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Ministry of Science and Higher Education - Ethiopia

STI for SDGs Roadmap and COVID-19: the Ethiopian Experience

*Presented at EC-JRC and UN-DESA Webinar on
“STI for SDGs Roadmaps-paving the pathways for sustainable recovery and future resilience”
22 June 2020*

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Contents

- COVID-19 in Africa: facts and figures
- Pandemic in Ethiopia and lessons learned
- Status of Ethiopian STI for SDGs roadmap
- Expectations from donors and international partners
- Conclusions



COVID-19 in Africa: facts and figures (Top 5 countries-21 June 2020)

No	Country	Total cases	Total deaths	Total recovered	Total tests	Tests/1 M pop
1	S. Africa	97 302	1 930	51 608	1 328 060	22 400
2	Egypt	55 233	2 193	14 376	135 000	1 320
3	Nigeria	20 244	518	6 879	113 575	551
4	Ghana	14 154	85	10 473	267 286	8 608
5	Cameroon	11 892	303	7 710	ND	ND
15	Ethiopia	4 532	74	1 213	216 328	1 883

(<https://www.worldometers.info/coronavirus/#countries>)



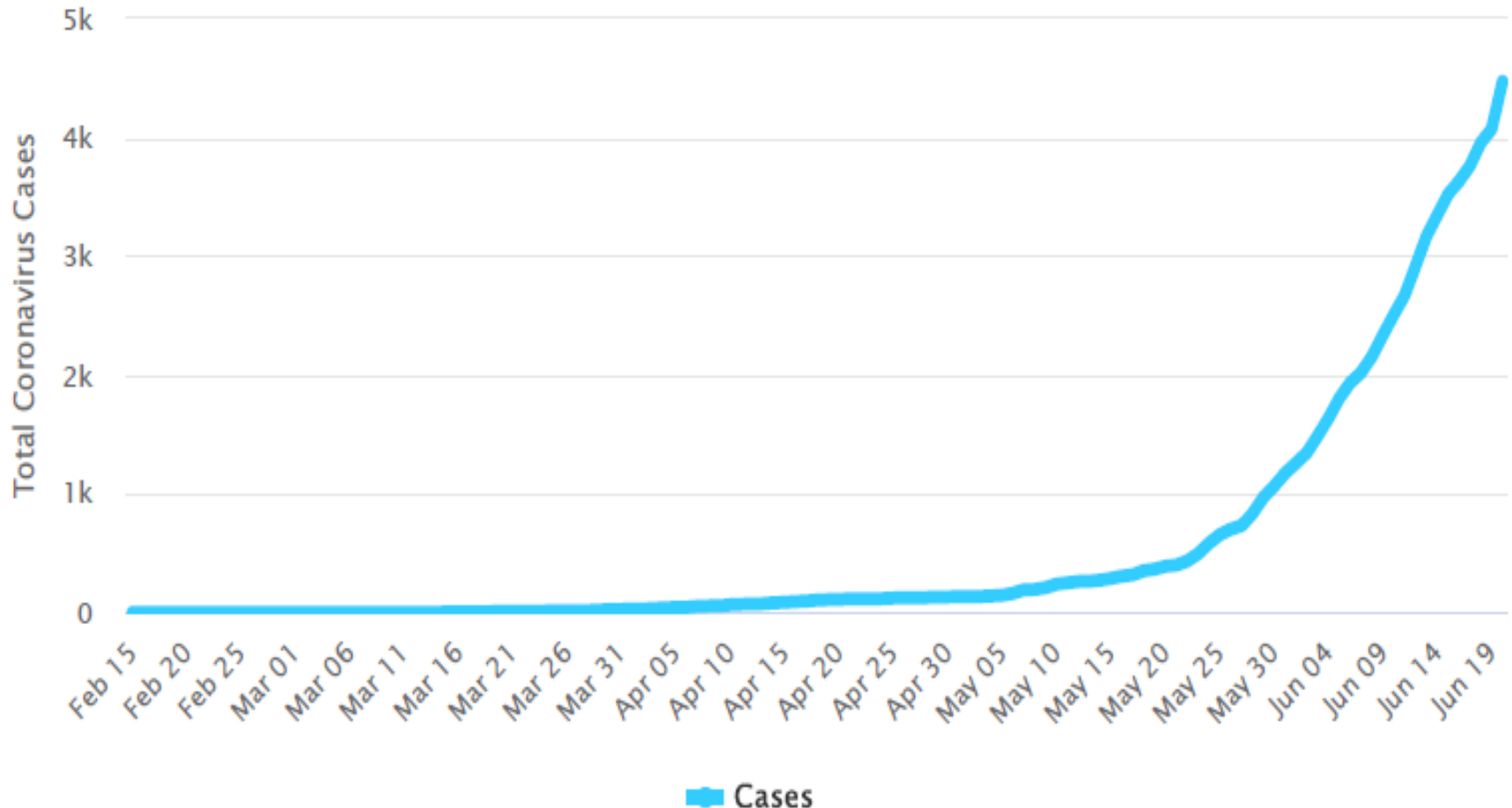
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Total Coronavirus Cases in Ethiopia (21 June 2020)



