



# ANNUAL REPORT

2020

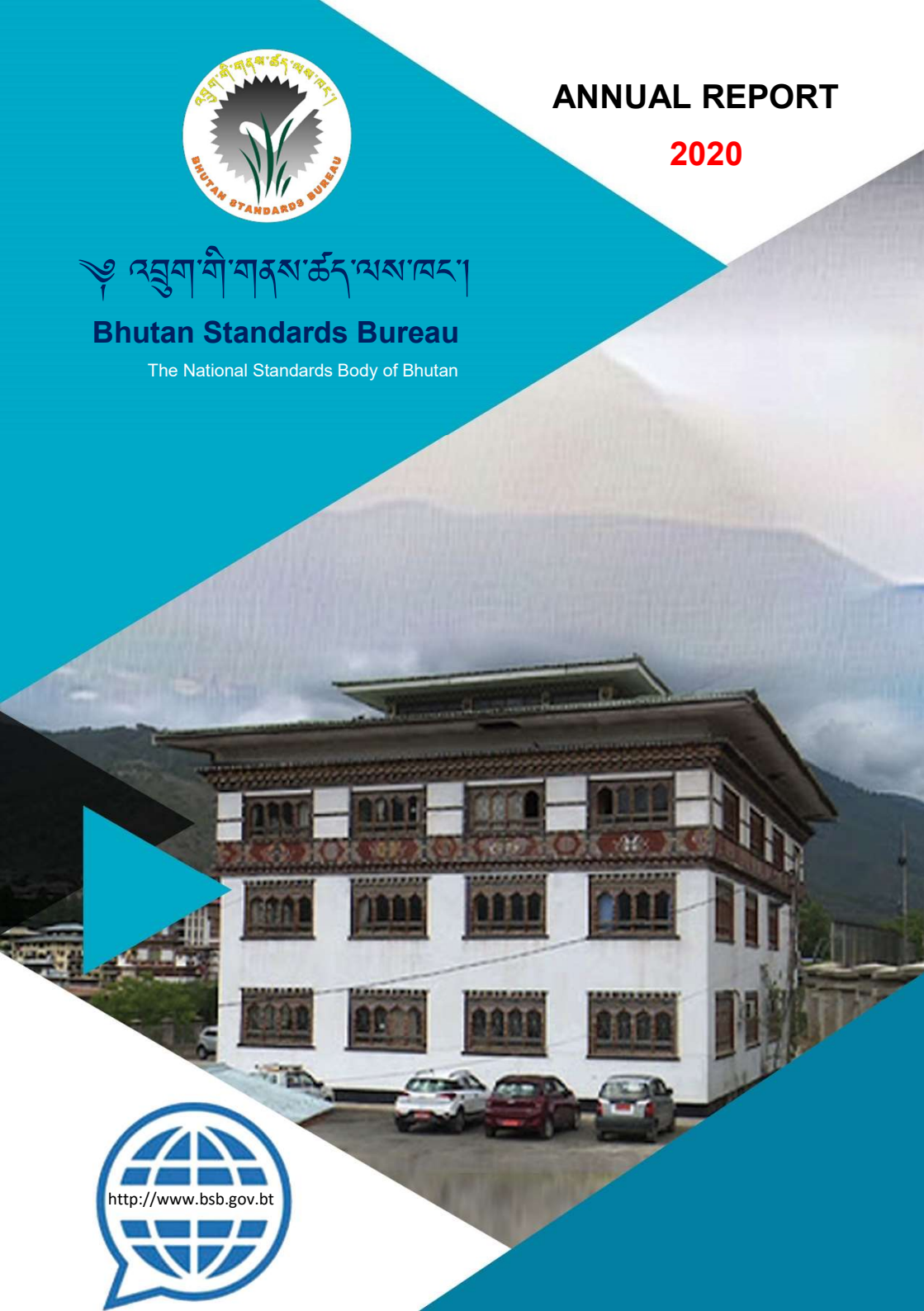
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**Bhutan Standards Bureau**

The National Standards Body of Bhutan



<http://www.bsb.gov.bt>



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## **Message from the Chairman**

The International Standards Organization, Geneva in its ten-year strategy paper 'ISO Strategy 2021-2030' has stated its vision as "making lives easier, safer and better". It indeed encompasses what BSB strives to achieve through its work on standards, certification and laboratory services.

