

17-19 January 2020

# GENERAL ASSEMBLY PLENARY COMMITTEE

Background Guide 2020

written by:

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#### DEAR DELEGATES,

It is a great honor to welcome you, the delegates representing various countries from around the world, to the **General Assembly Plenary** of Erfurt Model United Nations 2020.

The topics on the agenda will be:

- I. International Cooperation in the Peaceful Uses of Outer Space
- II. Implementation of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and / or Desertification, Particularly in Africa

This Background Guide will help you prepare for the conference. Indeed, aiming to support you in your further research, it provides you with a comprehensive overview over the committee and offers detailed insights in both topics and information on the most relevant aspects. We encourage you to thoroughly delve into your countries' policies and their positions concerning these topics as they represent issues that the international community needs to face. When preparing for the conference, please keep in mind the mandate of the **General Assembly Plenary.** 

If you have any questions regarding the conference or your preparation for the **General Assembly Plenary**, please do not hesitate to contact <a href="mailto:mun@uni-erfurt.de">mun@uni-erfurt.de</a>

Sincerely,

Lea, Leopold

#### **MEET YOUR CHAIR**

#### Lea Groß (President)

Lea studies International Relations and Social Sciences at the University of Erfurt. Besides participating in several national and international conferences such as NMUN Germany 2019, she is a tutor for the current Erfurt delegations.

### Leopold von Grießenbeck (Vice President)

Leopold studies International Relations and Philosophy at the University of Erfurt. After participating in several national MUN conferences and NMUN New York, he was a tutor for the University of Erfurt's delegation to NMUN Germany 2019.

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#### **ABBREVIATIONS**

AAD Action Against Desertification

ACP African, Caribbean and Pacific Group of States

APSCO Asia-Pacific Space Cooperation Organization

AU African Union

Benefits Declaration Declaration on International Cooperation in the Exploration and Use of Outer

Space for the Benefit and in the Interest of All States, Taking into Particular

Account the Needs of Developing Countries

CBD Convention on Biological Diversity

CD Conference on Disarmament

COP Conference of the Parties

COPUOS Committee on the Peaceful Uses of Outer Space

CPC Committee for Programme and Coordination

CRIC Committee for the Review of the Implementation of the Convention

DGACM Department for General Assembly and Conference Management

ECOSOC Economic and Social Council

EDF European Development Fund

EGNSS European Global Navigation Satellite Systems

EPA Environmental Protection Agency

ESA European Space Agency

EU European Union

FAO Food and Agriculture Organization of the United Nations

FfD Financing for Development

GA General Assembly Plenary

GAP Gender Action Plan

GGE Group of Governmental Experts

GGWSSI Great Green Wall Initiative for the Sahara and Sahel

GM Global Mechanism

HLPF High-level Political Forum on Sustainable Development

HRC Human Rights Council

ICJ International Court of Justice

INCD Intergovernmental Negotiating Committee

IPBES Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Ser-

vices

IPCC Intergovernmental Panel on Climate Change

IWAN International Asteroid Warning Network

LDN Land Degradation Neutrality

Liability Convention Convention on International Liability for Damage Caused by Space Objects

LSC Legal Subcommittee [of COPUOS]

MERET Managing Environmental Resources to Enable Transition Project

NAP National Action Plan

NASA [American] National Aeronautics and Space Administration

NSC National Steering Committee

Outer Space Treaty Treaty on Principles Governing the Activities of States in the Exploration and Use

of Outer Space, including the Moon and Outer Celestial Bodies

PACD Plan of Action to Combat Desertification

PGA President of the General Assembly

PRAIS Performance Review and Assessment of Implementation System

RAP Regional Action Programme

Registration Convention Convention on Registration of Objects Launched into Outer Space

SAMOA SIDS Accelerated Modalities of Action

SC Security Council

SDG Sustainable Development Goal

SIDS Small Island Developing States

SPI Science-Policy Interface

SPMAG Space Mission Planning Advisory Group

STSC Scientific and Technical Subcommittee [of COPUOS]

TST Technical Support Team

UN United Nations (Organization)

UN-SPIDER United Nations Platform for Space-based Information for Disaster Management

and Emergency Response

UNCCD United Nations Convention to Combat Desertification in those countries experi-

encing serious drought and / or desertification, particularly in Africa

UNCED United Nations Conference on Environment and Development

UNCOD United Nations Conference on Desertification

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

UNIDIR United Nations Institute for Disarmament Research

UNODA United Nations Office for Disarmament Affaires

UNOOSA United Nations Office for Outer Space Affaires

#### **COMMITTEE OVERVIEW**

#### Introduction

The United Nations (UN) Organization was founded in 1945, following the end of the Second World War. It was established with the aim to maintain international peace and security, foster diplomatic relations between states, achieve international cooperation in addressing global problems and promoting human rights, and harmonize state actions towards these ends. Article 7 of the Charter of the United Nations (1945) establishes six principal organs: the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat. Of these, only the membership of the General Assembly is universal, rendering it a unique forum for discussion within the UN system. Being the normative center of the UN, the General Assembly is a generator of ideas, a place of international debate, and a hub for new concepts and practices in the political, economic, humanitarian, social, and legal spheres.

#### Governance, structure and membership

All 193 UN Member States are represented in the General Assembly, with each Member State (MS) having one vote.<sup>5</sup> Additionally, the General Assembly may grant Observer status to intergovernmental organizations, non- governmental organizations, and non-Member States or entities, which allows them to participate in sessions but does not grant them voting rights.<sup>6</sup> The General Assembly makes the majority of its decisions via consensus.<sup>7</sup> When a vote is held, regular decisions require a simple majority of Member States present and voting, while important decisions require a two-thirds majority of members present and voting.<sup>8</sup>

The General Assembly has six Main Committees that are topically organized around its main fields of responsibility: the Disarmament and International Security Committee (First Committee); the Economic and Financial Committee (Second Committee); the Social, Humanitarian and Cultural Committee (Third Committee); the Special Political and Decolonization Committee (Fourth Committee); the Administrative and Budgetary Committee (Fifth Committee); and the Legal Committee (Sixth Committee). The Main Committees discuss agenda items assigned to them, adopt draft resolutions, and submit a report on their work to the Plenary. The Plenary then considers these reports and without debate votes on the adoption of the resolutions and decisions recommended. If the committee adopted the report by consensus, the Plenary also has to decide by consensus. However, if the committee adopted the report by vote, the Plenary is obligated to vote on the resolution or decision in question. The Plenary may also decide to address an issue without prior reference to a committee.

<sup>&</sup>lt;sup>1</sup> UN, Charter of the United Nations, 1945, Art. 1.

<sup>&</sup>lt;sup>2</sup> Ibid., Art. 7.

<sup>&</sup>lt;sup>3</sup> UN General Assembly, General Assembly of the United Nations [Website], n.d.

<sup>&</sup>lt;sup>4</sup> Thakur, *The United Nations, Peace and Security*, 2006, pp. 91, 162; UN General Assembly, *Functions and powers of the General Assembly* [Website], n.d.

<sup>&</sup>lt;sup>5</sup> UN, Charter of the United Nations, 1945, Art. 18.

<sup>&</sup>lt;sup>6</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 30.

<sup>&</sup>lt;sup>7</sup> New Zealand, *United Nations Handbook 2017-2018*, 2017, p. 12.

<sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 18.

<sup>&</sup>lt;sup>10</sup> New Zealand, *United Nations Handbook 2017-2018*, 2017, p. 23.

<sup>&</sup>lt;sup>11</sup> Smith, *Politics and Process at the United Nations: The Global Dance*, 2006, p. 161; Switzerland, *The PGA Handbook: A practical guide to the United Nations General Assembly*, 2011, p. 62.

<sup>&</sup>lt;sup>12</sup> New Zealand, United Nations Handbook 2017-2018, 2017, p. 23.

Each year, the General Assembly's regular session begins on the Tuesday of the third week in September. Since its 44th session in 1989, the General Assembly has been considered in session throughout the year. It busiest period, otherwise known as its main part, lasts from the start of the session in September until the end of December; it includes the general debate and most of the Main Committees' work. The remainder of the year, the so-called resumed part of the General Assembly, involves thematic debates, consultation processes, and working group meetings. In addition to the regular session, the General Assembly may also hold special sessions on individual issues at the request of either the Security Council or a majority of Member States.

The President of the General Assembly (PGA) is the largely ceremonial head of the General Assembly, elected each year by a simple majority of MS to a nonrenewable one-year term. The PGA's duties are to facilitate Plenary sessions by directing discussion, managing the administration of meetings, and enforcing the General Assembly Rules of Procedure. The PGA does not preside over all six General Assembly committees separately; rather, Chairs and Vice Chairs are the facilitators of individual committees. The PGA also performs executive duties, such as meeting regularly with the Secretary-General, the President of the Security Council, and the President of the Economic and Social Council; communicating with the press and the public; and organizing high-level meetings on certain thematic issues.

As a main organ of the UN, the General Assembly does not report to any other organ.<sup>22</sup> It receives substantive and organizational support from two important entities: the General Committee and the Department for General Assembly and Conference Management (DGACM).<sup>23</sup> The General Committee is comprised of the PGA and the 21 Vice-Presidents of the General Assembly, as well as the Chairpersons of the Main Committees; all position-holders are elected each session on a nonrenewable basis.<sup>24</sup> The General Committee's main duty, aside from making recommendations on organizational issues, is to allocate agenda items to the Plenary and the Main Committees from a preliminary list received from the UN Secretariat.<sup>25</sup> The DGACM acts as the intersection between the General Assembly and the Economic and Social Council and provides valuable technical secretariat support, mainly through its General Assembly and Economic and Social Council Affairs Division.<sup>26</sup> Within the UN Secretariat, other departments and offices offer both substantive and technical support to each of the six Main Committees.<sup>27</sup>

#### Mandate, functions and powers

The mandate of the GA is defined in Chapter IV (Articles 10-22) of the Charter of the United Nations. <sup>28</sup> As stipulated by Article 10, the GA is broadly tasked with discussing all issues within the framework of the UN

<sup>&</sup>lt;sup>13</sup> Ibid., p. 17.

<sup>&</sup>lt;sup>14</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 14.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Ibid., p. 16.

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Ibid., pp. 15 & 18.

<sup>&</sup>lt;sup>21</sup> Ibid., pp. 16 & 17.

<sup>&</sup>lt;sup>22</sup> UN, Charter of the United Nations, 1945, Art. 98.

<sup>&</sup>lt;sup>23</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 17.

<sup>&</sup>lt;sup>24</sup> Ibid., p. 18.

<sup>&</sup>lt;sup>25</sup> Ibid., p. 17.

<sup>&</sup>lt;sup>26</sup> Ibid., p. 24; UN DGACM, Functions of the Department [Website], n.d.

<sup>&</sup>lt;sup>27</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, pp. 63-68.

<sup>&</sup>lt;sup>28</sup> UN, Charter of the United Nations, 1945, Ch. IV.