<https://www.worldometers.info/coronavirus/#countries>



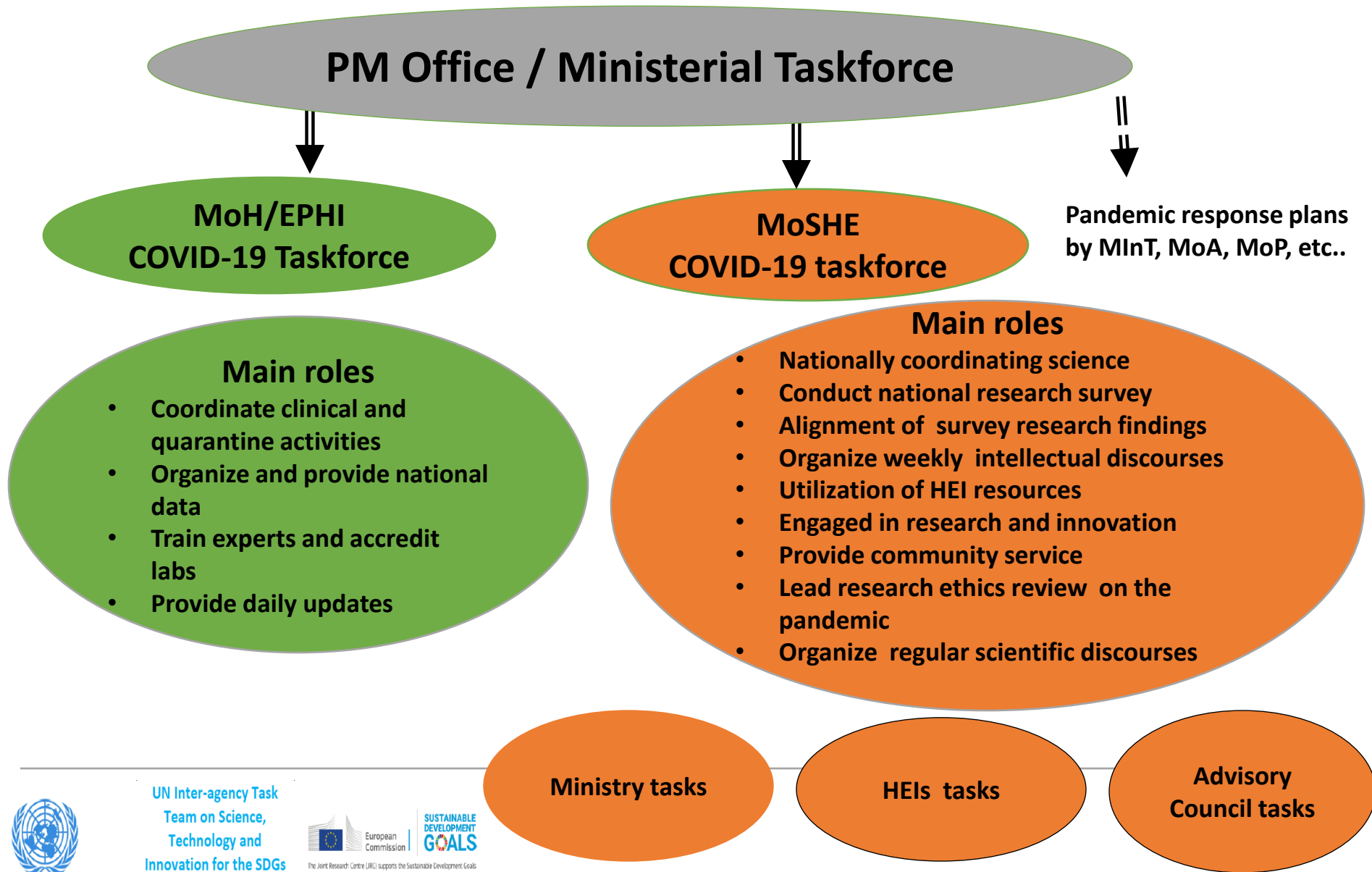
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Ethiopian experience in containing COVID-19



MoSHE's pandemic response plan via STI interventions

1. Coordinating national science organizations
2. National COVID-19 multidisciplinary research taskforce
2. Active engagement with intellectual diaspora
3. STI related pandemic response plans by HEIs



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MoSHE's pandemic response plan via STI ...

National COVID-19 multidisciplinary research taskforce

Aim

- Identify research priority areas (**short, medium, & long-term**)
- Disseminate information for **intervention and policy making**
- **Align** research recommendations to HEIs and science Orgs
- Identify and **access required resources**

National COVID-19 Survey Research

- 14 research categories
- Online Qualtrix survey conducted in **52 Orgs**
- A total of 281 respondents



MoSHE's pandemic response plan via STI ...



