



**Regional Workshop on Accelerating Science and Technology to foster the Implementation of the Sustainable Development Goals in Asia and the Pacific
Dili - Timor Leste, 7-9 June 2017**

Cambodia Country Report

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OUTLINE OF PRESENTATION



Overview of National Strategic Development Plan (2014-2018)

National S&T Capabilities

Main Issues in S&T

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Overview of National Strategic Development Plan (NSDP 2014-2018)

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Overview of National Strategic Development Plan (NSDP 2014-2018)

BACKGROUND



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- First, after the United Nations Millennium Summit in 2000—which declared the Millennium Development Goals (MDGs)—Cambodia developed its own set of MDGs called the Cambodia Millennium Development Goals (CMDGs), focusing on poverty alleviation and human development.
- Second, a National Poverty Reduction Strategy (NPRS) was adopted in December 2002. Since that time, achieving CMDGs and alleviating poverty have assumed centrality in Cambodia's development strategies.
- The Third Five-year Development Plan for 2006-2010 was formulated as an overarching national policy document for pursuing prioritized goals, targets and actions for the next five years. The new plan was renamed as National Strategic Development Plan (NSDP) 2006-2010.

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Overview of National Strategic Development Plan (NSDP 2014-2018)

BACKGROUND



- The NSDP 2014-2018 presents a roadmap for the implementation of the **Royal Government of Cambodia's** (RGC) priority policies of the Fifth Legislature as articulated in the Rectangular Strategy Phase III.
- The NSDP's purpose is to ensure that the actions, programs and projects of all ministries, agencies and sub-national authorities are aligned to implement the prioritized policies of the RGC outlined in the Rectangular Strategy.
- The NSDP 2014-2018 aims to achieve at least 7% growth in GDP and reduce the poverty rate by at least one percentage point each year.

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Overview of National Strategic Development Plan (NSDP 2014-2018)

➤ Main Targets and Indicators of NSDP 2014-2018

- | | |
|--|--|
| 1. Poverty Headcount (5 indicators) | 10. Industries (4 indicators) |
| 2. Gender Issues (3 indicators) | 11. Energy (6 indicators) |
| 3. Population (11 indicators) | 12. Transport (5 indicators) |
| 4. Macro-Economic (13 indicators) | 13. Telecommunications (5 indicators) |
| 5. Fiscal (3 indicators) | 14. Tourism (5 indicators) |
| 6. Finance Sector (4 indicators) | 15. Public Information (20 indicators) |
| 7. Official Development Assistance (4 indicators) | 16. Health (44 indicators) |
| 8. Agriculture, Forestry and Fisheries (18 indicators) | 17. Education (30 indicators) |
| 9. Rural Development (8 indicators) | 18. De-Mining Program (3 indicators) |

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***Planned Actions to Implement
the Prioritized Policies related to NSDP***

- Institutionalization of National S&T
- Cultivation of S&T Human Resource
- Systemization of S&T Financial Support
- Government-driven R&D
- Reinforcement of International Cooperation for S&T
- Promotion of S&T Information
- Enhancement of Public Awareness of S&T
- Enforcement of Agricultural
- Development of Self-Supporting Industry
- Securement of ICT-based Technology

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**Overview of SDGs Localization into
Cambodian Context**

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Localization of the SDGs into CSDGs

BACKGROUND

- Cambodia millennium development goals (CMDGs) has finished at the end of 2015
- The Agenda for post 2015 is well known as Sustainable Development Goals (SDGs);
- The SDGs preparation process has been started very early,
- There are 17 goals and 169 targets aiming to address emerging issues related to Socio-economic and population;
- The Ministry of Planning (MOP) has been provided full power, on 2nd February 2016, as a leading and facilitating agency in the process of preparing localization of SDGs;
- The result from this localization process of the SDGs would be named “**Cambodia Sustainable Development Goals- (CSDGs)**”, and it is expected to be endorsed by the RGC at mid-2017.
- the localization is planned for the rest of the year 2016 and another half year of 2017 including an endorsement of the CSDGs by the Royal Government of Cambodia (RGC) to be ready for integrating it into the national development frameworks.

Localization of the SDGs into CSDGs (cont.)

