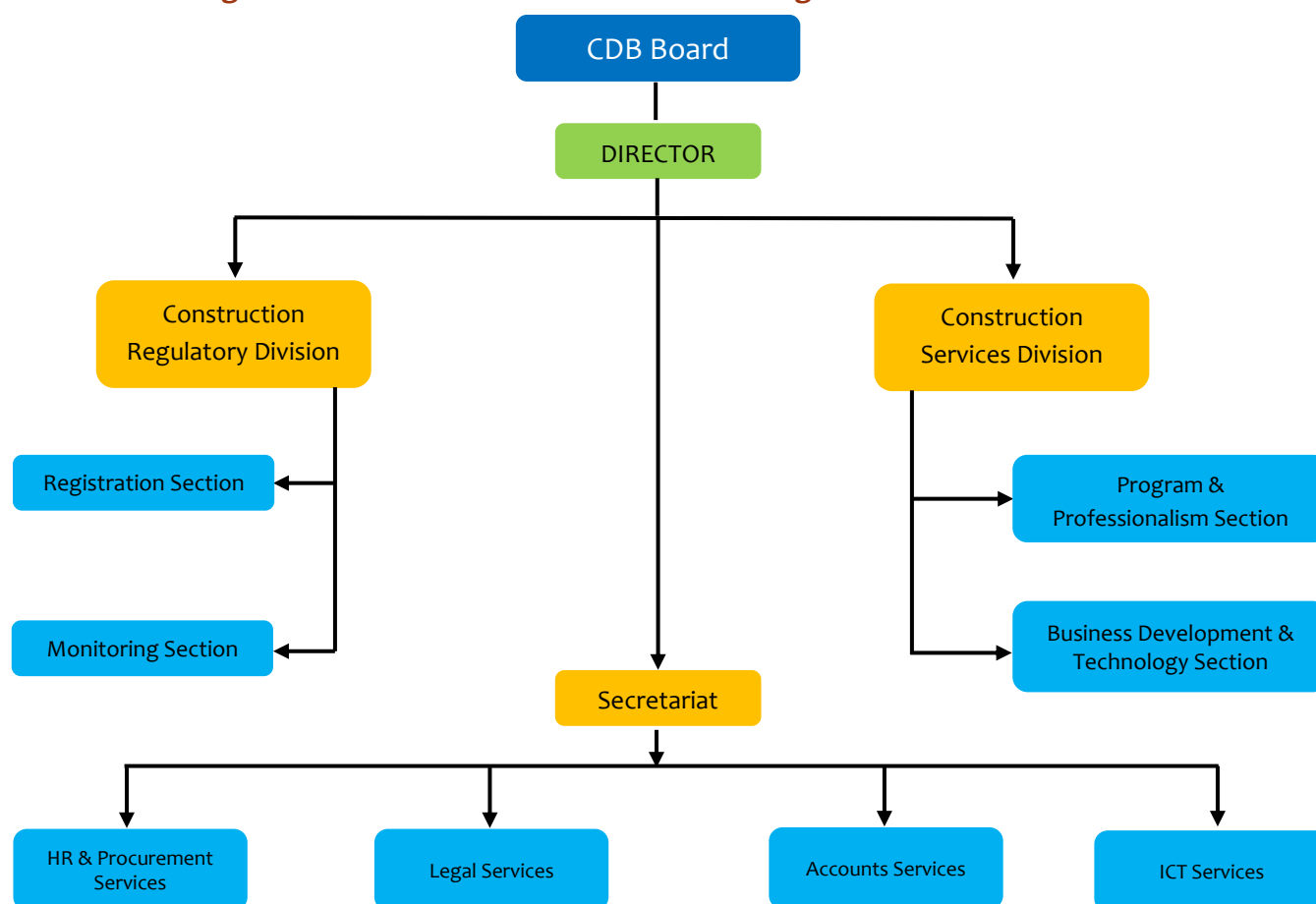
73rd Board Meeting:

- » Adopted Registration Guidelines 2020.
- » Adopted Guidelines for Specialized Trade and Firms 2020.
- » Adopted Monitoring Guidelines 2020.

74th Board Meeting:

- » Launched Construction Journal.
- » Increased the “works in hand” limit for the large class contractors from 5works to 8works.
- » Increased the ‘financial threshold’ for medium class contractors from 15million to 20million.
- » Recommended the Change of coefficient of the ‘Bid capacity’ from 2 to 2.5.
- » Temporary measure for addressing shortage in NC3 skilled persons endorsed
- » Adopted virtual trainings for Induction Course, Refresher Courses & e-Tool.

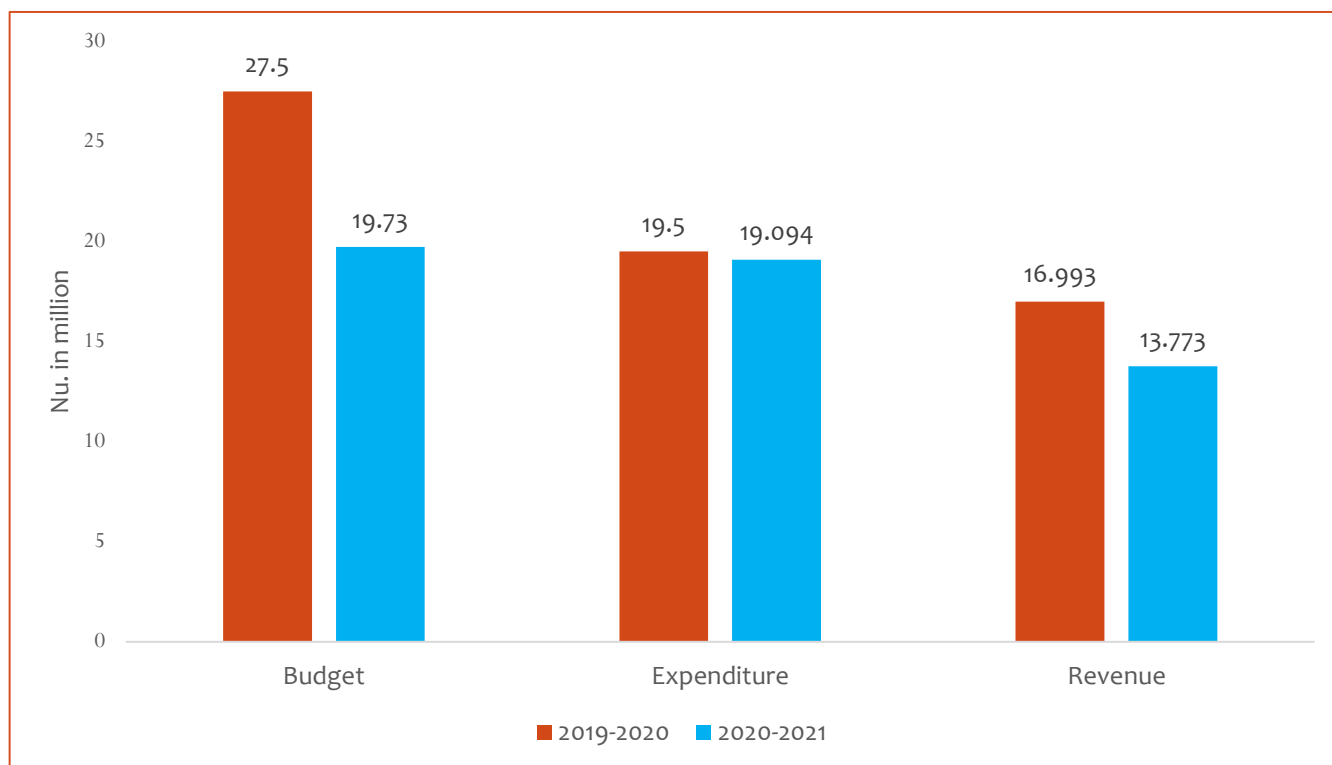
CDB Organizational Structure & Staff Strength



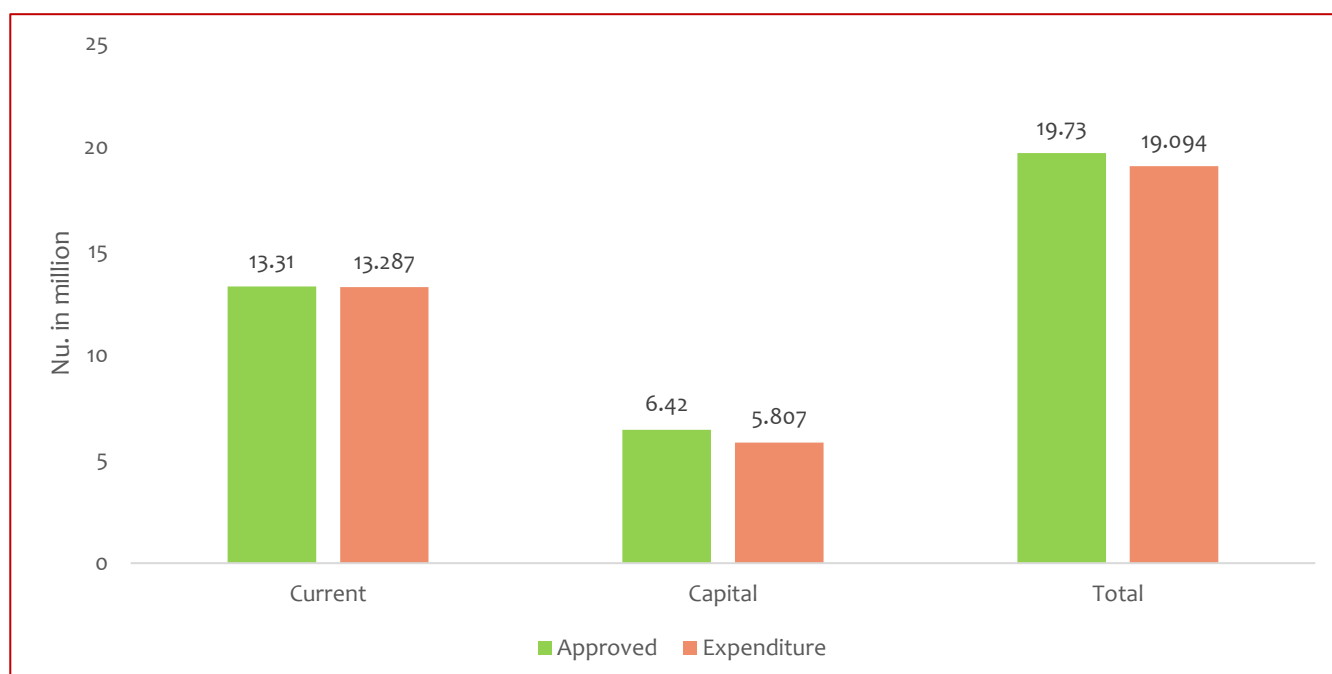
Division/Section	Staff Strength	Recruited	Separated	Total staff strength
Secretariat Services				
Secretariat	1	0	0	1
HR & Procurement Services	1	1	0	2
Legal Services	2	0	0	2
Accounts Services	2	0	0	2
ICT Services	2	0	0	2
Pool staff (Dispatcher/PA/Messenger/Driver/Sweeper)	6	0	0	6
Construction Regulatory Division				
Registration Section	3	0	0	3
Monitoring Section	2	0	0	2
Construction Services Division				
Program & Professionalism Section	1	0	0	1
Business Development & Technology Section	2	0	0	2
Deputation to RAP, Pangbisa, Paro	3	0	0	3
Total Staff Strength	27	1	0	28

