

MAKING MYANMAR THE NEXT ASIAN TIGER

STI to support Myanmar's sustainable and inclusive development goals



This presentation

- Short recap on Policy instruments
- How to developing a policy instruments (2)
- Innovation
- Instruments for stimulating innovation
- Group discussions on instruments for stimulating innovation

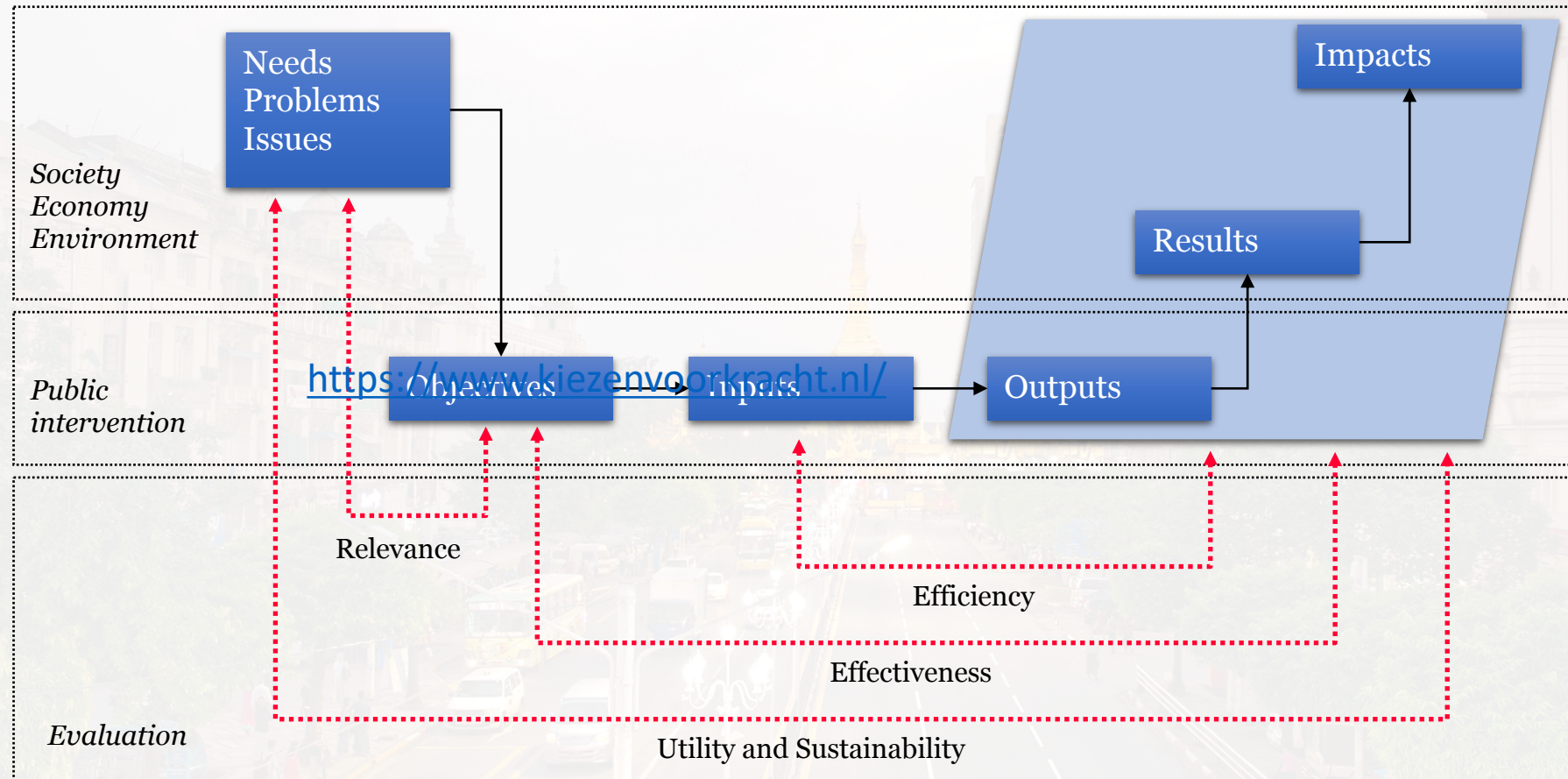
Policy instruments

- A **policy instrument**: the means of **government** intervention in society in order to accomplish goals or to solve problems.
- Main types of policy instruments:
 - Regulation (Commandments and prohibitions)(incl. enforcement, governance)
 - Information & Communication
 - Financial instruments (for encouraging or discouraging activities)
- Various instruments can be used together in a **policy mix**

How to develop a policy instrument?

