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# UN Industrial Development Organization Background Guide 2019

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# NATIONAL MODEL UNITED NATIONS



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Dear Delegates,

Welcome to the 2019 National Model United Nations New York Conference (NMUN•NY)! We are pleased to welcome you to the United Nations Industrial Development Organization (UNIDO). This year's staff are: Directors Omar Torres-Vasquez (Conference A) and Ben Wrigley (Conference B), and Assistant Directors Athiang Makuoi (Conference A) and Kyle Roberts (Conference B). Omar holds a BA in Political Science with an emphasis on political theory from California State University, Fullerton and currently manages a Sears Auto Center. Ben holds a BSc in Mechanical Engineering and is working towards his MS in Economic Policy at the University of Siegen, Germany. Athiang is working on her BS in Nursing from the University of Alberta, and will soon be starting her MSN. Kyle Roberts holds a BA in Philosophy and English from John Jay College. Currently, he works as an assistant in the Office of External Affairs and as a Parliamentarian at his alma mater.

The topics under discussion for the United Nations Industrial Development Organization are:

- 1. The Role of Information and Communications Technology in Industrial Development
- 2. Promoting Sustainable Production and Consumption
- 3. Empowering Women through Entrepreneurship

UNIDO is a specialized agency tasked with promoting sustainable and inclusive industrial development, providing an avenue through which the United Nations (UN), Member States, and other stakeholders can develop partnerships and address challenges to industrial development, particularly in developing regions. The committee has the ability to make programmatic and policy decisions on issues within the mandate of UNIDO in line with the overall function of the organization.

This Background Guide serves as an introduction to the topics for this committee. However, it is not intended to replace individual research. We encourage you to explore your Member State's policies in depth and use the Annotated Bibliography and Bibliography to further your knowledge on these topics. In preparation for the Conference, each delegation will submit a <u>Position Paper</u> by 11:59 p.m. (Eastern) on 1 March 2019 in accordance with the guidelines in the <u>NMUN Position Paper Guide</u>.

Two resources, available to download from the <u>NMUN website</u>, that serve as essential instruments in preparing for the Conference and as a reference during committee sessions are the:

- <u>NMUN Delegate Preparation Guide</u> explains each step in the delegate process, from pre-Conference research to the committee debate and resolution drafting processes. Please take note of the information on plagiarism, and the prohibition on pre-written working papers and resolutions. Delegates should not start discussion on the topics with other members of their committee until the first committee session.
- 2. <u>NMUN Rules of Procedure</u> include the long and short form of the rules, as well as an explanatory narrative and example script of the flow of procedure.

In addition, please review the mandatory <u>NMUN Conduct Expectations</u> on the NMUN website. They include the Conference dress code and other expectations of all attendees. We want to emphasize that any instances of sexual harassment or discrimination based on race, gender, sexual orientation, national origin, religion, age, or disability will not be tolerated. If you have any questions concerning your preparation for the committee or the Conference itself, please contact the Under-Secretaries-General for the Development Department, Aiskell Roman (Conference A) and Marleen Schreier (Conference B), at <u>usg.dev@nmun.org</u>.

We wish you all the best in your preparations and look forward to seeing you at the Conference!

#### **Conference A**

Conference B

Omar Torres-Vasquez, Director Athiang Makuoi, Assistant Director Ben Wrigley, Director Kyle Roberts, Assistant Director

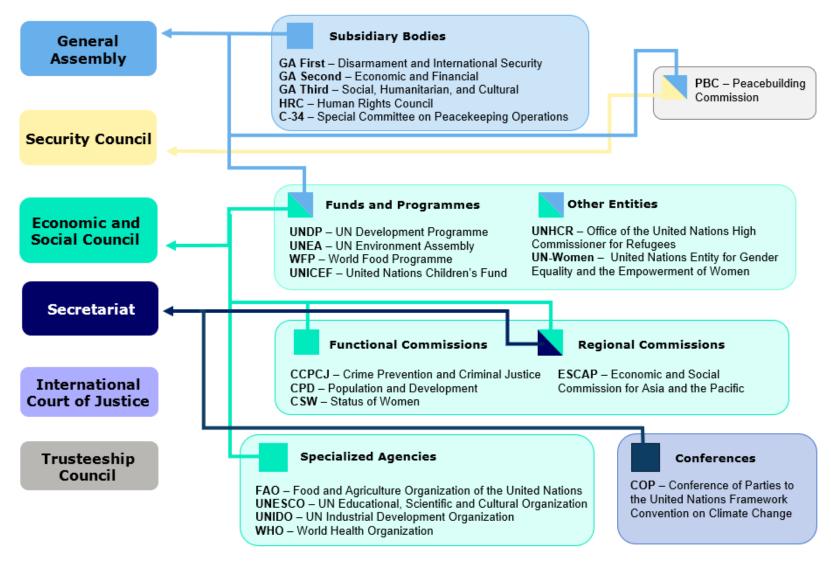
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# United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY and demonstrates the reportage and relationships between entities. Examine the diagram alongside the Committee Overview to gain a clear picture of the committee's position, purpose, and powers within the UN system.





## **Committee Overview**

#### Introduction

The United Nations Industrial Development Organization (UNIDO) is a specialized agency of the United Nations (UN) that "promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability."<sup>1</sup> The UN General Assembly established UNIDO in 1966 through resolution 2152, which outlined the purpose of the organization and also called for the creation of the Industrial Development Board and a Secretariat to ensure UNIDO's proper operation.<sup>2</sup> In March 1975, UNIDO held its second General Conference, which led to the adoption of the Lima Declaration and Plan of Action on Industrial Development and Cooperation.<sup>3</sup> The Lima Declaration and Plan of Action created a framework with the main focus on industrial development among Member States in order to combat poverty.<sup>4</sup> Industrialization is believed to be a driver for increased favorable economic conditions for job creation and increased income, thus an economic engine for poverty reduction.<sup>5</sup> Additionally, the document also stated that in order to achieve the goals set out by the United Nations for industrial development, UNIDO needed to be strengthened into an autonomous specialized agency of the UN.<sup>6</sup> The General Assembly's September 1975 Seventh special session announced in resolution 3362 (S-VII) that UNIDO would become a UN specialized agency.<sup>7</sup> UNIDO's autonomous status allows for enhanced participation within the UN system to provided technical cooperation among Member States in "research and policy advisory services, standards and compliance" in order to fully realize its mandate.8

On 8 April 1979, UNIDO adopted its Constitution, and in that same year, UNIDO established its headquarters in Vienna, Austria.<sup>9</sup> Due to lack of consensus among Member States having ratified, accepted or approved the Constitution, the document was not officially entered into force until 21 June 1985.<sup>10</sup> In December 1985, the first session of the General Conference was held under the renewed system, making UNIDO the sixteenth specialized agency of the United Nations.<sup>11</sup> Unlike other programs and funds of the UN, as a specialized agency, UNIDO became an independent organization working with the UN framework though with a separately funded budget with its own governing council.<sup>12</sup>

Nearing the deadline for the Millennium Development Goals (MDGs), UNIDO adopted the promotion of inclusive and sustainable industrial development (ISID) to its mandate to accelerate industrial development among Member States in order to achieve MDGs post-2015.<sup>13</sup> The MDGs were a framework with a total of 8 goals, in which a better world would emerge by the target deadline of 2015.<sup>14</sup> UNIDO's work toward industrial development was aligned with the MDGs, particularly with MDG 1, which focused on the eradication of poverty and hunger, and MDG 7, which emphasized environmental protection.<sup>15</sup> In 2013, UNIDO's continued commitment to the MDGs, and with only two more years for the deadline of the 8 goals, UNIDO welcomed the decision by the General Assembly to adopt post-2015 development agenda, and therefore adopted ISID to further the new global agenda.<sup>16</sup>

<sup>3</sup> UNIDO, Lima Declaration and Plan of Action on Industrial Development and Cooperation, 1975.