Budget, Expenditure & Revenue collections

1. Budget, Expenditure & Revenue



2. Capital & Current Budget



Services of CDB

Registration

- » Registration of contractors
- » Registration of consultants
- » Registration of Specialized firms (from July 2020)
- » Registration of architects
- » Registration of specialized trade (from June 2019)
- » Registration of engineers (from June 2019)
- » Registration of surveyor (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)** - Online evaluation tool for procurement of works carried out by government procuring agencies.
- » **CiNET (Construction Industry online information)** - Interface for corporate, NGOs and donor funded projects to update work information.
- » **CRPS (Contractor Registration & Performance System)** - for managing contractors, consultants, architects and specialized trade.

Legal Services

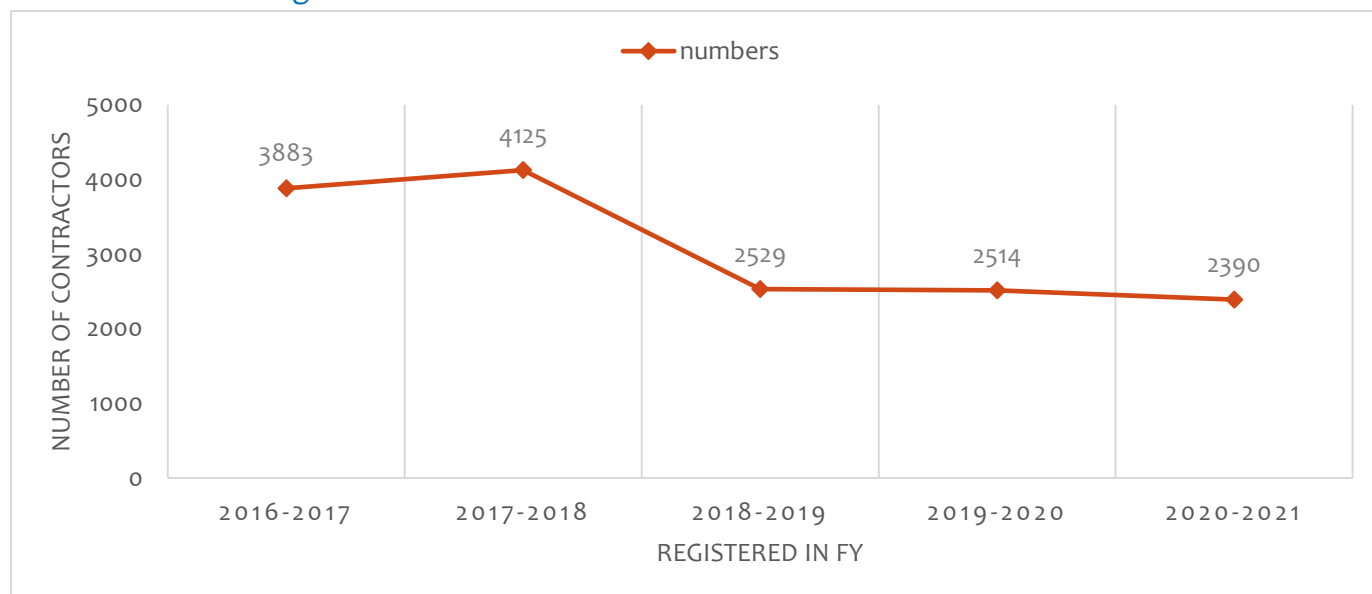
- » Grievance Redressal (facilitation of grievances in payment, human resource and equipment, registration, transfer etc.)

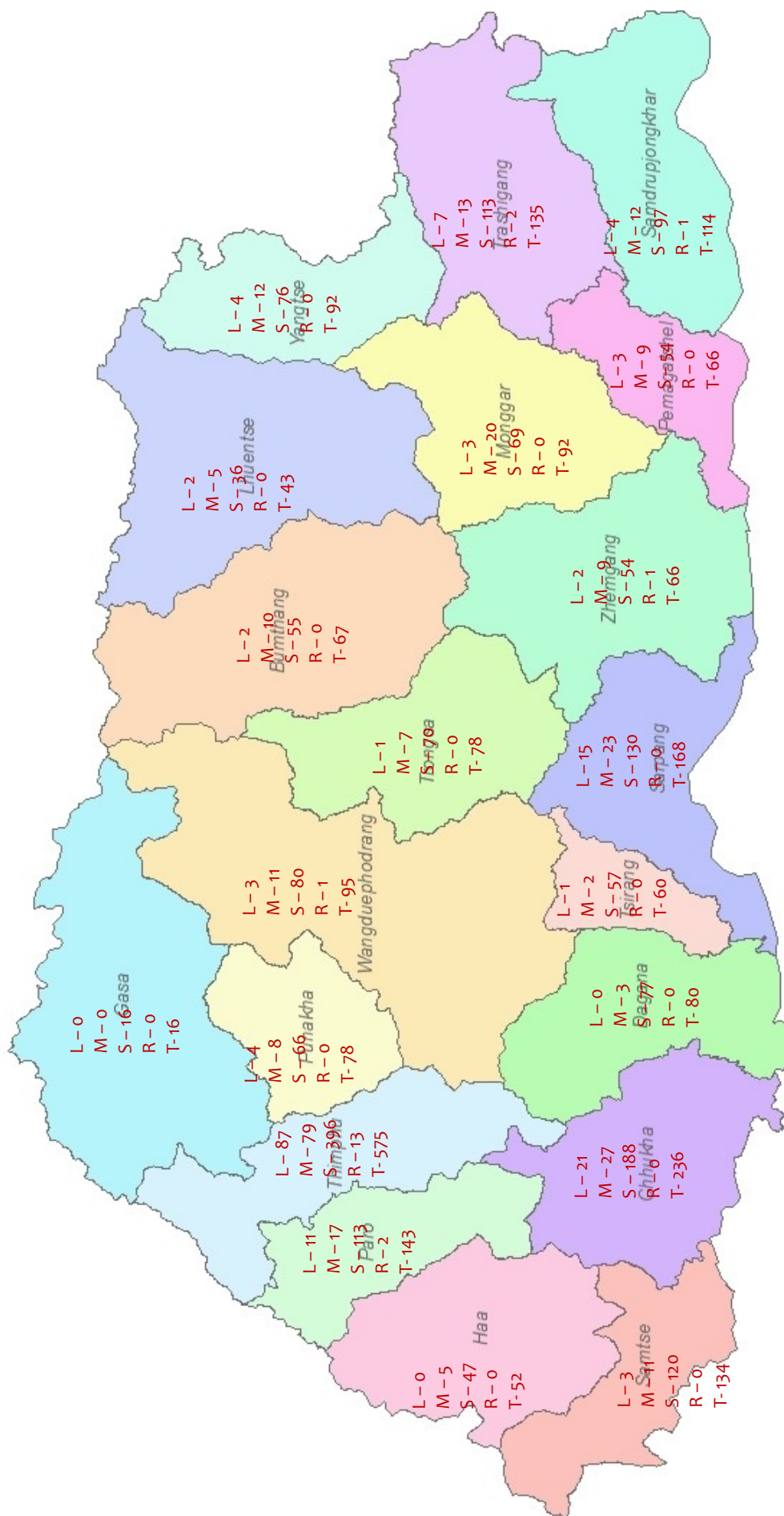
Capacity Development and Promotion Services

- » Trainings (Induction & Refresher course, BIM, OHS)
- » Awareness programs (OHS)