- Policy Goal, instrument goal
- Target group
- Actor
- Choice of instrument
 - Type of steering: hard/soft
 - Broad vs specific
 - Type of instrument: regulation, communication, financial
 -
 - Use selection criteria

Criteria for the choice of a policy instrument



Detailed design of a policy instrument (1)

- Applicants are the actors that have to realize the impact: they are your friend, not your enemies
- Make sure everybody that belongs to the target group gets a fair chance
- Take into account efficiency for applicant and for program office

Detailed design of a policy instrument (2)

- Budget
- Opportunities to apply
 - Continuous (advantage: applicants do not have to wait)
 - Tender (advantage: proposals can be compared with each other)
- Announcement
- Support offered to applicants
- Eligibility criteria
 - Depending on goals, target groups
 - Can include financial and non-financial criteria (sector, sustainability, inclusiveness)

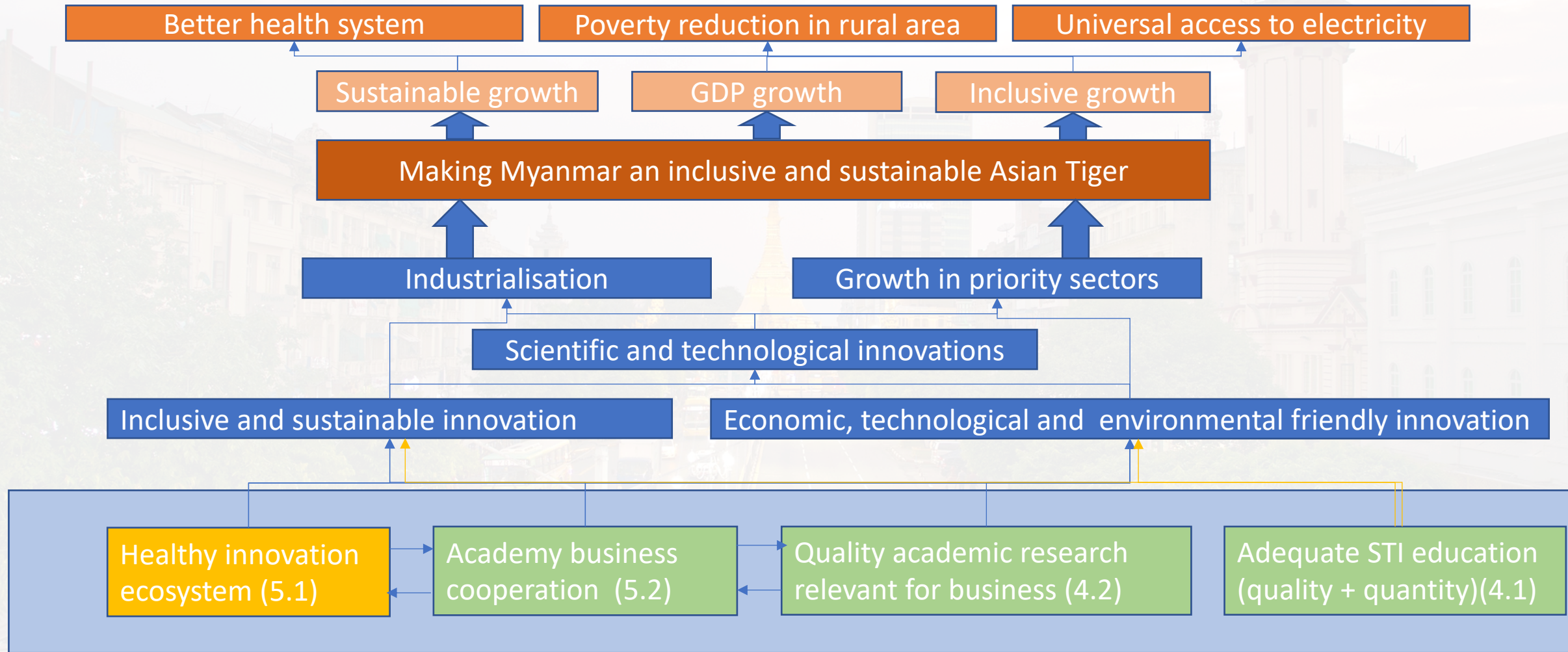
Detailed design of a policy instrument (3)

