

In The Name of God

Leadership For Innovation

DIT 4th Strategic Forum

WAITRO 20th Biennial Congress & General Assembly

11-14 October 2010, Dubai, UAE

**Institutions Building for NIS:
An Experience Of CITC**

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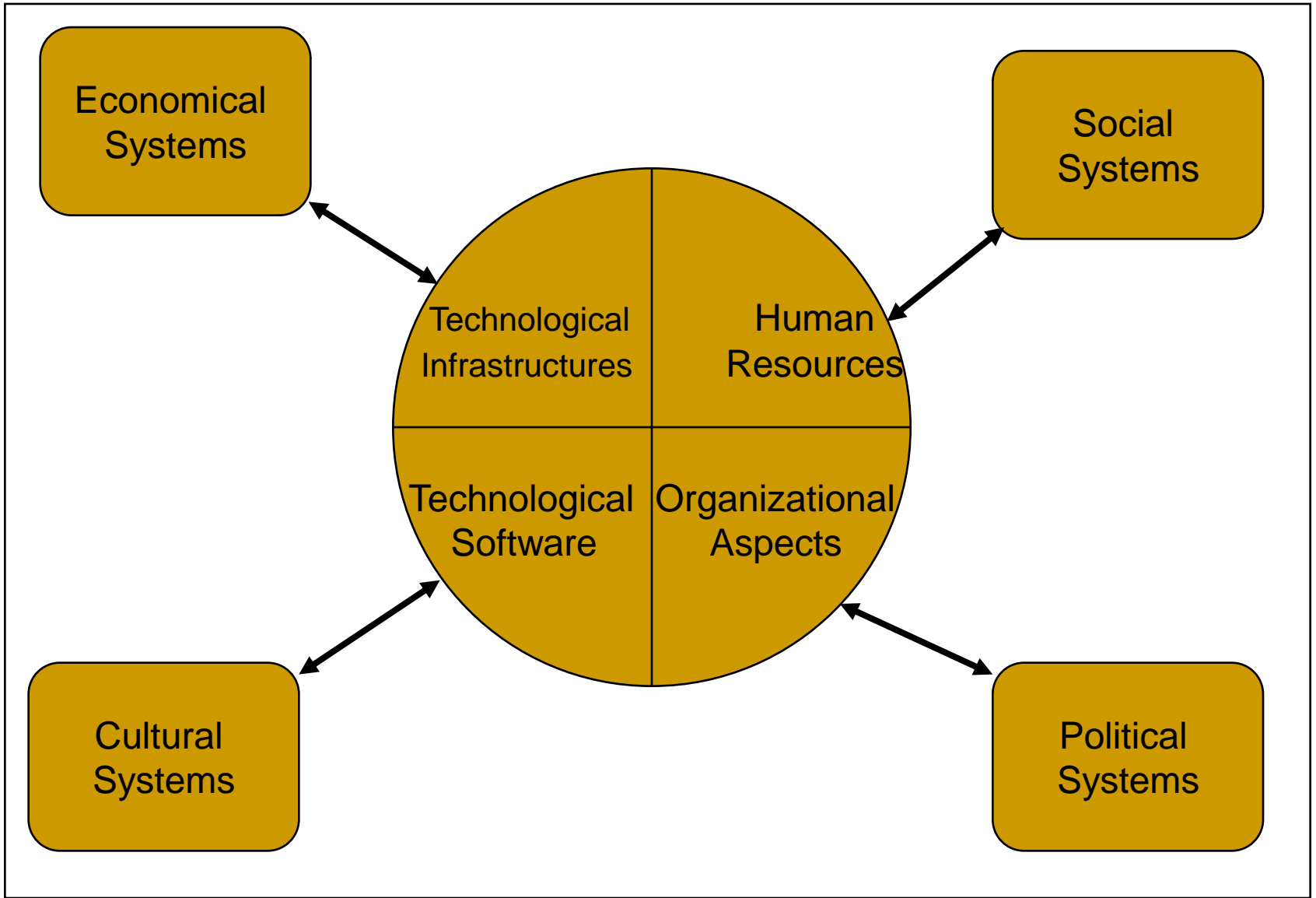
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Center for Innovation and Technology Cooperation,

Presidency, I. R. Iran

Contents of Presentation

- Functions and Activities of NIS
- Institutions Building for NIS
- Conclusions



Technology System

Functions & Activities of NIS ...