Charter or related to the mandate of organs previewed in it.<sup>29</sup> Furthermore, the GA may make relevant recommendations to Member States or to the Security Council.<sup>30</sup>

Functions and powers of the GA include the following:

- While the GA may address matters of international peace and security, any such matters requiring action must also be referred to the SC. Further, the GA may not make recommendations related to any dispute or situation in respect of which the SC is exercising its functions.<sup>31</sup> The only exception is if the SC fails to reach a decision on an issue due to lack of consensus among its permanent members, at which point the GA may convene an emergency special session within 24 hours to address the issue in question.<sup>32</sup>
- The GA my initiate studies and make recommendations to promote international cooperation in the political, economic, social, cultural, educational, or health fields; the development and codification of international law; or the realization of fundamental human rights and freedoms.<sup>33</sup>
- The GA may make recommendations "for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations.<sup>34</sup>
- The GA may create subsidiary organs "as it deems necessary for the performance of its functions." Main Committees are therefore capable of introducing resolutions that can lead to the creation and funding of agencies or meetings, as well as ad hoc committees or working groups that consider a particular question with the purpose of reporting to the General Assembly. 36
- The GA receives and considers regular reports from the SC and from other UN organs.<sup>37</sup>
- The GA considers and approves the UN's budget and apportions expenses to be borne by individual Member States.<sup>38</sup>
- The GA "elects the 10 non-permanent members of the Security Council and the 54 members of the Economic and Social Council. Together with the Security Council, but voting independently, it elects the members of the International Court of Justice." 39
- The GA also elects the members of its subsidiary bodies, such as the Human Rights Council (HRC) and the Peacebuilding Commission.<sup>40</sup>
- Based on the recommendation of the SC, the GA appoints the Secretary-General.<sup>41</sup>

Only resolutions adopted by the Plenary are put into effect as official resolutions of the GA.<sup>42</sup> However, unlike SC resolutions enacted under Chapter VII of the Charter, GA resolutions are not legally binding on the MS even after adoption by the Plenary.<sup>43</sup> Nonetheless, GA resolutions represent policy norms reached by consensus among MS, and they often lead to concrete action by the international community.<sup>44</sup>

<sup>&</sup>lt;sup>29</sup> Ibid., Art. 10.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid., Arts. 11-12.

<sup>&</sup>lt;sup>32</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 15.

<sup>&</sup>lt;sup>33</sup> UN, Charter of the United Nations, 1945, Art. 13; UN General Assembly, Functions and Powers of the General Assembly.

<sup>&</sup>lt;sup>34</sup> UN, Charter of the United Nations, 1945, Art. 14.

<sup>&</sup>lt;sup>35</sup> Ibid., Art. 22.

<sup>&</sup>lt;sup>36</sup> Weis, The United Nations and Changing World Politics, 2004, p. 161.

<sup>&</sup>lt;sup>37</sup> UN, Charter of the United Nations, 1945, Art. 15.

<sup>&</sup>lt;sup>38</sup> Ibid., Art. 17.

<sup>&</sup>lt;sup>39</sup> New Zealand, United Nations Handbook 2017-2018, 2017, p. 12.

<sup>&</sup>lt;sup>40</sup> Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, pp. 72-7

<sup>&</sup>lt;sup>41</sup> New Zealand, United Nations Handbook 2017-2018, 2017, p. 12.

<sup>&</sup>lt;sup>42</sup> UN General Assembly, Functions and Powers of the General Assembly.

<sup>43</sup> Ibid.

<sup>44</sup> Ibid.

#### Recent sessions and current priorities

The following agenda for the 74<sup>th</sup> session of the General Assembly (2019-2020) was adopted in resolution 74/251 of 20 September 2019:

- A. Promotion of sustained economic growth and sustainable development in accordance with the relevant resolutions of the General Assembly and recent United Nations conferences;
- B. Maintenance of international peace and security;
- C. Development of Africa;
- D. Promotion of human rights;
- E. Effective coordination of humanitarian assistance efforts;
- F. Promotion of justice and international law;
- G. Disarmament;
- H. Drug control, crime prevention and combating international terrorism in all its forms and manifestations;
- I. Organizational, administrative and other matters.<sup>45</sup>

The General Assembly has not yet adopted the priorities for the biennium 2020-2021. The Committee for Programme and Coordination (CPC), which set the priorities for the current biennium 2018-2019, recommended that the General Assembly reviews all 28 program plans of the proposed program budget for 2020, ranging from security- and human rights-related to social and economic topics, at its 74th session.<sup>46</sup> Said session opened on 17 September 2019 and was followed by high-level Debate from 23-30 September 2019.<sup>47</sup> The President of the 74<sup>th</sup> session of the General Assembly is Nigeria's former Permanent Representative to the UN, Tijjani Muhaammad-Bande.<sup>48</sup> He stated that "[p]eace and security, poverty eradication, zero hunger, quality education, climate action and inclusion will constitute a major priority of [his] presidency."<sup>49</sup> At the top of his agenda, he also put the promotion of human rights, women's and youth empowerment, and gender parity within the UN system.<sup>50</sup>

Additionally, on 23 September 2019, the UN Secretary-General convened a Climate Summit.<sup>51</sup> Following the opening of the 74th General Debate, the General Assembly held a meeting of the UN High-level Political Forum on Sustainable Development (HLPF), and convened a high-level dialogue on financing for development (FfD).<sup>52</sup>

Furthermore, the General Assembly held a high-level meeting on the elimination of nuclear weapons, and one on the progress made in addressing the priorities of Small Island Developing States (SIDS) through the implementation of the SIDS Accelerated Modalities of Action (SAMOA) Pathway.<sup>53</sup> In its 74<sup>th</sup> session, the General Assembly will also commemorate the founding of the UN 75 years ago being "a unique opportunity for us to reduce the trust deficit between nations."<sup>54</sup>

<sup>&</sup>lt;sup>45</sup> UN General Assembly, Agenda of the seventy-fourth session of the General Assembly (A/RES/74/251), 2019.

<sup>&</sup>lt;sup>46</sup> UN General Assembly, Report of the Committee for Programme and Coordination (A/74/16), 2019.

<sup>&</sup>lt;sup>47</sup> IISD, 74<sup>th</sup> Session of the UN General Assembly (UNGA 74), 2019.

<sup>&</sup>lt;sup>48</sup> UN News, Newly-elected Nigerian UN General Assembly President pledges focus on 'peace and prosperity' for most vulnerable, 2019.

<sup>&</sup>lt;sup>49</sup> Ibid.

<sup>50</sup> Ibid.

<sup>&</sup>lt;sup>51</sup> IISD, 74<sup>th</sup> Session of the UN General Assembly (UNGA 74), 2019.

<sup>&</sup>lt;sup>52</sup> Ibid.

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#### Conclusion

The General Assembly prioritizes the maintenance of international peace and security, as well as disarmament in its 74<sup>th</sup> session.<sup>55</sup> As outer space is key to the resolution of these issues, the General Assembly has decided to hold discussions on possible challenges to space security and sustainability, reiterated the commitment to not place weapons in outer space first, as well as to develop further practical measures to prevent an arms race in outer space.<sup>56</sup> These issues have long been of concern to the UN (see Topic I below) and will continue to be of immense importance for the maintenance of global peace.

The 74<sup>th</sup> session of the General Assembly also sets priorities on economic growth and sustainable development with respect to relevant resolutions adopted by the General Assembly and other UN conferences, as well as on development in Africa. This prioritization raises several questions on sustainability on this continent. Not only is Africa the poorest of all continents, with the majority of its countries having a rate of extreme poverty higher than 25%.<sup>57</sup> Many of its regions are also still struggling with sustainable development, especially regarding farming techniques that often even pose a risk to the environment.<sup>58</sup> This issue is further exacerbated by the climatic conditions prevailing on the African continent, altogether contributing to the immense rate of areas affected by desertification. Thus it is essential for the General Assembly to discuss the implementation of the United Nations Convention to Combat Desertification (UNCCD), for desertification 25 years after the adoption of the convention still is a crucial issue in many parts of the African Continent (see Topic II below).

As the main policymaking and representative organ of the UN, the General Assembly plays a key role in the UN system and is in its characteristic as a forum where all issues within the scope of the UN Charter can be discussed multilaterally, unique.<sup>59</sup> Outcomes reached by the General Assembly may define new norms that can promote peace, human rights, and development.<sup>60</sup> Going forward, the General Assembly will continue to be a cornerstone of international efforts towards a better world.<sup>61</sup>

<sup>&</sup>lt;sup>55</sup> UN General Assembly, Agenda of the seventy-fourth session of the General Assembly (A/RES/74/251), 2019.

<sup>56</sup> Ibid.

<sup>&</sup>lt;sup>57</sup> Understanding Money, *Mapping Extreme Poverty Around the World*, 2018.

<sup>&</sup>lt;sup>58</sup> Agula, Akundugu, Dittoh & Mabe, *Promoting sustainable agriculture in Africa through ecosystem-based farm management practices: evidence from Ghana*, 2018.

<sup>&</sup>lt;sup>59</sup> UN General Assembly, Functions and powers of the General Assembly [Website], n.d.

<sup>&</sup>lt;sup>60</sup> Thakur, *The United Nations, Peace and Security*, 2006, p. 162.

<sup>&</sup>lt;sup>61</sup> Sciora, Stevenson, Planet UN: The United Nations Confronting the Challenges of the 21st Century, 2009.

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United Nations News. (2019). *Newly-elected Nigerian UN General Assembly President pledges focus on 'peace and prosperity' for most vulnerable* [News Article]. Retrieved 31 July 2019, from: <a href="https://news.un.org/en/story/2019/06/1039801">https://news.un.org/en/story/2019/06/1039801</a>.

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### I. INTERNATIONAL COOPERATION IN THE PEACEFUL USES OF OUTER SPACE

#### Introduction

The founding of the United Nations in 1945 almost perfectly coincided with the beginning of the space age. The space age has seen several milestones, including the first human to orbit the Earth, Yuri Gagarin in 1961, and the first moon landing in 1969, Apollo 11.63 The first international space mission, the Apollo Soyuz Test Project, was conducted by the United States and the Soviet Union in 1975, putting an end to the cold-war-competition between the two countries in the realm of space exploration. After 1975, the focus of their space programmes shifted from exploration to the development of space stations and reusable orbital vehicles. The Soviet Union had already launched its first space station, the Salyut-1, in 1971, while the United States began using the space shuttle in 1981. Since NASA discontinued the programme in 2011, the United States has relied on Russian Soyuz vehicles to send astronauts to space.