COVID-19 posed a huge challenge to everyone. Normal operation became impossible. That BSB, in spite of the challenges, was able to deliver on its APA targets is therefore most commendable.

As much as COVID-19 was a challenge, it also provided opportunities to introspect and reassess every aspect of life including economic policies as it exposed the risks and vulnerabilities of a highly import dependent economy. It indeed heightened the urgency of the need to strengthen domestic production of goods and services.

It is in this context that the work of BSB has gained importance. BSB must be at the forefront helping Bhutanese industries to meet the demands of the local as well as international markets. BSB has recently developed standards on wooden doors and windows, dappa, bangchung, honey, sea-buckthorn, kombucha, kiwi, mustard oil and potato chips. I am hopeful that this will lead to increased production and consumer confidence.

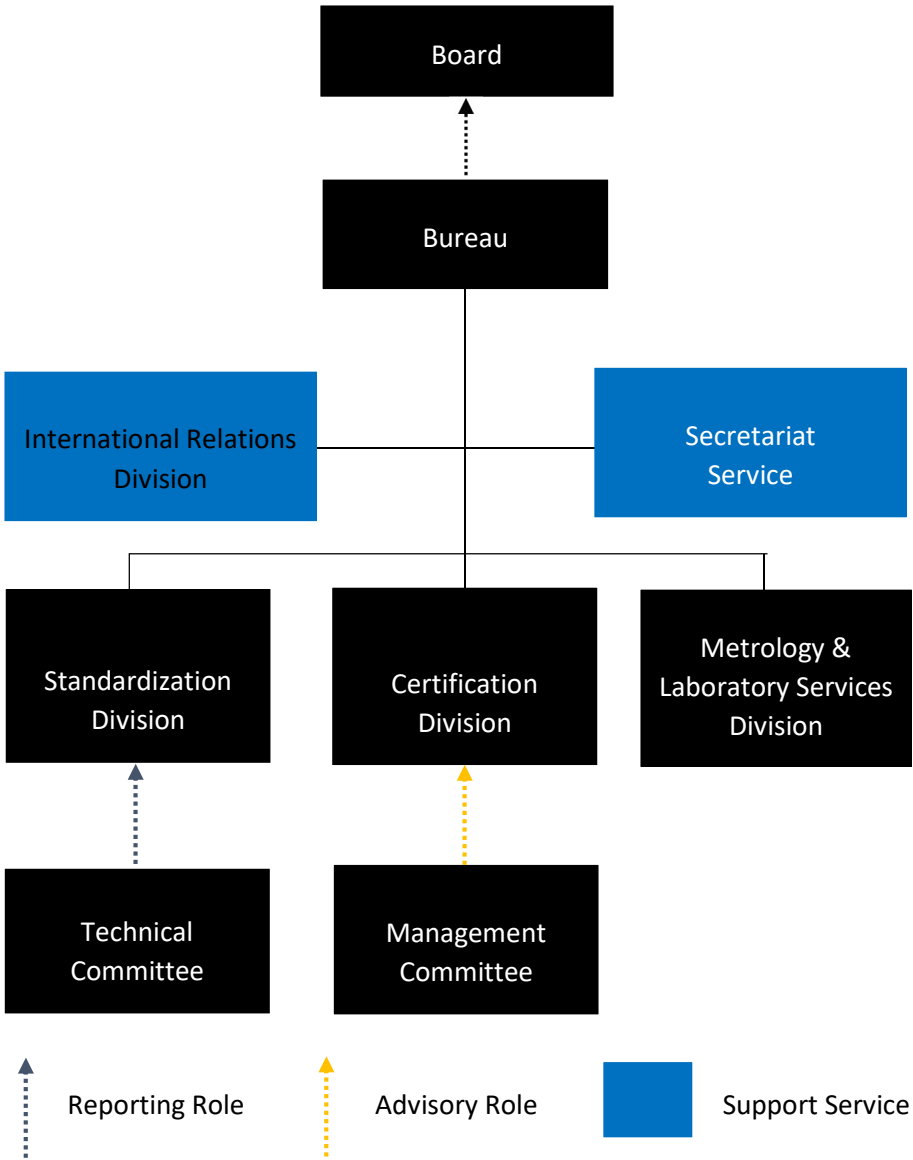
I, on behalf of the Board and, on my own behalf, would like to wish everyone another year of success and fulfilment!