<sup>4</sup> Ibid.

<sup>9</sup> UNIDO, A Brief History.

<sup>&</sup>lt;sup>1</sup> UNIDO, UNIDO in brief.

<sup>&</sup>lt;sup>2</sup> UN General Assembly, United Nations Industrial Development Organization (A/RES/2152 (XXI)), 1966.

<sup>&</sup>lt;sup>5</sup> UNIDO, *Lima Declaration: Towards inclusive and sustainable industrial development (GC.15/Res.1)*, 2013. <sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> UN General Assembly, *Development and international economic cooperation (A/RES/S-7/3362)*, 1975.

<sup>&</sup>lt;sup>8</sup> UNIDO, Lima Declaration: Towards inclusive and sustainable industrial development (GC.15/Res.1), 2013.

<sup>&</sup>lt;sup>10</sup> Ibid.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> UNDPI, Funds, Programmes, Specialized Agencies and Others.

<sup>&</sup>lt;sup>13</sup> UNIDO, Inclusive and Sustainable Industrial Development: Creating shared prosperity and safeguarding the environment, 2018.

<sup>&</sup>lt;sup>14</sup> UNIDO, UNIDO and the Millennium Development Goals, 2009.

<sup>&</sup>lt;sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup>UNIDO, Lima Declaration: Towards inclusive and sustainable industrial development (GC.15/Res.1), 2013.



Additionally, at the Sustainable Development Summit on 25 September 2015, UNIDO adopted the *2030 Agenda for Sustainable Development* as its driving framework toward Sustainable Development Goals (SDGs).<sup>17</sup> In order to meet this challenge, at the forty-fifth session in June 2017, the *Medium-term program framework 2018-2021* (MTPF) was presented as a guide to UNIDO's commitment for the next four years in achieving SDGs with ISID as the driving mechanism.<sup>18</sup> This new guide introduced four pillars that would make up the four core functions of UNIDO for the next few years.<sup>19</sup>

The four core pillars of MTPF are: creating shared prosperity, advancing economic competitiveness, safeguarding the environment and strengthening knowledge and institutions.<sup>20</sup> Each pillar focuses on different SDGs.<sup>21</sup> For instance, the pillar on creating shared prosperity sets standards by which to achieve SDG 5 on gender equality, by increasing the participation of woman in the development of industries and manufacturing.<sup>22</sup> The pillar on advancing economic competitiveness is a guide to many SDGs and focus on investing on new technologies such as information communications that would streamline productivity, increase trade capacity-building, and help enterprises improve competitiveness.<sup>23</sup> Safeguarding the environment pillar promotes clean and sustainable production by reducing waste and pollution and efficiently manages resources.<sup>24</sup> Lastly, the final pillar, strengthening knowledge and institutions, enhances the effort of the first three pillars.<sup>25</sup> The four pillars combined contribute greatly to UNIDO's ongoing commitment in achieving 2030 Agenda by further streamlining UNIDO's global activities toward the "scale up its programmes and development impact."<sup>26</sup>

#### Governance, Structure and Membership

The two policymaking organs of UNIDO are the General Conference and the Industrial Development Board.<sup>27</sup> Within the Industrial Development Board is a subsidiary body called the Programme and Budget Committee.<sup>28</sup> The General Conference brings together all 168 members of UNIDO to meet once every two years and serves as the organization's highest policymaking organ.<sup>29</sup> In addition to establishing regulatory policies, the General Conference also approves the budget and programs of action, and appoints the Director-General every four years.<sup>30</sup> The Conference is also responsible for electing members of the Industrial Development Board and the Programme and Budget Committee.<sup>31</sup>

The Industrial Development Board (IDB) meets annually and is comprised of 53 Member States elected on a rotational basis for four-year terms.<sup>32</sup> The IDB reviews UNIDO's work programs and budgets, and makes recommendations to the General Conference organizational policy and also on the selection of the Director-General.<sup>33</sup> The Programme and Budget Committee accepts a draft of UNIDO's program of work from the Director-General for the coming fiscal year, and in turn recommends a proposed budget for the

<sup>&</sup>lt;sup>17</sup> UNIDO, *The 2030 Agenda for Sustainable Development: Achieving the industry-related goals and targets.* 

 <sup>&</sup>lt;sup>18</sup> UNIDO, *Medium-term programme framework 2018-2021*, 2017.
<sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> UNIDO. UNIDO in brief. 2018.

<sup>&</sup>lt;sup>21</sup> UNIDO, Programme and Budgets 2018-2019, 2017.

<sup>&</sup>lt;sup>22</sup> UNIDO, Inclusive and Sustainable Industrial Development: Creating shared prosperity and safeguarding the environment, 2018.

<sup>&</sup>lt;sup>23</sup> UNIDO, The 2030 Agenda for Sustainable Development: Achieving the industry-related goals and targets.

<sup>&</sup>lt;sup>24</sup> UNIDO, Inclusive and Sustainable Industrial Development: Creating shared prosperity and safeguarding the environment, 2018.

<sup>&</sup>lt;sup>25</sup> UNIDO, Strengthening knowledge and institutions, 2018.

<sup>&</sup>lt;sup>26</sup> UNIDO, Medium-term programme framework 2018-2021, 2017.

<sup>&</sup>lt;sup>27</sup> UNIDO, Constitution of the United Nations Industrial Development Organization, 1979.

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> UNIDO, The General Conference.

<sup>&</sup>lt;sup>30</sup> Ibid.

<sup>&</sup>lt;sup>31</sup> UNIDO, Constitution of the United Nations Industrial Development Organization, 1979.

<sup>&</sup>lt;sup>32</sup> Ibid.

<sup>&</sup>lt;sup>33</sup> Ibid.



IDB to vote on based on the program of work.<sup>34</sup> The Committee consists of 27 Member States serving two-year terms and also meets annually.<sup>35</sup>

Member States of the UN, UN specialized agencies, and the International Atomic Energy Agency are eligible for UNIDO membership upon becoming parties to its Constitution and being approved by the General Conference by a two-thirds majority vote.<sup>36</sup> As a member of UNIDO, Member States become part of the General Conference.<sup>37</sup> Parties acknowledged by the UN General Assembly as having observer status are also eligible for observer status with UNIDO upon approval by the General Conference.<sup>38</sup>

The UNIDO Secretariat is comprised of: the Director-General, the chief administrative officer held accountable by UNIDO's policymaking organs; the Deputy to the Director-General, responsible for supporting the Director-General in routine operation of UNIDO; the Programme Development and Technical Cooperation Division, responsible for providing capacity-building opportunities to developing Member States; the Industrial policy, External Relations and Field Representation Division, which monitors and analyzes trends in industrial development; and the Programme Support and General Management Division, which institutes policies, and offers guidance and support to all other bodies of the Secretariat.<sup>39</sup>

#### Mandate, Functions and Powers

Article one of UNIDO's Constitution states:

"The primary objective of the Organization shall be the promotion and acceleration of industrial development in the developing countries with a view to assisting in the establishment of a new international economic order. The Organization shall also promote industrial development and co-operation on global, regional and national, as well as on sectoral levels."<sup>40</sup>

When the Constitution entered into force in 1985, UNIDO was established to "play the central role in and be responsible for reviewing and promoting the coordination of all activities of the United Nations system in the field of industrial development." <sup>41</sup> By 1995, UNIDO's mission had evolved to focus on the importance of public and private partnerships, and in 1997, the Seventh session of the General Conference brought on the adoption of the Business Plan for the Future Roles and Functions of UNIDO in order for the organization to better adapt to the changes in the global economy.<sup>42</sup> The plan restructured UNIDO's mandate to focus on cooperating with supporting institutions, integrating women in industrial development, and aiding small and medium-sized enterprises (SMEs).<sup>43</sup>

Entering the new millennium, UNIDO altered programs to focus on meeting the MDGs.<sup>44</sup> A recent shift in the focus of the UNIDO mandate occurred in 2013 at the Fifteenth session of the General Conference resulting in the *Lima Declaration: Towards inclusive and sustainable industrial development.*<sup>45</sup> The document called attention to the need for ISID in order to achieve the goals of the organization, and made

<sup>&</sup>lt;sup>34</sup> UNIDO, Constitution of the United Nations Industrial Development Organization, 1979.

