



*The Contribution of the ISARM initiative to international cooperation and its role regarding SDG Goal 6.5.2 on water cooperation*

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- F. Sindico, Transboundary Water Cooperation and the Sustainable Development Goals, UNESCO-IHP Advocacy Paper, 2016, Doc. 2016/SC/HYD/SDGs-1

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*UNESCO*



**Resolution XIV-12., June 2000,  
Intergovernmental Council of UNESCO's IHP,  
representing 160 Member States, decided to  
adopt a resolution to promote studies in regard  
to internationally shared aquifers**

**Launch of The Project on**

**Internationally Shared  
/Transboundary Aquifer Resources  
Management  
ISARM**

# Multidisciplinary aspects of ISARM

- **Legal**
  - eg Treaties, interstate agreements
- **Scientific**
  - Hydrology, hydrogeology, conceptual modelling
- **Socio-economic**
  - Water security, accesibility, efficiency, poverty reduction
- **Institutional Capacity Building**
  - Awareness raising, counterpart agencies
- **Environmental**
  - Sustainability, biodiversity, risks, vulnerability

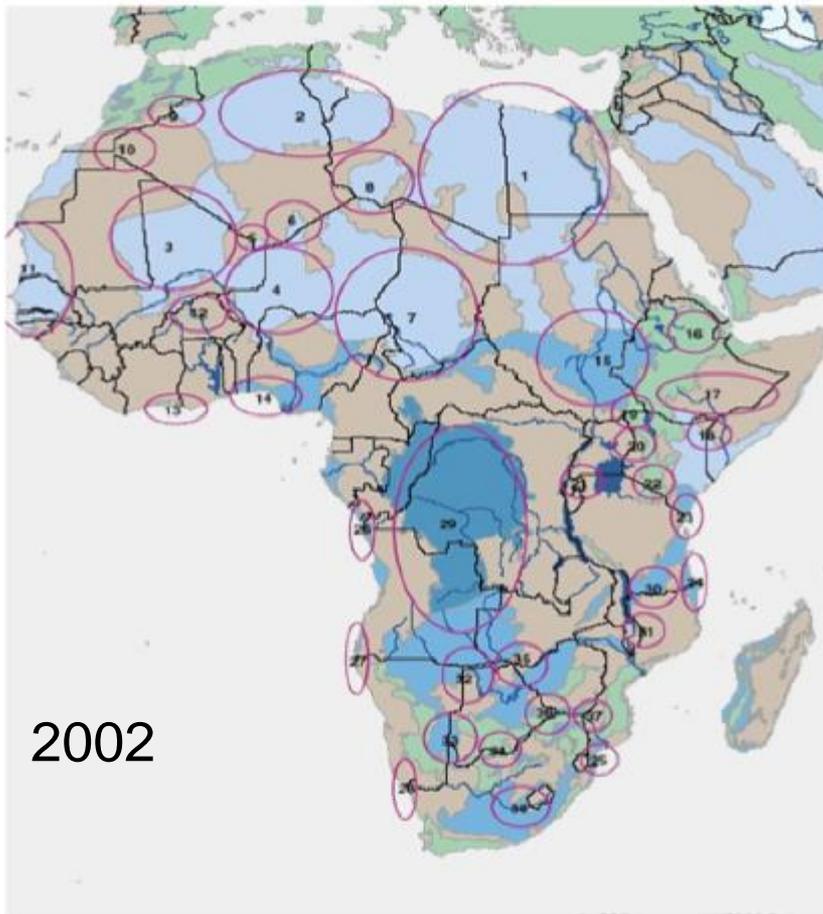
# Transboundary Aquifers Delineation



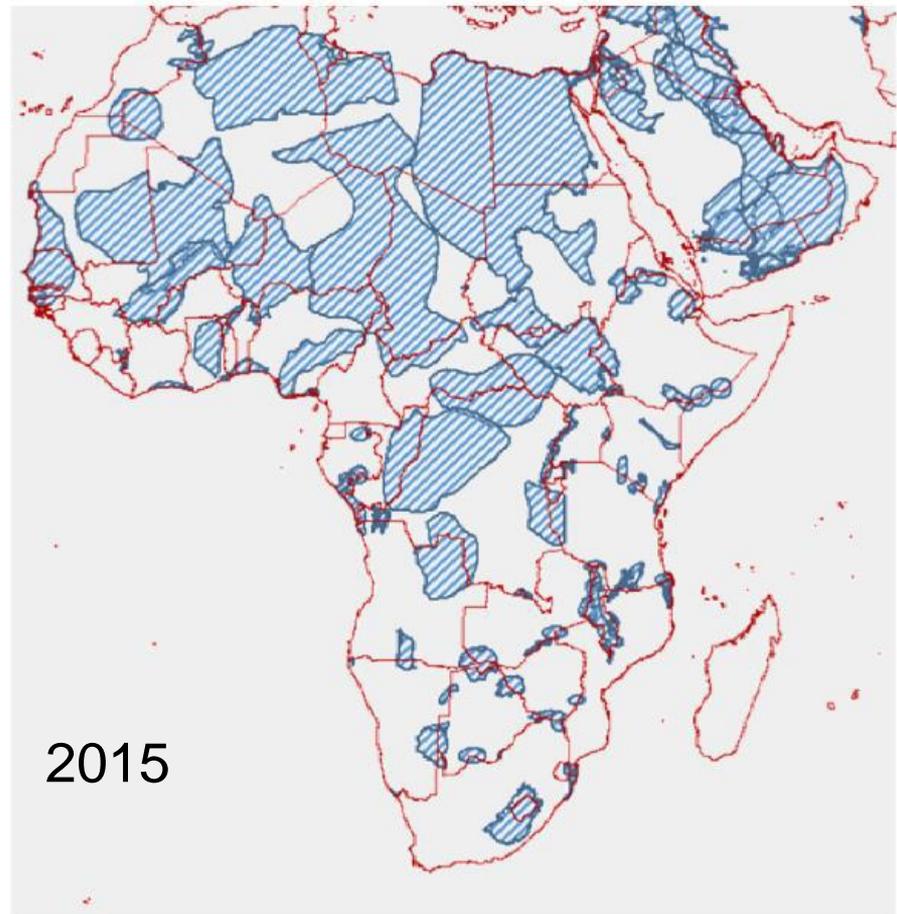
United Nations  
Educational, Scientific and  
Cultural Organization



International  
Hydrological  
Programme



2002



2015

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## Draft Articles on the Law of Transboundary Aquifers

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The process:

### UN International Law Commission

✧ Introduces in its programme of work the topic of **“Shared Natural Resources” (2002)**

- Transboundary groundwaters
- Oil
- Natural gas



✧ 2008 : the ILC adopts the draft articles on the law of TB aquifers at second reading → *Deferred to the UN GA*

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## Draft Articles on the Law of Transboundary Aquifers

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*Unique process:* Support from UNESCO-IHP

Within the frame of its ISARM project:



- Scientific and technical advice on the issues related to hydrogeology