The objectives of localization of the SDGs are:

- Build common understanding among policy makers, parliamentarians, inter-ministerial government officials, local authorities, Development Partners, and other stakeholders including private sector on the nature of the new development agenda.
- Ensure leadership and ownership of the RGC in the process of localizing the SDGs with a SMART setting of prioritized indicators and targets by taking into account its different challenges, national realities, capacities and levels of development.
- Have a common understanding and agreement among of key actors and multi-stakeholders on the Goals, Target, and Indicators of CSDGs; sources of Data including a relevant definition of each indicator and its purpose, benefits, approaches, methodology, and their actions or contributions to the end results of the localization process of the SDGs.

Localization of the SDGs into CSDGs (cont.)

EXCEPTED OUTPUTS/DELIVERABLE

- The localization process will come up with a final SDGs framework in the context of Cambodia called “**Cambodia Sustainable Development Goals- (CSDGs)**”;
- With a clear periodical review and the mandate of key relevant stakeholders;
- The CSDGs will be indorsed by the RGC in mid-2017 for next development framework and action.

Conclusion

Cambodia has achieved rapid economic growth in the past 10 to 15 years and has made significant progress in virtually eliminating abject/food poverty. Governance too has improved, and the government is able to respond to crises like natural disasters more effectively.

Therefore, the RGC continuing efforts to achieve priorities, targets of NSDP 2014-2018 and CMDGs (**ACCELERATION FRAMEWORK FOR POVERTY REDUCTION WITH REFLECTION OF ACHIEVING CMDGs.**

SDGs not new for Cambodia since most SDGs Goals and targets remaining in the RGC Policy Platform and NSDP.

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Analysis of National S&T Capabilities

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Government's Policy, Plan and Commitment

❖ Rectangular Strategic Phase III



The Royal Government Cambodia (RGC) will focus on the enhancing knowledge and human resource capacity in science and technology, especially in the priority sectors including agriculture, livestock farming and aquaculture, industry, energy, construction and physical infrastructure, ICT, healthcare and environment. RGC Phase III also focus on strengthening and enhancing education, science and technology technical training in the RGC on Angle 4.

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Government's Policy, Plan and Commitment on S&T



KINGDOM OF CAMBODIA
Nation Religion King
ROYAL GOVERNMENT OF CAMBODIA

**Cambodia's National Science and
Technology Master Plan
(2014-2020)**

For GROWTH and QUALITY of LIFE

December 2013




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❖ **National Science and Technology Master Plan 2014-2020**

The importance of science and technology has been emphasized for self-sustainable socioeconomic development in the international society and is considered one of the major requirements to achieve future national strategies.

❖ **NSTC chaired by *Samdech* Prime Minister**

❖ **RGC-Direction document : S&T HRD , R&D program, S&T institute, Strengthening S&T Database and Reinforcement international corporation for S&T.**

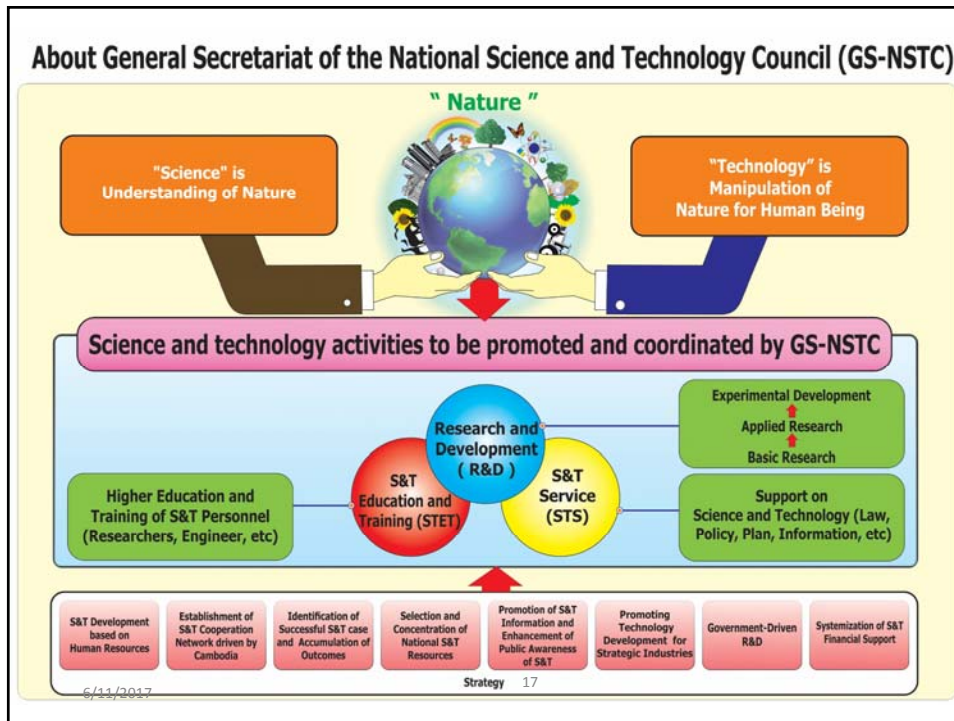
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Administrative Framework on S&T