- OECD (1999):
 - Functions:
 - Leading
 - R&D
 - Financing R&D
 - Human resources development
 - Technology diffusion
 - Upgrading technology entrepreneurship
 - Activities:
 - Technology and innovation policy making, coordination, supervision and evaluation
 - Basic research
 - Applied research
 - Developing research
 - Supporting non-profit R&D organizations
 - Supporting R&D activities
 - Supporting special researches
 - Human resource development and facilitating their mobility
 - Upgrading capabilities for technology localization
 - Upgrading capabilities for technology absorption
 - Creating innovation capacities in the firms
 - Financing technology-based companies
 - Others.

Proposed set of functions

Innovation Policy Making



Innovation Infrastructures



Innovation Management

Need For Change Management Due To:

- Scarcity of Resources
- Traditional Organization Resistance
- Lack of Human Capital
- Bureaucracy
- Subjective

Optimum Model

Creation of Best Practice: Institution Building

Innovation Policy Making

■ Iran Nanotechnology Initiative

Vision:

- Creation of Wealth and Raising People's Quality of Life

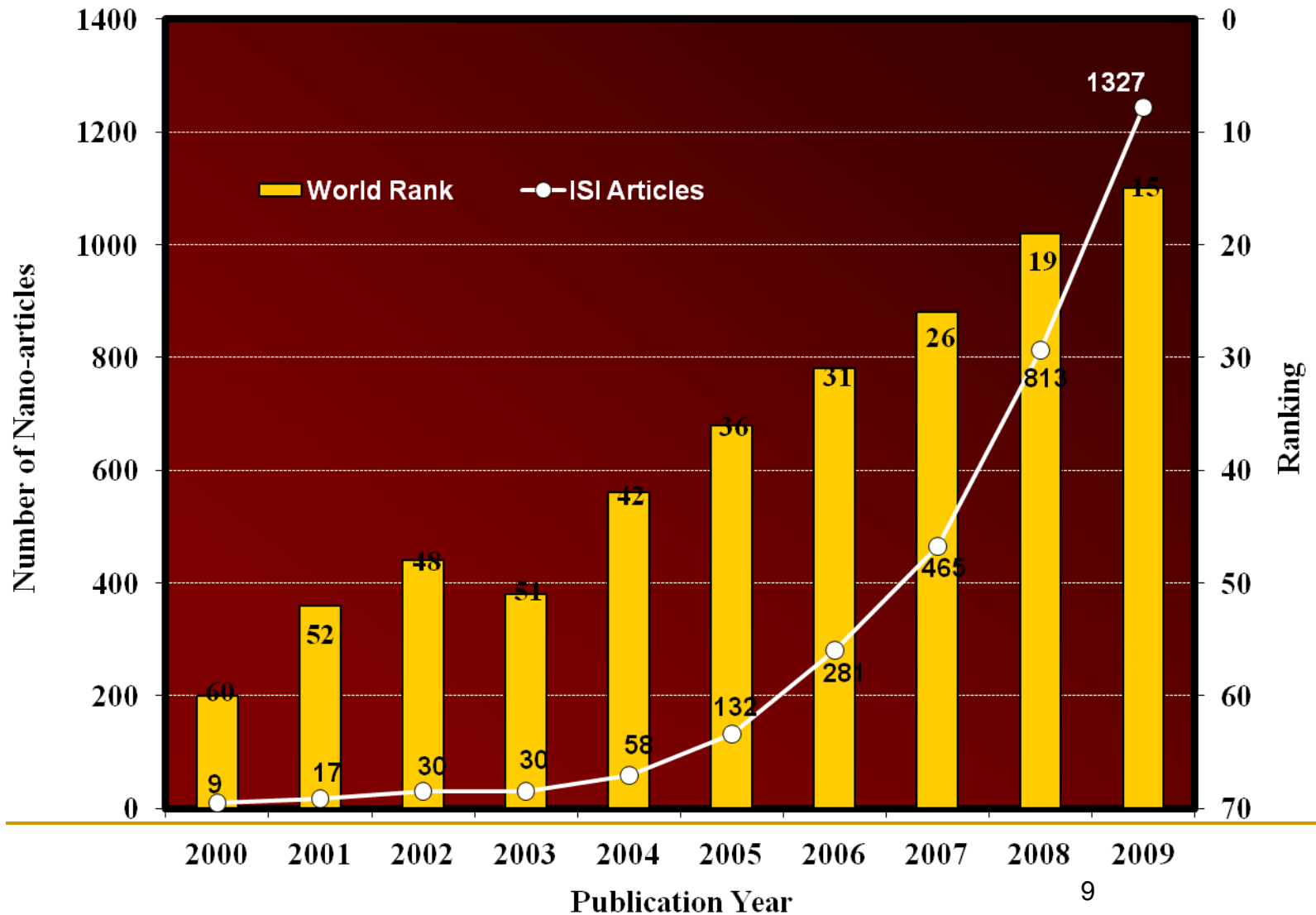
Mission:

To be among the top 15 countries in the world in all rings of value chain

- Nano-Science Generation (No. of ISI Publications)
- Nano-Tech Innovation and Development (No. of International Patents)
- Nano-Industrial Development (Volume of Nano Products)
- Wealth Generation (Share of Nano Market)

Education and Publication

ISI Publications



No.	Country	2003	No.	Country	2004	No.	Country	2005	No.	Country	2006	No.	Country	2007	No.	Country	2008	No.	Country	2009
1	USA	8134	1	USA	9529	1	USA	11523	1	USA	12812	1	USA	13752	1	China	14867	1	China	16196
2	Japan	4196	2	China	5341	2	China	7390	2	China	9544	2	China	12644	2	USA	13825	2	USA	14046
3	China	4011	3	Japan	4804	3	Japan	5232	3	Japan	5649	3	Japan	5838	3	Japan	5103	3	Japan	5210
4	Germany	3393	4	Germany	3770	4	Germany	4164	4	Germany	4660	4	Germany	5073	4	Germany	4757	4	Germany	4868
5	France	2259	5	France	2449	5	France	2930	5	France	3164	5	France	3301	5	south korea	3368	5	South Korea	3657
6	Uk	1733	6	south korea	2024	6	south korea	2398	6	south korea	2874	6	south korea	3259	6	France	3364	13	Canada	1748
7	Russia	1619	7	Uk	1846	7	Uk	2066	7	Uk	2367	7	Uk	2602	7	India	2739	14	Australia	1387
8	south korea	1543	8	Russia	1750	8	Russia	1743	8	India	1940	8	India	2452	15	Singapore	1040	15	Iran	1244
13	Taiwan	698	13	Canada	984	13	Canada	1243	13	Canada	1447	13	Canada	1645	16	Switzerland	1005	16	Singapore	1130
14	Poland	653	14	Poland	793	14	Poland	856	14	Australia	957	14	Australia	1140	17	Netherlands	866	17	Switzerland	1023
15	Netherlands	614	15	Netherlands	735	15	Netherlands	811	15	Poland	933	19	Brazil	832	18	Brazil	841	18	Netherlands	985
16	Switzerland	562	16	Switzerland	734	16	Switzerland	787	16	Switzerland	930	20	Sweden	721	19	Iran	813	19	Brazil	885
17	Australia	534	17	Australia	617	17	Australia	751	17	Netherlands	898	21	Belgium	642	20	Poland	775	20	Poland	851
18	Sweden	531	18	Singapore	579	18	Singapore	691	18	Singapore	890	22	Israel	596	21	Sweden	690	21	Sweden	747
19	Brazil	467	19	Sweden	577	19	Brazil	638	19	Brazil	743	23	Mexico	517	22	Israel	619	22	Belgium	674
20	Belgium	403	20	Brazil	553	20	Sweden	629	24	Austria	427	24	Greece	493	23	Belgium	606	23	Israel	583
21	Israel	388	21	Belgium	494	21	Israel	541	25	Ukraine	390	25	Iran	465	24	Mexico	532	24	Turkey	540
22	Singapore	359	22	Israel	380	22	Belgium	516	26	Czech republic	352	26	Austria	455	25	Austria	450	25	Mexico	524
23	Mexico	348	23	Austria	350	25	Ukraine	387	27	Finland	342	27	Ukraine	447	26	Finland	446	27	Austria	482
24	Austria	319	24	Mexico	344	28	Greece	282	28	Portugal	330	28	Romania	417	27	Ukraine	422	26	Finland	460