**Lyonpo Loknath Sharma**  
**Minister for Economic Affairs**  
**Thimphu**

## Mandates of the Bureau

- 01 develop national standards and facilitate their implementation;
- 02 establish and operate metrological referral and calibration laboratories;
- 03 establish and operate product testing infrastructure;
- 04 carry out/operate product and management system certification schemes;
- 05 permit, coordinate and facilitate accreditation of laboratories and certification bodies;
- 06 promote quality and standardization;
- 07 oversee the implementation of Regional and International Trade Agreement related to standards and Technical Barriers to Trade;
- 08 carry out such other mandate related to standardization and quality control including monitoring as may be assigned by the Royal Government.

BSB Governance Structure

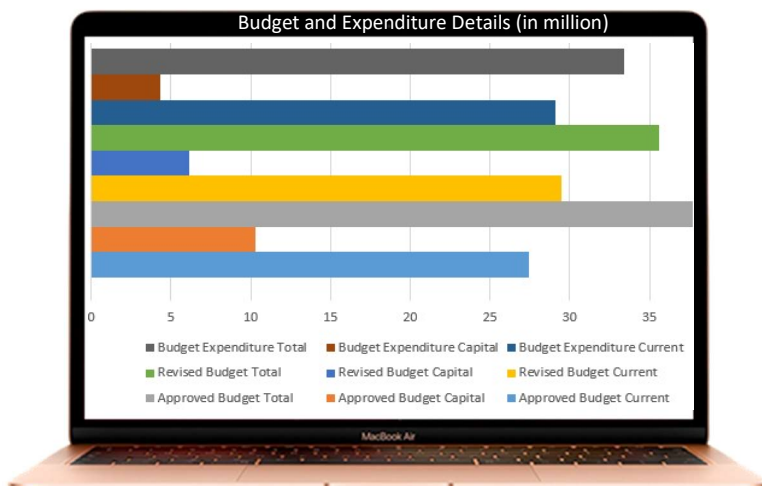
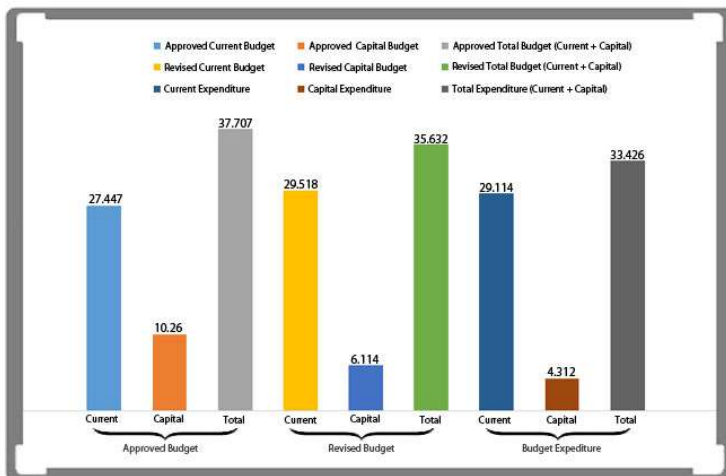