- *Cambodia does not have a dedicate ministry for science and technology, would be responsible for design and implement S&T policy.*
- *Since 2015, National Science and Technology Council (NSTC) was establish and chaired by **Prime Minister** . Permanence Deputy Chair by Ministry of Planning*
- *The members of NSTC are from government ministries, universities, chamber of chamber of commerce, Supreme National Economic Council, representative of research Institute and **General Secretariat of the National Science and Technology (GS-NSTC)**.*
- *GS-NSTC was establish in 2015 to support the NSTC which main function is to coordinated and to promote Science and Technology activities in Cambodia*

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➤ Five main direction for STI Development

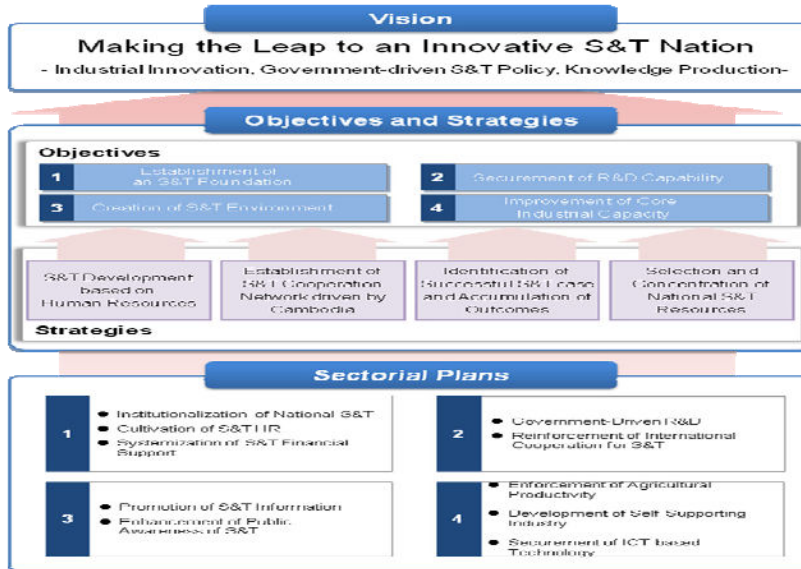
1. Promote S&T HRD.
2. Initiate and expand R&D Investment and administration.
3. Strengthen STI foundation and infrastructure with establishment of Cambodia Institute of Science and Technology (CIST) for R&D Center (co-utilization of R&D facility and equipment), S&T HRD, and STI Management and Administration.
4. Establish and strengthen national STI information system.
5. Strengthen international cooperation for support in S&T HRD, infrastructure, STI information system, and knowledge sharing

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1. Overview of National S&T Master Plan

b). National long-term plans for S&T development



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1st Cambodia Master Plan 2014-2020

Describe the national long-term plans for S&T development

Cambodia's National Science and Technology Master Plan 2014-2020

Objective:

- Contribute to the sustainable socioeconomic development of the Royal Government of Cambodia through the establishment of the National S&T Master Plan, which will guide domestic research and development (R&D) infrastructure building, capacity expansion, and government research projects contribution to poverty reduction.
- Help to improve the quality and quantity of human resources for the development of national R&D program in the Kingdom of Cambodia.
- Build S&T policy-maker and related entities, both public and private sections in other foster economic development.
- To improve the better Social Economic and better poverty

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❖ Government's Commitment on Technology

**Cambodia Government Direction
(Samdech Prime Minister Approval in principle)**



➤ Six national priority technology areas:

- 1/. *Agro-Processing Technology,*
- 2/. *Software and Digital Contents,*
- 3/. *Biotechnology,*
- 4/. *Textile Technology,*
- 5/. *Agricultural Engineering Technology, and*
- 6/. *Material Design Technology,*

- To be national priority technologies for the year 2017-2020, and relevant ministries and organizations must jointly develop as national priority strategy, complementing to the specialized technology of respective ministries and organizations.

