

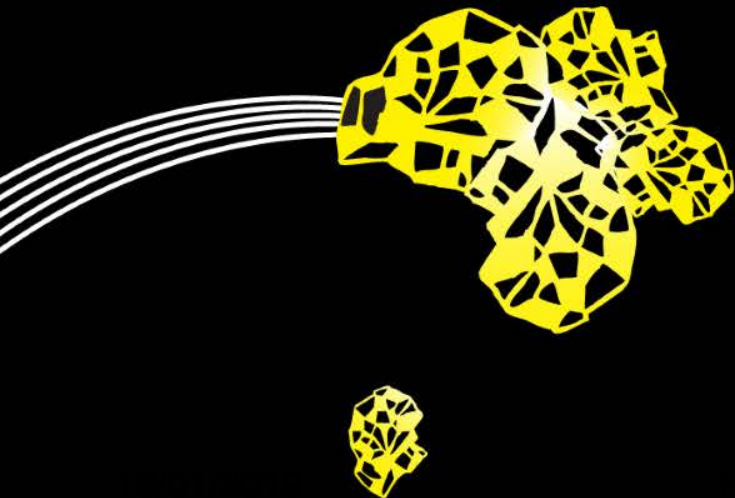
Governance of Knowledge and Innovation Systems – *Building Capacity for Development*

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Introduction

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OECD Review of Innovation Policy Colombia 2014:

- **Innovation is essential to tackling the challenges Colombia faces.** It can help develop new economic activities, boost productivity to sustain income and employment growth for the rising urban population, foster agricultural diversification to improve rural livelihoods, and raise the environmental sustainability of growth.
- **The new system for distributing royalties** allocates 10% of non-renewable resource revenues to an STI fund. This implies a significant increase in the resources available for STI. **If well managed, this can significantly strengthen the innovation system** and address imbalances between public and private innovation and between the **regions**.

