# TERMS OF REFERENCE FOR THE R&D PROJECT

**1. Title of the Project:** Development of Specifications for Therapeutic equipments used in Ayurveda

## 2. Background:

**2.1** Ayurveda, the traditional Indian system of healthcare, has been practiced for centuries. With its emphasis on a holistic approach to health and well-being, Ayurvedic treatments have gained significant popularity worldwide. However, in order to propel the quality, standards, and service delivery of these treatment methods, there is an urgent need for standardization of therapeutic equipments used in Ayurveda.

**2.2** According to the World Health Organization (WHO) benchmarks for the practice of Ayurveda, medical devices play a crucial role in the successful implementation of this traditional medicine. These medical devices include equipment, instruments, and special furniture that are essential for providing effective Ayurvedic treatments. To ensure the success of Ayurveda practice, the availability of good-quality Ayurveda medical devices is of utmost importance. These products and devices should adhere to defined safety parameters and meet the specific requirements of Ayurveda. Additionally, they ought to be affordable and accessible to the general public.

**2.3** As Ayurveda expands into new markets and regions, it is crucial to have standardized equipment that can be easily understood and adopted by practitioners worldwide. This will enable the dissemination of Ayurvedic knowledge and practices across borders. In order to bring uniformity in the standards of equipment used in prophylactic and therapeutic procedures, BIS has identified this subject for formulating Indian Standards.

## 3. Objective

To produce a list of therapeutic equipments used in Ayurveda along with their specifications, database of manufacturers and testing laboratories.

## 4. Scope of study

**4.1** Preparation of a list of Therapeutic equipments used in Ayurveda and their specifications.

**4.2** Preparation of a database of manufacturers of therapeutic equipments used in Ayurveda.

**4.3** Preparation of a Database of laboratories which possess the testing facilities.

## 5. Research Methodology

According to the project plan, the following steps will be involved in the implementation of the project:

**5.1 Compilations of Data:**

Compilation of data on different therapeutic and diagnostic equipments manufactured and used in India along with a comprehensive list having details of manufacturers of these equipments.

**5.2 Literary Review**

Comprehensive study and analysis to review existing literature on compiled equipments, focusing on available standards, technical regulations, research papers, any guidelines, instructions issued by the Ministries/regulators concerned, and any other relevant studies.

**5.3 Cross-Reference:**

Cross-referring the gathered information with existing databases, industry reports, and scientific literature to identify additional equipments that may not be directly available in the market but are suitable for development as Indian Standards.

**5.4 Industry visits**

Visit to manufacturing facilities of selected manufacturers to physically inspect the manufacturing process and collection of data through various methods such as interviews, observations, and document review.

The visit involves observation of manufacturing processes, examining quality control measures, reviewing product catalogues, requesting documentation such as technical specifications and user manuals and discussing any concerns or limitations with the manufacturer's representatives.

It is anticipated that the research will involve a minimum of 6 visits. Three Manufacturing units from each large/medium and small/micro scale shall be visited.

Collection of information during visits to manufacturing units may comprise of the following:

**5.4.1** Varieties of equipments manufactured along with the manufacturing process.

**5.4.2** Materials used.

**5.4.3** Dimensions

**5.4.4** Quality parameters including safety and performance parameters requirements followed.

**5.4.5** In-process quality control, test facilities and test methods used.

**5.4.6** Marking, labelling, packing practices.

**6. Expected Deliverables:**

**6.1.** Final project report, in hard copy format as well as in soft copy, covering all aspects mentioned in the scope.

**6.2.** Questionnaire, visit reports, test reports to be appended with the final project report.

**7. Timelines and Method of Progress Review:**

The duration of the project is 6 months from the date of the award of the project. The stage wise indicative timelines are as follows: -

| Time line | Progress |
|---|---|
| 0-1 month | Compilation of data on different therapeutic equipments along with a list of manufacturers. |
| 1 – 2 months | Review of existing literature on compiled equipments from various sources. |
| 3-5 months | Industry visits to observe the manufacturing process and collection of data through interviews, observations, and document review. Preparation and submission of first draft report. |
| 5-6 months | Submission of Final report. |

Progress reviews will be conducted as needed to track developments and to make timely adjustments.

**8. Support BIS will Provide:**

**8.1** BIS will provide access to latest available editions of Indian standards and/ or international standards relevant to the project, on request.

**8.2** Facilitation/Introduction of the project leader/organization to relevant Industry and industry association, testing lab, regulator/ministries.

**9. Relevant sectional committee and Nodal officer from BIS**

**Sectional Committee:** Ayurveda Sectional Committee, AYD 01
**Nodal Officer:** Dr Raghavendra Naik, Scientist C and Member Secretary of AYD 01
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