



NABL's Role in Food Safety Through Laboratory Accreditation



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NABL MANDATE

- NABL grants accreditation to testing & calibration laboratories as per ISO/IEC 17025 and medical laboratories as per ISO 15189.
- NABL operates its own system as per ISO/IEC 17011:2004 *Conformity Assessment: General Requirements for Accreditation Bodies accrediting Conformity Assessment Bodies*
- NABL Accreditation is a voluntary program

Key Requirements for Demonstrating Food Safety

**Food Safety Management Systems
(ISO 22000, HACCP)**

Regular Surveillance mechanism

***Credible testing laboratories
(ISO17025; ILAC-MRA)***

HOW CAN WE DEFINE 'ACCREDITATION'?

- Procedure by which an Authoritative Body (NABL) gives formal recognition that a Body (laboratory) is competent to carry out a specific task (testing/calibration)



*How 'Accreditation' critical
to 'Food
Manufacturer/Supplier*



- ✓ Minimizing Risk of producing Faulty Food Products entering the market
- ✓ Avoid Expensive Retesting
- ✓ Ease Export & import issues regarding Food safety

Need for Food Laboratory Accreditation

- ❖ To ensure accurate, reliable and reproducible test results and measurement data.
 - ❖ To achieve consistency and uniformity in test results and measurement data.
 - ❖ To have confidence in the quality of goods and services we use.
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- ❖ **To meet Customer's requirement who specify testing by accredited laboratories.**
- ❖ **To meet requirements of Regulatory and Government agencies who sometimes require testing by accredited laboratories.**
- ❖ **To ensure equivalence of results produced by different laboratories.**

Now Recognition by Government & Regulators



- Food Safety and Standards Authority of India (FSSAI)
- Ministry of Consumer Affairs & Public Distribution
- Agricultural & Processed Food Products Export Dev. Authority (APEDA)
- Export Inspection Agency (EIA) & Bureau of Indian Standards (BIS)
- Tea Board, Coffee Board, Spices Board.....

Checking the Competence of a Laboratory

1. On Site Assessment of Food Testing laboratory by Experts for Its Technical Competence

ISO/IEC 17025:2005

*Specific Criteria,
NABL-102, 103*



2. By analyzing the test result of a particular test / measurement generated by the laboratory during participation in a 'Proficiency Testing program'

3. Overall Compliance to ISO/IEC 17025:2005



Once Tested ----- *accepted Everywhere*

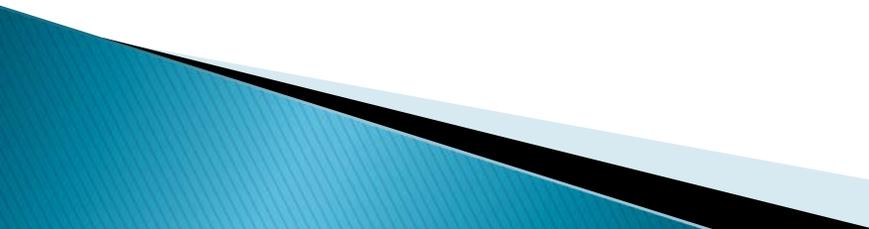
Accreditation Of PT-Providers

✓ **NABL has commenced the new program for the convenience of Laboratories-----**

“Accreditation of ‘Proficiency Testing Providers’ in accordance with *ISO/IEC 17043:2010* on the eve of “World Accreditation Day-9th June 2011”

-----Also Potential PT providers are being identified in the area of Food Testing