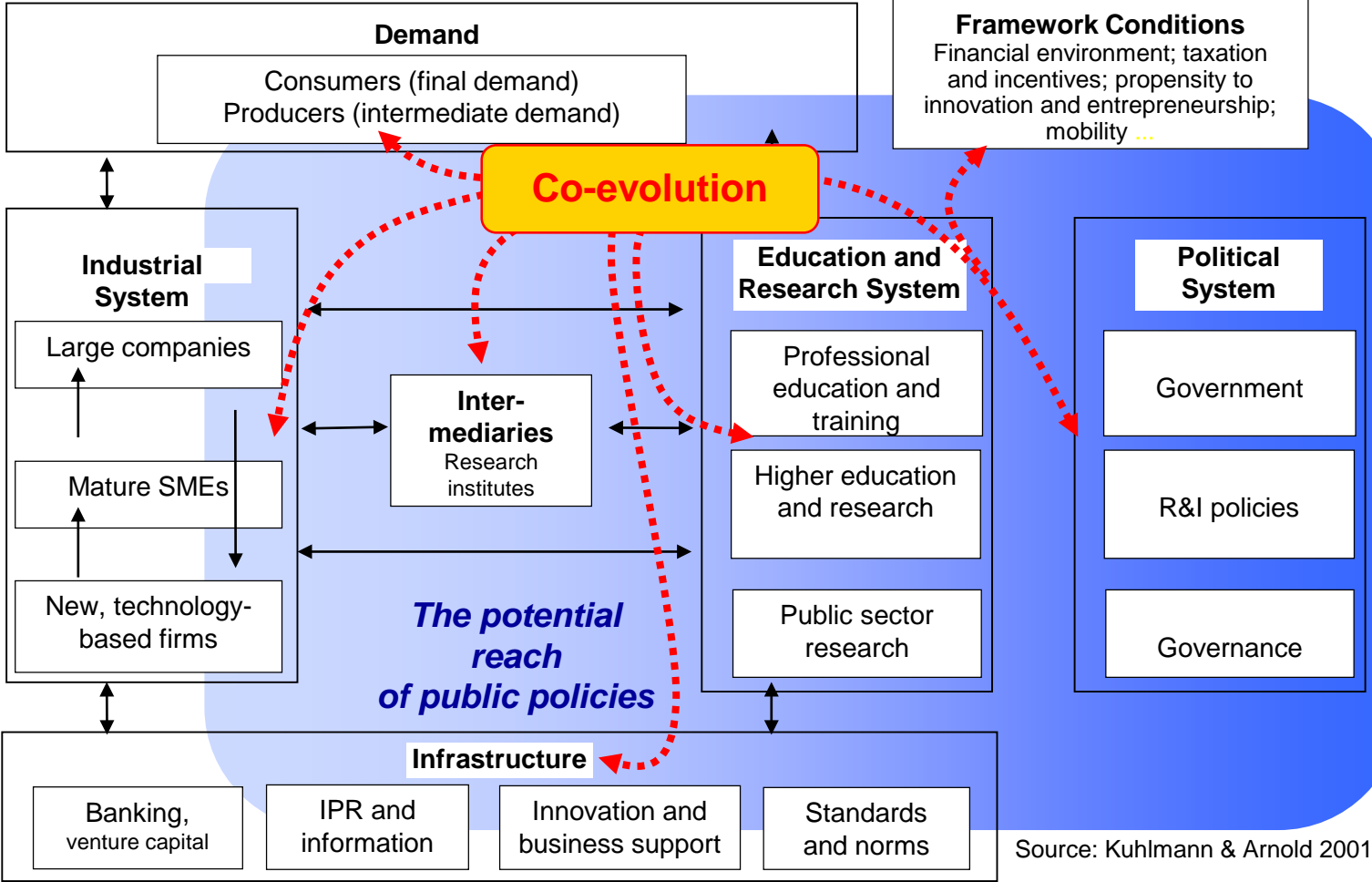
Overview

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- Knowledge & Innovation Systems (KIS)
- KIS in less developed countries
- New actors
- Regions
- Fora for debate and use of Strategic Intelligence

Knowledge & Innovation System (KIS): A Heuristic

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National KIS (NIS)

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- NIS approach in OECD world largely agreed.
- NIS = “biotopes” of all institutions engaged in scientific research, accumulation and diffusion of knowledge, education and training of working population, technology development, production and distribution of innovative products and processes.
- NIS: Schools, universities, research institutions (education and science system), industrial enterprises (economic system), politico-administrative and intermediary authorities (political system), and formal and informal networks of related actors.
- Each NIS is different. Sustainable systems develop their special profiles and strengths only slowly, based on stable exchange relationships among the institutions of S&T, industry and the political system (= co-evolution).

National KIS?

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- **Innovator-producer-user chains** either ‘local’ or ‘inter-local’ (incl. internat.) – less within ‘national’ economy
- In many domains **knowledge** either ‘local’ or ‘inter-local’ (collaboration; internat. migration) – less ‘national’
- **Public knowledge policy institutions** (regulation; funding; evaluation) structurally alike (public sector reforms; NPM, ...)

*What counts is content + governance of thematic
‘KIS configurations that work’, ‘local’ and ‘inter-local’*

KIS Politics for Less Developed Countries: Major Challenges

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- To overcome inequality; to mobilise social innovation
- To facilitate endogenous knowledge, innovation for local and global needs
- To go beyond “government” and technocratic approaches – inclusive governance
- To build legitimacy; democratic culture and procedures