While it used to be the case that only states had the capabilities to engage in space exploration, a number of private companies have managed to dramatically reduce the cost of space flight over the past 20 years.<sup>69</sup> Private space flight raises questions of liability, as under the current legal regime states are liable for damages caused by space objects launched from their territory, and *only* states have the ability to demand compensation for damages caused to them or their space objects (see below the concept of the "launching state").<sup>70</sup> Space has also started to become a tourism destination, with the first space tourist having boarded the ISS in 2001.<sup>71</sup> However, most space-related activity is more concerned with Earth than with the exploration of space itself and includes telecommunication, navigation and disaster relief among others.<sup>72</sup>

Since the UN began its work concerning the peaceful uses of outer space, the number of actors in outer space has increased dramatically, and the risk of militarization of space has risen with it.<sup>73</sup> So long as certain actors see space as a potential arena for war, this trend will continue.<sup>74</sup> As there are still important states holding this view, the threat of an arms race in outer space remains real.<sup>75</sup>

#### International Framework

The body of law governing space-related activities is referred to as "space law".<sup>76</sup> Space is generally considered part of the common heritage of mankind, meaning that no state can claim sovereignty over it or any celestial bodies.<sup>77</sup> The General Assembly laid the foundations of space law in 1963, when it passed resolution 1962 (XVIII), entitled *Declaration of Legal Principles Governing the Activities of States in the* 

<sup>62</sup> UN, History of the UN [Website], n.d.

<sup>&</sup>lt;sup>63</sup> UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.

<sup>64</sup> Ibid.

<sup>65</sup> Samuels, Richard J. (ed.), Encyclopedia of United States National Security, 2005, p. 669.

<sup>&</sup>lt;sup>66</sup> UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.

<sup>&</sup>lt;sup>67</sup> NASA, Space Shuttle: Mission Archives: STS-1 [Website], n.d.

<sup>&</sup>lt;sup>68</sup> Howell, Elizabeth, NASA Astronauts Will Still Ride Russian Rockets After US Craft Arrive [Website], 2018.

<sup>&</sup>lt;sup>69</sup> Zapata, Edgar, An Assessment of Cost Improvements in the NASA COTS/CRS Program and Implications for Future NASA Missions, 2017.

<sup>&</sup>lt;sup>70</sup> UNOOSA, *Information for Industry & the Private Sector* [Website], n.d.

<sup>&</sup>lt;sup>71</sup> UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.

<sup>&</sup>lt;sup>72</sup> UNOOSA, Benefits of Space for Humankind [Website], n.d.

<sup>&</sup>lt;sup>73</sup> UN News, UN Disarmament Commission debates ways to prevent arms race in outer space, 2018.

<sup>74</sup> Ihid

<sup>&</sup>lt;sup>75</sup> Youssef, Nancy, and Gordon Lubold, *Trump Announces Creation of U.S. Space Command* [Website], 2019.

<sup>&</sup>lt;sup>76</sup> UNOOSA, Space Law [Website], n.d.

<sup>77</sup> Ibid.

Exploration and Uses of Outer Space.<sup>78</sup> Amid further concerned with the future use of nuclear energy the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water (Partial Test Ban Treaty, PTBT) was signed in 1963 and came into effect later that same year.<sup>79</sup>

These actions were followed by the five treaties which are commonly considered to be at the center of space law. 80 Together, they provide the legal framework for international cooperation in space. 81 The first of these is the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (Outer Space Treaty, 1967). 82 Its most important provision is Article IV, the prohibition on the positioning of weapons of mass destruction in Earth orbit, outer space, or on celestial bodies. 83

The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Rescue Agreement, 1968) constitutes a further development of the principle that all states shall provide all possible assistance to astronauts in the event of accident, distress or emergency landing, which was first stated in the Outer Space Treaty.<sup>84</sup> The Rescue Agreement further clarifies the obligations and realms of jurisdiction of states in space and over space objects.<sup>85</sup>

According to the *Convention on International Liability for Damage Caused by Space Objects* (Liability Convention, 1972), launching states are liable for damage caused by their space objects. <sup>86</sup> A launching state is defined in Article I as the state launching a space object, or the state from whose territory such an object is launched. <sup>87</sup> Prompted by the development towards more international cooperation in the uses of space, including between non-governmental entities, the General Assembly further clarified the application of the term "launching state" in resolution 59/115 (2005). <sup>88</sup> In this resolution, the General Assembly recommended that states provide continual supervision of all non-governmental entities active in outerspace, and that all future agreements states might make be in accordance with the Liability Convention.

The fourth major treaty, the *Convention on Registration of Objects Launched into Outer Space* (Registration Convention, 1975) is an expression of the desire of states to simplify the identification of space objects. <sup>89</sup> It provides the basis for the *United Nations Register of Objects Launched into Outer Space*, which is administered by the Secretary General and serves as the mechanism to determine which states bear responsibility for which space objects. <sup>90</sup> The mechanism maintains a database of more than 88% of all manmade space objects launched into Earth orbit or beyond. <sup>91</sup> General Assembly resolution 62/101 (2007) made further recommendations on the registration of joint launches of space objects. <sup>92</sup> These included,

82 Ibid.

<sup>&</sup>lt;sup>78</sup> See UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.; UN General Assembly, Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (A/RES/1962(XVIII)), 1963

<sup>&</sup>lt;sup>79</sup> UN General Assembly, Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I)), 1945; Nuclear Threat Initiative, Treaty Banning Nuclear Tests in the Atmosphere, in Outer Space and Under Water (Partial Test Ban Treaty) (PTBT) [Website], 2011.

<sup>80</sup> UNOOSA, Space Law Treaties and Principles [Website], n.d.

<sup>81</sup> Ibid.

<sup>83</sup> UN, United Nations Treaties and Principles on Outer Space, 2002, p.4.

<sup>&</sup>lt;sup>84</sup> Ibid., p. 9.

<sup>&</sup>lt;sup>85</sup> Ibid., p. 9-12.

<sup>&</sup>lt;sup>86</sup> UNOOSA, Convention on the Liability for Damage Caused by Space Objects [Website], n.d.

<sup>&</sup>lt;sup>87</sup> UN, United Nations Treaties and Principles on Outer Space, 2002, p. 13.

<sup>88</sup> UN General Assembly, Applications of the concept of the "launching state" (A/RES/59/115), 2004.

<sup>&</sup>lt;sup>89</sup> UNOOSA, Convention on Registration of Objects Launched into Outer Space [Website], n.d.

<sup>&</sup>lt;sup>90</sup> UNOOSA, *United Nations Register of Objects Launched into Outer Space* [Website], n.d.

<sup>91</sup> Ibid.

<sup>&</sup>lt;sup>92</sup> UN General Assembly, Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects (A/RES/62/101), 2007.

inter alia, encouraging Member States who had until then not ratified the Registration Convention to do so, as well as asking UNOOSA to provide a model registration form.<sup>93</sup> 18 additional states have since acceded, succeeded, or ratified the Registration Convention, and a standardized Registration Information Submission Form is available on UNOOSA's website.<sup>94</sup>

The fifth major treaty, the *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* (Moon Agreement, 1979) entered into force in 1984.<sup>95</sup> Only 18 states have ratified the treaty, the least of all five treaties.<sup>96</sup> The most controversial section of the Moon Agreement states that all natural resources on the moon are part of the common heritage of mankind, thereby prohibiting their exploitation except through an international regime.<sup>97</sup>

The five treaties are complimented by the five declarations and legal principles which include aforementioned General Assembly resolution 1962 (XIII), as well as the resolution 37/92 on "Broadcasting Principles" (1982), resolution 41/65 on "Remote Sensing Principles" (1986), and resolution 47/68 "Nuclear Power Sources" (1992). Resolution 51/122, named the *Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries* (Benefits Declaration) of 1996 is of particular importance to the topic under discussion, as it encourages cooperation among states in order to help interested states develop the capabilities to engage in space exploration. 99

In 2013, the General Assembly passed resolution 68/74, wherein it recommended that states should issue authorization and ensure supervision over space activities both within its territory and by its citizens outside of its territory, except in such cases where another state is already exercising jurisdiction, so as to avoid duplicative requirements and avoid unnecessary burdens.<sup>100</sup>

#### Regional Framework

Since space exploration is an extremely costly endeavor, cooperation among states is needed to allow all states, irrespective of their economic and scientific development, to participate. The *European Space Agency* (ESA) provides a primary example of how regional cooperation can be effective in this regard. ESA was founded in 1975 and has 22 Member States as of August 2019. ESA is its own international organization, not a subsidiary organ of the European Union (EU), although many states are members of both organizations. Its main programmes include the Galileo satellite navigation system, the Earth observation system Copernicus, which focuses mainly on issues involving climate change, and the space probe Rosetta, which became the first spacecraft to land on an asteroid. The EU first proposed the *Draft International Code of Conduct for Outer Space Activities* in 2008, with the latest draft dating back to

<sup>93</sup> Ibid.

<sup>&</sup>lt;sup>94</sup> UN, Status of the Registration Convention [Website], n.d.; UNOOSA, Registration Information Submission Form (as at 1 January 2010), n.d.

<sup>95</sup> UNOOSA, Space Law Treaties and Principles [Website], n.d.

<sup>&</sup>lt;sup>96</sup> UN, Status of the Moon Agreement [Website], n.d.

<sup>&</sup>lt;sup>97</sup> Listner, Michael, The Moon Treaty: failed international law or waiting in the shadows? [Website], 2011.

<sup>98</sup> Ibid.

<sup>&</sup>lt;sup>99</sup> UN General Assembly, *Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and the Interest of All States, Taking into Particular Account the Needs of Developing Countries* (A/RES/51/122), 1996.

<sup>&</sup>lt;sup>100</sup> UN General Assembly, Recommendations on national legislation relevant to the peaceful exploration and use of outer space (A/RES/68/74), 2013.

<sup>&</sup>lt;sup>101</sup> UN General Assembly, Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and the Interest of All States, Taking into Particular Account the Needs of Developing Countries (A/RES/51/122), 1996.

<sup>&</sup>lt;sup>102</sup> ESA, *History of Europe in Space* [Website], 2013.

<sup>&</sup>lt;sup>103</sup> Ibid.; ESA, ESA member states, Canada and Slovenia [Website], n.d.

<sup>&</sup>lt;sup>104</sup> ESA, ESA Convention [Website], n.d.

<sup>&</sup>lt;sup>105</sup> Böhnhardt, Hermann, 104 Hours With Philae [Website], 2014.