- Invitation, coordination and support of contributions from international experts, international and national institutions, and centres on groundwater resources,

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## Draft Articles on the Law of Transboundary Aquifers

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UN GA Resolutions on the law of TBA (63/124 (2008); 66/104 (2011); 68/118 (2013)) :

- Non binding instrument
- Only instrument covering TBA
  
- Resolutions 63/124 (2008) & 66/104 (2011):  
*encourages* the States concerned to make appropriate bilateral or regional arrangements for the proper management of their transboundary aquifers, taking into account the provisions of the draft articles

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## Draft Articles on the Law of Transboundary Aquifers

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Resolution 68/118 (2013): change in language:  
*Commends* to the attention of Governments the draft articles on the law of transboundary aquifers (...) as guidance for bilateral or regional agreements and arrangements for the proper management of transboundary aquifers;

 **New (final?) resolution in October 2016**

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## Context

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- Target 6.5 Indicators
  - 6.5.1 Degree of integrated water resources management (IWRM) implementation
  - **6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation**
- **UNESCO Custodian Agency with UN Economic Commission for Europe (UNECE)**



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## Transboundary Water Cooperation (TWC)

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- 40% of the world population lives in transboundary rivers and lake basins
- 276 transboundary surface water basins and 592 transboundary aquifers
- Examples of problems and challenges
  - Overexploitation
  - Pollution
  - Competition over different uses

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# Transboundary Water Cooperation (TWC)

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- United Nations Watercourse Convention
- UNECE Water Convention
- Bilateral and multilateral **arrangements**
- Customary international law