<sup>&</sup>lt;sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> Ibid.

<sup>&</sup>lt;sup>37</sup> Ibid.

<sup>&</sup>lt;sup>38</sup> Ibid.

<sup>&</sup>lt;sup>39</sup> Ibid.

<sup>40</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> Ibid.

<sup>42</sup> UNIDO, A Brief History.

<sup>43</sup> Ibid.

<sup>44</sup> Ibid.

<sup>&</sup>lt;sup>45</sup> UNIDO, *Lima Declaration: Towards inclusive and sustainable industrial development (GC.15/Res.1)*, 2013.



ISID the mandate of UNIDO while also requesting the issue be addressed on the post-2015 development agenda.<sup>46</sup>

The nature of ISID reinforces the SDGs that were adopted at the Sustainable Development Summit on 25 September 2015.<sup>47</sup> UNIDO has determined that ISID is the optimal driver to achieve SDGs because "every country achieves a higher level of industrialization in their economies and benefits from the globalization of markets for industrial goods and services."<sup>48</sup> During the sixteenth session of the General Conference, the MTPF 2016-2019 introduced three strategic priorities: creating shared prosperity; advancing economic competitiveness; and safeguarding the environment to help UNIDO's mandate toward ISID.<sup>49</sup>

UNIDO has four core functions that are outlined in the most recent MTPF 2018-2021, which are: technical cooperation; analytical and research functions, and policy advisory services; normative functions, and activities related to standards and quality; and convening and partnerships for large-scale investment, knowledge and technology transfer, networking, and industrial cooperation.<sup>50</sup> With these four core functions UNIDO can enhance its organizing of internal operations toward the achievement of SDGs.<sup>51</sup>

The General Conference also has the ability to make recommendations to Member States as well as other international organizations on matters of which UNIDO may have special expertise.<sup>52</sup> While the General Conference is often influenced by the General Assembly, or important developments from other UN bodies, they do not directly report to any other agency.<sup>53</sup> The General Conference often requests action be taken by the Director-General or the IDB, and will ask that reports be made back to one of the policymaking bodies or in UNIDO's annual report.<sup>54</sup>

#### **Recent Sessions and Current Priorities**

Since the Lima Declaration of 2013, UNIDO has actively included the new mandate of ISID in its endeavors in recent years.<sup>55</sup> In efforts to attain the various goals encompassed through ISID, UNIDO organized ISID forums occurring on a regular basis.<sup>56</sup> The seventeenth session, which was the most recent session of UNIDO's General Conference was 27 November-1 December 2017 with a follow-up session scheduled for November 2018.<sup>57</sup> UNIDO recognizes the power women in promoting economic development and strives to empower women, gender equality, and inclusion of women in the development of sustainable industrialization.<sup>58</sup> Other reports submitted by the Director-General include items covering environmental protection, agribusiness, trade capacity-building, and *2030 Agenda for Sustainable Development*.<sup>59</sup> In 2017, at the forty-fifth session of the Industrial Development Board, the Director-General proposed framework for the next four years was adopted as MTPF 2018-2021.<sup>60</sup> MTPF 2018-2021 introduced four strategic core priorities: creating shared prosperity; advancing economic competitiveness; safeguarding the environment; and strengthening knowledge and institutions.<sup>61</sup>

<sup>48</sup> UNIDO, The 2030 Agenda for Sustainable Development: Achieving the industry-related goals and targets.

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> UNIDO, *Medium-term programme framework 2018-2021*, 2017.

<sup>&</sup>lt;sup>49</sup> UNIDO, Medium-term programme framework 2018-2021, 2017.

<sup>50</sup> Ibid.

<sup>&</sup>lt;sup>51</sup> Ibid.

<sup>&</sup>lt;sup>52</sup> UNIDO, Constitution of the United Nations Industrial Development Organization, 1979.

<sup>&</sup>lt;sup>53</sup> UNIDO, General Conference, Decisions and Resolutions of the General Conference (GC.14/INF/4), 2011.

<sup>54</sup> Ibid.

<sup>&</sup>lt;sup>55</sup> UNIDO, Annual Report 2014, 2014.

<sup>&</sup>lt;sup>56</sup> UNIDO, ISID Forum.

<sup>&</sup>lt;sup>57</sup> UNIDO, *The General Conference*.

<sup>&</sup>lt;sup>58</sup> UNIDO, UNIDO gender equality and empowerment of women.

<sup>&</sup>lt;sup>59</sup> UNIDO, The General Conference.

<sup>60</sup> UNIDO, Medium-term programme framework 2018-2021, 2017, p. 6.

<sup>&</sup>lt;sup>61</sup> UNIDO, Medium-term programme framework 2018-2021, 2017



In practice, UNIDO's renewed efforts with the adoption of MTPF 2018-2021 will enhance the implementation of the third Industrial Development Decade for Africa.<sup>62</sup> The third decade was adopted by the General Assembly in 2016 but efforts to collaborate on such a major program were tasked to UNIDO since the goals of the decade squarely align with ISID.<sup>63</sup> UNIDO has committed to leading African countries into first class manufacturing and industrial hubs, able to compete with developed countries.<sup>64</sup> This in turn will create new job opportunities as demand for more skilled workers increases along with better income.<sup>65</sup>

#### Conclusion

UNIDO serves as the lead specialized agency of the UN promoting industrial development. Formed in 1966, and becoming an autonomous specialized agency in 1985, UNIDO has experienced much change throughout the years.<sup>66</sup> Focusing on the promotion of industrial development in developing countries since its inception, UNIDO has adapted to the ever-changing environment and global economy by incorporating ISID and the *2030 Agenda for Sustainable Development* into its mandate.<sup>67</sup> As underlined in MTPF, UNIDO will use its four strategic core priorities and functions to escalate its efforts in having a greater sustainable industrial development impact on participating Member States.<sup>68</sup>

# **Annotated Bibliography**

United Nations, General Assembly, Twenty-first session. (1966). *United Nations Industrial Development Organization (A/RES/2152 (XXI))* [Resolution]. Adopted on the report of the Second Committee. Retrieved 06 August 2018 from: <u>http://undocs.org/A/RES/2152%20(XXI)</u>

This document is the General Assembly's resolution that formed UNIDO. The resolution acknowledges the quickly evolving industrial development occurring at the time, and the need for assistance in the field of developing Member States and states with economies in transition. This document explains the need for a body within the UN system involving industrial development. This resolution is also crucial in understanding the structure and foundation of UNIDO.

United Nations Industrial Development Organization. (1979). Constitution of the United Nations Industrial Development Organization. Retrieved 06 August 2018 from:

https://www.unido.org/sites/default/files/2009-10/UNIDO\_Constitution\_E\_0.pdf

The Constitution of UNIDO is crucial in understanding the foundation and guidelines of the organization. The document offers detailed explanations of how the committee is to be run. This is an especially useful resource for delegates looking for complete explanations of the three policymaking bodies of UNIDO. Delegates will find this to be a useful resource for learning how actual UNIDO sessions are conducted.