2013.<sup>106</sup> The draft aims at enhancing the safety, security, and sustainability of all outer space activities by forming a regime of transparency and confidence-building measures.<sup>107</sup> Additionally, the *Treaty of Lisbon* (2009) provides an important legal framework for European space exploration in the fields of the EU's work.<sup>108</sup>

The African Union (AU) adopted the *African Space Policy and Strategy* in 2016, which was later endorsed by the General Assembly.<sup>109</sup> The General Assembly further noted the *African Space Policy and Strategy* as a first step towards an African Space Program to be realized within the framework of the *African Union Agenda 2063*, the AU's strategic framework for development.<sup>110</sup> The AU believes that space science and technology can make crucial contributions in solving the regions socio-economic challenges.<sup>111</sup>

The Space Conference of the Americas has been held regularly since the 1990s. 112 Its fifth installment in 2007 resulted in the *Declaration of San Francisco de Quito*, which calls upon states to contribute to international disarmament and effectively ban of weapons of mass destruction. 113

The *Asia-Pacific Space Cooperation Organization* (APSCO) was inaugurated in 2008.<sup>114</sup> APSCO has established a sharing network for satellite remote sensing data, a disaster management network, and an education and training network among its members.<sup>115</sup>

#### The Role of the International System

The UN began its efforts to maintain space for peaceful purposes a few months before the first launch of a man-made satellite, Sputnik. <sup>116</sup> One year after the launch of Sputnik by the Soviet Union in October 1957, the General Assembly passed resolution 1348 (XIII), which established the ad hoc *Committee on the Peaceful Uses of Outer Space* (COPUOS) as the first UN agency specifically concerned with space. <sup>117</sup> In 1959, resolution 1472 (XIV) transformed COPUOS into a permanent institution, citing as one of its reasons the imperative that the exploration of outer space be of benefit to all humankind. <sup>118</sup> COPUOS is tasked by the General Assembly with the review of peaceful international cooperation in space, the study of space-related activities that could be undertaken by the UN, as well as the study of legal issues that arise out of the exploration of space. <sup>119</sup> It has two subcommittees: the Scientific and Technical Subcommittee (STSC), and the Legal Subcommittee (LSC). <sup>120</sup> It reports to the Special Political and Decolonization Committee (Fourth Committee) of the General Assembly. <sup>121</sup> The *United Nations Office for Outer Space Affairs* (UNOOSA) serves as the secretariat to COPUOS. <sup>122</sup> Additionally, UNOOSA is responsible for maintaining the aforementioned *United Nations Register of Objects launched into outer Space*, and it maintains a 24-hour hotline for satellite imagery requests during disasters. <sup>123</sup> It also conducts workshops and training

<sup>&</sup>lt;sup>106</sup> Secure World Foundation, *Draft International Code of Conduct for Outer Space Activities Fact Sheet*, 2014.

<sup>107</sup> Ihid

<sup>&</sup>lt;sup>108</sup> Béclard, Julien, *The Lisbon Treaty and the Evolution of European Space Governance*, 2013.

<sup>&</sup>lt;sup>109</sup> UN General Assembly, *International cooperation in the peaceful uses of outer space* (A/RES/73/91), 2018.

<sup>110</sup> Ibid.; AU, Agenda 2063. The Africa we want [Website], n.d.

<sup>&</sup>lt;sup>111</sup> AU, African Space Strategy. Towards social, political, and economic integration, 2017, p. 3.

<sup>&</sup>lt;sup>112</sup> UNOOSA, Space Conference of the Americas. General Information, n.d.

<sup>&</sup>lt;sup>113</sup> STSC, Declaration of San Francisco de Quito of the Difth Space Conference of the Americas. Regional Space Agreement for Human Security and Development and Action Plan, 2007.

<sup>&</sup>lt;sup>114</sup> APSCO, About APSCO [Website], n.d.

<sup>115</sup> Ibid.

<sup>&</sup>lt;sup>116</sup> UNODA, *Outer Space* [Website], n.d.

<sup>&</sup>lt;sup>117</sup> UN General Assembly, *Questions on the peaceful use of outer space* (A/RES/1348(XIII)), 1958.

<sup>&</sup>lt;sup>118</sup> UN General Assembly, International co-operation in the peaceful uses of outer space (A/RES/1472(XIV)), 1959.

<sup>&</sup>lt;sup>119</sup> Ibid.; UNOOSA, Committee on the Peaceful Uses of Outer Space [Website], n.d.

<sup>&</sup>lt;sup>120</sup> Ibid.

<sup>121</sup> Ibid.

<sup>&</sup>lt;sup>122</sup> UNOOSA, Roles and Responsibilities [Website], n.d.

<sup>123</sup> Ibid.

courses on topics including remote sensing, satellite navigation, and basic space science for the benefit of developing nations. 124

In 1966, COPUOS adopted a report recommending the holding of the UNISPACE conference on peaceful uses of outer space. 125 Three such "UNISPACE" conferences took place in 1968, 1982, and 1999, leading to the creation of the United Nations Programme on Space Applications, the post of "Expert on Space Application" within UNOOSA, and the establishment of regional centres on space science and technology education. 126 The first of these was opened in India in 1995, with additional centres being opened in Africa, Mexico, and western Asia. 127 In 1999, UNISPACE III concluded with The Space Millennium: Vienna Declaration on Space and Human Development, which recognized the importance of space science and applications for human society and well-being, including in the realms of disaster management, climate modeling, navigation and communication, and fundamental knowledge of the universe. 128 Five years later, COPUOS reviewed the progress made towards the goals set out at UNISPACE III in its UNISPACE +5 report. 129 The report stated that the establishment of "action teams" under the voluntary leadership of Member States had been effective to work towards the goals that had been set out. 130 These action teams are formed by Member States and work on specific issues. 131 For instance, the action team chaired by Malaysia and Greece worked on the improvement of knowledge-sharing through the promotion of universal access to space-based communication services.<sup>132</sup> The report further contained a very detailed plan of action. 133 Some of its key recommendations were to use space to support the Sustainable Development Agenda, and to maximize the benefits of existing space capabilities for disaster management. 134

In 2006, the General Assembly created the *United Nations Platform for Space-based Information for Disaster Management and Emergency Response* (UN-SPIDER), which is managed by UNOOSA.<sup>135</sup> It aims to facilitate knowledge exchange and capacity building, especially in developing countries.<sup>136</sup> Its Technical Advisory Support is based on three pillars: Technical Advisory Missions, Capacity Building and Facilitation of Emergency Support/Technical Support.<sup>137</sup>

Space exploration has historically been conducted mostly by developed countries.<sup>138</sup> In 1996, the General Assembly passed the aforementioned Benefits Declaration, declaring the fostering of space capabilities in interested states as one of the principal goals of space-related international cooperation<sup>139</sup> In 2016, UNOOSA announced the first ever UN-mission to space, called *Dream Chaser*, which will be uniquely ac-

<sup>124</sup> Ibid.

<sup>&</sup>lt;sup>125</sup> UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.

<sup>&</sup>lt;sup>126</sup> UNOOSA, UNISPACE Conferences [Website], n.d.

<sup>127</sup> Ibid.

<sup>&</sup>lt;sup>128</sup> UNISPACE III, The Space Millennium: Vienna Declaration on Space and Human Development, 1999.

<sup>129</sup> UNOOSA, UNISPACE Conferences [Website], n.d.

<sup>&</sup>lt;sup>130</sup> COPUOS, Report of the Committee on the Peaceful Uses of Outer Space on the implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III), 2004, p. iii.

<sup>&</sup>lt;sup>131</sup> Ibid., p. 7.

<sup>&</sup>lt;sup>132</sup> Ibid., p.7.

<sup>&</sup>lt;sup>133</sup> Ibid., p. 57-77.

<sup>&</sup>lt;sup>134</sup> Ibid., p. 57; Ibid., p. 64.

<sup>&</sup>lt;sup>135</sup> UN General Assembly, *United Nations Platform for Space-based Information for Disaster Management and Emergency Response* (A/RES/61/110), 2006.; UNOOSA, *Roles and Responsibilities* [Website], n.d.

<sup>&</sup>lt;sup>136</sup> UN Bonn, United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) [Website], n.d.

<sup>&</sup>lt;sup>137</sup> UN-SPIDER, Newsletter May 2012, 2012.

<sup>138</sup> UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.

<sup>&</sup>lt;sup>139</sup> UN General Assembly, *Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and the Interest of All States, Taking into Particular Account the Needs of Developing Countries* (A/RES/51/122), 1996.

cessible to countries without a developed space industry. The launch of the mission is to take place in 2021. A first briefing on the technical capabilities of the mission was held in Vienna on 10 January 2018. The Call for Interest concerning the Landing Site for Dream Chaser will be open until 30 April 2020. 143

In 2013, the *Group of Governmental Experts* (GGE), which the General Assembly had previously asked the Secretary General (SG) to set up, released its report on *Transparency and Confidence-building Measures in Outer Space Activities*.<sup>144</sup> In 2017, the General Assembly passed a resolution encouraging Member States to review and implement the measures proposed by the GGE.<sup>145</sup>

Another space-related challenge facing the international community is the issue of space debris and the danger posed to live on Earth by possible asteroid impacts (Earth defense). The Space Debris Mitigation Guidelines proposed by COPUOS were endorsed by the General Assembly in resolution 62/217. About 2000 of the 18000 known near-Earth objects are considered to be potentially hazardous. In United Nations International Conference on Near Earth Objects was held at UNHQ in 1995. In 2013, the General Assembly welcomed the recommendations for an international response to the near-Earth impact threat. These recommendations included the establishment of an *International Asteroid Warning Network* (IWAN), a network linking institutions monitoring potentially hazardous near-Earth objects, and of a *Space Mission Planning Advisory Group* (SMPAG) responsible for laying out the framework, timeline and options for initiating and executing response activities. Both IWAN and SMPAG have since been established.

The UN also engages in public outreach to raise awareness of space-related issues in the general public: 1992 was proclaimed as the International Space Year by the General Assembly in resolution 44/46 (1989) and *Space Week* has been celebrated annually since 1999.<sup>153</sup> It was created by the General Assembly and takes place from October 4<sup>th</sup>, the day Sputnik I launched in 1957, to October 10<sup>th</sup>, the day the Outer Space Treaty (see above) entered into force in 1967.<sup>154</sup>

Space and the Sustainable Development Goals (SDGs)

The 2030 Agenda for Sustainable Development was formulated in General Assembly resolution 70/1 (2015).<sup>155</sup> In the resolution, the General Assembly explicitly recognized the important role played by Earth

<sup>142</sup> UNOSA, *Orbital Space Mission* [Website], n.d.

<sup>150</sup> UN General Assembly, *International cooperation in peaceful uses of outer space* (A/RES/68/75), 2013.

<sup>&</sup>lt;sup>140</sup> UNOOSA, The United Nations and Sierra Nevada Corporation Announce First Ever Dedicated United Nations-Dream Chaser Space Mission [Website], 2016.

<sup>141</sup> Ibid.

<sup>&</sup>lt;sup>143</sup> UNOOSA, Proposed Orbital Space Mission. UNOOSA Call for Interest for Landing Site, n.d., p. 4.

<sup>&</sup>lt;sup>144</sup> UN General Assembly, *Transparency and confidence-building measures in outer space activities* (A/RES/65/68), 2010.; UN General Assembly, *Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities.* Note by the Secretary General (A/68/189), 2013.

<sup>&</sup>lt;sup>145</sup> UN General Assembly, Transparency and confidence-building measures in outer space activities (A/RES/72/56), 2017.

<sup>&</sup>lt;sup>146</sup> UN General Assembly, *International cooperation in the peaceful uses of outer space* (A/RES/62/217), 2007.

