



EXPERT GROUP MEETING
ON SCIENCE, TECHNOLOGY
AND INNOVATION
ROADMAPS FOR THE SDGs



***STI ROADMAP AND SDGs IN GUATEMALA;
MAIN CHALLENGES, ACTIONS AND IMPACT OF
GO-SPIN STUDY IN THE STI POLICY
IMPLEMENTATION AND GOVERNANCE***

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***National Secretary of State for Science and Technology, Guatemala
Tokyo, Japan May 9th 2018***

Main Schedule

- **STI overview in Guatemala.**
- **Impact of GO-SPIN Study.**
- **Actions to reduce STI gaps in terms of addressing social inclusion and sustainable development in Guatemala.**

STI Investment as % of GDP

- 0.029% of GDP in R+D (0.22% en 1976).
- 25% less than Latin America and caribbean, 85% less than Occidental Europe and 150% less than Israel and South Korea average.

STI and GENDER

- Worst Gender Gap in LAC and ranks 105/144 in the world.
- 44.7% of women as total of scientific researches in Guatemala.

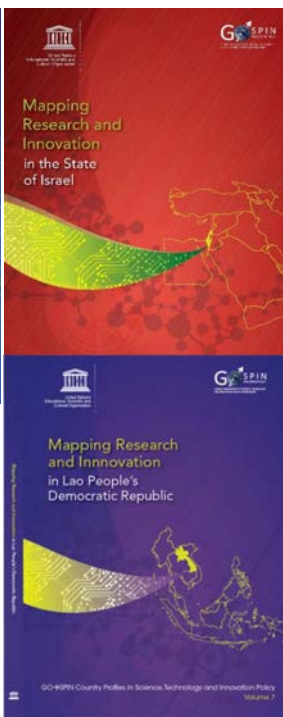
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Human Resources in STI

- 411 Full-Time Researches for million inhabitants **(16 times less than the Latin America and Caribbean Average)**.
- 180 Scientific Articles published in journals with “Impact Index”. **(11/million inhabitants, 16/35 in Latin America and Caribbean)**.

Country	Global Competitiveness Index		Economy of Knowledge (KEI)		GDP per cápita		Tertiary Education Matriculation rate		Human Capital Index		% of Internet Users		Human Development Index (HDI)	
	2017-2018		2014		(in current USD)		2016		2016		2016		2015	
	Ranking	Note	Ranking	Note	Ranking	USD	Ranking	Note	Ranking	Note	Ranking	%	Ranking	Value
USA	3	5.85	12	8.77	10	59,609	9	28.17	24	78.86	55	76.18	10	0.920
Germany	5	5.65	8	8.9	17	49,814	18	23.72	11	81.55	22	89.65	4	0.926
Japan	8	5.49	22	8.28	26	42,860	9	34.40	4	83.44	17	92.00	17	0.903
Hong Kong, (RAE)	9	5.53	18	8.52	9	60,553	SD	SD	SD	SD	27	87.30	12	0.917
Finland	10	5.49	2	9.33	25	43,545	3	34.79	1	85.86	26	87.70	23	0.895
Sweden	6	5.52	1	9.43	15	51,377	14	24.93	5	83.29	18	91.51	14	0.913
UK	7	5.51	14	8.76	23	44,001	13	25.89	19	80.04	12	94.78	16	0.909
Norway	11	5.40	5	9.11	7	70,665	9	28.19	2	84.64	8	97.30	1	0.949
Denmark	12	5.39	3	9.16	19	49,364	12	26.08	7	82.47	9	96.97	5	0.925
Canada	15	5.35	7	8.92	20	47,771	1	38.14	9	81.95	21	89.84	10	0.920
Qatar	18	5.11	54	5.84	1	129,112	59	12.22	66	68.64	14	94.29	33	0.856
Taiwan	14	5.33	13	8.77	16	49,901	ND	ND	ND	ND	42	79.75	ND	ND
New Zealand	13	5.37	6	8.97	29	38,706	9	28.71	6	82.79	24	88.47	13	0.915
Australia	22	5.19	9	8.88	16	50,817	11	26.94	18	80.08	25	88.24	2	0.939
South Korea	26	5.07	29	7.97	28	39,446	24	25.26	32	76.89	16	92.72	18	0.901
Costa Rica	54	4.50	51	5.93	73	17,260	38	18.09	62	69.72	81	66.03	66	0.776
Mexico	51	4.44	72	5.07	62	19,480	56	12.92	65	69.25	92	59.54	77	0.762
Guatemala	78	4.08	99	3.7	114	8,132	93	6.41	94	61.07	134	34.51	125	0.640
	Countries	137	Countries	145	Countries	179	Countries	130	Countries	130	Countries	228	Countries	188

6th GO→SPIN Study in the World and 1st in America.