United Nations Industrial Development Organization. (2016). *The 2030 Agenda for Sustainable Development: Achieving the industry-related goals and targets* [Report]. Retrieved 07 July 2018 from: <a href="https://www.unido.org/sites/default/files/2015-12/ISID\_SDG\_brochure\_final\_0.pdf">https://www.unido.org/sites/default/files/2015-12/ISID\_SDG\_brochure\_final\_0.pdf</a>

All 17 SDGs are explained in detail for delegates to get familiarized with and how they relate to UNIDO and its mandate. It is important to note that there is a brief description of why, how, and when SDGs were adopted from MDGs. Delegates should also pay close attention to the industry-related targets offered by this document at the end of every SDG description. The targets give a realistic goal that UNIDO is working toward. For example,

<sup>62</sup> Ibid.

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>&</sup>lt;sup>65</sup> UNIDO, Programme and Budgets 2018-2019, 2017.

<sup>&</sup>lt;sup>66</sup> UNIDO, A Brief History.

<sup>&</sup>lt;sup>67</sup> UNIDO, Introduction to UNIDO inclusive and sustainable industrial development, 2015.

<sup>&</sup>lt;sup>68</sup> UNIDO, Medium-term programme framework 2018-2021, 2017, p. 5.



UNIDO is working to substantially reduce by 2030 the negative health effects from pollution and hazardous chemicals contamination.

United Nations Industrial Development Organization. (2017). UNIDO Technical Cooperation Programmes, Projects and Tools. Retrieved 08 July 2018 from: <u>https://www.unido.org/sites/default/files/2017-</u>04/PTC\_Brochure\_Draft\_16.3.2017\_0.pdf

It is important for delegates to understand that advancing economic competitiveness, creating shared prosperity and safeguarding the environment are crucial elements to implementing ISID and the development of UNIDO programs. Therefore, delegates should familiarize themselves with this document since it details all three elements with real world examples such as the implementation of national and regional standards for recycling industries. Another example is working with national stakeholders in improving financial capabilities to include women for the creation of new industries. These and the other examples found in this document are a good source of information for delegates to better understand UNIDO's area of work and objectives.

United Nations Industrial Development Organization, General Conference, Fifteenth session. (2013). *Lima Declaration: Toward inclusive and sustainable industrial development (GC.15/Res.1)* [Resolution]. Retrieved 05 August 2018 from: <u>https://www.unido.org/sites/default/files/2014-</u>04/Lima\_Declaration\_EN\_web\_0.pdf

The Lima Declaration of 2013 establishes UNIDO's current mandate as ISID. This document explain what ISID is and how it can be incorporated in efforts to achieve the SDGs. Understanding the Lima Declaration is crucial in order for delegates to understand UNIDO's current efforts. It is important to note that this document reaffirms UNIDO's commitment to achieve the SGDs with ISID as the major driver toward that achievement.

United Nations Industrial Development Organization, Industrial Development Board, Forty-fifth session. (2017). *Medium-term programme framework, 2018-2021*. Retrieved 7 July 2018 from: <a href="https://www.unido.org/sites/default/files/2017-05/IDB.45\_8\_Add.2\_2\_E\_Medium-term\_programme\_framework\_2018-2021\_1703143E\_20170522\_0.pdf">https://www.unido.org/sites/default/files/2017-05/IDB.45\_8\_Add.2\_2\_E\_Medium-term\_programme\_framework\_2018-2021\_1703143E\_20170522\_0.pdf</a>

Proposed by the Director-General to the Industrial Development Board, the Medium-term program framework 2018-2021 (MTPF) introduces the four strategic priorities and functions of UNIDO for the next four years and is an update to the previous MTPF 2016-2019. In addition, MTPF recognizes the changing economic environment in which renewed efforts toward ISIDs and SDGs are needed to combat poverty. Included in this document is a report recently completed by a Joint Inspection Unit (JIU) that provides details on UNIDO's progress toward achieving ISIDs and SDGs. For instance, currently UNIDO is working on SDGs relating to gender equality, environmental degradation, poverty and others.

United Nations Industrial Development Organization, Industrial Development Board, Forty-fifth session. (2017). *Programme and Budgets 2018-2019*. Retrieved 7 July 2018 from: <u>https://www.unido.org/sites/default/files/2017-04/PBC.33\_5\_E\_Programme\_and\_budgets\_2018-2019\_V1701280\_0.pdf</u>

The various current programs within UNIDO can be found in this document. For instance, the program on meetings of the policymaking organs are intended to develop guidelines and policy within UNIDO. Strategic management program ensures that effective communication to all Member States in implementing ISID. This source also has a good explanation of how ISID is a major driver in achieving SDGs and it highlights that SDG 9 is essential for sustainable development. Both the 2030 Agenda and the third Industrial Development Decade for Africa are discussed in relation to UNIDO and its current work toward achieving those programs.

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United Nations Industrial Development Organization. (n.d.). *Gender equality and the empowerment of women* [Website]. Retrieved 25 September 2018 from: <u>https://www.unido.org/our-focus/cross-cutting-services/gender-equality-and-empowerment-women</u>

United Nations Industrial Development Organization. (n.d.). *ISID Forum* [Website]. Retrieved 25 September 2018 from: <u>https://www.unido.org/news-centre/events/isid-forum</u>

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# I. The Role of Information and Communications Technology in Industrial Development

"Information technology plays a key role in fostering development. Governments, civil society, the private sector, academia and others must join forces to promote new business models, public policies and technology solutions in the global approach to development."<sup>69</sup>

#### Introduction

The United Nations (UN) views industrial development as necessary for poverty eradication and seeks to build stronger economic foundations as well as improve the productive capacities of least developed countries (LDCs).<sup>70</sup> Development needs to be sustainable minimizing the amount of resources required to maintain development and minimizing the negative environmental effect that may come as a result of new industries.<sup>71</sup> By making industrial development inclusive and sustainable, all Member States, stakeholders, and organizations have the opportunity to improve economic capacity and infrastructure while minimizing negative environmental effects.<sup>72</sup> Technology is a dynamic and integral part of promoting industrial and economic development.<sup>73</sup> As industries grow, generated income can fund initiatives to maximize current public services such as energy and transportation, and create the capacity to sell other goods.<sup>74</sup> As companies become more efficient in producing goods, they create structural changes in communities, increasing demand for new services (e.g. public, health, environmental, and educational), which fosters innovation for new ideas, opportunities for a growing service economy, and the capacity for new jobs, which reinvigorates companies' efficiency and begins the cycle of innovation over again.<sup>75</sup> Industries (manufacturing or agricultural) provided 500 million jobs in 2015, approximately one-fifth of all jobs worldwide.<sup>76</sup>

The United Nations Industrial Development Organization (UNIDO) considers small and medium-sized enterprises (SMEs) to be the key facilitators of industrial development as they act as economic building blocks for developing countries and create employment and services that directly affect local communities.<sup>77</sup> Coupled with information and communications technologies (ICTs), SMEs can become effective tools for improving the economic globalization process and foster sustainable development.<sup>78</sup> In partnership with the International Telecommunication Union (ITU), UNIDO announced the beginning and implementation of Industry 4.0, also called the 4<sup>th</sup> Industrial Revolution.<sup>79</sup> Industry 4.0 describes emerging trends in data and communication in manufacturing industries and is a sign for increasing needs of technological advancement and the emerging digital market.<sup>80</sup> The digital market provides developing states with an opportunity for increasing economic ability and infrastructure as well as a connection with the global market.<sup>81</sup> By connecting with the rest of the world, developing states can extend their

<sup>73</sup> UNIDO, Lima Declaration and Plan of Action on Industrial Development and Co-Operation (GC.2/Res.1), 1975.
<sup>74</sup> UNIDO, Industrial Development Report 2018, 2018.