<sup>&</sup>lt;sup>148</sup> UNOOSA, *Near-Earth Objects and Planetary Defence*, 2018, p. 9.

<sup>&</sup>lt;sup>149</sup> Ibid., p. 10.

<sup>&</sup>lt;sup>151</sup> COPUOS, Report of the Scientific and Technical Subcommittee on its fiftieth session, held in Vienna from 11 to 22 February 2013, Annex III, 2013.

<sup>&</sup>lt;sup>152</sup> UNOOSA, *IWAN* [Website], n.d.; UNOOSA, *SMPAG* [Website], n.d.

<sup>&</sup>lt;sup>153</sup> UNOOSA, A Timeline of the Exploration and Peaceful Use of Outer Space [Website], n.d.

<sup>&</sup>lt;sup>154</sup> UN General Assembly, *Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space* (A/RES/54/68), 1999.

<sup>&</sup>lt;sup>155</sup> UN General Assembly, Transforming our world: the 2030 Agenda for sustainable development (A/RES/70/1), 2015.

observation and geolocation in achieving the SDGs.<sup>156</sup> The UNOOSA estimates that about 40% of the 169 sub-targets of the SDGs directly benefit from the use of European Global Navigation Satellite Systems (EGNSS) and Copernicus applications.<sup>157</sup> While space applications cannot contribute to the achievement of all SDGs to the same degree, they can make contributions to all 17.<sup>158</sup> Geospatial data can help increase agricultural yields (SDG 2: zero hunger), help make cities more efficient (SDG 11: sustainable cities and communities) and help find ways to reduce pollution (SDG 13: climate action).<sup>159</sup> In its joined report with the European Global Navigation Satellite System Agency (GSA) titled *European Global Navigation Satellite System and Copernicus: Supporting the Sustainable Development Goals*, UNOOSA outlined the positive impact space technology is already having on the SDGs.<sup>160</sup> For instance, EGNNS and Copernicus can contribute to SDG 7: affordable and clean energy, by improving infrastructure management, power grid synchronization, and the forecasting of solar and wind energy production.<sup>161</sup> In 2019, COPUOS released a zero draft for a space 2030 agenda for sustainable development.<sup>162</sup> Goals include improving the economic benefits of space activity, improving access to space for all, and strengthening international cooperation in the peaceful uses of outer space.<sup>163</sup>

#### The possibility of an arms race in space

The possibility of a militarization of outer space has been of chief concern to the UN since the beginning of the space age. <sup>164</sup> With several states planning the establishment of military forces specifically dedicated to space activities, the possibility of an arms race in outer space continues to pose a threat to global security. <sup>165</sup> In resolution 73/30 (2018), the General Assembly explicitly recognized the existing legal framework does not by itself guarantee the prevention of an arms race in outer space. <sup>166</sup> The committee also noted that there had, in principle, been no objection to the re-establishment of the *Ad Hoc Committee on the Prevention of an Arms Race in Outer Space*, which had previously been established in 1985, at the *Conference on Disarmament* (CD) in 1992. <sup>167</sup> In 2008, the Russian Federation submitted a draft of its proposed *Prevention of an Arms Race in Space* (PAROS) treaty to the CD. <sup>168</sup> As of 2017, the draft was still under discussion at the CD. <sup>169</sup> The *United Nations Institute for Disarmament Research* (UNIDIR) holds annual conferences on the implications of space for global security. <sup>170</sup> In its report from 2019, UNIDIR states that the current framework for discussion needs to be improved in some key areas. <sup>171</sup> In particular, it questioned whether the prevention of an arms race in outer space is even the right goal, citing the fact that much of space technology is dual use, and that the parameters used to prevent such an arms race might be too constricting of civilian space programs. <sup>172</sup>

<sup>156</sup> Ibid.

<sup>&</sup>lt;sup>157</sup> UNOOSA, European Global Navigation Satellite System and Copernicus: Supporting the Sustainable Development Goals, 2018, p. 2.

<sup>&</sup>lt;sup>158</sup> Ibid., p. 3

<sup>159</sup> UNOOSA, Space Supporting the Sustainable Development Goals [Website], n.d.

<sup>&</sup>lt;sup>160</sup> UNOOSA, European Global Navigation Satellite System and Copernicus: Supporting the Sustainable Development Goals, 2018.

<sup>&</sup>lt;sup>161</sup> Ibid., p. 45

<sup>&</sup>lt;sup>162</sup> COPUOS, Zero draft. The "Space2030" Agenda: Space as a driver of sustainable development, 2019.

<sup>163</sup> Ihid

<sup>&</sup>lt;sup>164</sup> UN News, UN Disarmament Commission debates ways to prevent arms race in outer space, 2018.

<sup>&</sup>lt;sup>165</sup> UNIDIR, UNIDIR Space Security Conference 2019. Supporting Diplomacy: Clearing the Path for Dialogue, 2019, p. 1.

 $<sup>^{166}</sup>$  UN General Assembly, *Prevention of an arms race in outer space* (A/RES/73/30), 2018.

<sup>167</sup> Ibid.

<sup>&</sup>lt;sup>168</sup> Nuclear Threat Initiative, *Proposed Prevention of an Arms Race in Outer Space (PAROS) Treaty* [Website], 2017.

<sup>169</sup> Ihid

<sup>&</sup>lt;sup>170</sup> UNIDIR, Annual Outer Space Security Conference [Website], n.d.

 $<sup>^{171}</sup>$  UNIDIR, UNIDIR Space Security Conference 2019. Supporting Diplomacy: Clearing the Path for Dialogue, 2019, p. 7.

<sup>&</sup>lt;sup>172</sup> Ibid, p. 7-8.

The International Space Station (ISS) is one such civilian programme and a primary example of international cooperation in the peaceful uses of outer space: its first modules were brought into orbit in 1998 and it has been continuously occupied since. The ISS is being used for scientific research in various fields, including physical and material sciences, biology and biotechnology, transportation and robotics. The ISS is operated by five space agencies representing fifteen countries: NASA (USA), Roscosmos (Russia), CSA (Canada), JAXA (Japan) and ESA (Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom). The ISS is participating state is responsible for the running and maintenance of the hardware it provides.

#### Conclusion

It becomes clear that this BGG can only serve as a short introduction to the numerous space-related activities of the UN. From the prevention of a militarization of space to the solving of legal questions of liability to questions of Earth defense – the UN deals with a diverse range of extremely complex issues regarding space. Consequently, the international community must continually review its actions and improve its mechanisms to ensure that the exploration of space continues to take place peacefully and cooperatively, whilst keeping in mind the particular needs of developing countries.

#### Further Research

To prepare themselves for this topic, delegates should focus on the following questions:

- What are the particular needs of developing countries regard space and what can the international community and the General Assembly do to meet those needs?
- How can the General Assembly contribute to ensuring that the exploration of space remains peaceful and an arms race in space is averted?
- How can space-applications and space technology be used to improve living conditions for people on Earth?
- How can the General Assembly contribute in this regard?

<sup>&</sup>lt;sup>173</sup> ESA, Building the International Space Station [Website], n.d.; NASA, International Space Station Facts and Figures [Website], n.d.

<sup>&</sup>lt;sup>174</sup> NASA, International Space Station. Overview, Research and On-Orbit Facilities, Non-Partner Participation, 2011.

<sup>&</sup>lt;sup>175</sup> NASA, *International Cooperation* [Website], 2019.

<sup>&</sup>lt;sup>176</sup> Ibid.

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## II. IMPLEMENTATION OF THE UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION IN THOSE COUNTRIES EXPERIENCING SERIOUS DROUGHT AND / OR DESERTIFICATION, PARTICULARLY IN AFRICA

"[Desertification] isn't just about sand, it isn't an isolated issue that will quietly disappear, and it isn't someone else's problem [...] It [is] the problem of anyone who wants to eat, drink or breathe; to make their home in a town, in the country or even in security [...]. To live. "177

- Ibrahim Thiaw, Executive Secretary of the United Nations Convention to Combat Desertification

#### Introduction

Desertification is a form of land degradation, which occurs in arid, semi-arid and dry sub-humid areas and is caused by various factors, including climatic variations and human activities.<sup>178</sup>

The several factors triggering desertification include poor agricultural practices, water mismanagement, drought, and climate change. Whilst flora and fauna usually adapt to periodical weather changes like droughts or high rainfalls, the human exploitation of dryland environments, especially for the purpose of farming, has been provoking dramatic shifts in dryland ecosystems. These dynamics particularly cause the loss of vegetation cover – due to intensive agriculture, overgrazing and deforestation – which lead to soil erosion, as well as the disappearance of water bodies and wildlife.

Thus, these effects of land degradation not only cause an increased vulnerability of populations towards natural disasters but also have other severe implication. Indeed, by decreasing the natural process of water filtering, the loss of vegetation not only negatively influences the quality of drinking water, but also catalyzes the spread of diseases as well as the extent of famines in areas where food is already scarce, as well as the intensity of social conflicts. Furthermore, land degradation endangers food supply while the demand for food worldwide is predicted to increase by 60 % until 2050. In fact, the *United Nations Conference on Desertification* (UNCOD), expects that even moderate desertification can lead to an estimated 10-25 % decrease in agricultural productivity.

These adverse dynamics, which arise out of desertification as well as human behavior and enforce land degradation, are amongst the leading causes triggering mass migration. Indeed, according to the *United Nations Convention to Combat Desertification in those countries experiencing serious drought and / or desertification, particularly in Africa* (UNCCD), if the rate of desertification remains unchanged, it will, within the following 10 years, force up to 50 million people to leave their homes.<sup>186</sup>

All in all, desertification affects over 120 million people in more than 168 countries worldwide, destroying about 125 square kilometers of arable land each year. 187 Yet, problematically, Africa is the region that is

<sup>&</sup>lt;sup>177</sup> UNCCD Executive Secretary, Message of I. Thiaw, World Day to Combat Desertification and Drought, 2019.

<sup>&</sup>lt;sup>178</sup> UN General Assembly, INC, *United Nations Convention to Combat Desertification*, 1994, Art. 1.

<sup>&</sup>lt;sup>179</sup> Misachi, What is Desertification? WorldAtlas, 2017.

<sup>&</sup>lt;sup>180</sup> Rafferty, Pimm, *Desertification – Ecology*, 2019.

<sup>&</sup>lt;sup>181</sup>Misachi, What is Desertification? WorldAtlas, 2017.

<sup>&</sup>lt;sup>182</sup> Popescu Slavikova, Causes and Effects of Desertification on People and the Environment, 2019.

<sup>&</sup>lt;sup>183</sup> Ibid.

<sup>&</sup>lt;sup>184</sup> UN FAO, The future of food and agriculture – Trends and Challenges, 2017.

<sup>&</sup>lt;sup>185</sup> Batterburry, Warren, *Desertification*, 2001.

<sup>&</sup>lt;sup>186</sup> IFAD, Factsheet Desertification, n.d.

