TECHNOLOGY FACILITATION MECHANISM

SUSTAINABLE DEVELOPMENT GOALS

Science, Technology and Innovation (STI) Policy Instruments: Implementation Challenges

On-line training sessions on STI policy and policy instruments for SDGs for the SADC region

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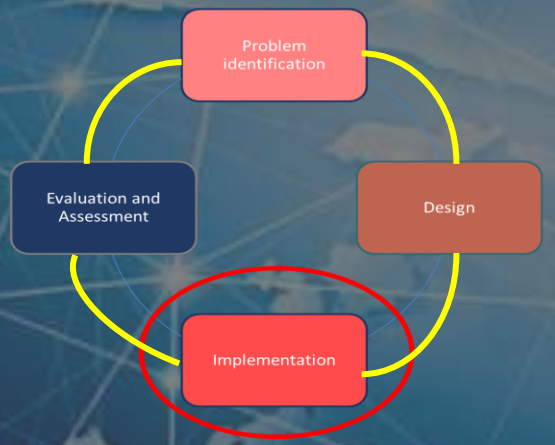
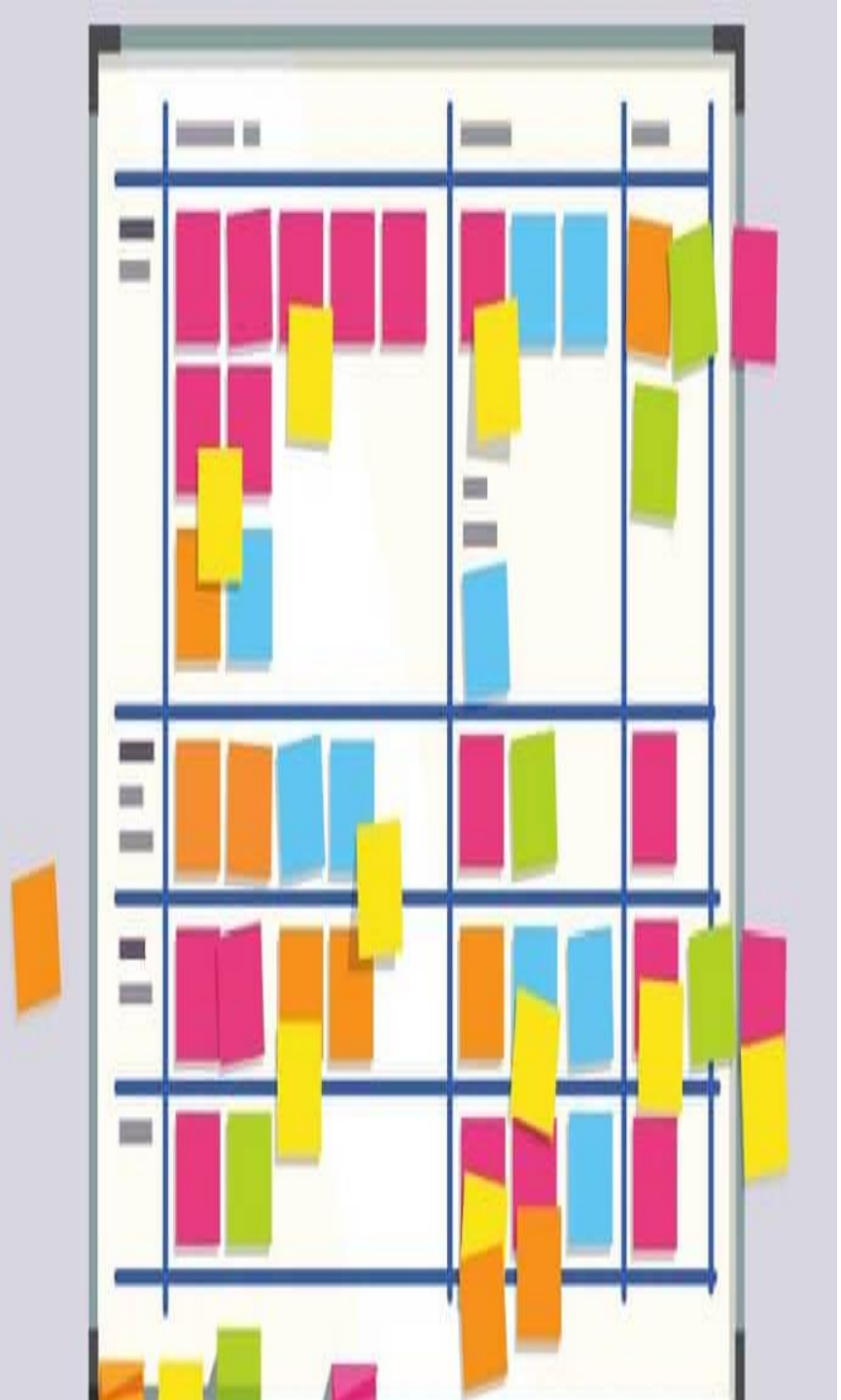
What is STI policy Implementation?