<sup>&</sup>lt;sup>69</sup> UNIDO, Building E-Competence: Enabling Small Business to Access Opportunities through Information and Communication Technology, 2008, p. 2.

<sup>&</sup>lt;sup>70</sup> UNIDO, Lima Declaration: Towards inclusive and sustainable industrial development (GC.15/Res.1), 2013; UN General Assembly, Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1), 2015.

<sup>&</sup>lt;sup>71</sup> UNIDO, Introduction to UNIDO: Inclusive and Sustainable Industrial Development, 2015.

<sup>&</sup>lt;sup>72</sup> UNIDO, Inclusive and Sustainable Industrial Development, 2013; UNIDO, Information and communications technology (ICT), 2018.

<sup>75</sup> Ibid.

<sup>&</sup>lt;sup>76</sup> UNIDO, Introduction to UNIDO: Inclusive and Sustainable Industrial Development, 2015.

<sup>&</sup>lt;sup>77</sup> UNIDO, Information and communications technology (ICT), 2018.

<sup>78</sup> Ibid.

<sup>&</sup>lt;sup>79</sup> UNIDO, UNIDO and ITU convene special session, 2017; PWC, Industry 4.0: Building the digital enterprise, 2016.

<sup>&</sup>lt;sup>80</sup> UNIDO, UNIDO and ITU convene special session, 2017; PWC, Industry 4.0: Building the digital enterprise, 2016; Hermann et al., Design Principles for Industries 4.0 Scenarios, 2016.

<sup>&</sup>lt;sup>81</sup> UNIDO, UNIDO and ITU convene special session, 2017; PWC, Industry 4.0: Building the digital enterprise, 2016.



businesses to other potential customers and communicate with new partners.<sup>82</sup> For businesses to thrive in an increasingly interconnected world, they need to have the ability to work in a digital market and must adapt to changing demands of a global information society.<sup>83</sup>

Global digital connectivity has increased over recent years, with Internet subscriptions increasing to 43% of the world's population in 2015 from 6% in 2000.<sup>84</sup> Furthermore, mobile phone and tablet subscriptions have increased to over 7 billion from 738 million in 2000.<sup>85</sup> ICTs are effectively changing the way people communicate and live.<sup>86</sup> ICTs can be defined as "devices and infrastructures that facilitate the transfer of information through digital means" and include items such as the Internet, mobile devices, and databases.<sup>87</sup> The UN considers any form of information-sharing platforms as types of ICTs, including social media.<sup>88</sup>

#### International and Regional Framework

The UN is devout in its commitment to development for all, as shown in the *Declaration on the Right to Development* (1986) and calls for Member States to create appropriate development policies aimed to the benefit of all persons and ensure their participation in development.<sup>89</sup> In the *Lima Declaration and Plan of Action on Industrial Development and Co-operation* (Lima Declaration) of 1975, UNIDO affirmed its desire to create industrial plans and strategies and promote an "integrated industrialization process" for all countries.<sup>90</sup> The 2013 UNIDO General Conference adopted the Lima Declaration of 2013, both to affirm the UN's commitment to industrial development as well as to highlight the need to update the parameters for development in today's world.<sup>91</sup> The declaration calls for international cooperation among Member States, corporations, UNIDO, and other UN entities for a structural approach in streamlining direct foreign investment and technology sharing through a structured system of communication.<sup>92</sup> Furthermore, in order to combat emerging challenges of inadequate funding or poor technological infrastructure in Member States, the declaration calls for UNIDO to be a global facilitator for knowledge and strategies.<sup>93</sup> These strategies must reflect the changing technological needs of Member States.<sup>94</sup>

The UN reemphasized its commitment to the progression of industrial development through ICTs, as shown in the *2030 Agenda for Sustainable Development* (2030 Agenda) which calls for economic, social, and technological progress.<sup>95</sup> Specifically, the UN highlights the importance of industrial development in Sustainable Development Goal (SDG) 9, calling upon stakeholders to build and promote resilient infrastructure as well as inclusive and sustainable industrialization.<sup>96</sup> Furthermore, SDG target 9.c highlights the specific concern of "[increasing] access to information and communications technology and strive to provide universal and affordable access to the Internet in LDCs by 2020."<sup>97</sup> Better infrastructure

<sup>82</sup> Ibid.

<sup>&</sup>lt;sup>83</sup> UNIDO, UNIDO and ITU convene special session, 2017; PWC, Industry 4.0: Building the digital enterprise, 2016; UNIDO, Advancing economic competitiveness, 2018.

<sup>&</sup>lt;sup>84</sup> UN DESA, Information and communication technologies (ICTs).

<sup>&</sup>lt;sup>85</sup> Ibid.

<sup>86</sup> Ibid.

<sup>&</sup>lt;sup>87</sup> Zuppo, Defining ICT in a boundaryless world: The development of a working hierarchy, 2012.

 <sup>&</sup>lt;sup>88</sup> UN System Chief Executives Board for Coordination, Information and Communications Technologies (ICTs), 2016.
<sup>89</sup> UN General Assembly, Declaration on the Right to Development (A/41/128), 1986.

<sup>&</sup>lt;sup>90</sup> UNIDO, Lima Declaration and Plan of Action on Industrial Development and Co-Operation (GC.2/Res.1), 1975.

<sup>&</sup>lt;sup>91</sup> UNIDO, Lima Declaration: Towards inclusive and sustainable industrial development (GC.15/Res.1), 2013.

<sup>92</sup> Ibid.

<sup>&</sup>lt;sup>93</sup> Ibid.

<sup>&</sup>lt;sup>94</sup> Ibid.

<sup>&</sup>lt;sup>95</sup> UN General Assembly, Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1), 2015.

<sup>&</sup>lt;sup>96</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015; UNIDO, *UNIDO in Brief*, 2018; UNDP, *Sustainable Development Goals*.

<sup>&</sup>lt;sup>97</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.



that supports regional and transborder initiatives can support economic development as well as focus on more affordable and equitable access for all.<sup>98</sup> In order to achieve this goal, the UN calls for increased mobilization of resources, specifically through enhanced development cooperation, as stated in SDG 1 on poverty eradication.<sup>99</sup> More so, the UN looks toward ICTs as having the potential to increase the efficiency and sustainability of industrial development.<sup>100</sup> The role of technology is drastically changing due to the global need for digital advances.<sup>101</sup> SDG 8 to promote sustained, inclusive and sustainable economic growth" and specifically target 3 considers the need for development-oriented actions to support job creation and entrepreneurship to help micro-, small-, and medium-sized enterprises grow.<sup>102</sup> SDG 17 is focused on the improvement of current information technologies, dissemination of financial and technological resources and strategies, and looks to enhance capacity-building in developing countries through regional cooperation.<sup>103</sup> The UN also calls for multi-stakeholder partnerships to support the mobilization and dissemination of knowledge, technology, and financial resources.<sup>104</sup>

In conjunction with the 2030 Agenda, the international community adopted the *Addis Ababa Action Agenda* (2015) to foster collaboration through sharing of best practices among Member States, the scientific community, the UN, and other stakeholders.<sup>105</sup> The Agenda calls upon Member States to develop a strategy to promote affordable access to ICTs for SMEs.<sup>106</sup>

On a regional level, the 2013 Transform Africa Summit adopted the Smart Africa Manifesto (SMART Africa), in which seven African nations committed to leading socio-economic development through ICTs.<sup>107</sup> SMART Africa calls upon all African nations to implement and integrate ICTs in the development plans of African states to minimize poverty, create prosperity, and increase productivity.<sup>108</sup> Furthermore, SMART Africa calls upon Member States to utilize ICTs for sustainable development and to address environmental topics such as climate change as well as engaging Africa in areas of cyber security and shared infrastructure and services.<sup>109</sup> The manifesto is a promise to attempt to involve Africa in the growing ICTs sector around the world by mobilizing the millions of smartphones and tablets existing in African markets and to respond to the needs of a consumer market of over one billion Africans.<sup>110</sup>

#### Role of the International System

Through a variety of programs, tools, and partnerships, UNIDO offers necessary services and resources to Member States for developing industry and ICTs as well as overall capacity-building.<sup>111</sup> These resources help facilitate international trade and communication between developing states and needed

<sup>&</sup>lt;sup>98</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

<sup>&</sup>lt;sup>99</sup> UN General Assembly, Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1), 2015; UNIDO, UNIDO in Brief, 2018.