## BOARD OF DIRECTORS

| Sl. No | Name and Designation of the Members     | Department /Organization /Ministry                    |
|--------|---|---|
| 1      | Lyonpo Loknath Sharma, Hon'ble Chairman | MoEA  |
| 2      | Karma Drupchuk, Director                | DES, MoWHS  |
| 3      | Sonam Tenzin, Director                  | DoT, MoEA   |
| 4      | Sonam Tenzin, Director                  | OCP, MoEA   |
| 5      | Dr. Tashi Samdup, Director General      | BAFRA, MoAF   |
| 6      | Dorji Dhradhul, Director General        | Tourism Council of Bhutan (TCB)                       |
| 7      | Rinchen Wangdi, Director                | Gross National Happiness Commission                   |
| 8      | Sangay Dorji, Secretary General         | BCCI  |
| 9      | Kunzang Namgyal Tshering                | Director, Department of Occupational Standards, MoLHR |
| 10     | Sherab Tenzin, Director General         | Bhutan Standards Bureau                               |

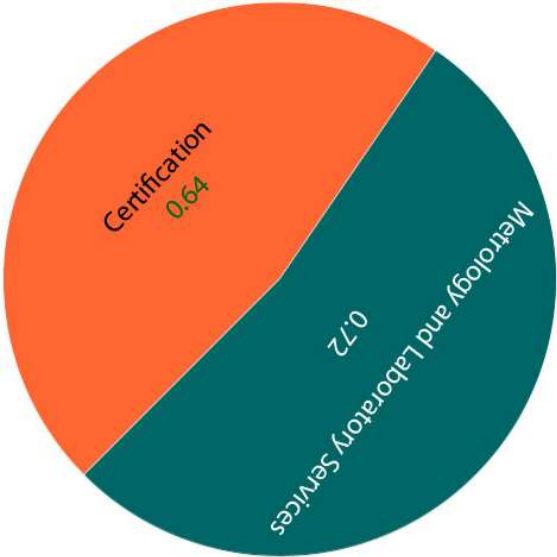
## Budget and Expenditure (In Million)

| Organization Name       | Approved Budget |         |        | Revised Budget |         |        | Budget Expenditure |         |        |
|-------------------------|-----------------|---------|--------|----------------|---------|--------|--------------------|---------|--------|
|                         | Current         | Capital | Total  | Current        | Capital | Total  | Current            | Capital | Total  |
| Bhutan Standards Bureau | 27.447          | 10.26   | 37.707 | 29.518         | 6.114   | 35.632 | 29.114             | 4.312   | 33.426 |
| Grand Total             | 27.447          | 10.26   | 37.707 | 29.518         | 6.114   | 35.632 | 29.114             | 4.312   | 33.426 |

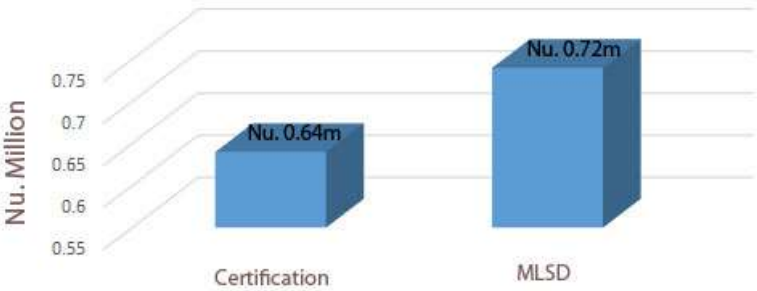


Revenue Generated

Revenue Generated (FY 2020-2021)  
Nu. in million



Revenue Generated (FY 2020 - 2021)





