Summary

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What's Ahead for Mexico? Mexico's Science and **Technology System and Pathways to R&D Cooperation in Changing Political Circumstances** VERANSTALTUNG AUS DER VORTRAGSREIHE "TRANSNATIONAL LECTURE SERIES ON INTERNATIONALIZATION OF SCIENCE, TECHNOLOGY AND INNOVATION Summary erstellt von: Tinja Zerzer Keywords: Forschung, Technologie, Innovation, Internationalisierung, Mexiko

What's Ahead for Mexico? Mexico's Science and Technology System and Pathways to R&D Cooperation in Changing Political Circumstances

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In her lecture at the Austrian Institute for International Affairs (oiip), Dafne Jerez from CONACYT (Mexico's National Council for Science and Technology) offered an overview on Mexico's science-technology and innovation (STI) system. The lecture gave insights into the institutional framework of the science, technology, and innovation sector in Mexico, an overview of ongoing international cooperation, and some thoughts on future development plans and cooperation opportunities. CONACYT is the Mexican Federal Executive's body responsible for articulating the federal government's public policies regarding scientific research, technological development and innovation. Its role in the science and technology field can be compared to a ministry of science and technology. As a financial agency it also provides funding to the Mexican scientific community to develop their activities.

Mexico's STI System

Broad guidelines for the development of the STI sector in Mexico are decided by the General Council of Scientific Research, Technological Development and Innovation. It comprises the president of Mexico, the heads of nine ministries (including the Ministry of Foreign Affairs and the Ministry of Finance), the director general of CONACYT, the heads of the Mexican Scientific and Technological Advisory Forum and the Mexican Academy of Sciences and representative of the National Conference on Science and Technology. Further, it comprises three representatives of the productive sector, one representative of the system of public research centres, and the Secretary General of the National association of Higher Education Universities and Institutions.

There are sectoral and regional programs for science, technology and innovation. Programmes are split into sectors such as national defense, governance, or health. National institutions, like ministries and National Committees or Commissions (i.e. National Committee on Security, National Water Commission) provide funds for projects in each sector. Mixed funds guarantee financing for specific

regional programmes and contribute to the decentralization of the STI system. There are currently over 230 research institutions in Mexico, conducting research in a wide variety of fields (e.g. competitiveness, biotechnology, or climate change).

The regulatory framework for Mexico's STI system is defined by the 'Science and Technology Law' on the one hand (which also establishes CONACYT's organic law), and the national development plan on the other. Based on the National Development Plan, the Special Program of Science, Technology and Innovation outlines the specific ambitions concerning STI. The last Special Programme of Science, Technology and Innovation has the overall aim to create conditions for a transition towards a knowledge based economy. Specific goals include increasing the national investment in research and development, strengthening the education of highly qualified human capital, bolster regional development, encourage the creation of links with the productive sector and strengthening the scientific and technological infrastructure. Strategic sectors include sustainable development, technological development, the environment, energy, health, and society and knowledge of the universe.

Regarding the tertiary education sector, there are 2.069 post-graduate programmes in Mexico. All in all 63.747 scholarships have been granted in 2016. There are furthermore 23.315 accredited evaluators. The budget for projects concerning 'national problems' has increased from 170 million pesos in 2014 to over 400 million pesos in 2016. Additionally, there are specific Centres for Innovation in Energy in the area of wind energy, solar energy, bioenergy, ocean energy and geothermic sciences.

International Cooperation

Through international cooperation, CONACYT aims to link Mexico's scientific, technological and innovative community with the research and innovation groups of its partner countries and regions. This is to be achieved through several measures. For example, the involvement of experts is to be increased through mobility and projects with country partners. Further, identifying international strategic partners is supposed to help CONACYT have a major impact in the STI national system and internationalization of STI groups is planned to increase the ability to transfer knowledge to the society.

A further goal is the development of skills and practices to improve the design and management of programs and instruments; including public policy (at the CONACYT's level). This also includes providing the needed legal instruments (e.g. agreements, memorandums of understanding, letters of intentions), in order to concretize international cooperation actions. Further, the aim is to enhance

scientific, technological and innovation resources of Mexico with external cooperation (i.e. through infrastructure financing).

Most relevant partner countries at the moment are Canada and the United States in North America, France, Germany, Spain, the United Kingdom and Italy in Europe, South Korea, China, India and Japan in Asia, Argentina, Brazil, Chile and Colombia in South America, South Africa, and Turkey and Israel in the Middle East. Furthermore, there is cooperation on a regional level with the European Commission, Latin America, Ibero-America, the Pacific Alliance and the Asia-Pacific Economic Cooperation. Multilateral partner organizations include the OECD, UNESCO, the Global Research Council, the Belmont Forum, G13, Organization of American States, the Inter-American Development Bank, the Secretary General for Ibero America and the UN Economic Commission for Latin America and the Caribbean. In addition, Mexico is a member of several international research associations and organizations. In monetary terms, the most important international partners are the United States (ca. 30% of resources allocated to cooperation), France (ca. 19%) and the United Kingdom (ca. 13%).

Future development goals and priorities

Through further cooperation, Mexico hopes to be able to effectuate effective technology transfers, to develop best practices in STI management policies, to be able to address common problems to generate a greater impact on society, and overall to better tackle national challenges.

Interesting to note in the context of the current political environment is that Mexico is not planning to decrease its cooperation with the United States. However, there is an interest to increase cooperation with other countries.

Regarding Mexican-European cooperation, Mexico identifies the fields of health, energy, society, environment, sustainable development and technological development as priority areas. Currently, six cooperation projects between Mexico and the EU are running, with a total funding of EUR 2.2 million. On an institutional level, Mexico is part of the ERANET-LAC network, the Network of the European Union, Latin America and Caribbean Countries on Joint Innovation and Research Activities. The network's aim is to strength the cooperation and international financing in the field of STI, in particular the bi-regional cooperation between the EU and the community of Latin American and the Caribbean. Mexico is eager to keep working in its current cooperation agreements and to increase cooperation with other partners.