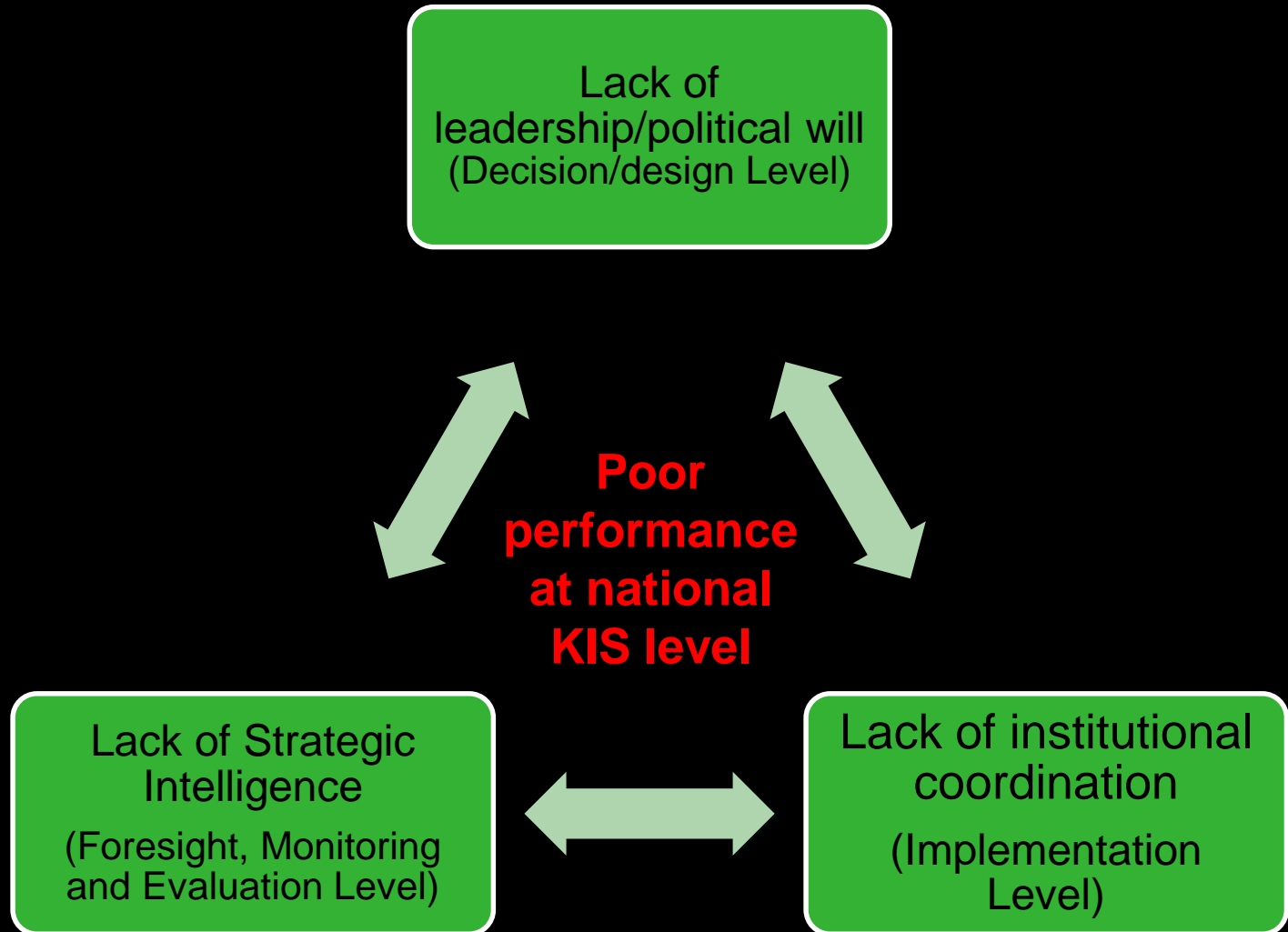
KIS Systemic Failures

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- Lack of entrepreneurial and innovative culture
- Lack of local S&T capacities
- Weak interaction and communication failures
- Weak institutions and governance