- Draft Articles on the Law of Transboundary Aquifers
- UNECE Model Provisions on Transboundary Groundwater
- Bilateral and multilateral **arrangements**
- Customary international law



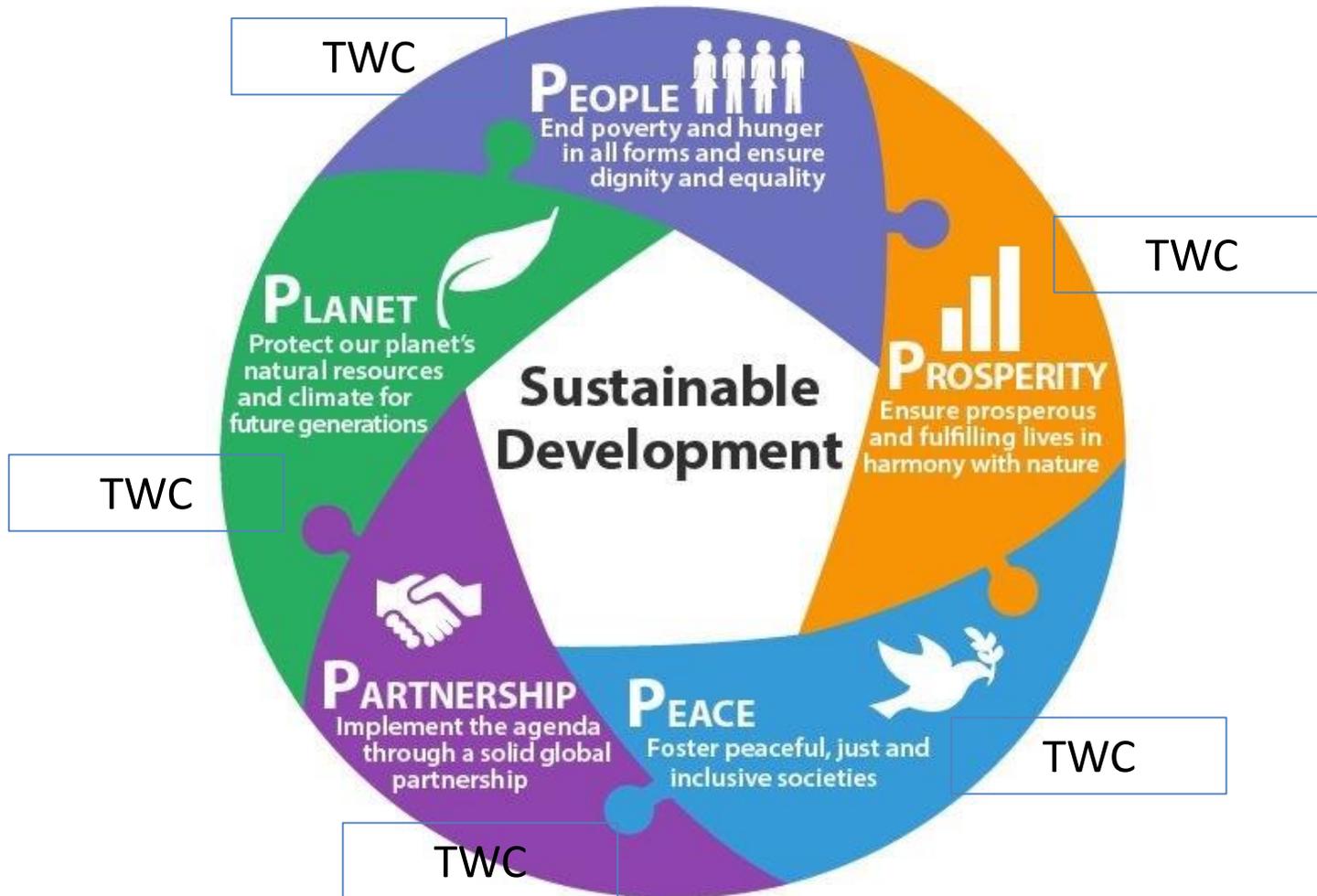
**TWC normative framework**



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# Sustainable Development and TWC