Registration trends

Contractors Registration

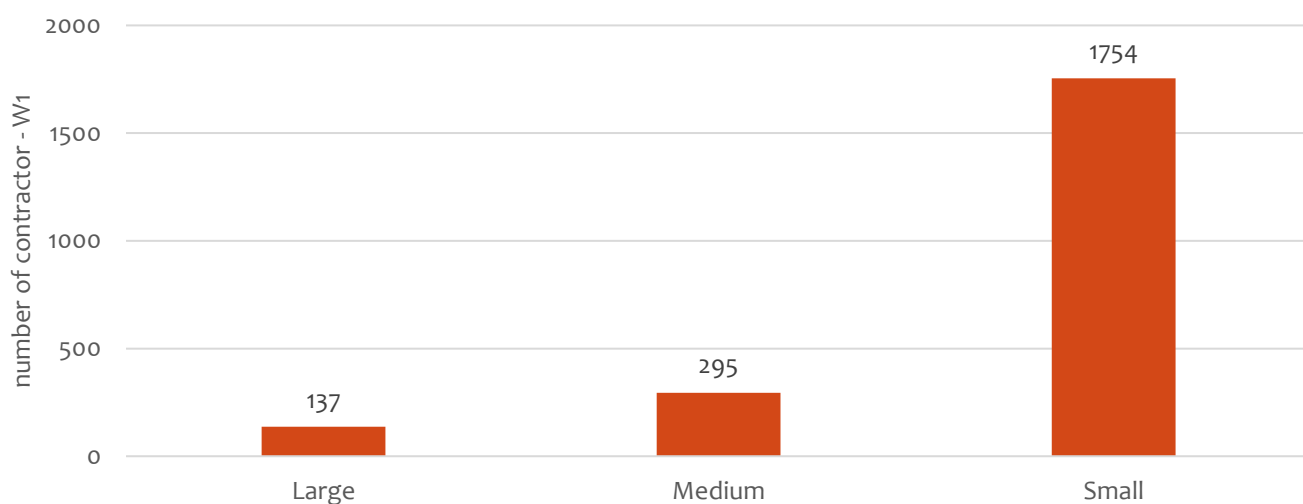




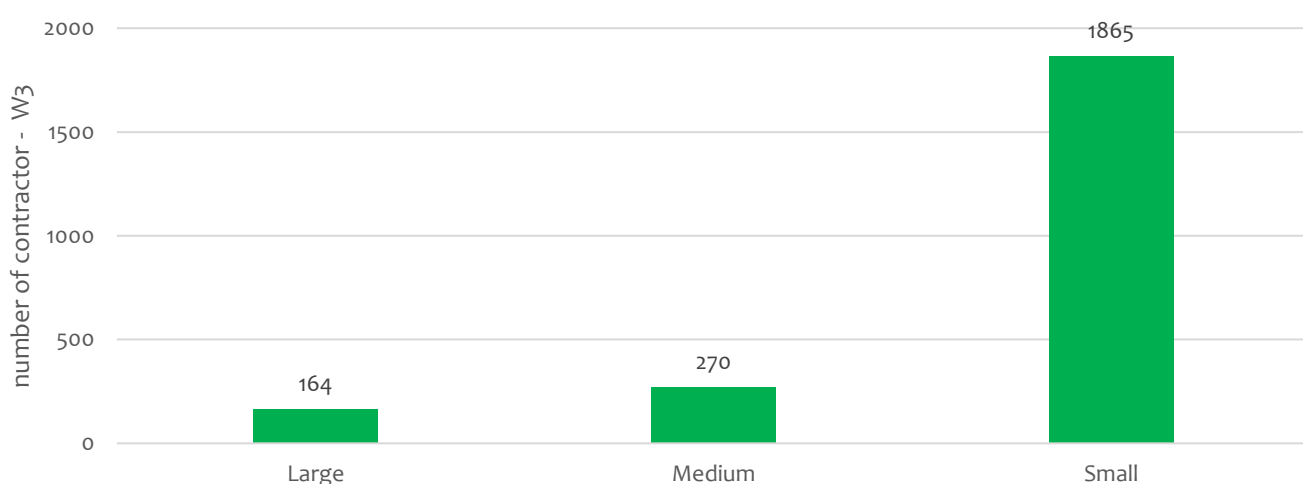
Dzongkhag wise Contractors Registration

L – Large class
M – Medium Class
S – Small class
R – Registered
T- Total

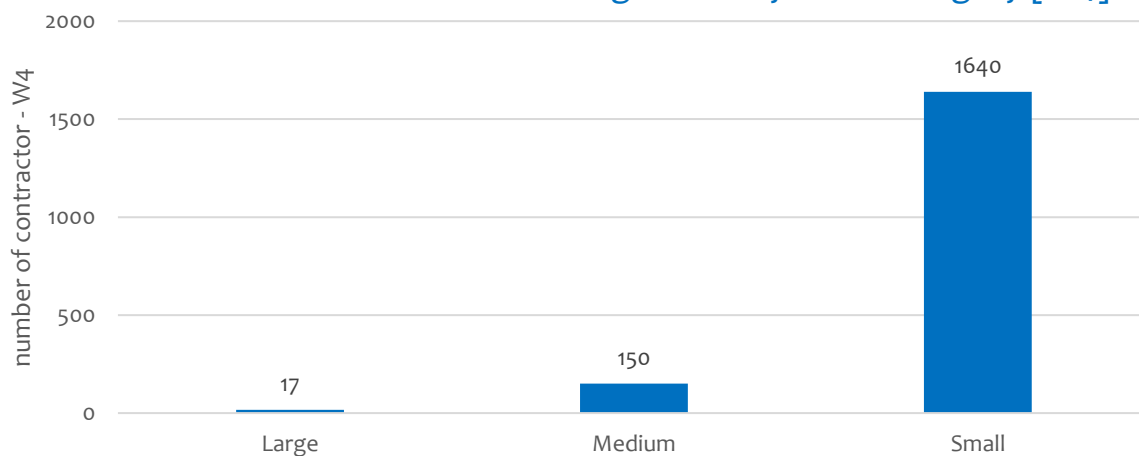
Nos. of Contractors registered by work category [W1]



Nos. of Contractors registered by work category [W3]



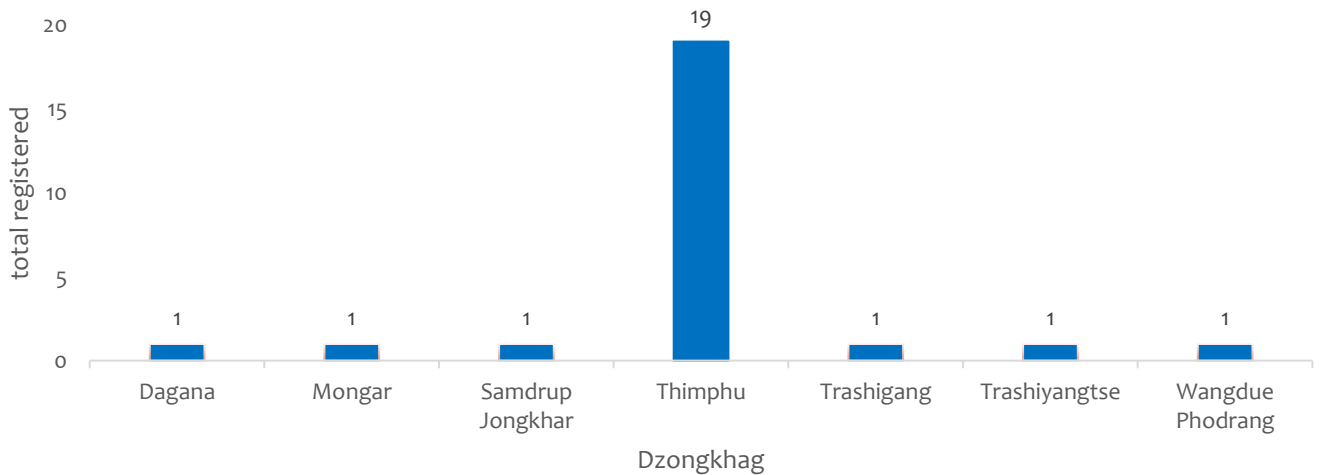
Nos. of Contractors registered by work category [W4]



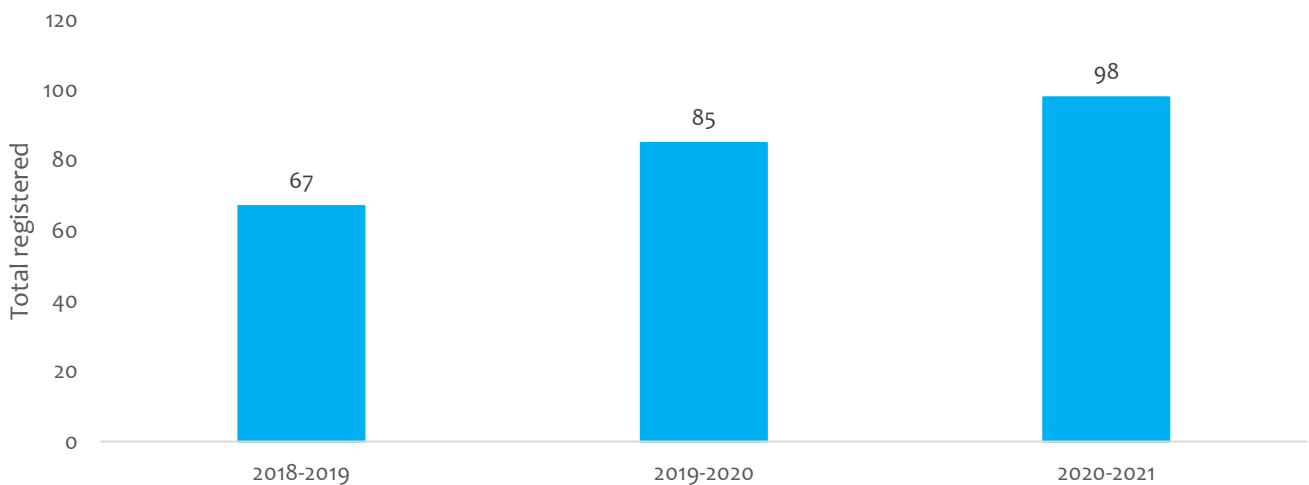
Number of Non-Bhutanese contractors



Number of Consultancy firms registered



Trend of Registered Consultancy firms



Number of Specialized Firms registered by Dzongkhag wise

Dzongkhag	SF1 - Masonry	SF2- Construction Carpentry	SF3- Plumbing	SF4- Electrical	SF5- Welding & Fabrication	SF6- Painting	Total
Bumthang	1	1	2	3	1	0	8
Chukha	0	0	0	0	0	0	0
Dagana	0	0	0	0	0	0	0
Gasa	0	0	0	0	0	0	0
Haa	0	0	1	1	0	0	2
Lhuentse	1	0	0	0	0	0	1
Mongar	1	0	2	1	0	0	4
Paro	3	3	3	5	2	2	18
Pemagatshel	0	1	0	0	0	1	2
Punakha	0	1	1	0	0	1	3
Samdrup Jongkhar	1	0	0	0	0	0	1
Samtse	0	0	1	0	0	0	1
Sarpang	1	1	0	0	0	0	2
Thimphu	2	5	3	1	2	4	17
Trashigang	3	0	1	3	1	1	9
Trashiyangtse	2	1	1	1	0	2	7
Trongsa	0	0	0	0	0	0	0
Tsirang	0	0	0	0	0	0	0
Wangdue Phodrang	0	0	1	1	0	1	3
Zhemgang	0	0	0	1	0	0	1
Total	15	13	16	17	6	12	79