<sup>&</sup>lt;sup>100</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015; UNDP, *Sustainable Development Goals.* 

<sup>&</sup>lt;sup>101</sup> UN General Assembly, Information and communications technology in the United Nations: Report of the Secretary-General (A/69/517), 2014.

<sup>&</sup>lt;sup>102</sup> UN General Assembly, Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1), 2015.

<sup>&</sup>lt;sup>103</sup> Ibid.

<sup>&</sup>lt;sup>104</sup> Ibid.

<sup>&</sup>lt;sup>105</sup> UN General Assembly, Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1), 2015; UN General Assembly, Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313), 2015; UN DESA, Countries reach historic agreement to generate financing for new sustainable development agenda, 2015.

<sup>&</sup>lt;sup>106</sup> UN DESA, Countries reach historic agreement to generate financing for new sustainable development agenda, 2015.

<sup>&</sup>lt;sup>107</sup> Smart Africa, *Smart Africa Overview*, 2017.

<sup>&</sup>lt;sup>108</sup> Smart Africa, Smart Africa Manifesto, 2017; Smart Africa, Smart Africa Strategic Vision.

<sup>&</sup>lt;sup>109</sup> Ibid.

<sup>&</sup>lt;sup>110</sup> Smart Africa, Smart Africa Manifesto, 2017.

<sup>&</sup>lt;sup>111</sup> UNIDO, Information and communications technology (ICT), 2018.



resources.<sup>112</sup> Finally, UNIDO implements ICT training and provides entrepreneurial experiences through seminars to help emerging markets adapt to the needs of the information society.<sup>113</sup>

In 2001, UNIDO introduced the Africa Investment Promotion Agency Network (AfrIPANet) to connect African Investment Promotion Agencies (IPAs) where stakeholders can participate in discussions regarding investment promotion strategies and gain access to information on potential investors.<sup>114</sup> Further, the initiative solidifies connections between African states and external parties and strategically uses donations for the most critical areas of a country's development.<sup>115</sup> UNIDO's Mobile Phone Solutions for SMEs and Local Software Initiative allow for the development and dissemination of software solutions and mobile phones to businesses in Africa.<sup>116</sup> Access to software and phones can substitute for the lack of existing connections, increase mobility and trade networks, and helps persons search for employment.<sup>117</sup> With more people connected to each other, communities can improve upon existing business efforts and create new ones.<sup>118</sup> For example, women entrepreneurs created a village phone operation business and rural communities gained access to banking services.<sup>119</sup>

UNIDO also partners with many private sector firms to offer further ICT services.<sup>120</sup> The Refurbished Computer Program is a partnership between UNIDO and Microsoft to offer affordable, quality computer hardware for African businesses.<sup>121</sup> Microsoft sells refurbished computers at a discounted rate to SMEs, especially those in rural areas.<sup>122</sup> The partnership also created the Uganda Green Computer Company, a computer repair and ICT training center located in Kampala, Uganda.<sup>123</sup> Other partnerships include L.M. Ericsson and Hewlett-Packard, which offer similar programs in providing quality hardware to SMEs and give lessons in technical application and policy making.<sup>124</sup>

In 2017, UNIDO and the ITU announced a joint partnership to support the development of innovative technology, policies, and SMEs.<sup>125</sup> The Industry 4.0 initiative focuses on digitization of all assets and integrating business processes for a streamlined production system and incorporates new methods of data collection and analysis.<sup>126</sup> This creates a common goal that all industries can work toward.<sup>127</sup> Industry 4.0 maintains digital relationships through platforms such as the Product Lifecycle Management Systems and Manufacturing Execution Systems, which provide connections between market intelligence, product development, vendors, and hosting companies.<sup>128</sup> These connections sustain communication between emerging businesses and external partners for much needed information and resource exchange to thrive in the global market as well as provide emerging businesses with a model for integrating digital platforms with physical goods and public services.<sup>129</sup>

<sup>&</sup>lt;sup>112</sup> UNIDO, Advancing economic competitiveness, 2018.

<sup>&</sup>lt;sup>113</sup> UNIDO, Advancing economic competitiveness, 2018; UNIDO & Centre for Private Sector Development Istanbul, Effective Policies for Small Business, 2016.

<sup>&</sup>lt;sup>114</sup> UNIDO, Africa Investment Promotion Agency Network (*AfrIPANet*), 2018.

<sup>&</sup>lt;sup>115</sup> Ibid.

<sup>&</sup>lt;sup>116</sup> UNIDO, Local Software Initiative, 2018; UNIDO, Mobile Phone Solutions for SMEs, 2018.

<sup>&</sup>lt;sup>117</sup> Ibid.

<sup>&</sup>lt;sup>118</sup> Ibid.

<sup>&</sup>lt;sup>119</sup> Ibid.

<sup>&</sup>lt;sup>120</sup> UNIDO, Independent Thematic Evaluation: UNIDO's Public Private Partnerships, 2013.

<sup>&</sup>lt;sup>121</sup> UNIDO, UNIDO-Microsoft Partnership, 2018; UNIDO, UNIDO and Private Sector, 2018; UNIDO, UNIDO-Hewlett Packard, 2018.

<sup>&</sup>lt;sup>122</sup> UNIDO, UNIDO-Microsoft Partnership, 2018.

<sup>&</sup>lt;sup>123</sup> Ibid.

<sup>&</sup>lt;sup>124</sup> UNIDO, UNIDO-Ericsson, 2018; UNIDO, UNIDO-Hewlett Packard, 2018.

<sup>&</sup>lt;sup>125</sup> UNIDO, UNIDO and ITU Partnership to accelerate the achievement of 2030 Agenda, 2017.

<sup>&</sup>lt;sup>126</sup> UNIDO, UNIDO and ITU convene special session, 2017; PWC, Industry 4.0: Building the digital enterprise, 2016.

<sup>127</sup> Ibid.

<sup>128</sup> Ibid.

<sup>&</sup>lt;sup>129</sup> PWC, Industry 4.0: Building the digital enterprise, 2016.