- Implementation is the stage of STI policy cycle where policy instruments are executed or operationalized



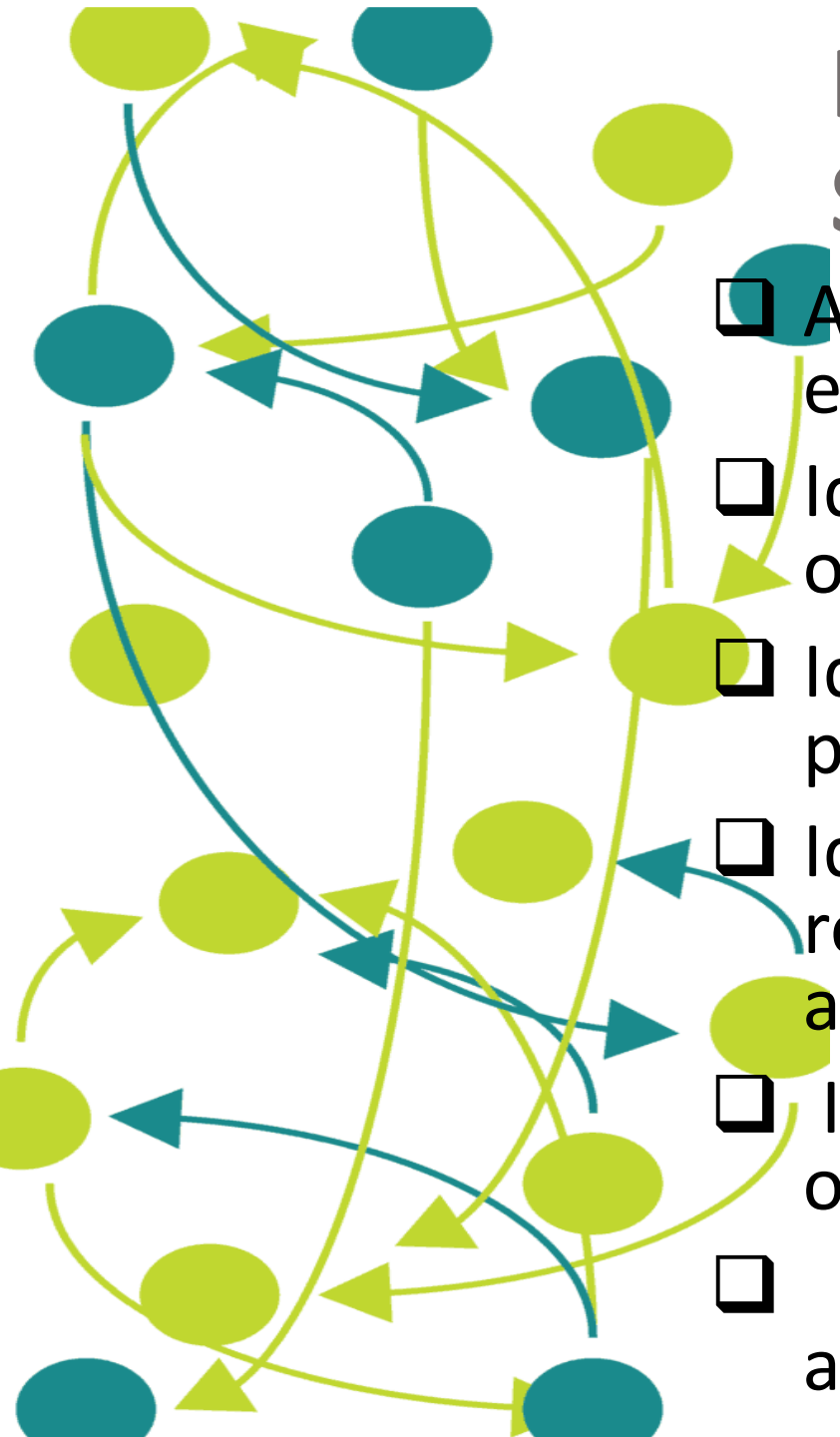
- Characteristics of the Implementation Stage
  - Proof of concept and learning
  - Social, Political, Managerial
  - Communication and Convincing
  - Managerial
  - Change process