Numbers of Engineers registered with Contractors & Consultancy firms

Civil

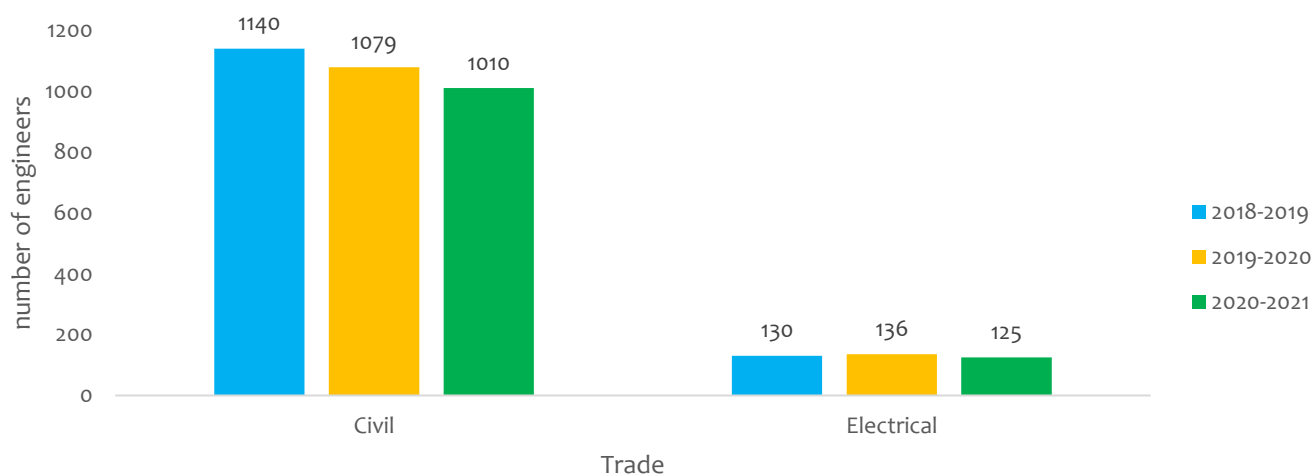
	Graduate	Diploma
Bhutanese	469	417
Non-Bhutanese	65	59
Total	534	476
Total Civil Engineers: 1010		

Electrical

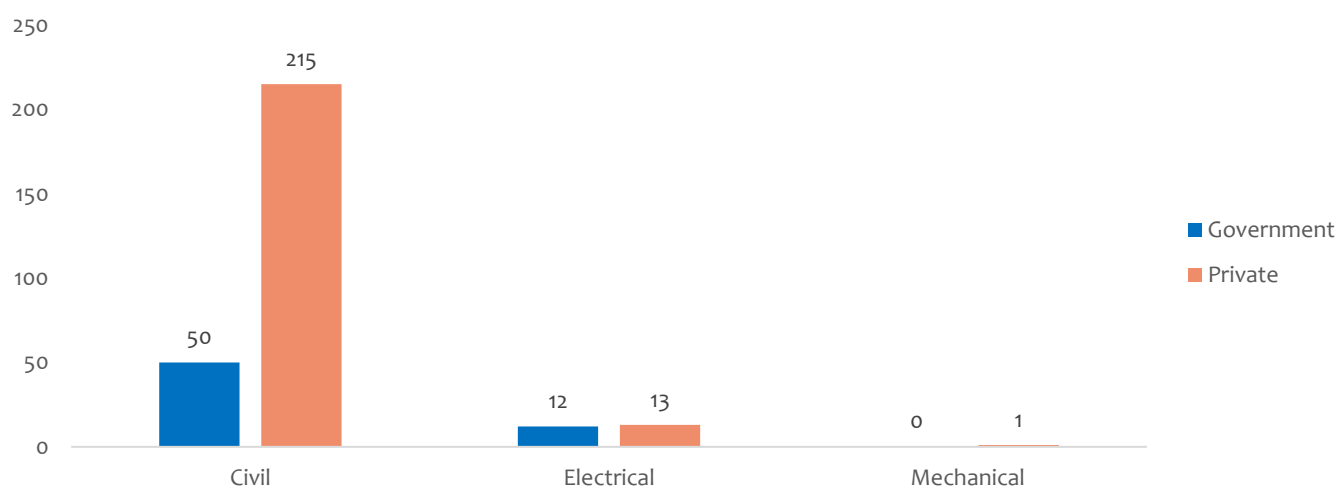
Bhutanese	65	60
Non-Bhutanese	0	0
Total	65	60
Total Electrical Engineers: 125		

Source: CDB database

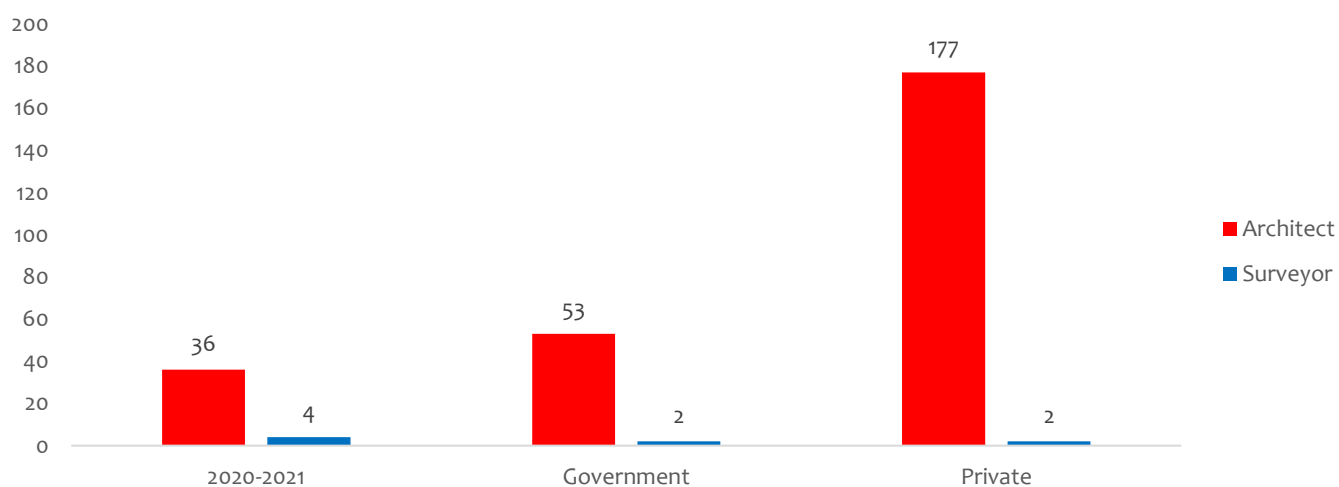
Trend of registered Engineers



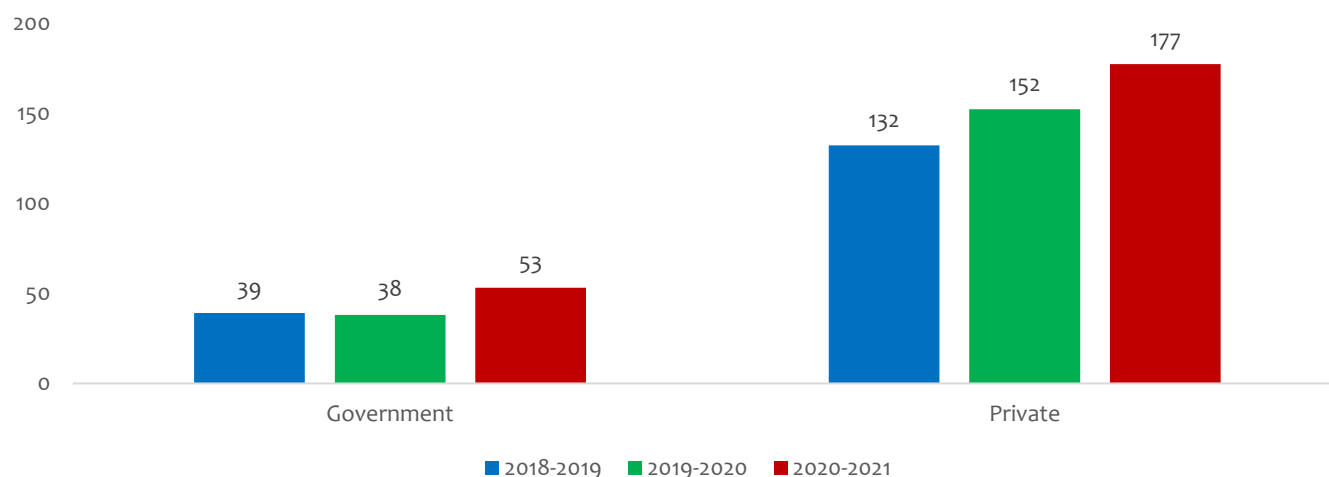
Number of Individual Engineers registered for FY 2020-2021