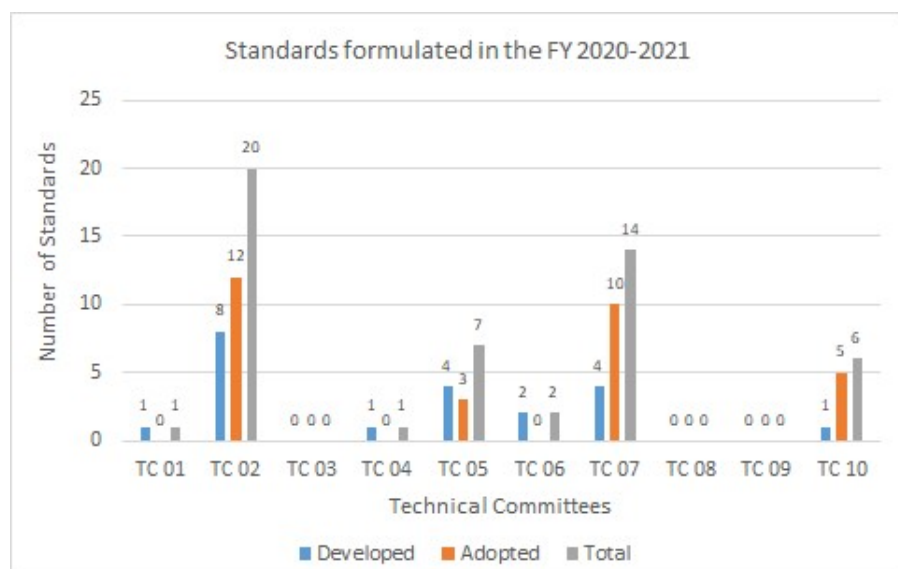
## Developing Standards and Raising Awareness

A total of 24 standards were developed and adopted. These however do not include normative standards which also consume huge amount of time.

| Number of Standards formulated during FY 20-21 |   |
|--|---|
| Sl/No.   | Title of the Standards  |
| 1  | BTS 340: 2021 Specifications and Methods for Making Dapa (Lidded Serving Plate or Container)  |
| 2  | BTS 341:2021 Specifications and Process of Making Bangchung (Bamboo Bowl)   |
| 3  | BTS 293: 2021 Timber Door Frame - Specification   |
| 4  | BTS 343: 2021 Timber Window Frame – Specification   |
| 5  | BTS 344: 2021 Timber Panelled and Glazed Door Shutters - Specification  |
| 6  | BTS 345: 2021 Timber Panelled and Glazed Window Shutters – Specification  |
| 7  | BTS 355: 2021 Blue Poppy (1 & 2) Hotel - Accommodation and Service Requirements   |
| 8  | BTS 342: 2021 Road - Geometric Design and Alignment Requirements  |
| 9  | BTS 336: 2021 Fried Potato Chips  |
| 10   | BTS 319: 2021 Honey   |
| 11   | BTS 320: 2021 Fruit Juices and Nectars  |
| 12   | BTS 192 (Part 1): 2014(Reaffirmed 2020) IS 2185 (Part 1): 2005 (Reaffirmed 2015) Concrete Masonry Units - Specification Part 1 Hollow and Solid Concrete Blocks (Third Revision)                |
| 13   | BTS 193 (Part 2): 2014 (Reaffirmed 2020) IS 2185 (Part 2): 1983 (Reaffirmed 2015) Specification for Concrete Masonry Units Part 2 Hollow and Solid Lightweight Concrete Blocks (First Revision) |
| 14   | BTS 194 (Part 3): 2017(Reaffirmed 2020) IS 2185 (Part 3): 1984 (Reaffirmed 2015) Specification for Concrete Masonry Units Part 3 Autoclaved Cellular (Aerated) Concrete Blocks (First Revision) |
| 15   | BTS 321 : 2021 Kombucha   |
| 16   | BTS 267:2019 IS 308: 1988, ICS 71.100.20, standard for Dissolved Acetylene Gas  |

|    |   |
|----|---|
| 17 | BTS 335: 2021 Mustard Oil   |
| 18 | BTS 356: 2021 IS 309: 2005 -Compressed Oxygen Gas-Specifications                                    |
| 19 | BTS 357: 2021 IS 1747: 1972-Specification for Industrial Nitrogen                                   |
| 20 | BTS 358: 2021 IS 5844: 2014-Hydrostatic Stretch Testing of Compressed Gas Cylinders-Recommendations |
| 21 | BTS 359: 2021-Standard for Medical Oxygen   |
| 22 | BTS 360: 2021 -Standard for Medical Oxygen 93%  |
| 23 | BTS 361: 2021-Standard for Medical Nitrogen   |

