Innovation Policy
Learning from Korea: Lessons for Design and Execution of Innovation Policies in Emerging Economies

November 2021
Innovation Policy Learning (IPL) project

• Knowledge related outputs on Monitoring and Evaluation, R&D Tax Incentives, and Technology Diffusion
• Training
• Applied projects with client countries
• Study tour to Korea

• Links to past and present World Bank innovation policy work in the Philippines
Innovation Policy Learning project

• Knowledge related outputs on Monitoring and Evaluation, R&D Tax Incentives, and Technology Diffusion
• Training
• Applied projects with client countries
• Study tour to Korea
Presenters and Facilitation Team

- Jaime Frias, Senior Economist, specialized in public expenditure analysis on Science, Technology and Innovation (STI), innovation policy and competitiveness.
- Task Team Leader (TTL) for the project, responsible for overall leadership & coordination.

- Justin Hill, Senior Private Sector Specialist in SME development, industry innovation and entrepreneurship, formally with the Australian Ministry of Industry, Innovation & Science
- Task Team Leader (TTL) for the project, responsible for overall leadership & coordination.

- Yehia Eldozdar, M&E Specialist, providing technical assistance and capacity building to projects supporting private sector growth through SME development, innovation and entrepreneurship.
- Supports providing expertise on M&E for documentation of case studies and knowledge sharing activities.

- Adela Antic, Consultant. Capacity building specialist focused on knowledge and learning initiatives related to innovation and Entrepreneurship.
- Providing support to the program with cross-cutting initiatives and knowledge exchange with external partners, practitioners and multi-sector stakeholders.

- Grace Morella, Consultant
- Supports knowledge sharing activities and identification and organization of relevant stakeholders in the Philippines
Course Outline

Day 1 – Basic understanding of M&E and innovation policy, Introduction to international best practices


Day 3 – Korean M&E in innovation policy

Day 4 – Philippines M&E for innovation challenges Philippines – lessons and transferring knowledge
Learning Objectives

You will obtain an overview of

• what is M&E and difference between monitoring and evaluation in the context of innovation policy

• why monitoring and evaluation (M&E) is important for the successful implementation and evolution of innovation policies,

• international best practices in M&E for innovation support programs,

• cases of M&E in innovation policy from Korea, with practical and transferable lessons

We will also work on translating the findings from Korea and the world to the current context of the Philippines.

_Ultimate objective: Transfer lessons on M&E into your day-to-day work to improve program delivery!_
Let’s get to know you

• Where do you work and what is your role?
• What is your experience with M&E in innovation policy?
• What do you expect from this course?

Please try to keep it brief (15-30 seconds) – so we can get to know everyone!
Guiding principles of the lessons

To make this a successful, we rely on you for the following:

- Active participation
- Feedback
- Respect
- Curiosity
What is Innovation

"a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)"

- OECD Oslo Manual

The definition most policy professionals work with.
"Innovation policy is the interface between research and technological development policy and industrial policy and aims to create a conducive framework for bringing ideas to market."

- European Union

Innovation policy seeks to foster, nurture and develop knowledge, and to have these ideas put into practice by business in new and better products, processes and ways of doing business.

- Australian government (Productivity Commission)
The Basics: What is Monitoring and Evaluation?

Before we start, here are some famous misconceptions about M&E

- M&E is an audit
- M&E is a list of indicators
- M&E is for accountability only
- M&E is an administrative process
- M&E satisfies reporting needs
- M&E is a periodic static deliverable
- M&E is a requirement
The Basics: What is Monitoring and Evaluation?

So, what is really M&E and what is the difference between monitoring and evaluation?

M&E is

A systematic ongoing process at the core of the intervention’s design, planning and operation that balances between accountability and ongoing learning/improvement.

Where Monitoring is

Periodic tracking of project activities’ implementation and progress towards achieving desired change.

And Evaluation is

Assessing the progress, contribution and/or the attribution of the intervention in achieving desired change (or not).
The Basics: why is M&E important

So, what are the benefits of a proper M&E system in place?