- Implementation needs a significant different skill set to be successful than other stages of the policy process



IMPLEMENTATION CHALLENGES: PLANNING

- STI Roadmap: describe long, middle and short term operational actions that are necessary to implement the policy
- Calendars: setting stages and gates (expected results), time allocated to each stage and clear deadlines
- Roles and responsibilities: clearly identify tasks and duties and answerabilities at all levels
- Resources: human and financial
- Targets: measurable and realistic STI performance indicators, intermediate and final
- Costing: content and process
- Press and social media: actions to obtain public support



IMPLEMENTATION CHALLENGES: SYSTEMS APPROACH

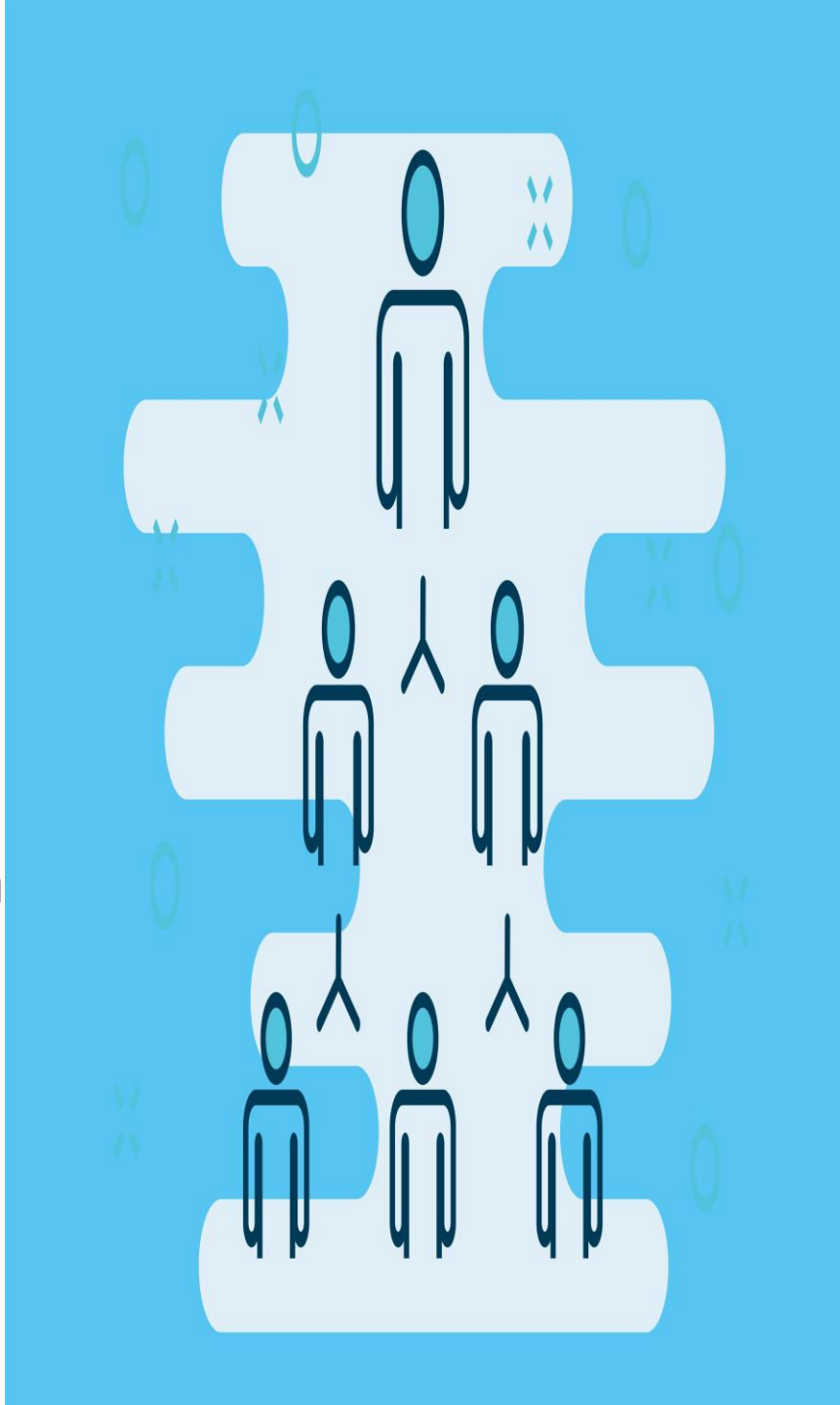
- Assess the current economic, social and political environment and how to adapt
- Identify the main inputs (laws, regulations) and outputs (behavioural outcomes) needed to succeed
- Identify the key STI actors required to implement the policies (granular perspective)
- Identify the social, economic and political (SEP) relations between key STI actors and with other actors, including those involved in SDGs
- Identify and assess the SEP effects and repercussions of the implementation process
- Examine and assess the interactions of all the above and their impact on successful implementation