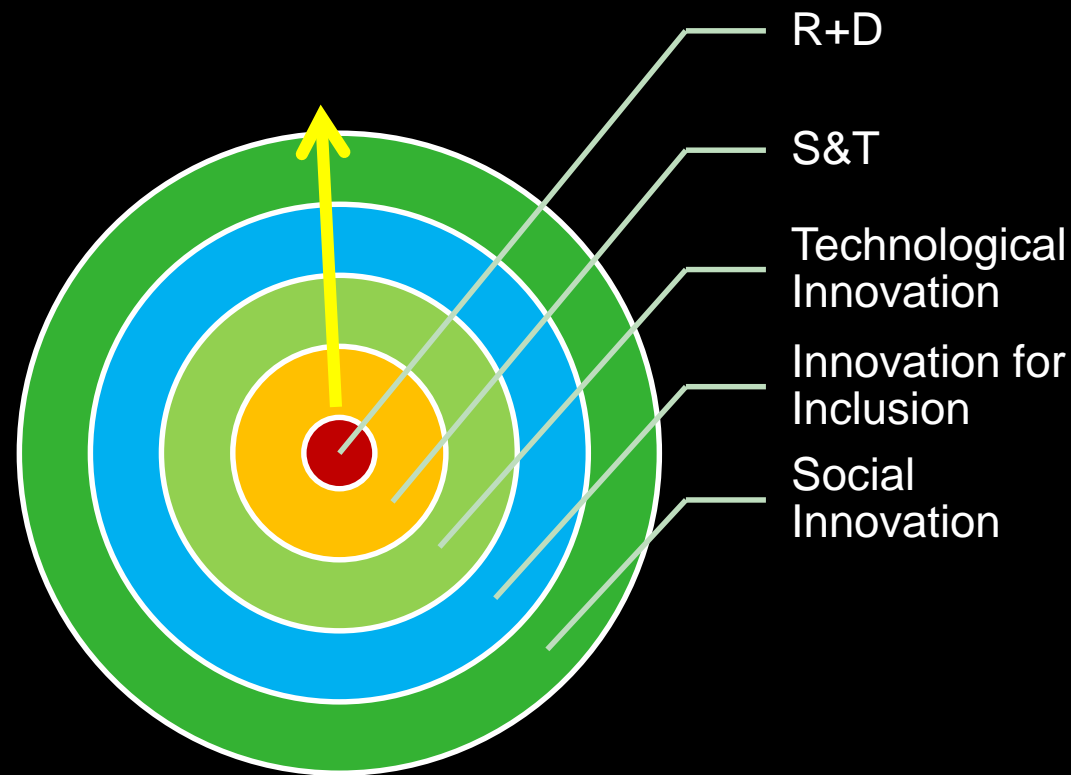
Governance Failure

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New Focus of Knowledge & Innovation Policy in Less Developed Countries

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Regional Knowledge and Innovation in Less Developed Countries

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Regional Knowledge Production

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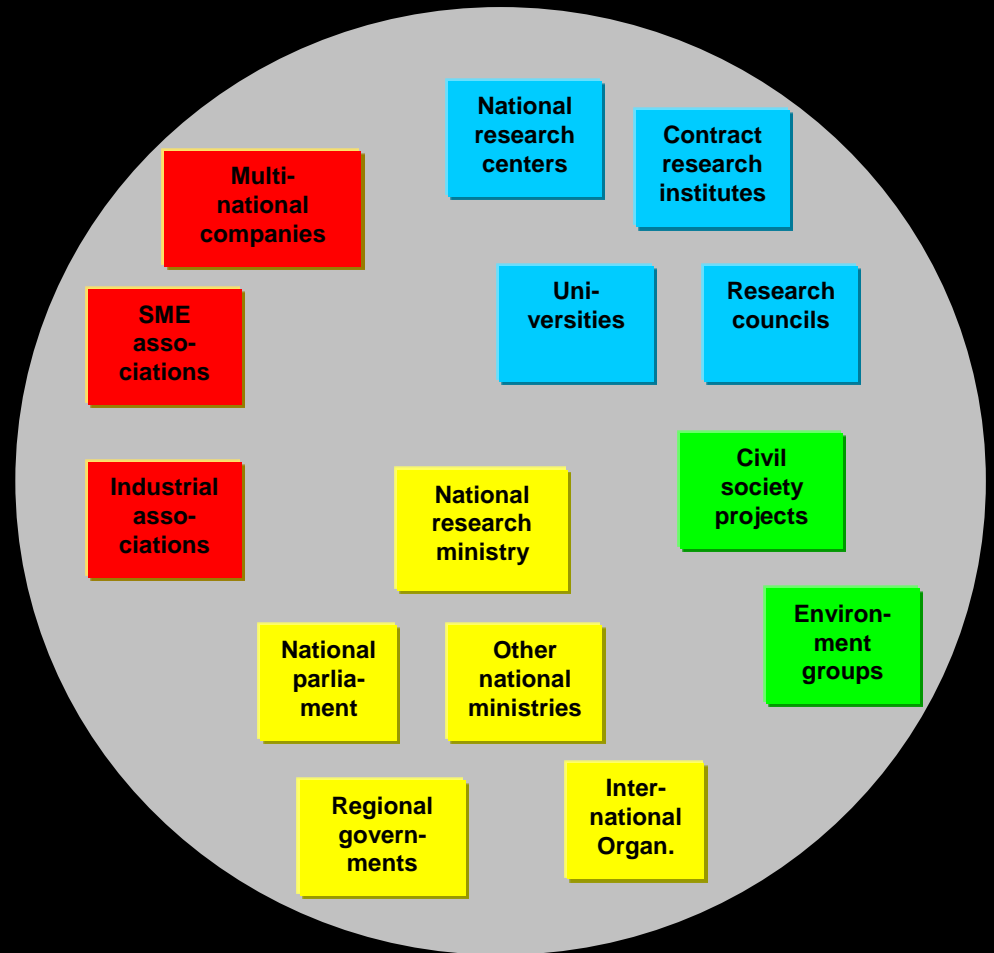
- **Higher Education Institutions, plus**
 - Incumbent regional industry
 - Creative industries
 - Grassroot and ‘user’ innovation movements
 - ‘Green producers’
 - Civil society innovation initiatives
 - HackerSpaces; FabLabs
- **Smart Cities**
 - E.g. ‘Copenhagenisation’