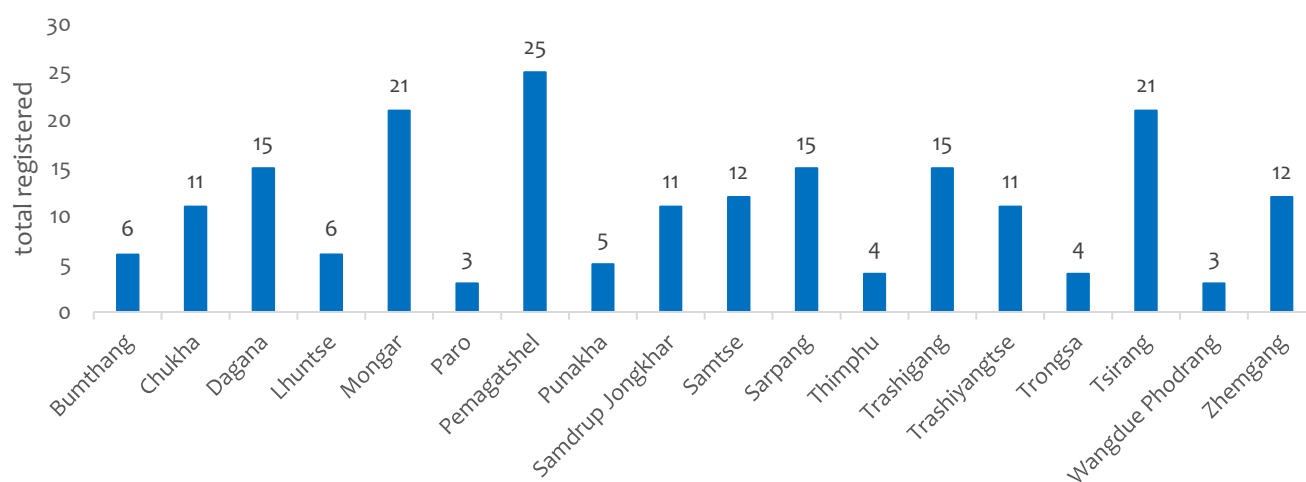
Number of Architects & Surveyors registered



Trend of registered Architects



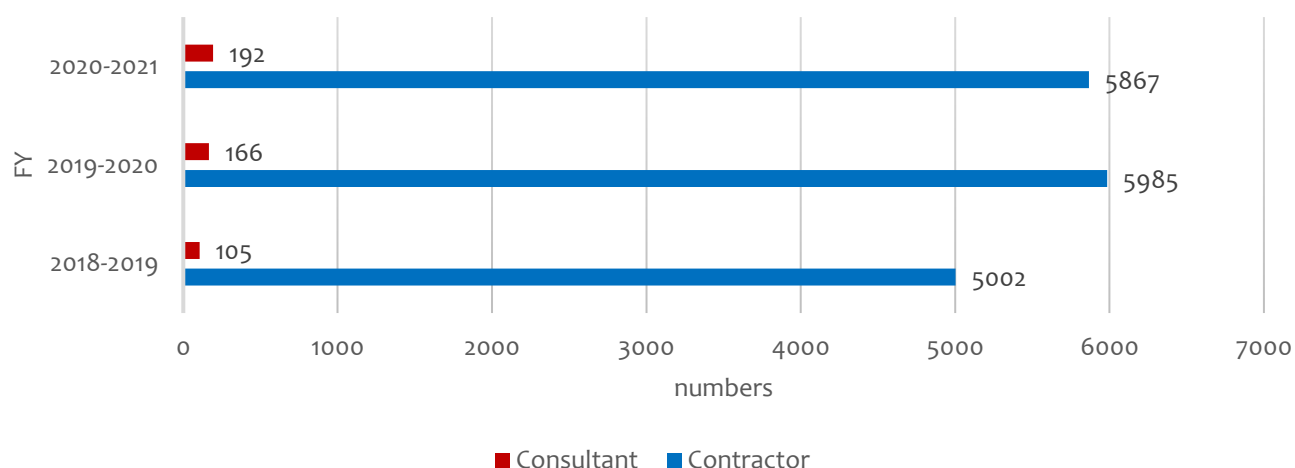
Number of Specialized Trade registered



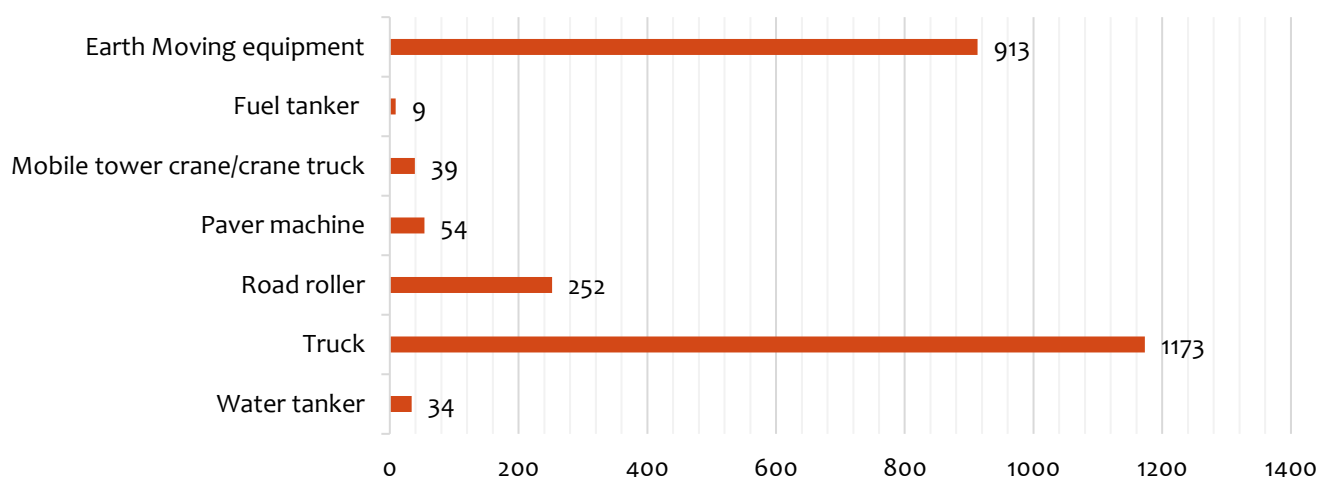
Other professions in the construction & consultancy firms

Descriptions	Construction firms	Consultant firms	Total
Accountant/ADM/Manager/MD/Messenger/OA	946	8	954
Architects	8	48	56
Site supervisor	3528	1	3529
Civil engineer	1127	78	1205
Mechanical Engineer	13	0	13
Electrical Engineer	70	12	82
Driver/blaster	7	1	8
Environment and Social/geologist	1	14	15
Lab Technician/Carpenter/plumber/electrical/welder	40	0	40
Project Manager	110	1	111
Survey Engineer/Surveyor	17	29	46
	5867	192	6059

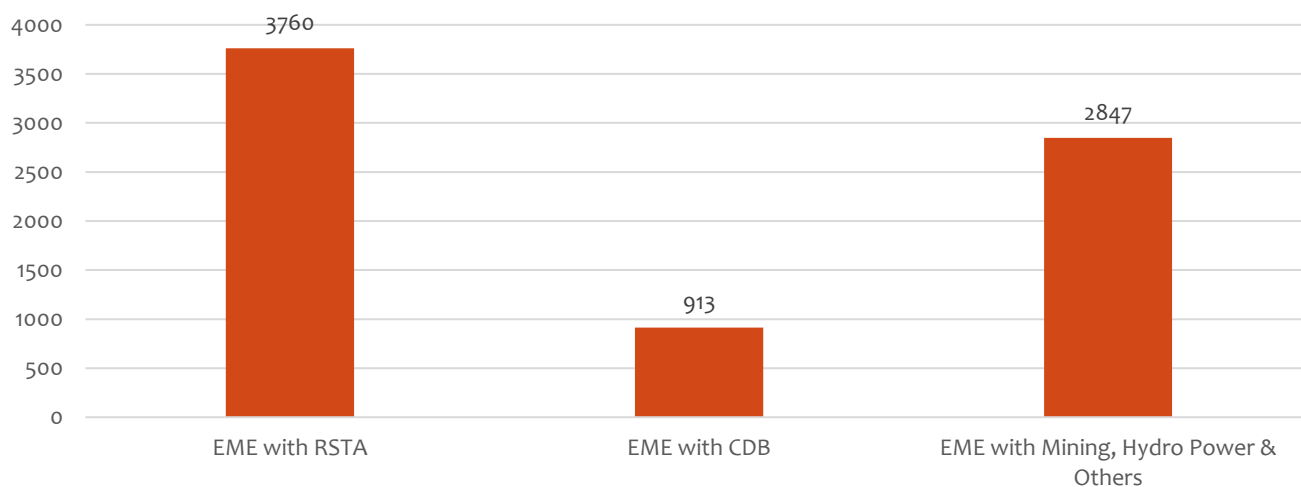
Employment Trend In Construction Industry



Major construction equipment registered by contractor



Number of Earth Moving Equipment (EME) registered



PROMOTION AND PROFESSIONALISM

The Program and Professionalism Section in pursuit of promoting a robust and vibrant construction industry has to conduct mandatory Refresher Course and 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 Induction Course for aspiring contractors is a one day program. The mandatory Refresher Course is a three days program for large and medium class contractors and two days program for small class contractors.

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

Details of the Induction and Refresher course for Contractors conducted.