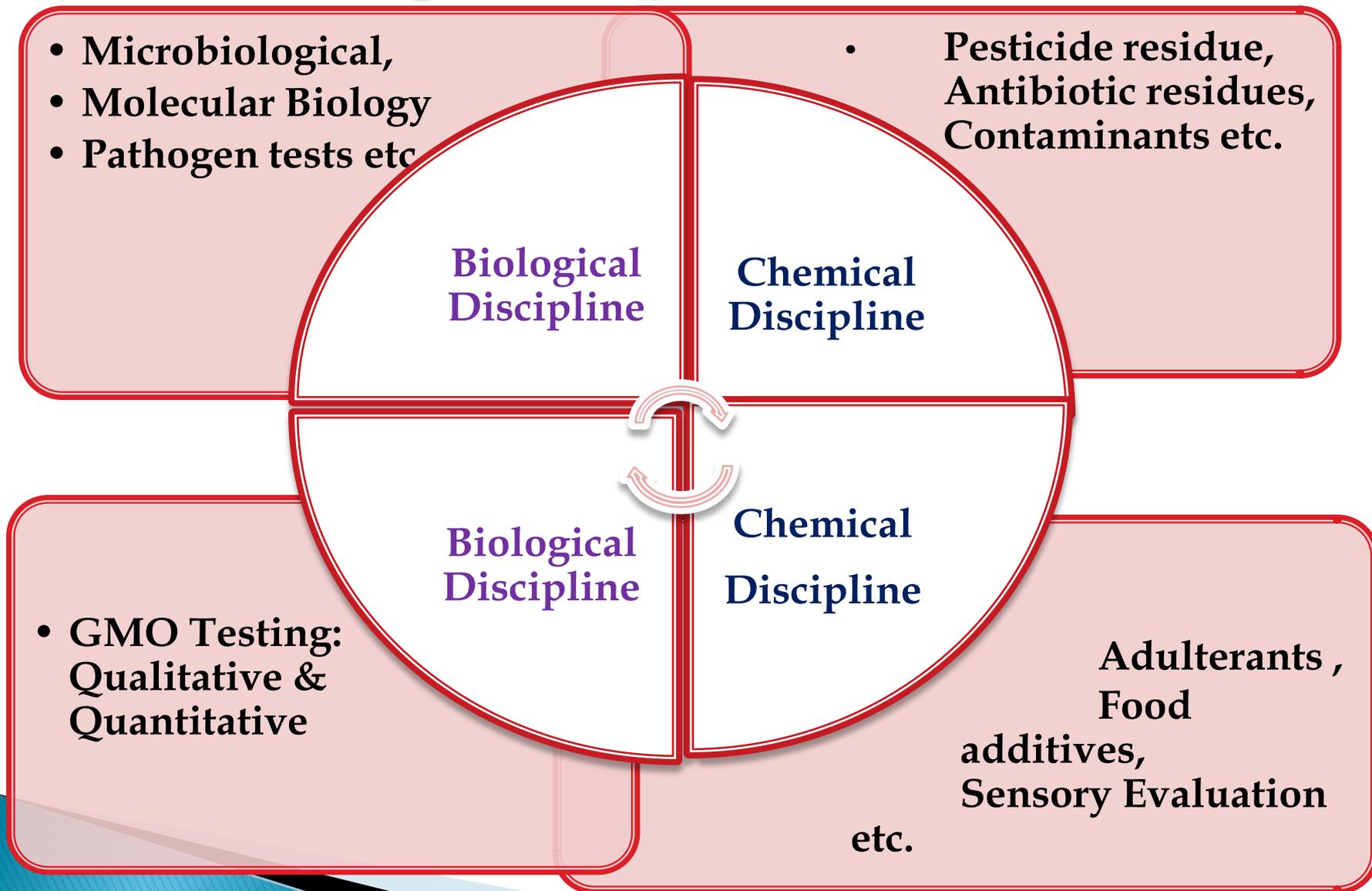
Management Requirements of ISO/IEC 17025