<sup>&</sup>lt;sup>187</sup> Ibid.

affected the most by this phenomenon. <sup>188</sup> This is due to the specific climatic conditions prevailing on the continent – for instance the high density of arid, semi-arid and dry sub-humid areas compared to other regions – as well as the region's geographic characteristics. <sup>189</sup> In fact, a large number of African countries are landlocked and therefore even more suffer from desertification. <sup>190</sup> Furthermore, the high rate of poverty, the great dependency on natural resources for subsistence, and the weak infrastructural base prevailing in many parts of the African continent exacerbate the effects of desertification. <sup>191</sup>

Subsuming, desertification increasingly has the potential to endanger all countries globally but especially affects regions already burdened by land degradation, heat, water scarcity, hunger and poverty. <sup>192</sup> Coming together under the UNCCD, the international community has acknowledged and taken measures against the problem of desertification, especially supporting domestic action. <sup>193</sup> However, actions taken within the framework of the UNCCD have also been encountering various obstacles, often closely linked to questions of financial means. As the issue of desertification has exacerbated, it is of upmost importance that the UN Member States reassess their actions and the efficiency of the convention. It is thus essential to understand the evolution of the international efforts against desertification as presented in the following.

#### International Framework

The issue of desertification first appeared on the international agenda in the 1970s after a disastrous drought period in the Sahel region that led to the death of over 200 million people. The Sahel is a semi-arid region located in western and north-central Africa, forming a transitional zone between the arid Sahara northern of it and the humid savannas located in its South. It extends form the Atlantic Ocean through the Republic of Senegal, the Islamic Republic of Mauritania, the Republic of Mali, Burkina Faso, the Republic of Niger, the Federal Republic of Nigeria, and the Republic of Chad to the Republic of Sudan. In this fatal drought, the UNCOD adopted a *Plan of Action to Combat Desertification* (PACD) in 1977. However, the implementation of the PACD failed due to several factors, which inter alia included a lack of international cooperation and monitoring of the successes.

Thus, in 1991 the Member States of *United Nations Environment Programme* (UNEP) stated that the problem of desertification had indeed exacerbated. Therefore, one year later, the Member States attending the *United Nations Conference on Environment and Development* (UNCED) in Rio de Janeiro discussed, inter alia, the question of how to effectively fight desertification in the light of sustainable development. The UNCED laid the foundation for the establishment of the UNCCD. Following the Conference and agreeing on resolution 47/188, the Member States of the General Assembly established an *Intergovernmental Negotiating Committee* (INCD). Its task was to create the *International Convention to Com-*

<sup>&</sup>lt;sup>188</sup> Ibid.

<sup>&</sup>lt;sup>189</sup> UN General Assembly, INC, *United Nations Convention to Combat Desertification*, 1994, Annex I, Art. 3.

<sup>&</sup>lt;sup>190</sup> Ibid.

<sup>&</sup>lt;sup>191</sup> Ibid.

<sup>&</sup>lt;sup>192</sup> Popescu Slavikova, Causes and Effects of Desertification on People and the Environment, 2019.

<sup>&</sup>lt;sup>193</sup> UN General Assembly, INC, United Nations Convention to Combat Desertification, 1994, Art. 10.

<sup>&</sup>lt;sup>194</sup> Rechkemmer, The conceptual matrix of the United Nations Convention to Combat Desertification (UNCCD), 2005, p. 4.

<sup>&</sup>lt;sup>195</sup> Encyclopedia Britannica, Sahel [Website], n.d.

<sup>&</sup>lt;sup>196</sup> Ibid.

<sup>&</sup>lt;sup>197</sup> UN Audiovisual Library of International Law, *UNCCD* [Website], 2013.

<sup>198</sup> Rechkemmer, The conceptual matrix of the United Nations Convention to Combat Desertification (UNCCD), 2005, p. 5.

<sup>199</sup> UNCCD, UNCCD History [Website], n.d.

<sup>&</sup>lt;sup>200</sup> UN Conference on Environment & Development Rio de Janeiro, *Agenda 21 – Chapter 12*, 1992.

<sup>&</sup>lt;sup>201</sup> Ihid

<sup>&</sup>lt;sup>202</sup> UN General Assembly, Establishment of an intergovernmental negotiation committee for the elaboration of an international convention to combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa (A/RES/47/188), 1992, p. 2.

bat Desertification, the latter UNCCD, which was to be open to all UN Member States.<sup>203</sup> The UNCCD was finally adopted in 1994, entered into force in 1996, and is the only legally binding international agreement to fight desertification.<sup>204</sup> Due to the connection between issues of climate, biodiversity and land, the UNCCD closely collaborates with the *United Nations Framework Convention on Climate Change* (UNFCCC) and the *Convention on Biological Diversity* (CBD).<sup>205</sup>

In 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development, which includes 17 Sustainable Development Goals (SDGs).<sup>206</sup> Although the *2030 Agenda* tackles various problems facing the international community, many goals are aimed at finding a solution for desertification and land degradation. Indeed, taking up the issues of desertification, SDG 15 is aimed at protecting, restoring and promoting the sustainable use of ecosystems, including the improving forest management, combating desertification and stopping land degradation.<sup>207</sup> Furthermore, the UNCCD is the UN agency responsible for monitoring the progress towards the achievement of SDG target 15.3, which is oriented at achieving Land Degradation Neutrality (LDN).<sup>208</sup> LDN is defined as stability of the quality and amount of available farming ground, crucial for a healthy functioning of ecosystems and food security.<sup>209</sup>

#### Regional Framework

Despite the efforts made through the UNCCD globally, the countries affected by desertification, particularly in Africa, claimed that there was a lack of progress in terms of action and impact on-site.<sup>210</sup> Therefore, in 2007, the African Union (AU) launched the *Great Green Wall initiative for the Sahara and Sahel* (GGWSSI).<sup>211</sup> This initiative aims to restore 100 million hectares of degraded land in the Sahel zone by 2030, growing trees and plants in this area, while also creating 10 million green jobs.<sup>212</sup> The UNCCD is a key partner of this project, and more than 20 countries across the continent have joined it.<sup>213</sup> So far, the GGWSSI has contributed to the restoration of 5 million hectares of degraded land in the Republic of the Niger, as well as in the Federal Republic of Nigeria.<sup>214</sup> The initiative contributes to the realization of most UN SDGs: first and foremost SDG 13, urgent action to combat climate change and its impacts, and SDG 15.<sup>215</sup> But also implementing goals like gender equality, or good health and well-being is on its agenda. <sup>216</sup>

In 2014, the Food and *Agriculture Organization of the United Nations* (FAO) launched *Action Against Desertification* (AAD), an initiative by the *African, Caribbean and Pacific Group of States* (ACP).<sup>217</sup> It aims at the restoration of degraded lands, the support of economic growth, and the sustainable use of natural resources.<sup>218</sup> Moreover, it aims at tracking the progress made, exchanging knowledge about how to reverse land degradation and raising awareness for the issue of desertification.<sup>219</sup> AAD is funded by the European Union's (EU's) 10<sup>th</sup> *European Development Fund* (EDF) and closely collaborates with the GGWSSI concerning their efforts to support six African countries in sustainably managing and restoring their dry-

<sup>&</sup>lt;sup>203</sup> Ibid.

<sup>&</sup>lt;sup>204</sup> UNCCD, About the Convention [Website], n.d.

<sup>&</sup>lt;sup>205</sup> Ibid.

<sup>&</sup>lt;sup>206</sup> Ibid.

<sup>&</sup>lt;sup>207</sup> UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1), 2015, p. 14.

<sup>&</sup>lt;sup>208</sup> UNCCD, Knowledge Hub, SDG Indicator 15.3.1 [Website], n.d.

<sup>&</sup>lt;sup>209</sup> UNCCD, Achieving Land Degradation Neutrality [Website], n.d.

<sup>&</sup>lt;sup>210</sup> FAO, National Strategy and Action Plan for the Implementation of the Great Green Wall Initiative in Ethiopia, 2012, p. 7.

<sup>&</sup>lt;sup>211</sup> GGWSSI, The Great Green Wall – Growing a World Wonder [Website], n.d.

<sup>&</sup>lt;sup>212</sup> Ibid.

<sup>&</sup>lt;sup>213</sup> Ibid.

<sup>&</sup>lt;sup>214</sup> GGWSSI, Results – Successes [Website], n.d.-

<sup>&</sup>lt;sup>215</sup> Ibid.

<sup>216</sup> Ihid

<sup>&</sup>lt;sup>217</sup> FAO, Action Against Desertification – Overview [Website], n.d.

<sup>&</sup>lt;sup>218</sup> Ibid.

<sup>&</sup>lt;sup>219</sup> Ibid.

lands.<sup>220</sup> Their work in Africa is based on a harmonized regional strategy for the GGWSSI and individual action plans for each country.<sup>221</sup>

Regional Successes: a Case Study of Ethiopia

The Federal Democratic Republic of Ethiopia (Ethiopia) is one of the sub-Saharan countries that are most heavily affected by land degradation, as 85 % of its lands are degraded.<sup>222</sup> This leads to declining agricultural productivity, food scarcity, poverty, and social and economic conflicts.<sup>223</sup> Due to land mismanagement, about 92.000 hectares and woodlands, and 2 billion tons of fertile soil are lost each year in Ethiopia.<sup>224</sup> In 1997, the Government of Ethiopia ratified the UNCCD.<sup>225</sup> To support the country in its fight against land degradation, AAD inter alia strives to restore landscapes, and to educate locals in concerned areas in re-greening their degraded lands.<sup>226</sup> So far, the initiative has contributed to the restoration of 1715 hectares of degraded land and the training of 1000 farmers.<sup>227</sup> Additionally, the Ethiopian Government and FAO collaborate with the GGWSSI, which has already managed to restore 15 million hectares of degraded land.<sup>228</sup>

In 2019, the Managing Environmental Resources to Enable Transition (MERET) Project of the Ministry of Agriculture of Ethiopia received the Land for Life Award by the UNCCD Initiative Land for Life.<sup>229</sup> The prize is bi-annually awarded to initiatives that contribute to the recovery and rehabilitation of degraded lands in order to achieve LDN.<sup>230</sup> The MERET Project fights for the complete restoration of landscapes severely affected by desertification by providing assistance in the recovery of concerned areas.<sup>231</sup> This project, which has its origins in the 1970s, has since then helped rehabilitate around 2.5 million hectares of degraded watersheds and reduce food shortages by half<sup>232</sup> Hence, more than 1.5 million households have benefited from its actions.<sup>233</sup> Ethiopia, having set nine voluntary LDN targets to consider in its national policymaking, is one of the key examples when it comes to successfully combating desertification.<sup>234</sup>

#### The Role and Impact of the International System

The implementation process and its institutions

As its supreme decision-making entity the UNCCD established the *Conference of the Parties* (COP), composed of ratifying states and regional economic integration organizations.<sup>235</sup> Its main tasks are the supervision of the implementation of the Convention and the oversight over the functional efficiency of its internal and external organizational framework, including the work of its subsidiary bodies.<sup>236</sup> It is also entrusted with the guidance of the *Global Mechanism* (GM). Being funded by the UNCCD, the GM is a

<sup>&</sup>lt;sup>220</sup> FAO, Action Against Desertification – Africa [Website], n.d.

