



## Sharing expertise in quality – PTB's International Cooperation in Asia

Quality is a crucial element when working towards sustainable development targets in Asia. To this end, strengthening the underlying infrastructure on both a national and a regional level is of the utmost importance.

PTB's International Cooperation Department, acting on behalf of the German Ministry for Economic Cooperation and Develop-

ment, has been a partner in this endeavour for more than 50 years. Following the motto "sharing expertise in quality", its objective is to assist developing countries and emerging economies in establishing an internationally recognized quality infrastructure.

## Asia – a dynamic and diverse continent

In recent decades, Asia has reached an unprecedented pace of economic growth and development. Driven by robust industrial performance and rising education levels, overall poverty rates have decreased by half over the last 25 years. Emerging economies, in particular China, India and Indonesia, have shaped Asia's profile as an international trading partner and gained increasing political and economic influence on a global level. Moreover, Asia has a strong track record in technological development, scientific progress and innovation. If current trends continue, Asia will account for more than half of global trade, investment and gross world product by 2050. Thus, the 21st century is often projected to become "the Asian century".

On the other hand, Asia faces substantial challenges that pose actual threats to its prosperity, security and stability. Poverty is still a wide-spread phenomenon and social disparities between and within Asian countries are on the rise. South Asia remains one of the least economically integrated regions in the world, due in part to non-tariff barriers to trade. Economic growth has been achieved at the cost of massive resource depletion and severe environmental degradation. Climate change threatens agricultural production and coastal populations, while the largest share of current global greenhouse gas emissions comes from Asia. In sum, Asia continues to struggle in many areas that are vital to the attainment of the universally-agreed Sustainable Development Goals, adopted in September 2015.



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Challenges and achievements are closely associated with issues of quality, health and safety. International value chains contain increasingly demanding quality requirements that exporters have to meet. Regional integration schemes draw on harmonized safety standards and recognized product certificates. Healthcare and food safety depend on trustworthy measurements and competent inspection bodies. Environmental protection and energy efficiency require reliable testing data.

Therefore, strengthening the underlying institutions, regulatory frameworks and quality-assurance processes is of the utmost importance for Asia's economic, social and environmental development.

In most developing countries in Asia, the importance of a quality infrastructure that comprises the fields of metrology, standardization and conformity assessment is becoming increasingly acknowledged and incorporated into sector-specific, national and regional policy guidelines. Nevertheless, a wide range of challenges remain: the quality-related needs of industry and consumers must be identified and articulated and resources channelled effectively. The employees of service providers need to be trained and their infrastructures developed in accordance with international standards and good practices. In short, capacity development in quality infrastructure remains a multifaceted task necessary to achieve sustainable development.

### Our contribution – sharing expertise in quality

The International Cooperation Department of the Physikalisch-Technische Bundesanstalt (PTB), acting on behalf of the German Ministry for Economic Cooperation and Development, has been a partner in capacity development for quality infrastructure for more than 50 years. As the national metrology institute of Germany, PTB leverages knowledge and competence to fulfil its mission in development cooperation. Its approach is demand-driven and comprises services such as training, consultancy and access to networks and information. Guided by its mission to assist developing countries and emerging economies in establishing an internationally recognized quality infrastructure, its modes of delivery include i) bilateral projects, ii) cooperation with regional economic communities and iii) projects with regional technical networks.

### Capacity development in Asia

In all project types, trilateral cooperation and partnerships with partners from more advanced Asian economies play an important role. Their aim is to share knowledge and resources for the benefit of developing economies whose quality infrastructure is at an early stage.

### BILATERAL PROJECTS

In bilateral projects, PTB assists partner countries in aligning their national quality infrastructure with international standards and good practices. Building on the focal areas of a given bilateral development cooperation and on the priorities of its partner organizations, PTB's support is designed to establish basic quality services and sector-specific expertise in fields such as trade, energy and consumer protection. The ultimate objective of these interventions is to facilitate the implementation of quality-related policies towards sustainable development.

To achieve this objective, PTB follows a systematic approach with a focus on capacity development of key institutions of the national quality infrastructure. These institutions include national metrology institutes, national standards bodies and sector-specific conformity assessment bodies. In addition, PTB offers advisory services for regulatory authorities and policy makers, as well as support for private sector associations, small and medium-sized enterprises and civil society organizations.