- ▶ **Organization**
 - ▶ **Documentation**
 - ▶ **Review of requests and sub-contracting**
 - ▶ **Purchasing services**
 - ▶ **Service to the client & Complaints**
 - ▶ **Control of non-conforming work**
 - ▶ **Corrective & preventive action**
 - ▶ **Technical Records**
 - ▶ **Internal audit & Management review etc.**
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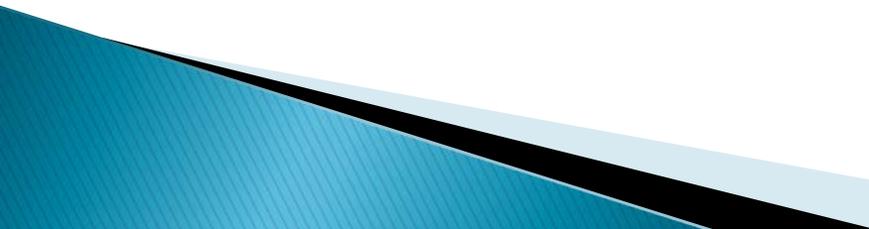
Technical Requirements of ISO/IEC 17025

- ▶ Technical competence of staff
 - ▶ Testing environment & accomodation
 - ▶ Test methods and validation
 - ▶ Equipment
 - ▶ Measurement Traceability
 - ▶ Measurement uncertainty
(laboratory must know how far its results are from true values)
 - ▶ Sampling, handling and transportation of test items
 - ▶ Quality assurance, Proficiency Testing
 - ▶ Test reports
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Food Testing Discipline



Assessors Training Programs

- NABL organizes its own Assessors' training courses as per ISO/IEC 17025.
 - NABL has pool of 1400 trained assessors out of which 948 are active.
 - NABL has organized Assessors' training courses for Sri Lanka, Nepal, Bangladesh, Mauritius & Mongolia.
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International Recognition of NABL



- NABL is signatory to APLAC / ILAC Mutual Recognition Arrangements (MRA) since 2000
- First evaluated by APLAC in 2000
- Second evaluation by APLAC in 2004
- Third evaluation by APLAC in 2008
- Fourth evaluation 2012 successfully



Global Acceptance of Reports

- Test reports issued by an NABL accredited laboratory is considered equivalent to those issued by ILAC/APLAC MRA partners.
- Global MRA has network of ~35,000 Accredited labs from 88 different economies
- Data generated by an accredited laboratory may lead to the more ready acceptance of exported goods in overseas markets



Global eCommerce Acceptance

Benefits from Laboratory Accreditation

1. *Using an accredited laboratory benefits Government and Regulators by:*

- Increasing confidence in data that are used to establish baselines for key analyses and decisions
- Reducing uncertainties associated with decisions that affect the protection of human health and the environment
- Regulators can reduce their In-house Inspectorate and specialist assessment personnel to reduce the cost or target their inspection more effectively
- Increasing public confidence, because accreditation is a recognisable mark of approval

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2. Using an accredited laboratory also increases confidence that:

- **Decisions regarding multiple facilities are based on comparable data**
- **Purchases received from suppliers are safe and reliable**
- **Costs associated with laboratory problems, including re-testing, re-sampling, and lost time are minimised**
- **False positives and negatives, which can directly affect compliance with regulations, are minimised**
- **Facilitates trade and economic growth**

Once Tested accepted Everywhere

Cross Border Food Laboratory Accreditation

- SGS Bangladesh Ltd, Dhaka, Bangladesh
- Bangladesh Standards and Testing Institution (BSTI), Dhaka
- Bureau Veritas Consumer Products Services (Lanka) Ltd., Sri Lanka
- SGS Lanka Pvt. Ltd, Colombo, Sri Lanka
- NFTL (Bhutan Agricultural Food Regulatory Authority), Bhutan--
- (*Applicant*)
- Central Food Laboratory, Kathmandu, Nepal



Participation in APLAC Evaluations

- NABL actively participates in APLAC evaluations of Other Accreditation Bodies which are operating in accordance with ISO/IEC 17011:2004.
- 8 NABL Officers have participated as APLAC / ILAC evaluation team members for 19 Accreditation Bodies, major are:

Australia, Japan, Newzealand, USA, Russia, China, South Africa, Singapore, Malaysia, Korea, Philippines, Sri Lanka etc

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**THANK
YOU**