- Procedure:
 - One round (quick)
 - Two more rounds with pre-proposals (less work for applicants: only writing full proposals when they stand a fair chance, opportunity to steer applicants after pre-proposals)
- Selection criteria: should be aligned with program goals
- Eligible costs: what kind of costs are supported?
- Contribution: how much is the support (e.g. percentage of subsidy)
- Communication with successful and unsuccessful clients
- Contracting

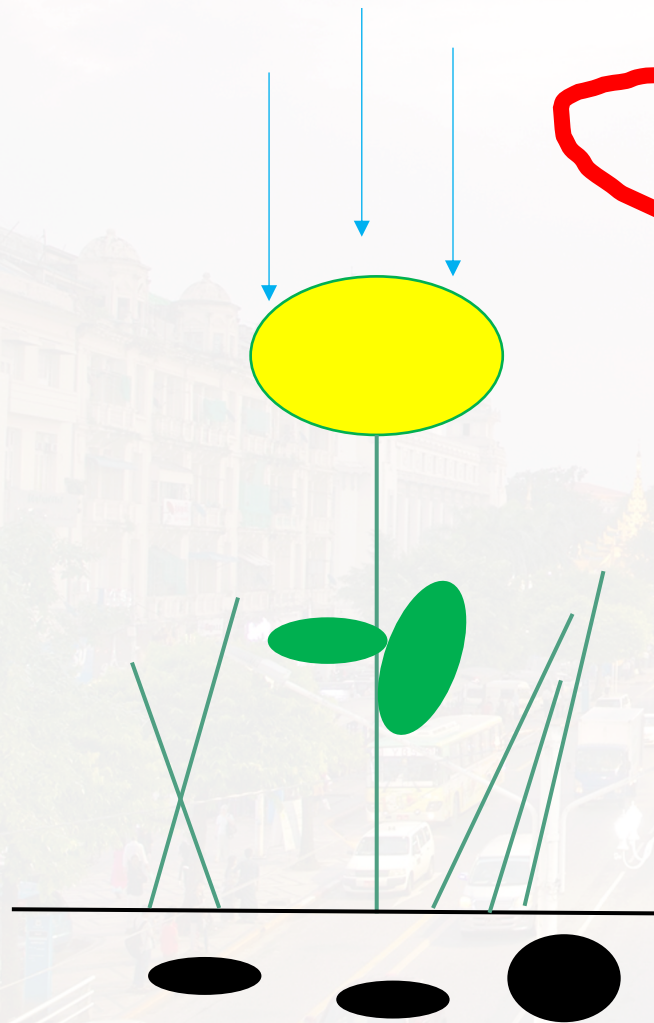
Detailed design of a policy instrument (4)

- Project execution
 - Deliverables (reports): only ask for reports that are actually used
 - Kind of interaction: visits, events, ...
 - Other obligations of awardees
 - Payments: in advance, after receipt of deliverables, final payment, ...
- Evaluation

Explicit goal setting: follow up of session 3



Gardening parallel (WB, 2008)