<sup>&</sup>lt;sup>221</sup> Ibid.

<sup>&</sup>lt;sup>222</sup> Gebreselassie, Kirui, Mirzabaev, Economics of Land Degradation and Improvement – A Global Assessment for Sustainable Development, 2015, p. 402.

<sup>&</sup>lt;sup>223</sup> UNCCD, Ethiopia – Land Degradation Neutrality National Report, 2015, p. 26.

<sup>&</sup>lt;sup>224</sup> FAO, Action Against Desertification: Ethiopia – Fact Sheet, 2018.

<sup>&</sup>lt;sup>225</sup> EPA, UN Conference on Sustainable Development Rio+20, National Report of Ethiopia, 2012, p. 23.

<sup>&</sup>lt;sup>226</sup> FAO, Action Against Desertification – Countries: Ethiopia [Website] 2019.

<sup>227</sup> Ihid

<sup>&</sup>lt;sup>228</sup> GGWSSI, *Results – Successes* [Website], n.d.

<sup>&</sup>lt;sup>229</sup> UNCCD, 2019 Land for Life Award Winners [Website], 2019.

<sup>&</sup>lt;sup>230</sup> UNCCD, Land for Life Award [Website], n.d.

<sup>&</sup>lt;sup>231</sup> MERET Project, *Our Mission* [Website], n.d.

<sup>&</sup>lt;sup>232</sup> UNCCD, 2019 Land for Life Award Winners [Website], 2019.

<sup>233</sup> Ihid

<sup>&</sup>lt;sup>234</sup> UNCCD, Ethiopia – Land Degradation Neutrality National Report, 2015, p. 1; GGWSSI, Results- Successes [Website], n.d.

<sup>&</sup>lt;sup>235</sup> UNCCD, The Conference of the Parties (COP) [Website], n.d.

<sup>&</sup>lt;sup>236</sup> UN General Assembly, INC, United Nations Convention to Combat Desertification, 1994, Art. 22.

mechanism that assists countries in the process of mobilizing and channeling substantial financial means to implementing the Convention and to effectively fight desertification, land degradation and drought.<sup>237</sup>

Furthermore, to provide a source of information and scientific and technological advice for the work of the COP, the Member States of the UNCCD established the *Committee on Science and Technology* (CST). It is composed of independent experts in the fields of fighting desertification and mitigating the effects of drought.<sup>238</sup> The scope of duties of the CST ranges from advisory functions, across data and information tasks, to researching, evaluating and making recommendations to the COP based on its work.<sup>239</sup> It is guided by the principles written down in the UNCCD Articles 16 to 19, namely the ensuring of scientific and technical cooperation and the importance of capacity building in those regions affected by desertification and / or drought.<sup>240</sup> In 2013, the COP established a *Science-Policy Interface* (SPI) to facilitate the work of the CST and enhance its efficiency by providing decision-makers with more profound knowledge.<sup>241</sup>

Having realized the need to regularly review the progress of the implementation process, the COP established the *Committee for the Review of the Implementation of the Convention* (CRIC) in 2001.<sup>242</sup> The CRIC is the primary body to assist the COP in the regular review of the implementation of the Convention.<sup>243</sup> The main function of the CRIC is to provide the COP with reliable information on current actions undertaken and results achieved by the Parties, but also on the challenges they are facing.<sup>244</sup> This information is crucial to ensure an effective implementation of the UNCCD, which is why its Parties are obliged to give reports on their progresses every four years.<sup>245</sup> The main tool Member States can use to submit reports to the CRIC is the *Performance Review and Assessment of Implementation System* (PRAIS).<sup>246</sup> To adapt the reporting process to the available technological conditions and to make the system user-friendlier, the UNCCD secretariat updated PRAIS in 2017 to its third version, the PRAIS 3 Portal.<sup>247</sup> It supplies the Parties with interactive reporting templates on biophysical data and financial issues.<sup>248</sup> The CRIC reports the accumulated information biannually to the COP, alongside with targeted recommendations and draft decisions to consider.<sup>249</sup>

At its 17<sup>th</sup> session in January 2019, the CRIC made various recommendations for the 14<sup>th</sup> session of the COP – inter alia on the further pursuit of the Strategic Objectives, LDN, and of the UNCCD Gender Action Plan.<sup>250</sup> Additionally, the CRIC also urged the COP to support the development of new financing systems

<sup>&</sup>lt;sup>237</sup> Ibid.

<sup>&</sup>lt;sup>238</sup> Ibid.

<sup>&</sup>lt;sup>239</sup> UNCCD, Report of the Conference of the Parties on its first session, held in Rome from 29 September to 10 October 1997. Addendum: Part two: Actions taken by the Conference of the Parties on its first session (ICCD/COP(1)/11/Add.1), 1997, pp. 51-53.

<sup>&</sup>lt;sup>240</sup> UN General Assembly, INC, United Nations Convention to Combat Desertification, 1994, Art. 24.

<sup>&</sup>lt;sup>241</sup> UNCCD, Report of the Conference of the Parties on its eleventh session, held in Windhoek from 16 to 27 September 2013. Part one: proceedings (ICCD/COP(11)/23), 2013, p. 30.

<sup>&</sup>lt;sup>242</sup> UNCCD, Report of the Conference of the Parties on its fifth session, held in Geneva from 1 to 12 October 2001. Addendum: Part two: Action taken by the Conference of the Parties at its fifth session (ICCD/COP (5)/11/Add. 1), 2001, p. 3. <sup>243</sup> Ibid., p. 5.

<sup>&</sup>lt;sup>244</sup> UNCCD, Reporting Process and the PRAIS [Website], n.d.

<sup>&</sup>lt;sup>245</sup> Ibid.; UNCCD, Report of the Conference of the Parties on its thirteenth session, held in Ordos, China, from 6 to 16 September 2017. Addendum: Part two: Action taken by the Conference of the Parties at its thirteenth session (ICCD/COP(13)/21/Add. 1), 2017, p. 57.

<sup>&</sup>lt;sup>246</sup> UNCCD, Reporting Process and the PRAIS [Website], n.d.

<sup>&</sup>lt;sup>247</sup> Ibid.

<sup>&</sup>lt;sup>248</sup> Ibic

<sup>&</sup>lt;sup>249</sup> UNCCD, Report of the Conference of the Parties on its thirteenth session, held in Ordos, China, from 6 to 16 September 2017. Addendum: Part two: Action taken by the Conference of the Parties at its thirteenth session (ICCD/COP(13)/21/Add. 1), 2017, p. 22.

<sup>&</sup>lt;sup>250</sup> IISD, 17<sup>th</sup> Session of the Committee for the Review of the Implementation of the Convention (CRIC 17) to the UN Convention to Combat Desertification (UNCCD) [Website], 2019.

to combat desertification, to strengthen communication and reporting tools and to take into account recommendations by civil society organizations.<sup>251</sup>

Problems of and developments in the implementation process

However, various factors hinder the implementation of the UNCCD internationally and domestically. In fact, before 2008, various countries reported problems in the implementation of National Action Plans (NAPs), mainly due to difficulties in mobilizing financial resources.<sup>252</sup> The NAPs are the key instruments previewed in the convention for its implementation.<sup>253</sup> Their primary aim is to identify factors contributing to desertification and necessary countermeasures, depending on the climatic conditions in each country.<sup>254</sup> The various stakeholders included in their development process are national government departments, scientific institutions and local communities.<sup>255</sup>

Additionally to the problems with the NAPs reported, the COP itself faced limiting factors such as insufficient financial resources, problems in the field of scientific cooperation and complications in the consensus-finding process between different parties. Therefore, in 2008 the COP developed a 10-year strategic plan and framework, *The Strategy*. <sup>256</sup> It included four strategic objectives to be achieved by 2018, as well as five operational objectives as action guidelines for stakeholders, which are meant to reinforce the implementation of the UNCCD by the COP. <sup>257</sup> These objectives included raising awareness and educating about desertification, improving the existing policy framework, and strengthening scientific and technological approaches. <sup>258</sup> Further targets of *The Strategy* were building more capacities for the implementation and improving the financing and technology transfer. <sup>259</sup> Additionally, under *The Strategy*, the Parties affected by desertification were requested to align their NAPs with its operational objectives. <sup>260</sup> In terms of financial and technical support for the realignment, the COP proposed collaboration of the Parties with the GM in order to make available international and national resources. <sup>261</sup> The main achievement of *The Strategy* was bringing back the UNCCD and NAPs to the agenda of national stakeholders. <sup>262</sup> Realigned NAPs showed improvement concerning factors such as the identification of biophysical and socioeconomic forces intensifying land degradation. <sup>263</sup>

Nonetheless, the main problems of lacking institutional, human and financial capacity remain present inhibitors on the way to successfully implementing the NAPs and the UNCCD.<sup>264</sup> Furthermore, with the adoption of *The Strategy*, the focus shifted from their practical implementation to the alignment of NAPs.<sup>265</sup> This problem is closely linked to a disproportionate allocation of financial and human resources,

<sup>&</sup>lt;sup>251</sup> Ibid.

<sup>&</sup>lt;sup>252</sup> UNCCD, Synthesis and preliminary analysis of information contained in reports submitted by affected African country Parties. Note by the secretariat (ICCD/CRIC(3)/2/Add. 1), 2005, p. 6.

<sup>&</sup>lt;sup>253</sup> UNCCD, Action programmes [Website], n.d.; UN General Assembly, INC, United Nations Convention to Combat Desertification, 1994, Art. 9-10.

<sup>&</sup>lt;sup>254</sup> UN General Assembly, INC, *United Nations Convention to Combat Desertification*, 1994, Art. 10.

<sup>&</sup>lt;sup>255</sup> UNCCD, Action programmes [Website], n.d.

<sup>&</sup>lt;sup>256</sup> UNCCD, Evaluation of the Effectiveness of NAPs to Implement the UNCCD, 2015, p. 3.

<sup>&</sup>lt;sup>257</sup> UNCCD, Report of the Conference of the Parties on its eight session, held in Madrid from 3 to 14 September 2007. Addendum: Part two: Action taken by the Conference of the Parties at its eight session (ICCD/COP(8)/16/Add.1), 2007, pp. 16.

<sup>&</sup>lt;sup>258</sup> Ibid., p. 18.

<sup>&</sup>lt;sup>259</sup> Ibid.

<sup>&</sup>lt;sup>260</sup> Ibid., p. 14.

<sup>&</sup>lt;sup>261</sup> Ibid.

<sup>&</sup>lt;sup>262</sup> UNCCD, Evaluation of the Effectiveness of NAPs to Implement the UNCCD, 2015, p. 5.