IMPLEMENTATION CHALLENGES: LEADERSHIP AND COMMITMENT

- ❑ Ensure STI is top Presidential or parliamentary priority
- ❑ Make sure it is also top Ministerial priority
- ❑ Secure private and public sector champions
- ❑ Draw on STI bureaucracy: influence and advocacy
- ❑ Work on generating leadership and commitment
- ❑ Build on committed personnel
- ❑ Have a ‘lead ministry/body’ that runs the process

IMPLEMENTATION CHALLENGES: GOVERNANCE

- Introduce an overall representative STI multi-stakeholder consulting/decision making instance
- Allocate a body with the overall responsibility of implementation (directorate, department, agency)
- Establish within the responsible body the duties, structures and joint tasks that fit the purposes according to their individual specializations
- Create intra and interorganizational teams to deal with specific aspects of the policies
- Provide the public full information on the reasoning underlying the policies, processes and actors involved and accountabilities
- Ensure implementation processes and related rules are clear and transparent to all those involved



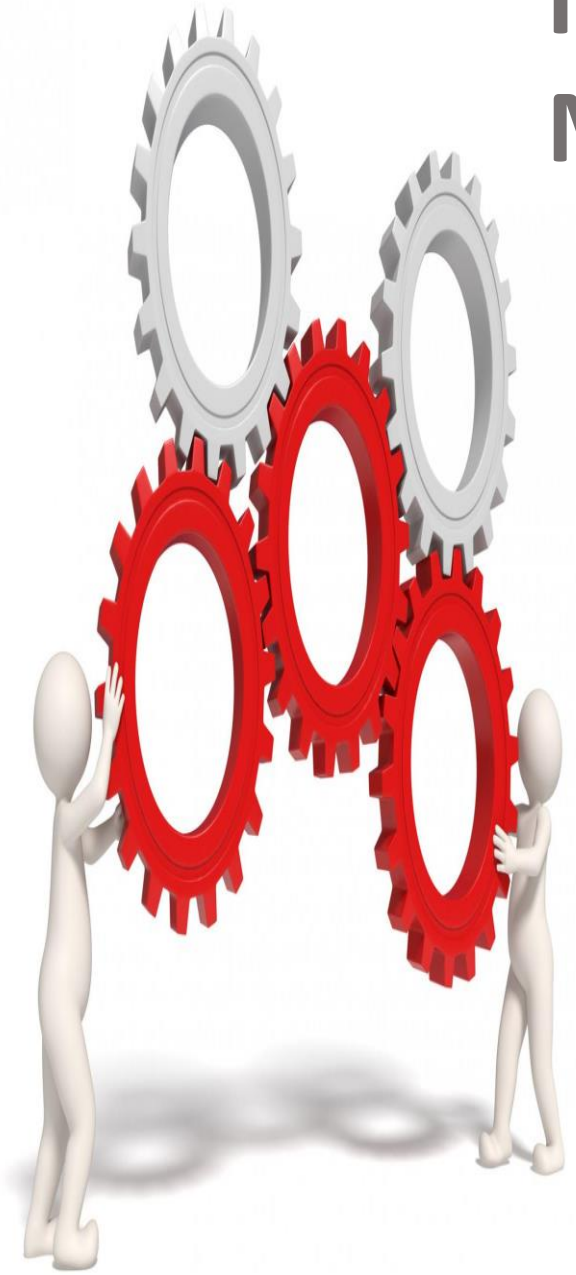
IMPLEMENTATION CHALLENGES: COORDINATION

- Achieving successful STI policy implementation often depends significantly non-STI actors or actions
- Create multi-stakeholders implementation committees, working groups and teams
- Ensure the relevant individuals or organizations are represented in these instances, including UN
- Rotate responsibilities across all stakeholders based on expertise
- Establish focal points for coordination in all the units and organizations involved in implementing policies
- Follow-up on the tasks which are responsibility of other organizations and ensure they are delivered as expected and in time

IMPLEMENTATION CHALLENGES: TRADITIONAL AND SOCIAL MEDIA AND INTERNET

- ❑ Media, and nowadays above all social media, can be an important ally for implementing STI policies
- ❑ Identify media outlets that are used by the STI communities to disseminate information (Web, Tweeter, Instagram Facebook)
- ❑ Introduce a media campaign aimed at:
  - Presenting the rationale and expected benefits of the policies
  - Inform the public and put STI at the center of the policy debate
  - Encourage debate
  - Advocate for the policies and enlist support
- ❑ Use internet platforms, facebook, tweeter, webpages and any available e-facilities to facilitate the involvement of stakeholders in the implementation process
- ❑ Ensure that information provided is easy to understand, useful and comprehensive so that users can have an adequate understanding of the issues at stake

IMPLEMENTATION CHALLENGES: MANAGERIAL CAPABILITIES



- Implementation involves allocation of resources across competing demands, and often it is unpredictable and uncertain, involves the resistance of some stakeholders, entails practical difficulties and even the disruption of existing arrangements
- Entrust STI managers with the power to make decisions during the implementation stage of the policy process
- Introduce the required managerial capabilities:
  - Technical expertise: content and process
  - Holistic thinking
  - Creativity