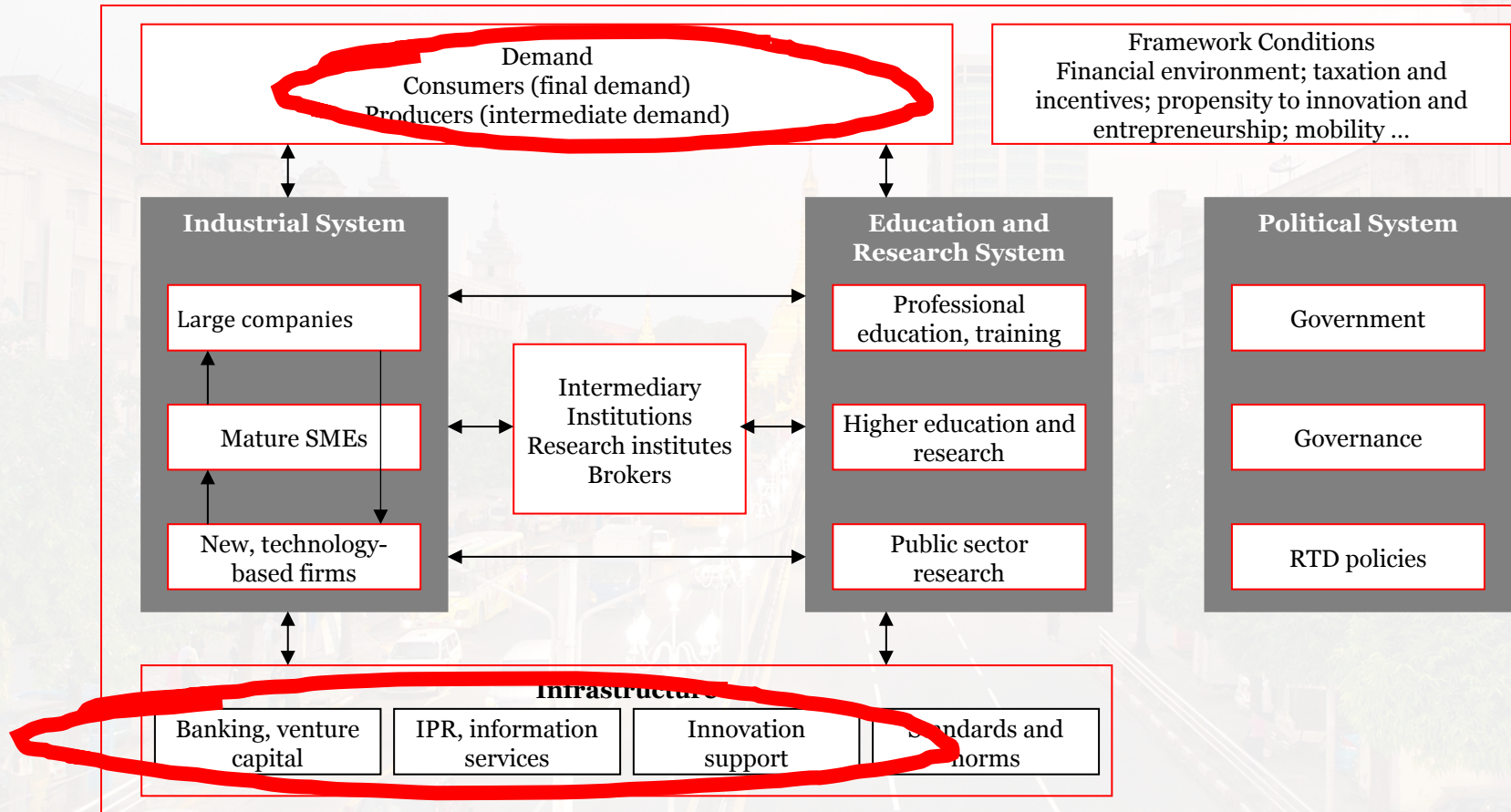


Watering (finance, support to innovators)

Removing the weeds (deregulation, competition)

Nurturing the soil (research, information)
Preparing the ground (education)

The complexity of innovation drives us to think in terms of National Innovation Systems



Source: Erik Arnold & Stefan Kuhlmann, 2000

Functions needed for successful innovation

1. Entrepreneurial activities
2. Knowledge development
3. Knowledge diffusion through networks, including policy networks
4. Guidance of the search ('directionality')
5. Market formation
6. Resources mobilisation
7. Creation of legitimacy/counteracting resistance to change

(Hekkert et al, 2007)

Market support: ideas for instruments from round tables

agriculture	law enforcement
agriculture	Facilitation for agro-based industry: developer from private and government to facilitate
agriculture	Support for farmers to access legal agricultural inputs, eg. awareness of how to access them, financial assistance, stronger networks with suppliers
agriculture	Demand-based product policy
agriculture	Identify the particular problems of local farmers to better choose technologies to be adopted (e.g. sesame seeds farming)
health	Foster pharmaceutical industry development. Encourage the establishment of factories to meet demand in key areas
health	supportive law and policy for generic drug
health	Existing Government Pharmaceutical Factories are one of strengths
health	Encourage foreign investors to invest in local pharma production capacity
health	To allow and encourage pharmaceutical factory in private sector.
ICT	Incentives for local companies to buy local innovations to encourage more local innovations
ICT	Create demand to digitalize through local options to create a vibrant demand and supply
ICT	Improve regulatory framework and public policies for govt digitalisation
ICT	enforce time limitations for gov ministries to use e-gov system should be set to promote compliance through better internal protocols
ICT	Digital Transformation Master Plan
ICT	Create Government Demand for innovation for sophisticated requirements
ICT	Financial Incentive for Digital Transformation SMEs
ICT	Deepen government digitalisation, e-government initiatives by means of multilevel stakeholder involvement
Manufacturing	Free technology transfer for the public
Manufacturing	make more agreements with the target market country to remove high tariffs
Manufacturing	Raw materials import substitution policy
resources&energy	deregulate electricity markets
resources&energy	Policy body to ensure that there is an enabling environment, policies are implemented
resources&energy	Enable international investments into the energy sector in Myanmar
resources&energy	Create more rules and regulations for the power providers
resources&energy	Regulate energy access for special economic zones