<sup>&</sup>lt;sup>263</sup> Ihid

 $<sup>^{264}</sup>$  UNCCD, Assessment of the alignment of action programmes and their implementation in accordance with The Strategy (ICCD/CRIC(11)/6), 2013, p. 7.

<sup>&</sup>lt;sup>265</sup> Ibid., p. 7.

as the majority of means is used for planning and reporting compared to the sums spent on the implementation of the UNCCD itself.<sup>266</sup> The main issue in terms of the implementation of the UNCCD is that by 2015, less than 60 % of NAPs were actually being implemented.<sup>267</sup> Regarding this matter, the CRIC criticized especially the ineffectiveness of the Convention in terms of assuring continuous fund flows designated to the implementation of the UNCCD on-site.<sup>268</sup>

Apart from that, the designated national persons responsible for the implementation mostly dispose over a very limited amount of political power, often leading to a neglect of their area of responsibility.<sup>269</sup> In few cases, they are directly subordinate to their respective prime minister.<sup>270</sup> The majority of ministries responsible for the NAPs however also deal with other questions of environment or agriculture, which indicates that, in these countries, the topic is of lower political importance.<sup>271</sup> Additionally, those responsible for the implementation of the three Rio Conventions traditionally tend to work separately, focusing on priorities established in their respective conventions, instead of cooperating with each other for joint solutions.<sup>272</sup> An increased effort to assure domestic cooperation is also necessary in terms of the national distribution of financial means, as often, the responsibilities for decisions concerning land investments are not clearly designated.<sup>273</sup> This issue conflicts with the perception of many Parties of the Convention that the UNCCD is too demanding concerning the planning and the drafting of implementation measures.<sup>274</sup>

The international community tried to answer these issues with multiple actions: With purpose to enhance *The Strategy*, the General Assembly declared the decade 2010-2020 as the *UN Decade for Deserts and the Fight Against Desertification*.<sup>275</sup> In line with the *2030 Agenda for Sustainable Development*, the COP adopted the *UNCCD 2018-2030 Strategic Framework*, guided by five Strategic Objectives and explicit statements concerning the Objectives' expected impacts.<sup>276</sup> The Strategic Objectives to guide the work of all bodies linked to the UNCCD are: the improvement of the condition of affected ecosystems, of the living conditions of concerned populations, and of drought-management.<sup>277</sup> Moreover, they include the generation of global environmental benefits and the mobilization of financial and non-financial resources in order to support the implementation of the Convention.<sup>278</sup> The main body entrusted with the periodic review of the progress made in terms of implementing the *Strategic Framework* is the CRIC.<sup>279</sup>

In September 2019, the COP convened for the 14<sup>th</sup> time so far, with an agenda focused on the SDGs for 2030, the Report of the CRIC, and its recommendations to the COP.<sup>280</sup> For instance, the COP discussed a report including achievements and recommendations for countries on the integration of SDG 15 concern-

<sup>&</sup>lt;sup>266</sup> Ibid., p. 10.

<sup>&</sup>lt;sup>267</sup> UNCCD, Assessment of implementation of the Convention: Policy framework (ICCD/CRIC(13)/3), 2015, p.12.

<sup>&</sup>lt;sup>268</sup> UNCCD, Assessment of the alignment of action programmes and their implementation in accordance with The Strategy (ICCD/CRIC(11)/6), 2013, p. 14.

<sup>&</sup>lt;sup>269</sup> UNCCD, Evaluation of the Effectiveness of NAPs to Implement the UNCCD, 2015, pp. 4, 23.

<sup>&</sup>lt;sup>270</sup>Ibid., p. 23.

<sup>&</sup>lt;sup>271</sup>Ibid., pp. 4, 23.

<sup>&</sup>lt;sup>272</sup> Ibid., p. 4.

<sup>&</sup>lt;sup>273</sup> Ibid.

<sup>&</sup>lt;sup>274</sup> Ihid

 $<sup>^{275}</sup>$  UNCDD, Background Information [Website], n.d; UN General Assembly, Report of the Governing Council of the UNEP on its twenty-fourth session (A/RES/62/195), 2008, p. 2.

<sup>&</sup>lt;sup>276</sup> UNCCD, Report of the Conference of the Parties on its thirteenth session, held in Ordos, China, from 6 to 16 September 2017. Addendum: Part two: Action taken by the Conference of the Parties at its thirteenth session (ICCD/COP(13)/21/Add.1), 2017, pp. 19.

<sup>&</sup>lt;sup>277</sup> Ibid.

<sup>&</sup>lt;sup>278</sup> Ibid.

<sup>&</sup>lt;sup>279</sup> Ibid., p. 22.

<sup>&</sup>lt;sup>280</sup> UNCCD, Provisional agenda and annotations (ICCD/COP(14)/1), 2019, pp. 6.

ing the implementation of the Convention.<sup>281</sup> At this Conference, the COP adopted the modalities, criteria and terms of reference for the midterm evaluation of the *Strategic Framework*, planned for 2024.<sup>282</sup>

#### Desertification and Gender Equality – Linking the SDGs

Since the adoption of the *2030 Agenda for Sustainable Development* by the General Assembly, which defined LDN as a key element of SDG 15, over 120 countries have set targets to achieve LDN.<sup>283</sup> Achieving LDN is not just an important element in the implementation process of the UNCCD, it also supports the success of NAPs and is furthermore synergistically linked to other SDGs.<sup>284</sup> For instance, achieving LDN contributes to the fight against climate change, the conservation of biodiversity, food and water security, and the combat of poverty.<sup>285</sup>

However, there is not only a synergy between LDN and environmental and economical SDGs, LDN is also closely linked to SDG 5, achieving Gender Equality.<sup>286</sup> Women who live in developing countries affected by land degradation presumably produce up to 60-80 % of the food there, while the majority of them are lacking fundamental land rights.<sup>287</sup> Globally, only a total of 15 % of women have the right to manage their land.<sup>288</sup> As observed in Ghana, the lack of rights to land causes women to make farming decisions that negatively affect land productivity.<sup>289</sup> This is due to concerns about not being able to maintain control over land actually belonging to someone else.<sup>290</sup> In fact, in sub-Saharan Africa, where the number of women and men in the agricultural sector is nearly equal, 90 % of the loans granted to smallholders are awarded to male farmers.<sup>291</sup> Additionally, land degradation also indirectly affects women adversely when their husbands have to leave their homes and families in order to find jobs to supplement their household incomes.<sup>292</sup> In the case of conflict due to scarce land resources, women must then defend themselves against physical violence and the loss of their lands, often unsuccessfully.<sup>293</sup> Therefore, in 2017, the COP adopted a Gender Action Plan (GAP), to set a stronger focus on gender-related decisions in the UNCCD implementation process.<sup>294</sup> The crucial priority areas set in the GAP are to enhance female participation in the decision making process of the UNCCD, but also to include women's economic empowerment in decisions related to the implementation of the UNCCD.<sup>295</sup> Moreover, the GAP strives to strengthen women's access to natural resources and their land rights.<sup>296</sup> It also includes a sector dedicated to the education of girls in the field of technologies related to the UNCCD, as well as an improved access to them for women in general.<sup>297</sup> An important mechanism for the implementation of the GAP is the close collaboration with

<sup>&</sup>lt;sup>281</sup> ENB, Summary of the Fourteenth Session of the Conference of the Parties to the UN Convention to Combat Desertification: 2-13 September 2019, 2019, p. 4.

<sup>&</sup>lt;sup>282</sup> UNCCD, Modalities, criteria and terms of reference for a midterm evaluation of the UNCCD 2018-2030 Strategic Framework. Note by the secretariat (ICCD/COP(14)/3), 2019, p. 3; ENB, 14<sup>th</sup> Session of the Conference of the Parties to the UNCCD [Website]. 2019.

<sup>&</sup>lt;sup>283</sup> UNCCD, The LDN Target Setting Programme [Website], n.d.

<sup>&</sup>lt;sup>284</sup> Ibid.

<sup>&</sup>lt;sup>285</sup> Ibid.

<sup>&</sup>lt;sup>286</sup> UNCCD, Gender Action Plan, 2017.

<sup>287</sup> Ibid.

<sup>&</sup>lt;sup>288</sup> UNCCD, Turning the Tide – The Gender Factor in Achieving Land Degradation Neutrality, 2017, p. 6.

<sup>&</sup>lt;sup>289</sup> Ibid.

<sup>&</sup>lt;sup>290</sup> Goldstein, Udry, *The Profits of Power: Land Rights and Agricultural Investment in Ghana*, 2008, p. 1008.

<sup>&</sup>lt;sup>291</sup> Ibid.

<sup>&</sup>lt;sup>292</sup> Ibid., p. 7.

<sup>&</sup>lt;sup>293</sup> Ibid.

<sup>&</sup>lt;sup>294</sup> UNCCD, Gender Action Plan, 2017.

<sup>&</sup>lt;sup>295</sup> Ibid.

<sup>&</sup>lt;sup>296</sup> Ibid.

<sup>&</sup>lt;sup>297</sup> Ibid.

women's organizations.<sup>298</sup> Such organizations fight for women's access to land use, water rights, financial services, and participation in decision-making and community development.<sup>299</sup>

#### Conclusion

Despite several local improvements, desertification is still one of the main issues in sub-Saharan Africa. Even though there are many different approaches to the problem of land degradation, it generally remains unsolved, exacerbating food and water scarcity, health issues, social conflicts, and the expansion of land degradation itself. However, the UNCCD led to a more distinct approach to the problem and massively contributed to developing new solutions. As observable in Ethiopia, regional and national initiatives, like the GGWSSI and the MERET Project, have proven to be more effective than global actions through the UNCCD. Nonetheless, local action cannot replace global collaboration on this complex issue. Combating desertification and land degradation is crucial on the way to a sustainable future, for its impact ranges from food security, over restoring ecosystems, to ensuring social and gender equality globally.

#### **Further Research**

As delegates research the topic and prepare for the conference, they may consider questions such as:

- What can the General Assembly do to find solutions for the problems hindering the full implementation of the UNCCD?
- What can industrialized countries do domestically and internationally to contribute to the fight
  against land degradation, especially in the countries most affected by this phenomenon? What
  can the General Assembly do to improve the financial situation of states trying to implement their
  NAPs?
- Can the General Assembly contribute to an improved management and allocation of financial and human resources available?
- In which ways can the synergies between SDG 15 target 3 and other SDGs be strengthened and further exploited?
- How may the communication between affected countries be improved in order to find supraregional solutions?

<sup>98</sup> Ibid

<sup>&</sup>lt;sup>299</sup> IFAD, Gender and desertification – Making Ends Meet in Drylands, 2010, p. 2.

<sup>&</sup>lt;sup>300</sup> Khatra, Loireau, *The Immense Challenge of Desertification in sub-Saharan Africa* [News Article], 2017.

<sup>301</sup> Ibid.

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