Public research and innovation policy actors' arena – a heuristic

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- Organised actors: differing interests, values, and power; bounded rationality
- Competition for impact and resources
- No dominant player?
- Contested policies
- Search for (some) alignment and policy learning - otherwise 'exit'



Public research and innovation policy actors' arena – Strategic Intelligence

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- Organised actors: differing interests, values, and power; bounded rationality
- Competition for impact and resources
- No dominant player?
- Contested policies
- Search for (some) alignment and policy learning - otherwise 'exit'
- 'Enlightenment' through 'Strategic Intelligence'



Strategic intelligence, policy learning, capacity building

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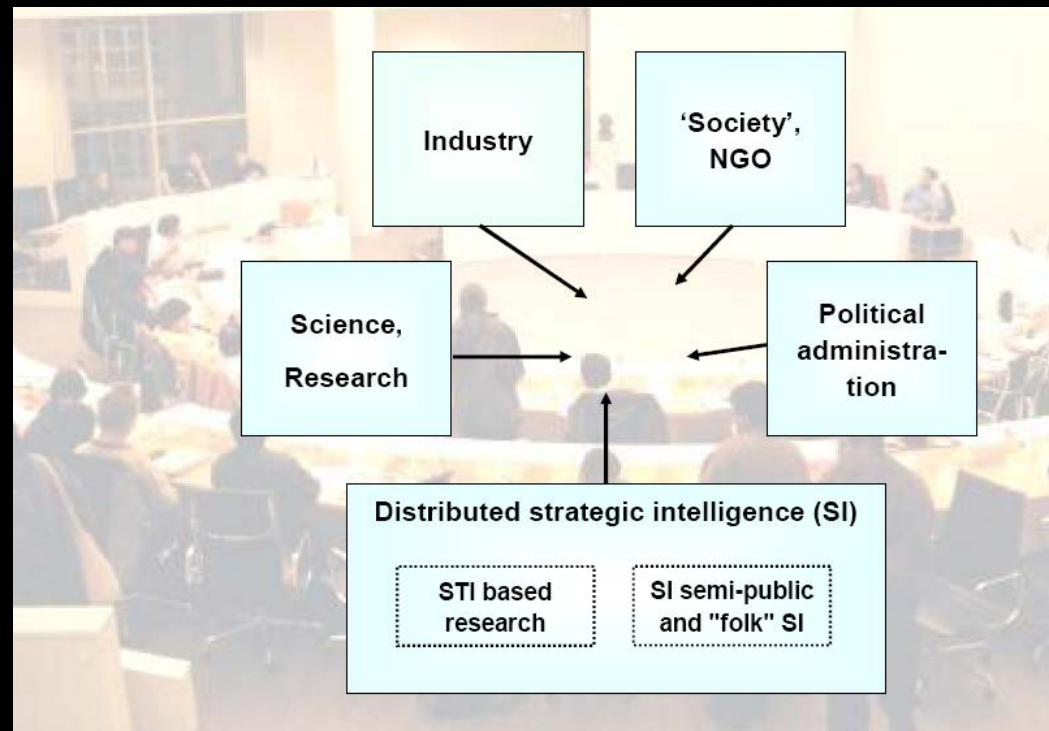
Strategic intelligence is ...

- ... a set of sources of information - often distributed and heterogeneous
- produced by academic, governmental, civil society and other experts
- explorative/empirical as well as analytical (theoretical, heuristic, methodological) tools
 - well known strategic intelligence tools are evaluation studies, performance measurement, benchmarking initiatives, foresight exercises, or technology assessment (TA)
- to be 'injected' and 'digested' in political arenas, to facilitate “multi-perspective” insight in the actual or potential costs and effects of public or private policy and management
- facilitating policy learning and capacity building.

Need for 'Policy Platforms' as 'Fora' for deliberation

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- Policy Platforms as 'Forum': institutionalised spaces for deliberation
- Thematic visions, on regional, national, transnational level
- Focus on multi-level arrangements: nation states, regional & transnational agencies
- Policy-makers from different levels and policy domains
- Representatives from research, industry and society
- **Use of Strategic Intelligence**



Summing up

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- Focus on knowledge and innovation system capacity
- Understanding special needs of less developed countries
- Stimulate civil society engagement
- Beyond a mainly national perspective – facilitate intelligent governance of knowledge and innovation in regions
- Capacity building: Particular role for scientific advice, Strategic Intelligence, and stakeholder Fora
- On national, regional, transnational levels