In 2009, the ITU created the ICT Development Index, an annual report that measures and compares the rates of development of ICTs between countries to show changes and trends in ICT usage.<sup>130</sup> The report looks at the evolution of ICT developments in states, the digital divide between them, and the potential of each state to maximize their capacity through ICT.<sup>131</sup> Furthermore, in 2010, ITU and the United Nations Educational, Scientific, and Cultural Organization established the Broadband Commission for Sustainable Development to promote worldwide broadband policies and practices by monitoring and evaluating broadband usage and policies and offering recommendations to promote Internet access.<sup>132</sup> The 2017 report on *The State of Broadband: Broadband catalyzing sustainable development* recorded the global IT market was worth \$3.8 trillion in 2016, up from \$3.7 trillion in 2015.<sup>133</sup> In addition, the report states that online content and applications are to be considered the major drivers for demand, hinting that an industrial platform in the digital market will prove to leverage better connections and results in the long run.<sup>134</sup>

A recent 2017 Special Meeting of the UN Economic and Social Council on "Innovation for Infrastructure Development and Promoting Sustainable Industrializations" addressed opportunities in the pursuit of SDG 9 and utilizing ICT's potential.<sup>135</sup> It reaffirmed the need for strong partnerships between the public sector and SMEs.<sup>136</sup> Furthermore, it highlighted the need to continue expanding markets as urbanization will double the consumer platform for ICT products by 2030.<sup>137</sup> The 2017 SDG Action Event on Innovation and Connectivity hosted by the President of the UN General Assembly provided a platform for leading innovators and technology companies to engage with Member States and the UN on using emerging technologies to better implement the SDGs.<sup>138</sup> The event noted that if hotspot innovation centers, cities, businesses, schools, or other hubs that highlight and promote technological advancements and efficiency, are properly used, they could help achieve the SDGs and the 2030 Agenda.<sup>139</sup>

Other organizations are also interested in the role of ICTs and industrial development. The United Nations Conference on Trade and Development's (UNCTAD) *Information Economy Report 2017* highlights key technologies in the evolving digital economy.<sup>140</sup> The report highlights the need for advancements in ebusiness and e-commerce, and studies the potential of these technologies for achieving the 2030 Agenda and the SDGs.<sup>141</sup> E-commerce was worth \$22.1 trillion in 2015, and is only expected to rise.<sup>142</sup> Understanding the potential of these technologies can help Member States and companies engage in activities that help SMEs connect to various services to build products and obtain finances via online platforms.<sup>143</sup> Furthermore, with the integration of Artificial Intelligence in business development and technologies, opportunities for business drastically increases.<sup>144</sup> UNCTAD also created a partnership with the International Trade Center to build institutional capacity to better facilitate trade between countries and corporations.<sup>145</sup> This group initiative will help businesses maximize their exports and address the

<sup>&</sup>lt;sup>130</sup> ITU, *The ICT Development Index (IDI): conceptual framework and methodology*, 2018.

<sup>&</sup>lt;sup>131</sup> Ibid.

<sup>&</sup>lt;sup>132</sup> UN Broadband Commission for Sustainable Development and International Telecommunication Union, *The State* of Broadband: Broadband catalyzing sustainable development, 2017.

<sup>&</sup>lt;sup>133</sup> Ibid.

<sup>&</sup>lt;sup>134</sup> Ibid.

<sup>&</sup>lt;sup>135</sup> ECOSOC, 2017 Special meeting of ECOSOC on Innovations for Infrastructure Development and Promoting Sustainable Industrialization, 2017.

<sup>&</sup>lt;sup>136</sup> Ibid.

<sup>&</sup>lt;sup>137</sup> Ibid.

<sup>&</sup>lt;sup>138</sup> President of the UN General Assembly, SDG Action Event on Innovation and Connectivity, 2017.

<sup>&</sup>lt;sup>139</sup> Ibid.

<sup>&</sup>lt;sup>140</sup> UNCTAD, Information Economy Report 2017, 2017.

<sup>&</sup>lt;sup>141</sup> Ibid.

<sup>&</sup>lt;sup>142</sup> UNCTAD, \$22 trillion e-commerce opportunity for developing countries, 2016.

<sup>&</sup>lt;sup>143</sup> UNCTAD, Information Economy Report 2017, 2017.

<sup>&</sup>lt;sup>144</sup> Ibid.

<sup>&</sup>lt;sup>145</sup> UNCTAD, UNCTAD-ITC Partnership on Trade facilitation, 2014.



needs of LDCs.<sup>146</sup> UNCTAD's "eTrade for All" also connects organizations, donors, and developing states with technological assistance and opportunities for funding.<sup>147</sup>

The World Summit on the Information Society (WSIS) Forum is the world's largest annual gathering for the ICT community with the purpose of convening stakeholder for discussion on increasing access and infrastructure for ICTs worldwide.<sup>148</sup> In 2015, WSIS recognized that ICTs support diversity and cultural expression of growing creative industries.<sup>149</sup> WSIS also highlighted that spending on ICTs has substantially increased in previous years, increasing to \$4.3 trillion in 2016 and is expected to reach \$5.5 trillion by 2020, which shows the global desire to evolve technologically.<sup>150</sup>

#### Challenges to Effectively Use ICTs for Development

While ICTs are a great asset for industrial development, there are challenges that hinder developing countries and SMEs from obtaining adequate ICTs.<sup>151</sup> These issues include the "lack of affordable access to ICTs, lack of ICT knowledge, lack of customized ICT solutions" to fit local contexts, and the lack of legal, institutional, or policy frameworks for ICTs.<sup>152</sup> Rapidly developing markets can increase the digital divide between and within Member States and further the disadvantage of developing nations that are building a presence in the digital market.<sup>153</sup> The solution lies in connecting communities to knowledge and resources for ICTs by targeting SMEs to become engaged components of the economy and community.<sup>154</sup> Connecting SMEs with the necessary financial resources and businesses remains an integral part of ensuring access to ICTs for all.<sup>155</sup>

These issues occur in part because current technologies and initiatives are fragmented across different entities.<sup>156</sup> The lack of consolidation prevents connections between groups (e.g. Member State to Member State, or Member State to corporations) and prevents funding from reaching groups in need.<sup>157</sup> In order to successfully develop LDCs and achieve SDG 9, there must be systematic and sustained innovation between the public and private sector and cooperation among Member States.<sup>158</sup> Almost half of the world's population had access to the Internet by the end of 2016 but only 14% had access in LDCs according to the statistics available.<sup>159</sup> Technology allows people to acquire information that can be useful for a state's development.<sup>160</sup> Consolidating and properly governing ICTs and respective initiatives will allow for multilateral initiatives that may reach many communities.<sup>161</sup> Thus far, the UN created the position of a Chief Information Technology Officer who disseminates common goals between LDCs as well as

<sup>&</sup>lt;sup>146</sup> UNCTAD, UNCTAD-ITC Partnership on Trade facilitation, 2014.

<sup>&</sup>lt;sup>147</sup> UNCTAD, \$22 trillion e-commerce opportunity for developing countries, 2016.

<sup>&</sup>lt;sup>148</sup> Internet Society, WSIS Forum 2018, 2018.

<sup>&</sup>lt;sup>149</sup> UN General Assembly, Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society (A/RES/70/125), 2015.

<sup>&</sup>lt;sup>150</sup> UN General Assembly, Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society (A/RES/70/125), 2015; International Data Corporation, Annual ICT Spending to Reach \$5.5 Trillion by 2020 According to New 3rd Platform Edition of IDC Black Book, 2017.

<sup>&</sup>lt;sup>151</sup> UNIDO, Information and communications technology (ICT), 2018.

<sup>152</sup> Ibid.

<sup>&</sup>lt;sup>153</sup> President of the UN General Assembly, SDG Action Event on Innovation and Connectivity, 2017.

<sup>&</sup>lt;sup>154</sup> UNIDO, Information and communications technology (ICT), 2018.

<sup>&</sup>lt;sup>155</sup> UNIDO, Introduction to UNIDO: Inclusive and Sustainable Industrial Development, 2015.

<sup>&</sup>lt;sup>156</sup> UN OICT, *ICT* strategy for the future United Nations, 2014.

<sup>&</sup>lt;sup>157</sup> Ibid.

<sup>&</sup>lt;sup>158</sup> ITU, Fast-forward progress: Leveraging tech to achieve the global goals.

<sup>&</sup>lt;sup>159</sup> Ibid.

<sup>&</sup>lt;sup>160</sup> Ibid.