Innovation Policy instruments: goals, target groups and actors

- Policy Goals to support innovation (to be discussed in iceberg exercise):
 - Generating knowledge to solve issues/realize opportunities in certain sectors/areas
 - Creating markets for certain innovations
 - Realize Financing for innovation
 - Creating an innovation environment
 - Nurturing innovation capabilities
 - Networks for innovation and market-access
 - Providing Information for innovation
- Target groups: universities, research institutes, industry, individual entrepreneurs
- Actors: DRI, funders, specific agency, intermediary organisations, universities

Innovation: ideas for instruments from round tables

agriculture	financing for innovation
agriculture	Procurement policy
agriculture	support programs for start-ups
agriculture	Have regulation for royalties to benefit the researchers and breeders (eg. 40/60)
agriculture	Facilitate the environment for innovators and inventors
agriculture	Provide Technology Transfer Office
agriculture	Business incubators for support early developers/adopters of new technologies
ICT	Collaboration incubators between industry and tech player in specific verticals such as agriculture
ICT	Programme to fund prototypes, use cases, and pilot projects for new applications of technology in not-very-digital sectors
ICT	Establishment of tech accelerators or incubation hubs
ICT	Commercialize research through collaboration with companies
ICT	Policy-wise, government supports sector through fiscal policies. eg. support tech start-ups. Address the challenge of access to finance
ICT	Incentives to develop the sector
ICT	Familiarize regional investors with the Myanmar market, give updates that give them confidence in the local market
ICT	Government policy for local innovators
ICT	Creating a mandate to both industry and academia to start incubation centres
Manufacturing	Supportive technology center for local manufacturers
Manufacturing	Information network center
Resources&energy	innovation on energy efficiency
Manufacturing	Cluster commercial, academic research, end users together to accelerate R&D (e.g. commercial zones)

Innovation/market: ideas for instruments from round tables

agriculture	Provide the facility for Farmer's Association by private sector
agriculture	Promotion of Food Technology Industry
health	Innovation does not come cheaply or quickly. So Government expenditure is very important. In 2019/2020 total health expenditure was 3% of GDP.
health	Package of support including funding and regulatory framework
ICT	Link up ICT sector with the main sectors Myanmar is focusing on such as the agricultural sector
ICT	Leverage other sectors as an enabler
ICT	Provide tax incentives for business (SMEs) to adapt new digital tools and overall digitization
ICT	Linking entrepreneurs with the market needs through programs such as exhibitions and market fairs
ICT	Local investors that invest in local startups. Buying local products/innovations.
ICT	Supply side: for companies eg tax credits, grants Demand side: tax credits, grants, skill development funds, incentives to SMEs
resources&energy	Comprehensive plan to use technology in combination with investments in human resources to meet escalating demand
resources&energy	A singular agency that is in charge of developing the energy sector
agriculture	SME policies in order to support value-added agricultural products

‘Hard’ Policy options for innovation

- Financing for innovation
 - Innovation project subsidies
 - Start-up support (direct or indirect)
 - VC Funds (national, sectorial, university level)
 - Banking support (e.g. warranties for banks)
 - Procurement
- Innovation environment
 - TTO-offices (include rules on IPR)
 - Business Incubators
 - Technology incubators (e.g. around a sector institute)
 - Business parks

‘Soft’ Policy options for innovation

- Innovation capabilities
 - Training, e.g. on IPR
 - Coaching (by professional coaches, or by experienced entrepreneurs)
 - Master classes
 - Start-up networks
 - Web-communities for start-ups
- Networks for innovation and market-access
 - Networks of entrepreneurs
 - Networks per sector
- Information for innovation
 - Market-information (research, databases)
 - Information about entrepreneurship (Publications, websites)