25	Ukraine	289	25	Ukraine	286	29	Finland	261	29	Greece	328	29	Finland	415	28	Turkey	419	28	Greece	397
26	Finland	226	26	Finland	262	30	Denmark	249	30	Denmark	292	30	Czech	370	29	Greece	396	29	Denmark	394
27	Greece	219	27	Hungary	249	31	Ireland	238	31	Iran	281	31	Ireland	345	30	Romania	384	30	Czech Republic	388
28	Denmark	212	32	Romania	203	32	Romania	232	32	Hungary	275	32	Turkey	332	31	Czech republic	369	31	Portugal	349
29	Hungary	212	33	Portugal	195	33	Turkey	215	33	Ireland	269	33	Denmark	326	32	Denmark	351	32	Romania	342
30	Czech republic	196	34	Turkey	190	34	Portugal	186	34	Turkey	263	34	Portugal	296	33	Portugal	320	33	Ukraine	307
31	Romania	160	35	Argentina	158	35	Argentina	151	35	Romania	262	35	Hungary	279	34	Thailand	306	34	Ireland	295
32	Ireland	153	36	Slovakia	117	36	Iran	132	36	Argentina	187	36	Argentina	215	35	Ireland	304	35	Thailand	271
33	Portugal	146	37	Bulgaria	105	37	Bulgaria	117	37	Thailand	147	37	Thailand	209	36	Hungary	268	36	Egypt	269
34	Turkey	139	38	Norway	79	38	Norway	109	38	New Zealand	132	38	Bulgaria	183	37	Argentina	217	37	Argentina	257
35	Argentina	121	39	Slovenia	75	39	Slovakia	104	39	Bulgaria	121	39	Egypt	160	38	Egypt	195	38	Hungary	233
36	Slovakia	88	40	New Zealand	74	40	Thailand	96	40	Slovenia	121	40	Norway	156	39	Bulgaria	152	39	Malaysia	200
37	Bulgaria	70	41	South Africa	61	41	Slovenia	93	41	Norway	114	41	Slovenia	155	40	Norway	152	40	Bulgaria	186
38	Norway	57	42	Iran	58	42	New Zealand	92	42	Egypt	112	42	Slovakia	142	41	Malaysia	149	42	Norway	153
44	Tunisia	37	43	Lithuania	58	43	South Africa	92	43	Slovakia	111	43	South Africa	113	42	Slovenia	146	41	Slovenia	152
45	South Africa	36	44	Chile	55	44	Egypt	72	44	Chile	100	44	New Zealand	109	43	South Africa	141	43	South Africa	150
46	Malaysia	34	45	Thailand	54	45	Tunisia	66	45	Malaysia	96	45	Malaysia	103	44	New Zealand	135	46	Slovakia	121
47	Morocco	34	46	Croatia	53	46	Lithuania	60	46	South Africa	94	46	Chile	94	45	Slovakia	126	44	New Zealand	118
48	Venezuela	33	47	Malaysia	53	47	Uruguay	60	47	Lithuania	91	47	Croatia	73	46	Chile	105	45	Saudi Arabia	116
49	Thailand	32	48	Egypt	48	48	Malaysia	54	48	Tunisia	83	48	Tunisia	65	47	Pakistan	87	47	Pakistan	98
50	Moldova	31	49	Tunisia	41	49	Croatia	52	49	Croatia	63	49	Tunisia	65	48	Colombia	86	48	Chile	95
51	Iran	30	50	Algeria	38	50	Chile	45	50	Algeria	56	50	Algeria	61	49	Lithuania	75	49	Tunisia	86
52	Belarus	28	51	Colombia	37	51	Cuba	42	51	Colombia	46	51	Colombia	60	50	Algeria	67	50	Algeria	70
53	Lithuania	25	52	Cuba	33	52	Colombia	38	52	Cuba	41	52	Lithuania	57	51	Croatia	66	51	Lithuania	65