### Number of standards formulated in the FY 2020-2021



## World Standards Day, 14th October 2020

World Standards Day is observed every year on 14<sup>th</sup> October across the globe to recognize the efforts of thousands of experts who develop standards. Bhutan Standards Bureau also observed the World Standards Day aligning with the theme '**Protecting the planet with Standards**' to recognize the Standards as one of the tools for protecting our planet.



## Providing Calibration and Testing Services

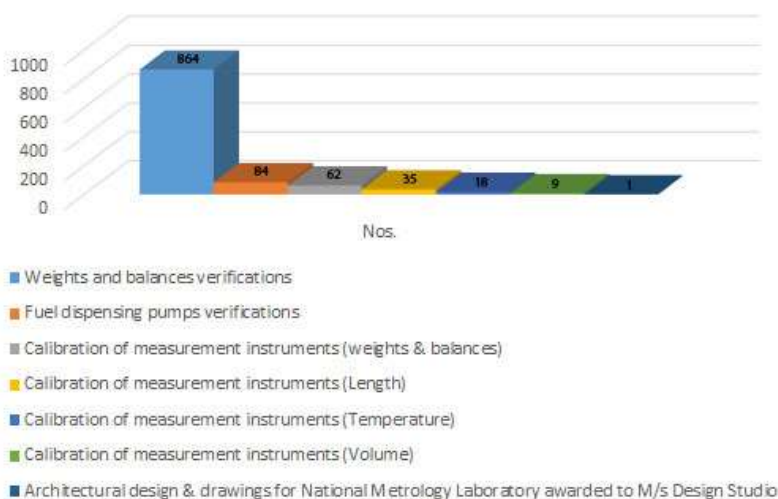
BSB as the National Metrology Laboratory with accreditation by NABL conducts calibrates for:

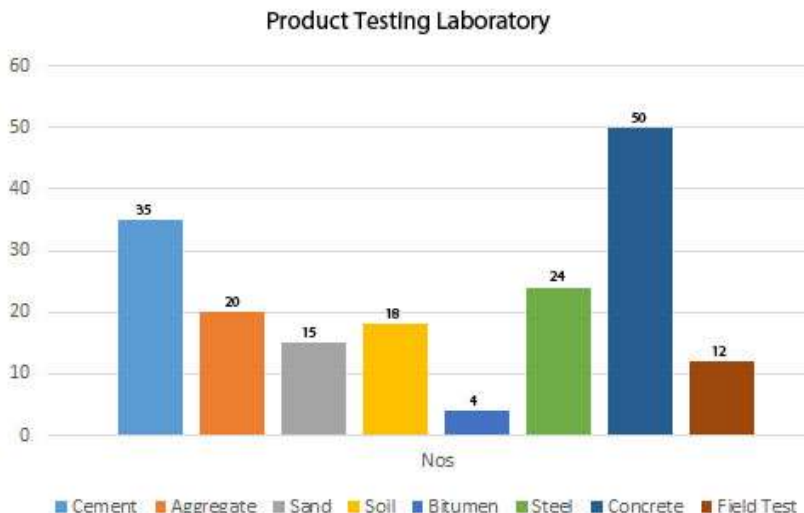
- a) Mass and
- b) Dimension. During the year under review, it conducted the following:

| S/N | National Metrology Laboratory                               | Nos. |
|-----|---|------|
| 1   | Weights and balances verifications                          | 864  |
| 2   | Fuel dispensing pumps verifications                         | 84   |
| 3   | Calibration of measurement instruments (weights & balances) | 62   |
| 4   | Calibration of measurement instruments (Length)             | 35   |
| 5   | Calibration of measurement instruments (Temperature)        | 18   |
| 6   | Calibration of measurement instruments (Volume)             | 09   |

| S/N                         | Product Testing Laboratory | Nos |
|-----------------------------|----------------------------|-----|
| 1                           | Cement                     | 35  |
| 2                           | Aggregate                  | 20  |
| 3                           | Sand                       | 15  |
| 4                           | Soil                       | 18  |
| 5                           | Bitumen                    | 4   |
| 6                           | Steel                      | 24  |
| 7                           | Concrete                   | 50  |
| 8                           | Field Test                 | 12  |
| Revenue Generated Nu. 0.72m |                            |     |