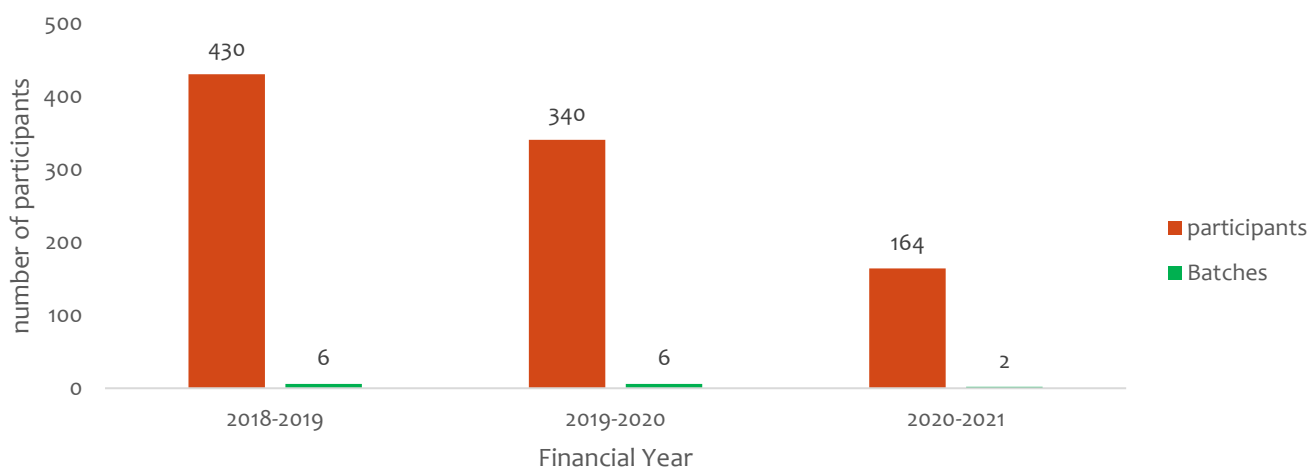
A. Induction course details

Batch	Period	Target Participants	Nos. of participants	Venue
1	4 th Dec. 2020	New contractors	74	Virtual
2	5 th Mar. 2021	New contractors	90	Virtual
		Total	164	

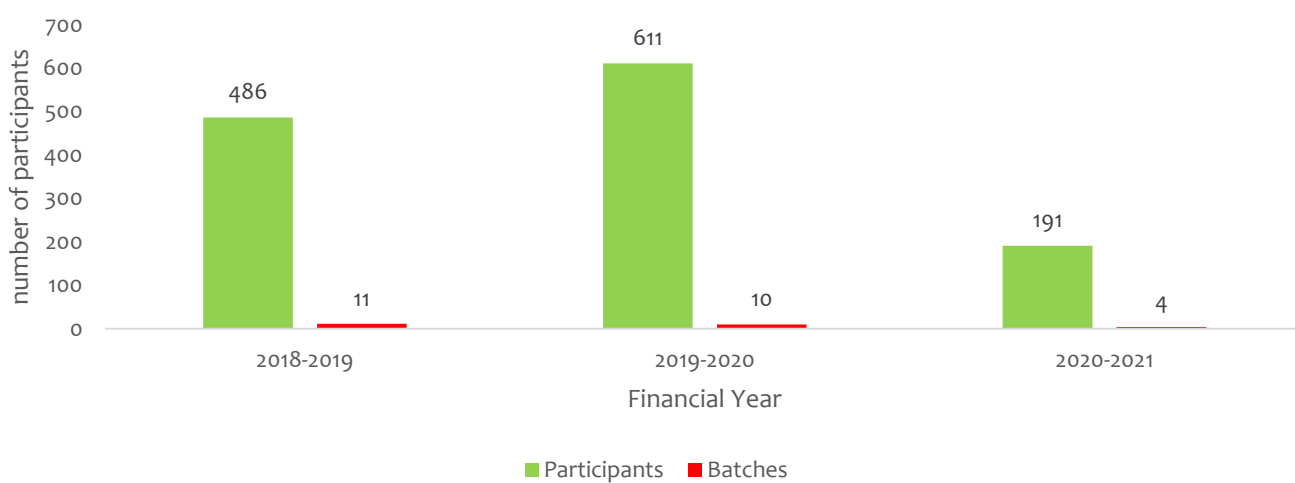
B. Mandatory Refresher's course details

Batch	Period	Target Participants	Nos. of Participants	Venue
1	24 th May – 25 th May 2021	Small Class	61	Virtual
2	27 th May – 28 th May 2021	Small Class	42	Virtual
3	31 st May – 1 st June 2021	Small Class	37	Virtual
4	2 nd June – 4 th June 2021	Large & Medium Class	51	Virtual
		Total	191	

Training trends for Induction course



Training trends for Refresher course



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 nonperforming 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 been conducting training on e-Tool and CiNET annually for the procuring agencies.

However, due to COVID-19 situation and imposition of travel restrictions the training on e-Tool and CiNET for the year couldn’t be conducted.



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.

Monitoring of Office establishment of Contractors and Consultants

The monitoring of office establishment of firms are carried out to ensure compliance to the registration requirement. All Large and Medium class contractor and consultants are required to establish office in their registered Dzongkhag and employ the minimum mandatory human resources fulfilled during the time of renewal/registration of CDB certificate.

Every year, Monitoring Section monitors firm's offices and verify the fulfillment of their registration requirement. However, due to COVID-19 situation and travel restrictions the office establishment monitoring was carried out through desk assessment where by the monitoring team called each firm, employees of the firm and verified the registration requirements.

Following of the summary of Monitoring activities.

Sl. no	Activity	Number of firms Monitored
1	Office establishment monitoring of Large and Medium Contractor	262
2	Office establishment monitoring of consultants	55

RESEARCH & TECHNOLOGY DEVELOPMENT

Observations for works awarded in e-tool

No. of works awarded and total amount in the three classes of contractors.

Class	Large	Medium	Small	Total
No of works	221	233	611	1065
Total Amount (Nu. million)	11,713.10	2,255.18	1,087.96	15,056.18

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

Dzongkhags	No. of works	Amount (Nu. in million)
Bumthang	24	291.58
Chukha	79	1,222.18
Dagana	71	307.90
Gasa	26	174.19
Haa	36	164.46
Lhuentse	69	695.08
Mongar	57	901.49
Paro	46	203.74
Pemagatshel	39	529.28
Punakha	56	338.04
Samdrup Jongkhar	65	845.36
Samtse	61	1,195.87
Sarpang	63	1,260.32
Thimphu	96	1,587.34
Trashigang	51	605.78
Trashiyangtse	48	3,167.34
Trongsa	19	297.26
Tsirang	39	307.66
Wangdue Phodrang	78	570.32
Zhemgang	42	390.99
Total	1065	15,056.18

In total, 1065 works were awarded in 2020-2021 amounting a total cost of the projects to Nu. 15,056.18million.

Thimphu had the highest number of works awarded at 69 works amounting to Nu. 1587.34 million. However, Trashy Yangtse executed the highest amount of project amounting to Nu. 3167.34 million.

Sl. No	Name of works	Contractor	Amount
1	Water Supply and Sewerage Works for KHEL Colony at Doksum, Trashiyangtse	Construction Development Corporation Limited	27,565,856.00
2	Power Distribution System for KHEL Colony at Doksum and Buyang (Infra 2020/1)	Wangthang Construction Private Limited	47,476,211.00
3	Construction of Rawdrang to Menchu Irrigation Channel under Tomijangsa Geog.	Druk Tshenden Builders Private Limited	15,241,000.00
4	Improvement of Farm Road from Nomaring to Tshangphuchen under Teotsho Gewog	Toetsho-Kheni Construction	13,201,086.00
5	Improvement of Nomaring-Domsang farm road	Toetsho-Kheni Construction	18,386,397.00
6	Construction of 96 bedded girls Hostel at Baylling CS under Yangtse Gewog	Druk Tshenden Builders Private Limited	16,679,840.05
7	Improvement of Farm Road from Dungzam to Cheng under Bumdeling Geog	Mindu Construction Private Limited	19,635,644.40
8	Upgradation of Tomijangsa GC Road (Package-I)	Nor-Zang Construction Private Limited	61,102,028.00
9	Upgradation of Tomijangsa GC Road (Package-II)	Nor-Zang Construction Private Limited	44,785,408.00
10	Blacktopping of Chazam-Duksum PNH(Chainage: 6+400km-8+000km1.6km)	Lg Builder Pvt Ltd	16,362,725.00
11	Construction of 96 bedded boys hostel at Baylling CS	Druk Tshenden Builders Private Limited	14,925,064.76
12	Improvement of Farm Road from Old Dzong to Gangkhar under Yangtse Geog.	Mindu Construction Private Limited	34,983,500.00
13	Development of Infrastructure in Doksum Town	K.D Builders Private Limited	24,423,548.00
14	Improvement of Ramjer to Romang Farm Road.	Puen Nga Construction	9,094,730.00
15	Construction of 4-Unit Staff Qtr. at Bumdeling LSS.	Rigsum Gonpa Construction	10,000,000.00
16	Development of Outdoor Sports Facility at Yangtse Town (Phase-II)	Master Construction	9,019,101.45
17	Improvement of Farm Roads from Zhapang Junction to Phudung.	Serbu Construction	8,363,586.49
18	Improvement of Farm road (Wukurung to Jamkhar Drang) under Jamkhar Geog.	Trashiyangtse Tongjang Construction	6,970,800.00
19	Development of Workshop area and Doksum throm	Rigsum Gonpa Construction	4,988,299.50
20	Construction of Woogomchu to Kheni Irrigation Channel	Puen Nga Construction	12,158,625.40
21	Construction of 32 bedded girls Hostel at Tarpel PS	Tshechab Construction	14,289,259.00
22	Improvement of Thedongchen to Khango Farm Road under Tomijangsa Geog	Druk Tshenden Builders Private Limited	10,766,500.00
23	Construction of Footpath from Trashiyangtse Gate-I to Chorten Cora Junction	Master Construction	6,986,110.00
24	Construction of 32 bedded boys hostel at Tarpel PS	Tshechab Construction	14,048,372.80
25	Construction of 4-unit staff quarter at Tarpel PS	Tshechab Construction	17,450,397.30
26	Improvement of Farm Road from Dungzam to Zhapang under Bumdeling Gewog	Khiney Construction	16,109,587.00