- Review and report progress for accountability
- Identify problems in planning, resource usage and/or implementation
- A continuous feedback loop for systematic data collection and utilization improvement
- Make adjustments to allow you achieve desired objectives
- Document what worked and what did not for future interventions to consider
The basics: The M&E Journey

1. Problem Identification
2. Indicator Selection and Definition
3. Theory of Change & Logic Model
4. Baseline and Target Setting
5. Data Collection
6. Analysis, Evaluation, and Learning

A process that is non-linear – feedback between different components
So, what are some of the key questions to be asked during the problem identification step?

- What is the problem and is it complicated?
- What are the causes and effects of the problem?
- Do we have sufficient evidence behind the problem?
- What previous attempts tried addressing the problem? What have we learned? What worked and what did not?
- Who else is currently addressing the problem?
## The basics: Problem Identification

### Market Failure

<table>
<thead>
<tr>
<th>Causes</th>
<th>Effects</th>
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</thead>
<tbody>
<tr>
<td>Lack of mechanism linking scientific research and innovation and technology stakeholders</td>
<td>Weak and irrelevant scientific research outcome</td>
</tr>
<tr>
<td>Lack of mechanisms that builds the capacity and culture around the importance and demand for scientific research</td>
<td>Private sector that is unaware of the role of scientific research in their innovation, technology and growth</td>
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<tr>
<td>An insufficient number of local scientific research incorporated into regional scientific research, innovation and technology agenda</td>
<td>Uncoordinated efforts between Scientific research and innovation and technology institutions</td>
</tr>
<tr>
<td>Lack of mechanisms integrating and incorporating local scientific research into regional scientific research, innovation and technology roadmap</td>
<td>Unqualified and inadequate human resources to conduct quality and relevant scientific research</td>
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**Minimal utilization and negligible contribution of local scientific research in innovation and technology needed for addressing local and regional economic and social challenges**
So, what are some of the key questions to be asked when developing a Theory of change and a logic model?

- Where do we want to be (outcomes and impact)?
- How will we get there (activities & outputs)?
- What might stop us from getting there (assumptions and risks)?
The basics: Theory of Change

Market Failure addressed

Local and regional economic and social challenges addressed as a result of full utilization and significant contribution of local scientific research in innovation and technology

Market Failure

Minimal utilization and negligible contribution of local scientific research in innovation and technology needed for addressing local and regional economic and social challenges

Effects Removed

Strong and relevant scientific research outcome
Private sector that is aware of (and utilizing) the value addition of scientific research in their innovation, technology and growth
Coordination between scientific research and innovation and technology institutions
Qualified and adequate human resources conducting quality and relevant scientific research
Sufficient number of local scientific research incorporated into regional scientific research and innovation and technology agenda

Effects

Weak and irrelevant scientific research outcome
Private sector that is unaware of (not utilizing) the role of scientific research in their innovation, technology and growth
Uncoordinated efforts between Scientific research and innovation and technology institutions
Unqualified and inadequate human resources to conduct quality and relevant scientific research
An insufficient number of local scientific research incorporated into regional scientific research, innovation and technology agenda

Causes Remedied

Evaluation framework and a funding mechanism strengthening the quality and relevancy of scientific research
Financial and institutional mechanisms creating the link and demand between scientific research and private sector innovation, technology and growth
Management mechanism linking scientific research and innovation and technology stakeholders
Institutional mechanisms that builds the capacity and culture around the importance and demand for scientific research
Institutional mechanisms integrating and incorporating local scientific research into regional scientific research, innovation and technology roadmap

Causes

Lack of evaluation framework and funding mechanism needed for strengthening the quality and relevancy of scientific research
Lack of financial and institutional mechanisms needed to create the link and demand between scientific research and private sector innovation, technology and growth
Lack of mechanism linking scientific research and innovation and technology stakeholders
Lack of mechanisms that builds the capacity and culture around the importance and demand for scientific research
Lack of mechanisms integrating and incorporating local scientific research into regional scientific research, innovation and technology roadmap
The basics: Logic Model

**Causes Remedied Outputs**

- Evaluation framework and a funding mechanism strengthening the quality and relevancy of scientific research
- Financial and institutional mechanisms creating the link and demand between scientific research and private sector innovation, technology and growth
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- Institutional mechanisms that builds the capacity and culture around the importance and demand for scientific research
- Institutional mechanisms integrating and incorporating local scientific research into regional scientific research, innovation and technology roadmap