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## PROJECTS WITH REGIONAL ECONOMIC COMMUNITIES

The goal of PTB's cooperation with ASEAN (Association of Southeast Asian Nations) and SAARC (South Asian Association for Regional Cooperation) is to strengthen regional integration and cooperation efforts. Interventions target the regional level by strengthening regional harmonization and coordination initiatives in quality infrastructure, and target the member states level by providing complementary support to less-developed economies. The final goal of this project type is to enhance regional trade and integration by reducing technical barriers to trade.

The project partners involved in this cooperation are the secretariats of ASEAN and SAARC, as well as regional committees and governance structures such as the ASEAN Consultative Committee for Standards and Quality (ACCSQ) and the South Asian Regional Standards Organization (SARSO). At the member states level, PTB cooperates with the respective national quality infrastructure bodies in their roles as both providers and recipients of know-how. Again, networking and active cooperation with the more advanced member bodies are an integral part of the project concept.

## PROJECTS WITH REGIONAL TECHNICAL NETWORKS

Regional technical networks such as the Asia Pacific Metrology Programme (APMP) and the Asia-Pacific Legal Metrology Forum (APLMF) play a crucial role in facilitating international recognition of their member organizations. In addition, they act as a platform for information exchange and knowledge transfer, and assist members in keeping pace with international developments. PTB projects in this category are designed to strengthen the capacities of these networks in their functions as service providers and stepping stones towards international recognition for members from developing economies.

Given the heterogeneity among member economies, particular attention is paid to tapping expertise and resources that are available within the region itself. In this regard, PTB facilitates knowledge sharing by providing technical and financial support for intra-regional capacity building by means of training measures, awareness-raising programmes and benchmarking exercises. Moreover, its projects are designed to establish mechanisms that assist partner networks in assessing the needs of existing and potential members, identifying available expertise and monitoring the results of activities.

### **Our impacts – facilitating sustainable development**

A functioning quality infrastructure is built on several pillars. These pillars include adequate services and institutional performance, a sound governance and policy framework, and effective partnerships and regional networks. PTB's International Cooperation Department aims to strengthen these pillars through collaborative capacity development in alignment with the goals of German development cooperation. Examples of corresponding impacts are illustrated below.

## IMPROVING SERVICES AND INSTITUTIONAL PERFORMANCE

Targeted training and consultancy enables PTB's project partners across Asia to expand the scope of their services and to increase their technical competence. For instance, partner laboratories in Nepal, Indonesia and the Philippines have gained international recognition through accreditation and successful benchmarking, thus adding value to their customers.

Similarly, regional partners such as APMP's Developing Economies' Committee have substantially increased their training and benchmarking activities based on innovative monitoring and evaluation tools. Better services, in turn, have helped members integrate into expert communities and align themselves with international good practices.

## STRENGTHENING GOVERNANCE AND POLICY FRAMEWORKS

PTB's projects facilitate good governance by providing support for policy design, strategy development and access to reliable testing data. In ASEAN, for example, national metrology laws have been benchmarked against international good practices, resulting in improved regulatory frameworks in individual member states.

In South Asia, SARSO is being strengthened as a regional platform for capacity building. In this way, mutual acceptance of conformity assessment is facilitated, resulting in a reduction of technical barriers to trade.

## BUILDING PARTNERSHIPS AND REGIONAL NETWORKS

Within the context of Asia's dynamic development, former recipients of technical assistance are now scientific cooperation partners and providers of technical assistance. The National Institute of Metrology Thailand, for instance, has become a key partner of PTB in Southeast Asia in delivering training and consulting services.

Similarly, in South Asia, India has become a close partner in fostering networking and cooperation in the fields of metrology and accreditation. Regarding this latter field, sub-regional partnerships between internationally recognized and emerging accreditation bodies have successfully been established, thereby helping to narrow the development gap.

Despite all these achievements, continued efforts are required to meet quality-related needs in our ever-changing environment. For Asia, these efforts include quality services to facilitate the transition to a low-carbon and energy-efficient economy, the provision of high-quality public goods and social services, and the expansion of regional production networks based on business excellence, productivity and innovation. PTB's International Cooperation Department remains committed to sharing its expertise in quality in order to ultimately achieve sustainable development.