Ethiopian National COVID-19 Research Priorities and Alignment

Multi-disciplinary Taskforce Report

Conducted by:
National Multi-disciplinary
COVID-19 Research Taskforce

Ministry of Science and Higher Education
May 2020 Addis Ababa, Ethiopia

Ethiopian National COVID-19 Research Priorities and Alignment Report

Conducted by:
Multi-Disciplinary Taskforce

Coordinated by:



May, 2020
Addis Ababa, Ethiopia

MoSHE's pandemic response plan via STI ...

Demographic Information (n=281)

Participants (%)

Age (years)

25-34	117 (41.6%)
35-44	81 (28.8%)
45-55	53 (18.9%)
> 55	30 (10.7%)

Gender

Male	253 (90.0%)
Female	28 (10.0%)

Educational Status

Master's degree	148 (52.7%)
Doctorate (PhD)	94 (33.45%)
Professional doctorate	39 (13.8%)

Demographic Information (n=281)

Participants (%)

Healthcare Professional

Yes	108 (38.4%)
No	173 (61.6%)

Employing Organization

University or TVET	222 (79.0%)
Research Institute	36 (12.8%)
Non-governmental	11 (3.9%)
Private sector	7 (2.5%)
Regulatory agency	4 (1.4%)
Not employed	1 (0.4%)



MoSHE's pandemic response plan via STI ...

Key Findings: Overall ranking Very High Priority

- 1) Infection Prevention/ Control (74%)
- 2) Clinical Management and Biomedical studies (61.1%)
- 3) Physical distancing / NP Intervention (60.4%)
- 4) Epidemiologic studies (53%)
- 5) Indigenous knowledge/ clinical trials (47%)
- 6) Economic Analysis (40.7%)
- 7) Product Development and Innovation (40.5%);
- 8) Technology (38.4%)
- 9) Psycho-social Assessment (36.8%)
- 10) Ethical considerations (35.1%)
- 11) Behavioral Research (31.2%)
- 12) Modeling (28.1%)
- 13) Animal, Human, Environment Interface (27.8%)
- 14) Genotyping and Strain Diversity (23.5%)



MoSHE's pandemic response plan via STI ...

National COVID-19 multidisciplinary research findings to:

- PM Office
- Various gov. ministries
- Science and technology Orgs.
- Research Institutes
- HEIs
- TVETs



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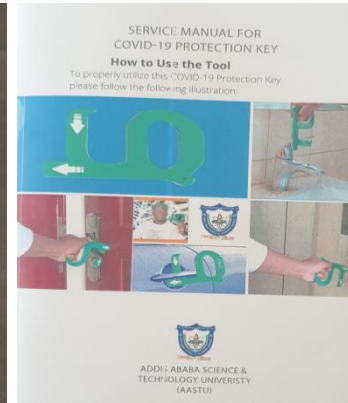
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STI related pandemic responses by HEIs

COVID-19 an opportunity for research and innovation

- Hand sanitizers (all HEIs)
- Mechanical & sensor-hand washing
- COVID-19 protection key
- Mechanical ventilators
- herbal medicine
- Telemedicine



Status of Ethiopian STI for SDGs pilot program

- A 10 year National Development Plan (July 2020-2030)
 - ✓ To make it fit in line with the SDGs
 - ✓ Major inputs in macroeconomics, industrialization, agricultural transformation, human resource development, energy, transport and services, urban development and housing
 - ✓ Home-grown economic reform
- The 2012 STI policy
 - ✓ Highly dependent on technology transfer
 - ✓ Little focus to science and indigenous knowledge
 - ✓ Current trends with emerging technology/the 4th industrial revolution
 - ✓ → need to revise and develop a new (2020) STI policy
 - ✓ The 2012 Ethiopian STI reviewed in collaboration with UNCTAD
- Development of new STI policy-Since June 2020
 - ✓ Aligning priority areas and directions from STISA-2024, SDGs-2030, AU-2063
 - ✓ Ongoing task on development of new STI policy



Expectations from donors and international partners ...

- Engagement with UNCTAD
 - ✓ Assisted in reviewing the 2012 STI policy
 - ✓ Interested to help in development of a new STI policy
 - ✓ Meeting on 3rd March 2000 (on STI, UN-CSTD & STI for SDGs)
 - ✓ Impact of COVID-19 on planned activities
- National STI policy designing working group-Since June 2020
 - ✓ MInT, MoSHE, others.....



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Expectations from donors and international partners

- The pandemic negatively affecting the economy
- COVID-19 emergency assistances to Ethiopia
 - ✓ IMF: US\$ 411 mil.
 - ✓ WB: US\$ 82.6 mil.
 - ✓ EU-Team Europe: €487 mil.



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Conclusions

Opportunities

- Strong national pandemic response plans
- STI-related coordinated efforts on COVID-19
- Alignment of the COVID-19 research findings
- High initiations on innovation and research
- Active diaspora engagement
- Utilization of virtual technologies
- Ongoing work on revising the 2012 STI policy

Challenges

- Impact on planned activities
- The pandemic's diverse impact on social, cultural & economy
- Effect on education system
- Limited funding opportunities to science and indigenous knowledge
- Little support on STI for SDGs pilot programs (except UNCTAD)

→ The need for continued support by donors and international partners



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Thank You!

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