### National Metrology Laboratory





## Product and Management Certifications

Towards fulfilling the mandate of product and management system certification, BSB, as stipulated both in the certification standards and the Rules Governing Product Certifications, carried out the following:

1. Certified 33 products (Civil 30/Electrical 3: 18 National/Indian 15)
2. Certified 5 products under the CSI FSP (Incense, Pencil, Handmade paper, Silk and Concrete Blocks)
3. Recertification of Bank of Bhutan for QMS ISO 9001:2015
4. Generated Nu. 0.64 million in revenue from certification fees
5. Conducted Awareness Programs in Gasa, Punakha and Wangduephodrang
6. Conducted Market Surveillance in Haa, Paro and Punakha
7. Trained three personnel in ISO 17021-1:2015 online. Conformity Assessment: Requirements of certification bodies providing management system certification.

## Networking and Harmonization of Standards

As an assurance of Bhutan's commitment to good quality systems and practices, BSB continues to strengthen its international relations and networking with both bilateral and international organizations through regular participation in meetings and conferences. BSB officials participated in the following meetings:

- i. The 43rd ISO General Assembly held virtually on 24<sup>th</sup> September 2020
- ii. The Ninth Meeting of the Governing Board of South Asian Regional Standards Organization (SARSO) held virtually on 29-30 October 2020
- iii. The 84<sup>th</sup> International Electrotechnical Commission (IEC) General Meeting (Council/SMB/Affiliate Forum/Industrializing Countries Workshop) held virtually on 13th November 2020
- iv. The Seventh Meeting of SAARC Expert Group held virtually from 19<sup>th</sup> – 20<sup>th</sup> January 2021.
- v. BSB signed an MOU with the Institute of Electricals and Electronics Engineers (IEEE) on 8 February, 2021. The IEEE is a global standardization body that develops consensus-based electro-technical, electronic, information and communication technology standards. The MoU will broaden opportunities for BSB and provide access to IEEE standards. Other agencies such as the Department of Renewable Energy can also benefit.

## Capacity Building of BSB

### Training on Managing National Standards Development Projects and Programs (MSPP)

As a part of Good Standardization Practices under the ISO DEVCO program, the BSB participated in the virtual training on 'Managing National Standards Development Projects and Programs'. The participants were introduced to an Opensource tool for project management called Project Libre and how to apply it during the standard development process.



## Special Report on SCL Flagship Program

### 1.0 Background

Bhutan Standards Bureau (BSB) is a stakeholder in the Cottage and Small Industries (CSI) Flagship Program spearheaded by the Department of Cottage and Small Industries (DCSI), Ministry of Economic Affairs (MoEA). BSB will support the DCSI by providing standardization and conformity assessment services in order to provide local manufacturers with market access of their products.

DCSI has identified twenty (20) products under the CSI Flagship Program covering Agro, Mineral, Wood and Textile based products. BSB shall develop/adopt standards for all the identified products. However, BSB shall certify only the Mineral, Wood and Textile based products (Initially 11, now reduced to 9) and BAFRA shall certify the remaining Agro and food based products, noting that they are already involved in these services.

10 standards were delivered in the FY 2019-2020 excluding 7 normative standards. The following 10 products were identified for standardization in the FY 2020-2021:

- 1) Wooden Doors
- 2) Wooden Windows
- 3) Dappa
- 4) Bangchung
- 5) Honey
- 6) Sea Buckthorn
- 7) Kombucha
- 8) Mustard Oil
- 9) Potato Chips
- 10) Kiwi Juice

Certification of these products would be carried out in the FY 2021-2022 (Sl. No. 1-4 BSB, rest BAFRA).