27	Contract Package KC-2B: Construction of Head Race Tunnel (HRT) from RD 2,303.00 m to RD 3,941.34 m (up to 18.85 m downstream of Adit II), Adit II to HRT and Chaplangchhu Diversion Works	Construction Development Corporation Limited	991,297,566.00
28	Contract Package KC-2A: Construction of Head Race Tunnel (HRT) from RD 3,941.34 m (18.85 m downstream of Adit II) to RD 14,091.07 m including Construction Adits III, IV and V	Rigsar Construction Private Limited	1,643,942,313.00
29	Construction of 2-Unit Toilet, Chain-link fence and Retaining wall for ECCD Centre at Trashiyangtse LSS.	Nkk Construction	660,000.00
30	Construction of Out Reach Clinic (ORC) at Changmadung under Tomijangsa Geog.	Uen Ten Construction	830,000.00
31	Construction of 1-block 3-unit classroom at Tarphel.	Ugyen Wangdi Young Construction	2,963,620.00
32	Construction of 1-block 3-unit classroom at Tarphel.	New Generation Construction	2,963,620.00
33	Construction of mortuary and chainlink fencing at duethrey	Druk Menlha Builders	2,022,885.03
34	Construction of Kitchen Cum Store at Womanang CPS	Tshering C Yeozer Construction	733,357.41
35	Construction of Peanut Processing Unit	Ugyen Wangdi Young Construction	1,799,914.06
36	Construction of 2-Unit Toilet and Compound Street Lighting at Ramjar MSS	Sha Nub Construction	619,861.88
37	Construction of Academic Toilet at Bayling CS.	Yashodhara Builders	3,002,658.50
38	Improvement of Farm Road from Prammar junction to Lamdra junction under Bumdeling gewog	Neten Dorji Construction	3,282,485.83
39	Maintenance of Tsenkharla-Khamdang Irrigation Channel	New Generation Construction	1,498,265.90
40	Construction of Meeting Hall, Gate and Fencing at Gewog Center, Teotsho	Kencho Tshering Construction	3,489,586.31
41	Renovation of School Structures and School Facilities	Yoechhap Construction	1,400,132.47
42	Blacktopping and Railing for Parking at Chorten Cora	Druk Menlha Builders	1,339,457.00
43	Construction of Farm Road from Bamdir to Rabneytse under Bumdeling Geog	Sha Nub Construction	1,104,613.00
44	Construction of Boys Hostel Toilet at Tsenkharla CS.	US Wangchen Construction	2,295,339.75
45	Construction of Out Reach Clinic (ORC) at Sep under Teotsho Gewog	Serphu Construction	847,969.85
46	Construction of Academic Toilet at Tsenkharla Cs	Yashodhara Builders	2,450,870.88
47	Construction of water supply and street light works at Doksum workshop	Shangphula Construction	3,375,000.00
48	Construction of Market Shed at Dungzam under Bumdeling Geog	Kunzang Lhadon Construction	407,340.00
Total amount			3,167,340,534.02

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	221	639	3	13	1
Medium	233	703	3	12	1
Small	611	6864	9	93	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 **70 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 40% of bidders gets disqualified during the 1st stage of evaluation.

Qualification of bidders in tenders for works on e-tool

Class	No of works awarded in e-tool	No of bidders participated	No of bidders qualified for 2 nd stage
Large	221	639	383 (60%)
Medium	233	703	380 (54%)

Point based system is applicable for works executed by large and medium construction firms. The advantage of the Point Based 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 2019-2020 the number of bidders disqualified for 2nd stage has increased from 28% to 40% for large class.

Works awarded below and above government estimate

The table below illustrates that for 1065 works awarded in the FY 2020-2021, the number of bidders participated for the works were 8206. Out of 1065 works, 791 works were awarded below the government estimate and 274 works were awarded above the 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 %
Large	221	639	133	88	48.05% *	- 44.38% *
Medium	233	703	150	83	33.97% *	- 34.26% *
Small	611	6864	508	103	39.71% *	- 61.62% *
Total	1065	8206	791	274	-	-

* The values are obtained from the evaluation reports

Discrepancy in Average Performance Score Rating (APS) of contractors

Average Performance Score (APS) is one of the main parameters to evaluate the contractors. APS is rated by the Procuring Agencies after the contractors has completed the work. APS is further divided into 2 sub categories;

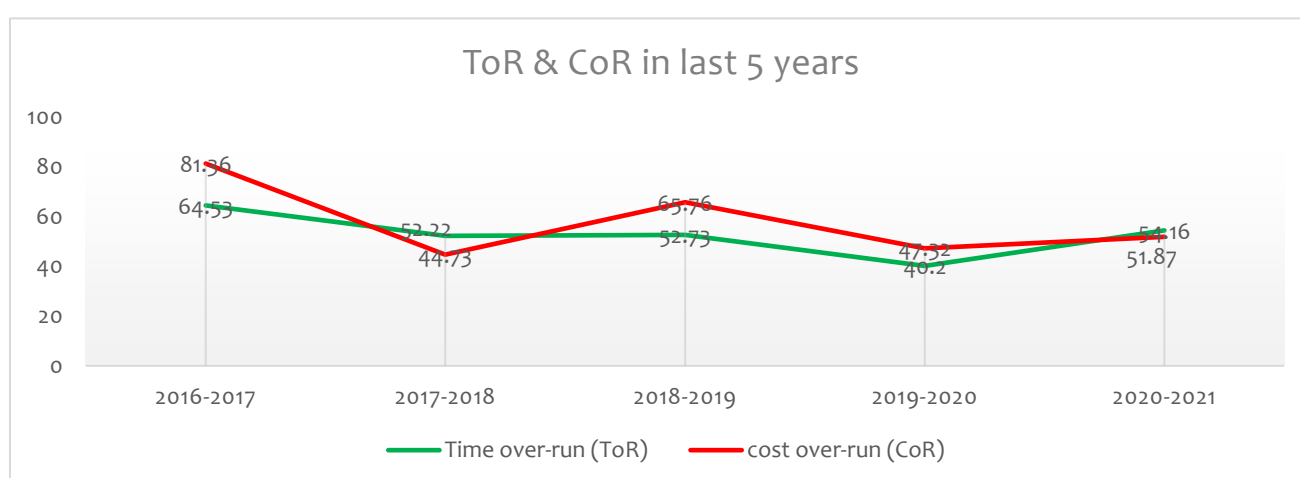
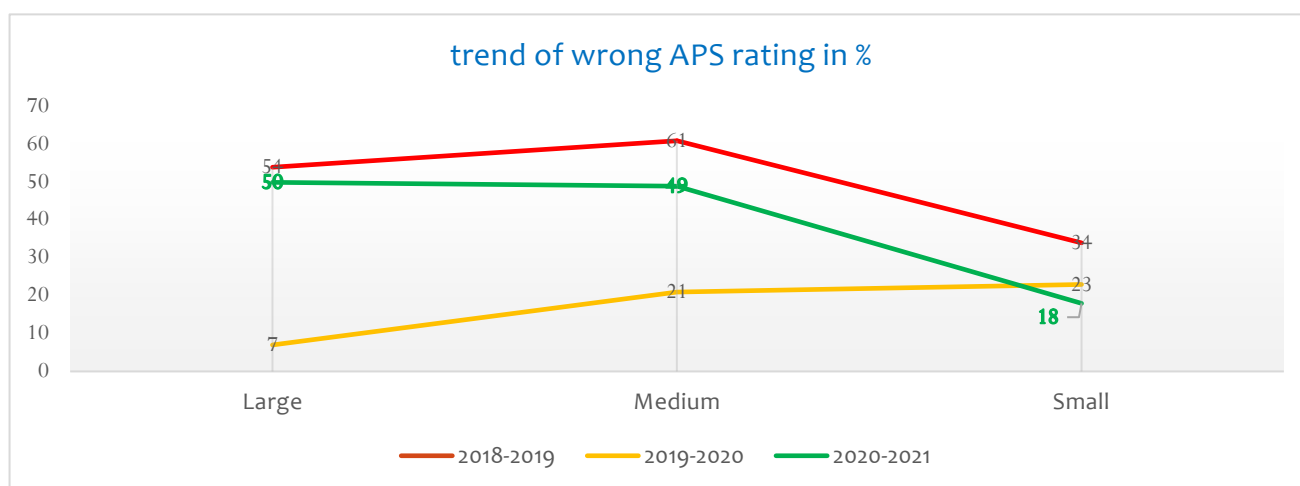
1. On-time Completion (30%); and
2. Quality of execution (70%).

Discrepancies in APS:

Despite the repeated reminders and advocating the procuring agencies, during the study of data for Annual Report, it was observed that some of the procuring agencies rates the contractors full score despite of the project running into time over run. For the FY 2020-2021, there were **451 works** rated full score that is 30 out of 30, however, on further analysis it was observed that out of **451 works** there were **217 works** running into time over run. This accounts to 48.11% of the works rated wrongly. This non-compliance by the procuring agencies will affect the bidder's technical capacity and their performance scores resulting into unfair bidding process.

Class	Works rated full score (30/30)	Works with time overrun but rated full score	% of works rated wrongly
Large	34	17	50%
Medium	125	61	49%
Small	292	139	48%
Total	451	217	48.11%

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



Projects running into Time and Cost Over-run

Time Overrun is a situation where the construction project does not meet the expected deadline. Every project during the planning phase will have the estimated cost of the project, HR and equipment utilization plan, designs and specifications. It was observed that out of 613 works completed in the FY 2020-2021, there were 332 works running into time over run, which is 54.16%.

Cost Overrun is a condition in which there is sudden variation in the project cost which leads to the increase in the total project cost. Out of 613 completed works, it was indicated that 51.87% of project which is 318 projects having cost overrun.