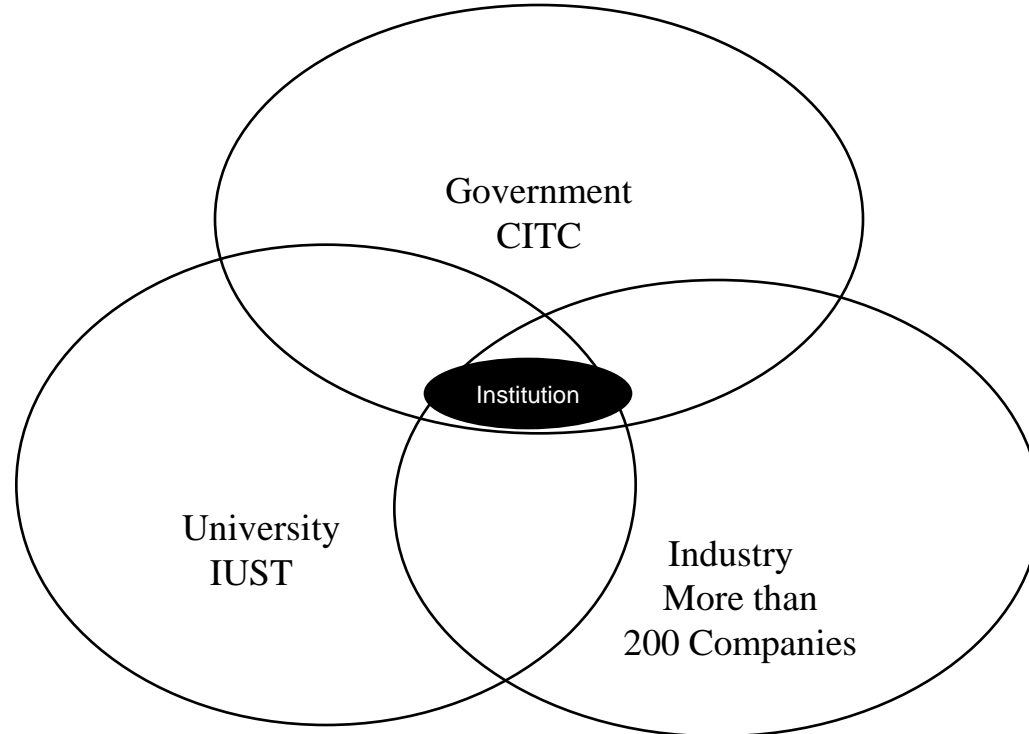
Achievements

- Nano Initiatives helps to generate 6 other Initiatives like:
 - Iran Renewable Energy Initiative Council
 - Biotechnology Development Council
 - Stem Cell Research Development Initiative
 - Aerospace Technology Development Initiative
 - ...