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❖ Government's Commitment on Technology

**Cambodia Government Direction
(Samdech Prime Minister Approval in principle)**

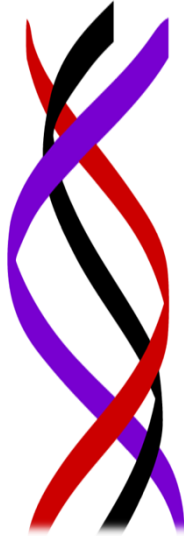


- **Increase R&D investment and creation of National Research Foundation:**
Increase government investment in Research and Development (R&D) to reach 0.1% of GDP by 2020, and 0.4% of GDP by 2025, and General Secretariat of the National Science and Technology Council must establish research and development foundation, for which the government will contribute budget in average of 0.013% of GDP per year from 2018 to 2020 and to increase to 0.12% of GDP by 2025.
- **Prioritize international cooperation on Science and Technology:**
Give priority on aid and international cooperation for science and technology development.

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Innovation clusters institutions to promote and allied



- ❑ **Government and Research Institute - GRIs**
 - Government-sponsored Research Institutes (GRIs)
 - Public Research Institutes (PRIs)
 - Research for Public Purposes
 - Applied Research
- ❑ **Institution of Higher Learning - IHLs**
 - Supply SMEs
 - Curiosity-driven
 - Basic Research
- ❑ **Business Enterprise - BE**
 - Commercialization
 - Produce Innovations
 - Development Research
- ❑ **NGO**

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- ❑ STEM aims to foster inquiring minds, logical reasoning, and collaboration skills. STEM also fosters delight in the wonder of science, natural curiosity driving enthusiastic investigation and discovery.



- ❑ In 2016, STEM policy was established, it was a road map for challenging in promoting education sector, science, technology, engineering and mathematics.



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Analysis of National Capabilities

Related to SETI/ST/STI targets and indicators in Cambodia S&T Master Plan 2014-2020 we focus on 5 dimensions to review and monitoring as below:

- ✚ S&T Manpower
- ✚ Higher Education
- ✚ R&D Output
- ✚ Gross Domestic Expenditures on R&D (GERD)
- ✚ Government Budget Appropriations or Outlays for R&D (GBAORD).

▪ Totally, we have 59 for S&T indicators.

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✚ Connecting with SDGs 2017-2030 to localization we adopted in SDGs as below:

Goals 9

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Targets 9.5

Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

Indicators 9.5.1

Research and development expenditure as a proportion of GDP

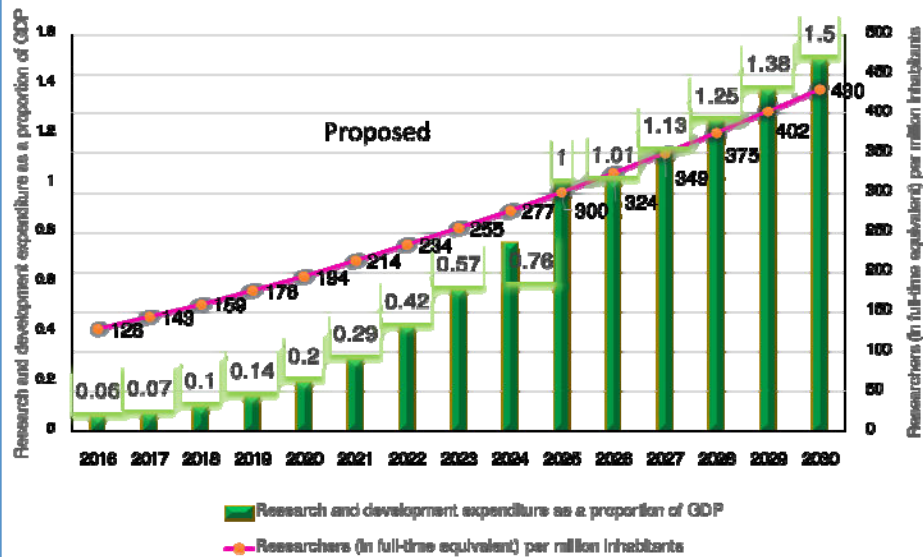
Indicators 9.5.2

Researchers (in full-time equivalent) per million inhabitants

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➤ **Baseline and targets on indicators of sustainable development goals (not officially)**



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S&T indicators data from National R&D survey 2016

Active Researchers	Number		Total
	Male	Female	
Doctor	168	17	185
Master	219	77	296
Bachelor	176	74	250
Vocational technical school	15	5	20
Total	578	173	751

Active Technicians	Number		Total
	Male	Female	
Doctor	39	7	46
Master	168	62	230
Bachelor	479	184	663
Vocational technical school	84	110	194
Total	770	363	1,133