**Effects Removed Outcomes**

- Strong and relevant scientific research outcome
- Private sector that is aware of (and utilizing) the value addition of scientific research in their innovation, technology and growth
- Coordination between scientific research and innovation and technology institutions
- Qualified and adequate human resources conducting quality and relevant scientific research
- Sufficient number of local scientific research incorporated into regional scientific research and innovation and technology agenda

**Market Failure addressed Impact**

- Local and regional economic and social challenges addressed as a result of full utilization and significant contribution of local scientific research in innovation and technology

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If we do/create this

This should lead to

Contributing to
The Basics: Indicator Selection and Definition

So, what are some of the key tips to keep in mind while selecting and defining indicators?

- Indicators should be directly linked to your logic model
- Indicators are meant to measure your intervention’s activities and performance
- Indicators should be specific and measurable, and time bound
Group Participation Exercise

For the Logic Model below, could I kindly ask the participants to think about and come up with potential indicator(s) for outputs, outcomes and impact

**Causes Remedied Outputs**
- Evaluation framework and a funding mechanism strengthening the quality and relevancy of scientific research
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**Effects Removed Outcomes**
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**Market Failure addressed Impact**

Local and regional economic and social challenges addressed as a result of full utilization and significant contribution of local scientific research in innovation and technology

If we do/create this

This should lead to

Contributing to
So, what are some of the key tips to keep in mind while considering baseline and targets for indicators?

- Factors in project duration and how long will it take to realize your outcome and impact targets
- Can be more ambitious/realistic with output level targets since those are directly linked to your activities and services
- At the outcome and impact level can be more conservative, since external factors may affect progress against those targets, especially true in innovation and technology uptake by businesses,
- Don’t be too conservative though! Everyone likes to surpass targets, but vastly overachieving targets can look like you didn’t know what was going on or didn’t pay enough attention to the logic model and results framework.
- You will always need baselines for firm level performance indicators, especially those that you are looking to increase (jobs, revenues, exports), unless you are working with startups
- Always lay out assumptions for each target, e.g. “we expect that 25% of supported businesses will apply what they learned into their everyday operations” – this contributes to the logical flow of your M&E framework and also provides a paper trail that you can use to evaluate if your assumptions and rationale were accurate or not.
If you selected an indicator “Number of supported businesses introducing innovative (business process/product/service) practices”, what are the inputs you need and assumptions that you would think about when being asked to set a baseline and target for this indicator?
The Basics: Data Collection

So, what are some of the key tips to keep in mind while creating a data collection mechanism?

- Make sure to collect the important metrics that would allow you to better understand and test the results and logic of your intervention.
- Make sure to incorporate the data needs and reporting frequency by different intervention stakeholders and avoid data collection fatigue.
- Data collection responsibility should be linked to the operational procedures of the intervention, with clear mandates articulated in the TOR of inhouse staff (client relationship managers and/or M&E specialist) or service providing partners.
- In addition to formal agreements (what, when and for how long), always make sure to provide incentives (non-monetary) for data collection, the what's in it for me question.
- Make sure to periodically revisit your data collection process/model and modify/streamline/tweak as/if needed.
- Don’t jump to automation when you don’t have the basics.
Group Participation Exercise

Can you please share with the group some of the most challenging indicators when it comes to data collection, why was it challenging and how did you overcome that challenge?
The Basics: Analysis, Evaluation, and Learning

So, what are some of the key tips to keep in mind while trying to make sense, analyze, learn, flag and recommend as a result of the monitoring process?

• Does the indicators meet the targets and are the target assumptions still holding?
• Is the finding surprising? Why or why not?
• Why are we seeing this trend?
• How do these data compare with others’ performance?
• What accounts for differences between interventions? Consider differences in funding, staff, programmatic approaches and processes.
• Are there external factors contributing to the findings? Examples include: seasonal, political, environmental, cultural, or socio-economic factors.
• Could the trend be the result of improved data collection?
• What other data should be reviewed to understand the finding?
Group Participation Exercise

Share with the group an example of a finding/learning/flagging experience resulting from data collection/analysis and how did it help the project team/management in Course correction/tweaking project activities/resources into a different direction?
Open discussion

Any questions, comments, reflections
Business hours

Please feel free to reach out to me via email yeldozdar@ifc.org to continue our discussion!
End of day