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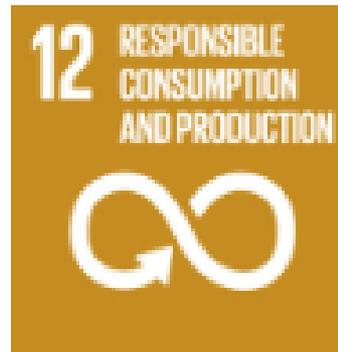


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## Sustainable Development and TWC

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Direct links between SDG 6 and other SDGs:

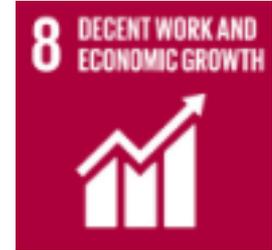


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# Sustainable Development and TWC

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## Indirect links between SDG 6 and other SDGs:

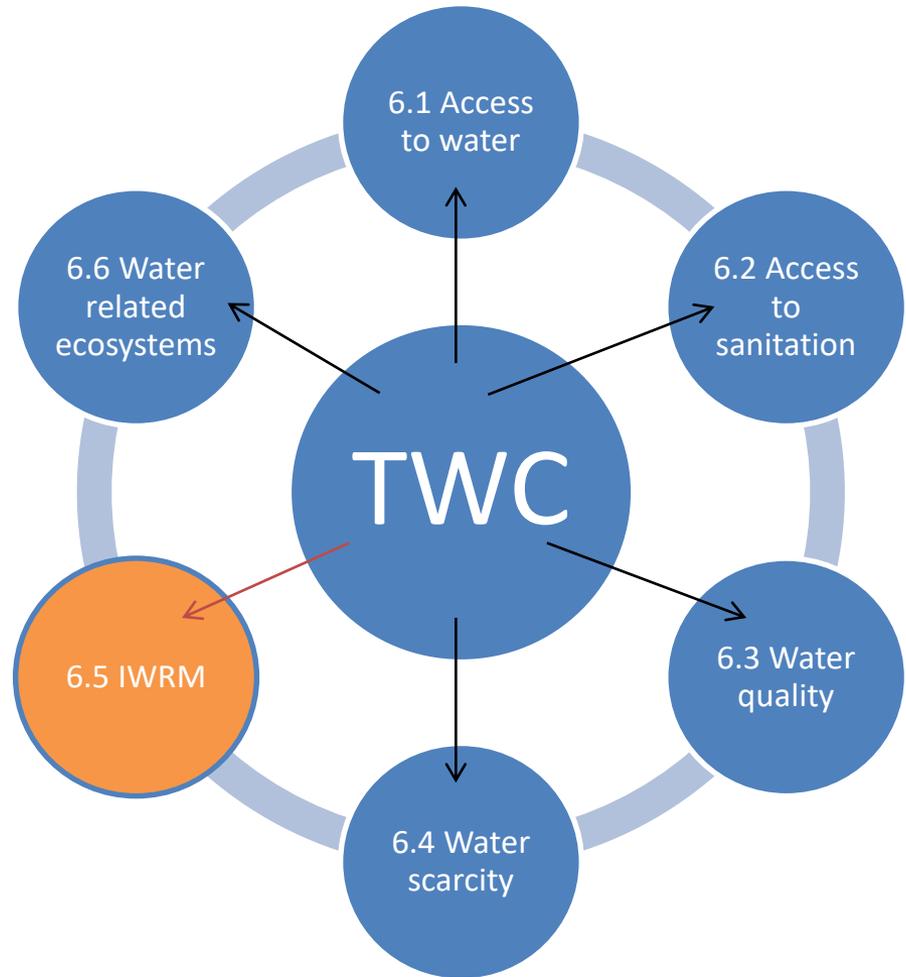


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# Sustainable Development and TWC

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- SDG 6
- Target 6.5 “By 2030, implement integrated water resources management at all levels, **including through transboundary cooperation as appropriate.**”



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# TWC and SDG indicators

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- Purpose and nature of SDG indicators
- To promote and encourage further action and cooperation
- Non-punitive



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## TWC and SDG indicators

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- Target 6.5 Indicators
  - 6.5.1 Degree of integrated water resources management (IWRM) implementation
  - **6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation**
  - **UNESCO Custodian Agency with UNECE**