Works awarded	Work completed	projects running into time over run [ToR]	Projects having cost overrun [CoR]	In terms of %	
				ToR	CoR
1065	613	332	318	54.16%	51.87%

Dzongkhag Administration having projects running into ToR & CoR	ToR	CoR
Bumthang Dzongkhag Administration	4	7
Chukha Dzongkhag Administration	11	11
Dagana Dzongkhag Administration	27	28
Gasa Dzongkhag Administration	11	13
Haa Dzongkhag Administration	12	9
Lhuntse Dzongkhag Administration	31	20
Mongar Dzongkhag Administration	2	9
Paro Dzongkhag Administration	2	3
Pema Gatsel Dzongkhag Administration	13	14
Punakha Dzongkhag Administration	7	14
Samdrup Jongkhar Administration	12	9
Samtse Dzongkhag Administration	1	7
Sarpang Dzongkhag Administration	2	4
Thimphu Dzongkhag Administration	5	10
Trashigang Dzongkhag Administration	23	6
Trashigang Dzongkhag Administration	16	8
Trongsa Dzongkhag Administration	4	4
Tsirang Dzongkhag Administration	22	27
Wangdue Dzongkhag Administration	12	18
Zhemgang Dzongkhag Administration	2	3
Total	219	224

Others Procuring Agency having projects running into ToR & CoR	ToR	CoR
Agriculture Research and Development Center, Samtenling	1	1
Basochu Hydropower Plant	2	2
Bhutan Plastic Industry	1	1
BPC rural electrification		1
BPC, Distribution & Customer Services Department	1	-
BPC, Transmission Department	5	1
Department of Roads, MoWHS	1	2
Dept of Agriculture	3	5
Dept. of Industry	2	2
Dept. of LiveStocks	5	4
Dophuchen Dungkhag	4	5
DoR Lingmethang	1	-
DoR Lobesa	1	3
DoR SamdrupJongkhar	5	1
DoR Sarpang	3	7
DoR Thimphu	2	5
DoR Trashigang	2	1
DOR Trongsa	2	4
DoR Zhemgang	4	6
DoR, Phuentsholing		1
Dratshang Lhentshog	2	-
Gelephu Muncial Corporation	3	3

Gelephug Referral Hospital	2	2
Kurichu Hydro Project	1	1
Lhaki Steels and Rolling Pvt. Ltd.	1	1
Mangdechhu Hydroelectric Project Authority	1	-
National Housing Development Corporation	1	1
NRDCL	8	3
Paro College of Education	1	1
Perfect Enterprise	1	1
PHPA II	1	1
Phuentsholing City Corporation	6	2
Private work	-	1
RBP	5	2
Regional Corporate Office, Wangdue	2	1
Renewable Natural Resources Research and Development Centre, Mongar	1	3
Royal Court of Justice	1	1
Royal University of Bhutan	3	1
Samdrup Jonkhar Thromde	2	2
School Planning and Building Division	1	1
Secretariat, MoWHS	4	1
Sherubtse College	1	1
Tala Hydropower Plant	4	1
Tashichholing Dungkhag	1	4
Thimphu District Municipality	14	5
UNDP	1	2
Total	113	94

Note: The above data are from the e-tool/CiNET updated by the focal person of various agencies.

From the justifications collected from the Procuring Agencies, there were 4 main reasons that contributed to the Time and Cost overrun as follows:

	ToR	CoR
Additional works	24%	39%
Pandemic	19.27%	2.7%
Failure from Contractors & Typo error by focal person	1.2%	0.31%
Agencies that didn't provide justification on ToR & CoR	9.69%	9.86%

Although initial data compilation indicated a Time overrun of 54.16% and Cost overrun was 51.87% after the justification sought from the procuring agencies, 24% of the works has ToR and 39% of the works has CoR due to **Additional work**. The additional works were awarded to the contractors mainly because there were increase in the size of the structures, construction of additional structure, under estimation during the initial estimation, additional earthwork, re-staging of scaffolding because of flash flood, some of the work items were overlooked during the estimation, change in design, poor work planning, and variation in the quantity of work, hindrance at the work site. All these reasons clearly reflect the poor planning and management from the procuring agencies.

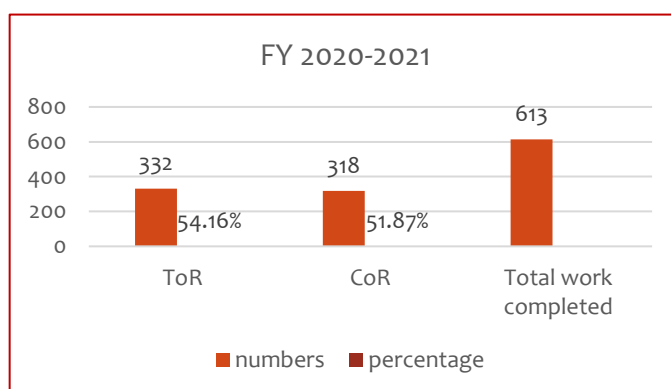
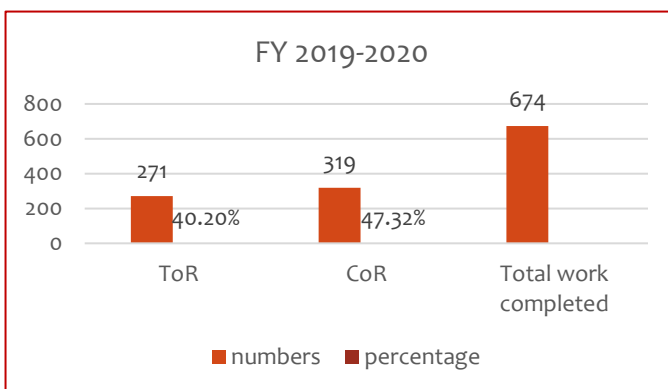
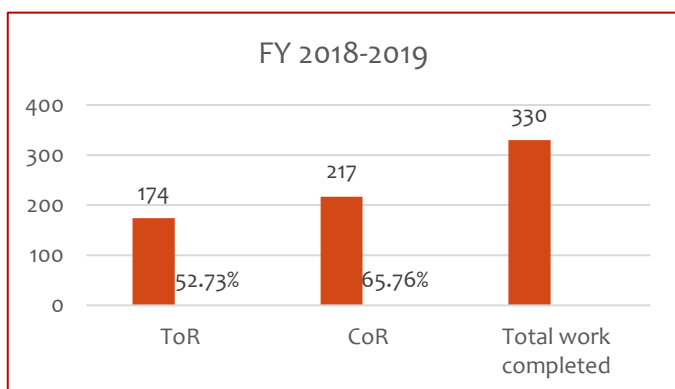
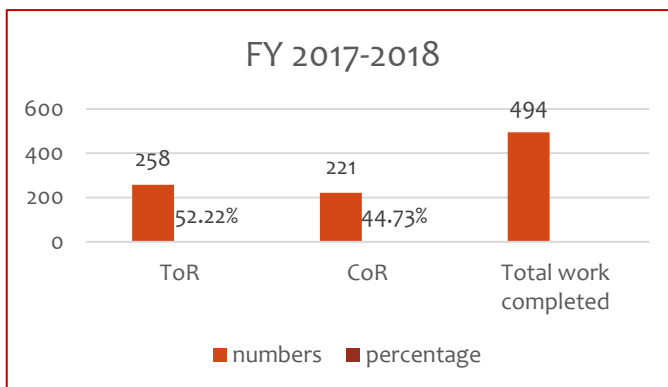
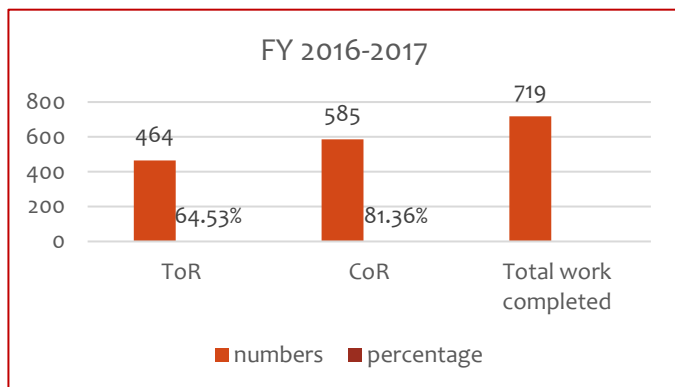
28 works from Dagana Dzongkhags in cost overrun and 22 works in Time overrun were approved by the Dzongkhag Tender committee, Gewog Tender Committee and Dungkhag Committee as there were additional work with additional amount. 3 works were delayed by the contractor and 10% Final bill amount deducted and 3 works were entered wrongly in the e-tool by the focal person.

Paro College of Education states that only 4.8% amount is varied due to quantity variation during the execution of works which is within the +- 20% permissible range.

19.27% & 2.7% of the works had ToR & CoR respectively due to **Pandemic**. Due to closure of borders, the scarcity of the construction materials and non-national labours abundantly contributed to ToR and CoR. The rest of the works had failure from the contractor's side and the carelessness of the e-tool focal person.

9.69% & 9.86% of the works had ToR & CoR respectively where the agencies have not provided any justification even though CDB has written to them.

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



Note: The above data are from the e-tool/CiNET updated by the focal person of various agencies.

CDB at a Glance

CDB welcomes new Director



CDB bids Farewell



Dasho Phub Rinzin - Transferred



Leki Dorji - Transferred



Pema Lotay - Resignation

Civil Service Award



Civil Service Medal Award – 10 Years
Yeshe Phuntsho



Outstanding Employee of the FY 2019-2020
Tandin Norbu



Civil Service Officials Promoted
[L-R: Leki Dorji & Yeshe Phuntsho]

Zero Waste Hour

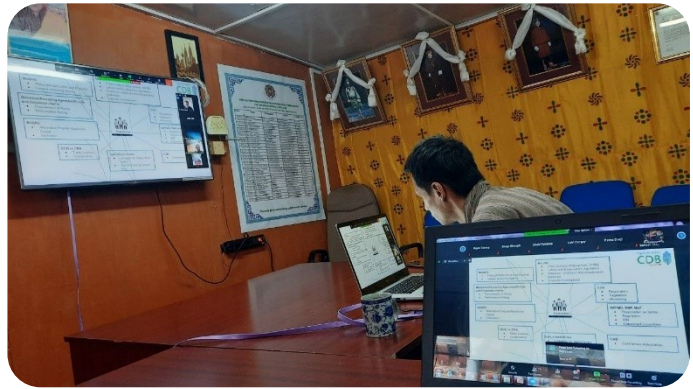


Cleaning campaign to observe “Zero Waste Hour’ in & around office surrounding every 2nd day of the month

CDB Board Meeting



Virtual Trainings conducted for Contractors



Virtual Interview for Selection of Program Officer





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