## 2.0 Activities in 2020-2021

There are three activities outlined in the FY 2020-2021: Development of 10 product standards, certification of 5 products and awareness programs.

## 3.0 Work plan and budget allocation

The following table indicates the work plan and budget utilization of the proposed budget requirements in the 12th FYP. Each standard is estimated to cost Nu. 0.18 million and 10 standards are earmarked for the FY 2020-2021. Certification of 5 products was planned to be carried out in the FY 2020-2021 each costing Nu. 0.35 million per product with Assessors recruited from India. Due to the pandemic the assessments were carried out by BSB Certification Personnel.

| Sl. No       | Activity                             | Approved budget (Nu. in million) | Budget utilization (Nu. in million) |             |            |
|--------------|--------------------------------------|----------------------------------|-------------------------------------|-------------|------------|
|              |                                      |                                  | 2019-2020                           | 2020-2021   | 2021-2022  |
| 1.           | Develop/adopt standards              | 3.6                              | 1.8                                 | 1.8         |            |
| 2.           | Product certification of 11 products | 3.15                             |                                     | 1.75        | 1.4        |
| 3.           | Procurement of metrology equipment   | 1.0                              | 1.0                                 |             |            |
| 4.           | Awareness programs                   | 1.0                              | 0.5                                 | 0.5         |            |
| <b>Total</b> |                                      | <b>8.75</b>                      | <b>3.3</b>                          | <b>4.05</b> | <b>1.4</b> |

## 4.0 Targets and Output

As targeted, 10 standards were delivered: Dappa, Bangchung, Wooden Doors and Windows, Honey, Kombucha, Kiwi Juice, Mustard Oil, Sea Buckthorn and Potato Chips. 5 products: Pencil, Handmade paper, Incense, Silk and Concrete blocks were certified during the same period. Awareness programs were conducted in Gasa, Wangdue and Punakha. Planned awareness programs in

Tsirang, Dagana, Trongsa, Zhemgang, Bumthang, Mongar, Lhuentse, Trashigang and Tashi Yangtse would be taken up in the FY 2021-2022.

**The Physical progress is 98% and Financial Progress is at 95% due to some awareness programs on hold.**

#### **6.0 Other activities**

BSB also initiated the certification of CheyChay Sanitary pads with the assistance of a technical expert from India, Mr. Vivek Gago. DCSI approved and released a budget of Nu. 0.138 million for this activity. The certification process has started and will be completed by the end of September 2021.

### Activities in pictures



Pic 1: 1st Meeting of Sub-Committee on Timber Doors and Windows at Namsey Choling Resort, Paro from 1st to 6th March 2021



Pic 3: 1st Meeting of Sub-Committee on Juices (Sea Buckthorn, Kiwi & Kombucha) at Hotel Khuru Khuru, Punakha 1st to 5th March 2021



Pic 5: Awareness Program in Gasa for Dzongkhag Engineering team (23rd April 2021)



Pic 6: Awareness Program in Wangdue for Dzongkhag Engineering team (26th April 2021)



Pic 8: Inspection visit to Silk Manufacturer, Changtagang, Thimphu



Pic 9: Inspection visit to M/s Himalayan Incense, Wangsisina, Thimphu





Pic 10: Inspection visit to M/s Druk Peci, Punakha



Pic 11: Attachment of Officer Designates to M/s Tagma Handmade Paper, Zhemgang



Pic 12: Attachment of Officer Designates to M/s Tagma Handmade Paper, Zhemgang

## Bhutan Herbal Tea



## Druk Peci







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Rijug Lam  
Po Box 171  
Thim Throm  
Thimphu (11001)



[bsb@bsb.gov.bt](mailto:bsb@bsb.gov.bt)

Location



SCAN ME