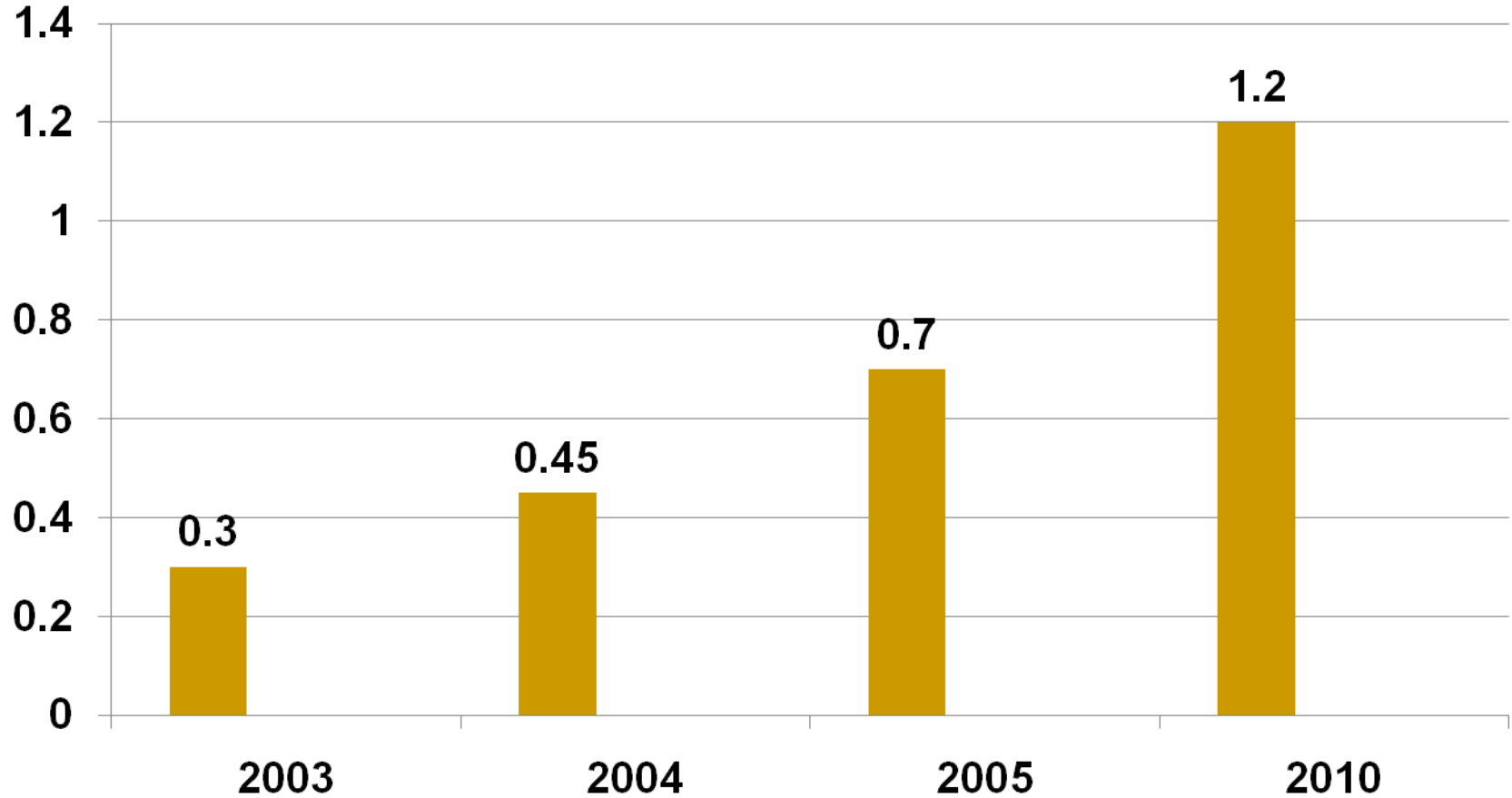
Innovation Infrastructures has created:

- Pardis Technology Park
- Iran Technology Development Fund
- Nokhbegan Venture Capital
- Iran Composites Institute
- Technological NGOs

■ Triple Helix as an Innovation Policy Framework for university transformation in Iran



Composites Consumption per Capita



Conclusion

- Developing countries should design their NIS.
- To stimulate establishment of NIS we can build Best Practice.

How We Can Cooperate?

Joint Market-Oriented Research

Joint Production

Joint Marketing

Thank you
for your
attention

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