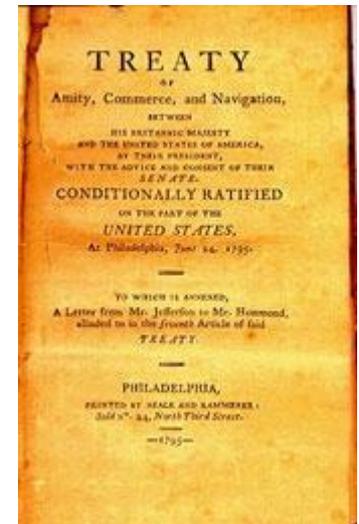


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# TWC and SDG indicators

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- Arrangement
  - Treaty (legally binding instrument)
  - Other arrangement (non-legally binding instrument)
  - Water specific (surface and/or groundwater)
  - Linked to other wider thematic areas (biodiversity)



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## **TWC and SDG indicators**

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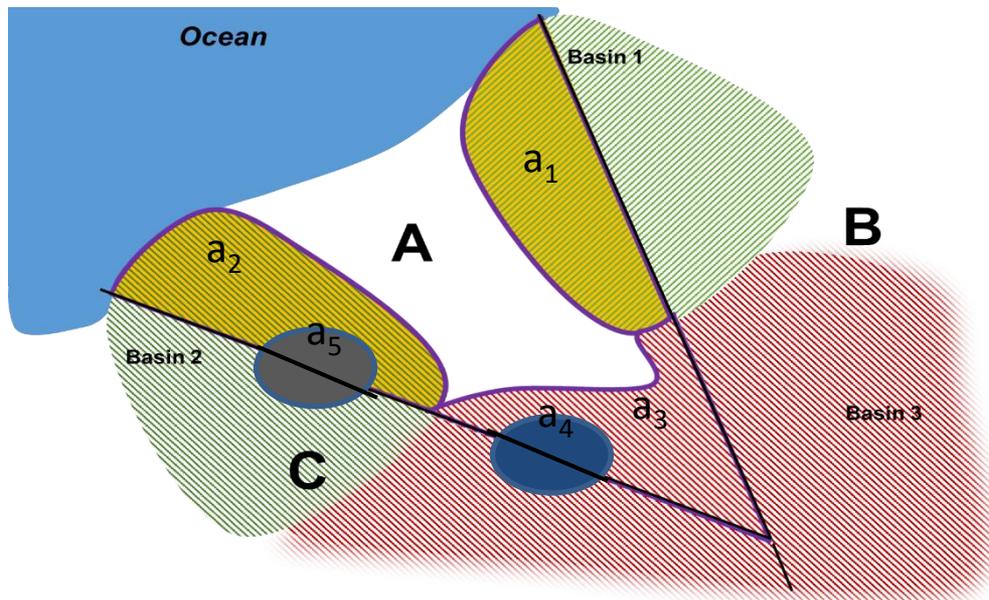
### **Criteria for operationality of cooperation arrangements**

- 1 Existence of a joint body, joint mechanism, commission (e.g. a river basin organization) for transboundary cooperation**
- 2 Regular formal communications between riparian countries (e.g. regular meetings)**
- 3 Existence of joint or coordinated water management plan(s), or of joint objectives**
- 4 Regular exchange of information between riparians.**

**Basis: the main principles of customary international law (reflected in global freshwater conventions, UN ILC Draft Articles on n The Law of Transboundary Aquifers)**

# TWC and SDG indicators

- Proportion of transboundary basin area with an operational arrangement for water cooperation



- Operational Arrangement
- No operational Arrangement
- Operational arrangement (aquifer)
- Total transboundary basin area - Country A
- Area with an operational arrangement - Country A
- No operational arrangement (aquifer)

$$\frac{a_1 + a_2 + a_5}{a_1 + a_2 + a_3 + a_4 + a_5}$$

$$\frac{10 + 10 + 1}{10 + 10 + 12 + 1 + 1}$$

=

$$\frac{21}{34}$$

$$\begin{aligned} &\times 100\% \\ &= \mathbf{61.8\%} \end{aligned}$$

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## Conclusions

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- Transboundary Water Cooperation is required to meet the Sustainable Development Goals through a specific indicator
- Countries should take into account the available Transboundary Water Cooperation normative framework when implementing the Sustainable Development Goals
- (Final?) Decision on the status of the Draft Articles in the new context of SDGs
- ISARM will provide inputs to these processes to implement SDGs



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**Thank you!**

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Programme



**Sustainable  
Development  
Goals**

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