  - Problem solving
  - Social networks
  - Communicating
  - Influencing and convincing
  - Trustworthy and respect
  - Risk-taking
  - Exploration and experimentation
- Make use of adequate implementation vehicles: executive orders, administrative mechanisms, rules and regulations

IMPLEMENTATION CHALLENGES: RESOURCES

- ❑ Ensure the necessary level of financial resources
  - Content: R&D grants, subsidies, tax incentives, funding programs, capacity building, services
  - Process: consultants, studies, interviews, travel, meetings, software, communications, press, social media
- ❑ Obtain the right mix of STI human resources
  - Managers
  - Experts
  - Support staff
  - Communications professionals
- ❑ Attain the required knowledge
  - Epistemic community
  - Policy Research
  - International Experiences
  - Consultancy companies/international organizations

IMPLEMENTATION CHALLENGES: LEARNING AND FEEDBACK LOOPS

- STI policy Implementation is far from being an exact science and successful implementation involves learning by doing and learning from the experiences and mistakes done
- Learning by doing:
  - Take into account the contextual conditions and how they affect implementation
  - Continuously adjust plans to reflect contextual conditions
  - Test alternative approaches to implementation as problems emerge
  - Reflect on the regular challenges that emerge during implementation
  - Regularly collect process data, systematize and analyze it
  - Constantly monitor progress
- Learning from experience:
  - Codify implementation process
  - Analyze and explain what went right and wrong and how can it be improved
  - Draw on experiences elsewhere
  - Perform full post-implementation process evaluations
- Improve processes based on the knowledge generated during learning

FINAL REMARKS

- Many of the implementation recommendations mentioned are already in place in countries with elaborate institutions and policy processes. Depending on the extent of institutional development the proposals will be more or less relevant to your respective countries, although implementation challenges occur al all levels of development
- How far to apply the suggestions made here will also depend of the type of instrument or combinations thereof that are being implemented. For instruments or policy mixes that are complex and expected to have large impact more elaborate processes tend to be required. Conversely, for instruments that are less sophisticated and of less impact, a more straightforward approach can be taken.
- The implementation of policy instruments is also a complex processes although their complexities lie more in the social, political and managerial processes involved than in the technicalities and processes of designing the instruments
- The intricacies involved in achieving successful implementation are such that 'cutting corners' or reducing the length of time processes demand for political expediency will only derail implementation and result in failure. Implementation processes need to be given the time that they take.

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Many Thanks

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