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Source: Data 2015

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S&T indicators data from National R&D survey 2016

Methods	GRI	Higher Education	BE	NGOs
Complete Enu./Sample (small BE)	71	114	764	409
Budgetary Information	7,071,203.00 USD	4,119,022.00 USD	2,963,068.00 USD	7,800,101.00 USD
Total R&D Expenditure	21,953,394.00 USD			
R&D expenditure as % of GDP (2015)	0.12			

Source: Data 2015

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Main Issues in S&T

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Challenge and Opportunity by S&T master Plan

❖ Cambodia's Strengths, Weaknesses, Opportunities and Threats (SWOT) in the S&T sector were comprehensively analyzed based on the results of situation analysis.

SWOT analysis	Strength	Weaknesses
Opportunities	SO S&T Development based on Human Reassures	WO Establishment of Cambodia driven S&T Cooperation Network
Threats <small>6/11/2017</small>	ST Identification of Successful S&T Case and Accumulation of Outcomes	WT Selection and Concentration of National S&T Resources

Main Issues in S&T

Issues in Cambodia produced through analysis of the current S&T situation through eight viewpoints and SWOT analysis are as follows

A. S&T Policy

Improvement of Institutional Environment for S&T Awareness and Policy Implementation

B. Human Resources

Improvement of Educational Environment for S&T Manpower Securement.
Necessity of Socioeconomic Support for Better Treatment of S&T Manpower

C. Financial Support

S&T investment should be expanded by changing the government's awareness of S&T in order to secure finances for it

Main Issues in S&T (Con't)

D. R&D

Introduction and Development of Technology Contributing to Industrial Development

E. Cooperation

S&T Foundation Securement through Cooperation Network

F. S&T Resources and Standards

Systematic S&T Information Management and Convenient Use of S&T Information

G. Socio-culture

National S&T Enlightenment for Improvement of Social Awareness

H. Organization

A cooperative task system and an exclusive department for integrated management should be established so that tasks dispersed to departments can be effectively conducted

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Challenge and Opportunity by S&T master Plan

- International organizations and supporting countries' active investment activities toward Cambodia.
- Emphasis on the necessity of introducing S&T to Cambodia by international organizations, including UNESCO, ASEAN, and KOICA.
- Rapid increase in foreign direct investment.
- Increase in demand for knowledge-intensive products and services.
- Inflow of international knowledge network and technical platform.
- Orientation to export value-added products and services as well as diversification of products.
- Increase in demand for technical manpower by global enterprises.
Market expansion for agricultural processing products.

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Gap and need to support for accelerating the achievement of S&T

- No S&T policy & No STI policy (in the process of preparing the Cambodia's)
- NSTI Policy 2017-2027 (In the process of preparing the Cambodia's)
- No National R&D Fund (In the process of preparing the Cambodia's)
- R&D Budget Investment: National Budget (small amount)

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Gap and need to support for accelerating the achievement of S&T

- Lack of S&T Awareness and Knowledge
- Lacking in Technical Support
- Very short of human capacity and institutional capability
- No harmonized system and no sufficient legal basis to promote STI development
- Little resources for STI development
- Call for Support and Cooperation

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The infographic displays the 17 Sustainable Development Goals (SDGs) in a grid format. At the top left is the logo of the United Nations Educational, Scientific and Cultural Organization (UNESCO). To its right is the 'Sustainable Development GOALS' logo, featuring a colorful wheel icon. Below these are the first six goals: 1. No Poverty (red), 2. Zero Hunger (orange), 3. Good Health and Well-being (green), 4. Quality Education (red), 5. Gender Equality (red), and 6. Clean Water and Sanitation (light blue). A large yellow banner with the text 'THANK YOU' in blue capital letters spans across the middle of the grid. Below the banner are goals 13 through 17: 13. Climate Action (green), 14. Life Below Water (blue), 15. Life on Land (green), 16. Peace, Justice and Strong Institutions (blue), and 17. Partnerships for the Goals (dark blue). The bottom right corner includes the UNESCO logo and the 'Sustainable Development GOALS' logo again. The date '6/11/2017' is printed in the bottom left corner, and the number '37' is in the bottom right corner.

United Nations Educational, Scientific and Cultural Organization

Sustainable Development Goals

SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

THANK YOU

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

United Nations Educational, Scientific and Cultural Organization

Sustainable Development Goals

SUSTAINABLE DEVELOPMENT GOALS

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