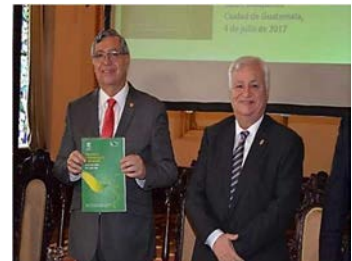


GO-SPIN Process

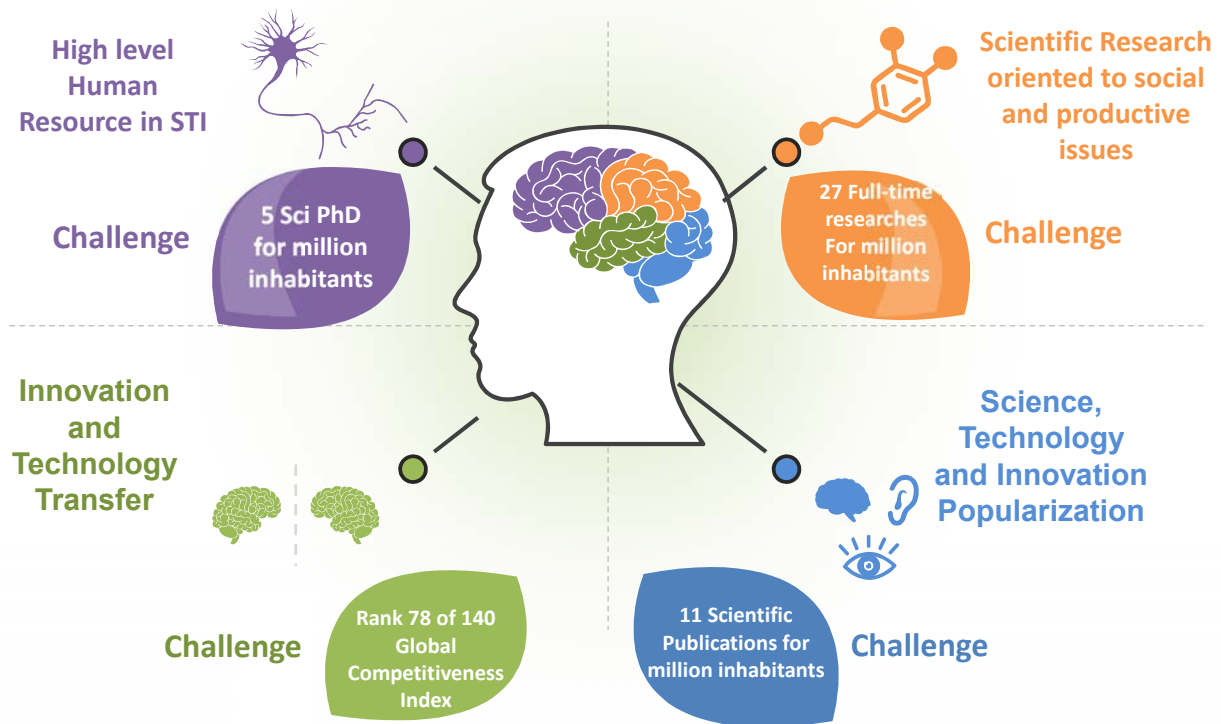
- 05-06.07.16; GO-Spin Methodology and mechanism of data collection.
- 02.23.17; Initial document validated.
- 07.04.17; Final document presented to Executive Organism –Presidency, Ministers and State Secretaries-.
- 07.05-31.17; Socialization of final document to Academic, Private and Public sectors.
- 09.12.17; Final document presented to Legislative Organism –Congress of the Republic-.

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TECNOLOGÍA SENACYT-

Presidency and Congress of Guatemala of GO-SPIN Study Presentation. July and September 2017.



National Founding for Science and Technology -FONACYT-



STI POLICY EDGES AND FONACYT FINANTIAL STRATEGY

STI POLICE EDGE I

High level Human Resource in STI
PROGRAM I

- Ph.D. and Master Scholarship Support.
- Integration (Post-Doc) of High Level Human Resources.

STI POLICE EDGE II

Scientific Research and Knowledge Management
PROGRAM II

- Basic Scientific Research (Scientific Knowledge generation)
- Support to International joint research projects.

STI POLICE EDGE II

Innovation, Entrepreneurship and Technology Transfer
PROGRAM III

- Support to Technological Offer.
- Impulse to I, E and TT processes.

STI POLICE EDGE IV

Science, Technology and Innovation Popularization
PROGRAM IV

- Difussion and Popularization of STI activities.
- Support to Scientific Papers, Reviews and Books publication.



PERSPECTIVES TO 2025 PLANDECYT

STI POLICE EDGE I: High Level Human Resources in STI

In 2025 Guatemala increased in 25% the High Level Human Resource in STI working in the country.



STI Police Edge III: Innovation, Entrepreneurship and Technology Transfer.

In 2025 the Innovation Ecosystem is working fully with Innovation, entrepreneurship and technology transfer as one of the main components of the country competitiveness.



STI Police Edge II: Scientific Research oriented to social and productive issues.

In 2025 the Scientific Research is developed at high level with regional and international projection, proposing solutions to national issues.



STI Police Edge IV:

Popularization of Science, Technology and Innovation.

In 2025 the guatemalan society knows and demand more scientific research, technology transfer and innovation processes as edge for our sustaintable development and more scientific exchange with the world.



STI and Government Administration

- **Transversal edges of STI Policy:**
 - ✓ **Gender**
 - ✓ **Disability**
- **Technological Innovation fucused in:**
 - ✓ **Government Modernization by Digital Technologies (Open Government, Electronic Government, National Digital Connectivity).**
 - ✓ **Transformation of Small Enterprisess from Manufacturing to Technological basis.**



**STI as fundamental edge
for world development**



THANKS A LOT

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