<sup>&</sup>lt;sup>161</sup> UN OICT, ICT strategy for the future United Nations, 2014; ITU, Fast-forward progress: Leveraging tech to achieve the global goals; UN General Assembly, Information and communications technology in the United Nations: Report of the Secretary-General (A/70/364), 2015.



serves as a hub to connect separated communities.<sup>162</sup> This connection can allow more effective collaborations between development stakeholders and LDCs as well as create innovate methods to improve technological infrastructure and development.<sup>163</sup> Well governed and connected ICTs can improve the efficiency of business operations for SMEs by creating links to local, regional, and international stakeholders and markets, and connecting them to technology and financial resources.<sup>164</sup>

Another issue for ICTs and development arises in the type of Internet connection used between the developed and developing world.<sup>165</sup> Developing states tend to have more affordable mobile connections as opposed to broadband networks.<sup>166</sup> Mobile connections do not maintain the same strength and capacity as their broadband counterparts.<sup>167</sup> Furthermore, not all SMEs have the ability to purchase broadband Internet connections for their computer hardware, keeping them in the intranet and out of the global Internet.<sup>168</sup> Technologies need to be more robust and secure in order to keep up with increasing technological needs and to be protected from digital threats such as cybercrime.<sup>169</sup> While increasing connections with external partners allows for more communication between stakeholders, it also poses threats to connected communities.<sup>170</sup> Not only is weak infrastructure vulnerable to cyber threats, but an attack on a novice technological system can be detrimental to the development of a country and can violate the privacy of affected persons.<sup>171</sup> Technology must not only be accessible but must also comply with increasing standards.<sup>172</sup> Further, adequate training must be made available for communities to react to potential cyber threats.<sup>173</sup>

#### Conclusion

ICTs are a crucial component for industrial development, particularly in developing countries.<sup>174</sup> SMEs and ICTs hold a synergistic relationship for industrial development. SMEs are noted as key players in the dissemination and advancement of ICT and critical infrastructure for development while ICTs drive SME development.<sup>175</sup> Connecting SMEs with regional and international organizations as well as partnering with the public and private sectors has been proven to increase the economic and technological ability of developing countries.<sup>176</sup> Successful partnerships will foster capacity-building and prepare the digital market for a growing consumer base.<sup>177</sup> However, not all places have been reached with adequate technological assistance.<sup>178</sup> Initiatives are still attempting to connect with low-tech areas while the digital divide between Member States and within societies continually increases.<sup>179</sup> A comprehensive approach

<sup>&</sup>lt;sup>162</sup> UN OICT, *ICT* strategy for the future United Nations, 2014; ITU, Fast-forward progress: Leveraging tech to achieve the global goals.

<sup>&</sup>lt;sup>163</sup> UNIDO, Building E-Competence: Enabling Small Business to Access Opportunities through Information and Communication Technology, 2008.

<sup>&</sup>lt;sup>164</sup> UNIDO, Information and communications technology (ICT), 2018.

<sup>&</sup>lt;sup>165</sup> ITU, *Measuring the Information Society*, 2012.

<sup>&</sup>lt;sup>166</sup> Ibid.

<sup>&</sup>lt;sup>167</sup> UN OICT, ICT strategy for the future United Nations, 2014; ITU, Fast-forward progress: Leveraging tech to achieve the global goals.

<sup>&</sup>lt;sup>168</sup> UNIDO, Evaluation, 2018.

<sup>&</sup>lt;sup>169</sup> Ibid.

<sup>&</sup>lt;sup>170</sup> UN OICT, ICT strategy for the future United Nations, 2014; ITU, Fast-forward progress: Leveraging tech to achieve the global goals.

<sup>&</sup>lt;sup>171</sup> Ibid.

<sup>&</sup>lt;sup>172</sup> Ibid.

<sup>173</sup> Ibid.

<sup>&</sup>lt;sup>174</sup> UN General Assembly, Information and communications technology in the United Nations: Report of the Secretary-General (A/69/517), 2014.

<sup>175</sup> Ibid.

<sup>&</sup>lt;sup>176</sup> UN DESA, Information and communication technologies.

<sup>177</sup> Ibid.

<sup>&</sup>lt;sup>178</sup> UNIDO, Information and communications technology (ICT), 2018.

<sup>&</sup>lt;sup>179</sup> ITU, The ICT Development Index (IDI): conceptual framework and methodology, 2018.



is needed that endorses partnerships with difficult to reach areas and helps transcend current financial, intellectual, and social barriers for sustainable industrial development.<sup>180</sup>

#### Further Research

Ensuring ICTs for all Member States remains an important goal for the UN.<sup>181</sup> Delegates should consider additional methods of connecting developing countries and SMEs to critical resources to improve industrial developmental advancements and maintenance for ICTs. What strategies could be improved or implemented to reach out to communities? How can the international community assist developing countries in overcoming financial, legal, or policy hindrances? How can developing countries with elementary ICT improve and compete with the rest of the world in growing digital markets? How can UNIDO foster additional collaborations to assist in the disseminations of ICT and critical infrastructure?

# **Annotated Bibliography**

PWC. (2016). *Industry 4.0: Building the digital enterprise*. Retrieved 10 August 2018 from: <u>https://www.pwc.com/gx/en/industries/industries-4.0/landing-page/industry-4.0-building-your-digital-enterprise-april-2016.pdf</u>

This survey highlights the importance of ICTs in the changing digital world. Industry 4.0 marks the next industrial revolution that Member States with developed ICTs are becoming a part of. With the current switch to the digital market, developing states need to have a sustainable digital platform in order to thrive and connect with the global market. Industry 4.0 provides a road map that all industries should abide by in order to build the necessary infrastructure for a digital platform. However, without adequate resources, SMEs and other industries might not have the tools necessary to build such a platform. Delegates should use this source to identify the technological needs for developing nations and SMEs and should also consider the steps necessary to prepare countries for this coming revolution.

Smart Africa. (n.d.). *Smart Africa Strategic Vision*. Retrieved 10 August 2018 from: <u>https://smartafrica.org/IMG/pdf/smart\_africa\_strategic\_vision-3.pdf</u>

This report serves as an example of international collaboration on ICTs. African states have drastically increased both mobile and Internet usage through initiatives such as capacity-building programs, startup support, and a Young Entrepreneurs sponsorship and mentorship program. However, there is still room for growth. Smart Africa sets small goals to slowly achieve a fully integrated and interconnected Africa. Delegates could use this source as a model for creating short-term goals for ICTs.

United Nations, Broadband Commission for Sustainable Development and International Telecommunication Union. (2017). *The State of Broadband: Broadband catalyzing sustainable development* [Report]. Retrieved 10 August 2018 from: <u>https://www.itu.int/dms\_pub/itu-s/opb/pol/S-POL-BROADBAND.18-2017-PDF-E.pdf</u>

This report provides statistics on the dynamic digital market and draws attention to ICTs in developing countries. The report also highlights strategies and needed assistance in order to properly use ICTs to achieve the SDGs. Delegates can consider how to use the world's increasing Internet connection to foster more collaboration between local and international markets to provide appropriate technologies needed for disconnected communities. Using network enhancements and techniques used in the "Broadband China" initiative, delegates have examples of successful practices in fostering and maintaining ICTs for the purpose of industrial development.

<sup>&</sup>lt;sup>180</sup> UNIDO, Introduction to UNIDO: Inclusive and Sustainable Industrial Development, 2015.

<sup>&</sup>lt;sup>181</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.



United Nations Conference on Trade and Development. (2017). *Information Economy Report 2017*. Retrieved 10 August 2018 from: <u>http://unctad.org/en/PublicationsLibrary/ier2017\_en.pdf</u>

This report talks about the benefits of digitization in industries. With digitization, companies can streamline processes to efficient mechanisms, increasing their business opportunities and maximizing resources by creating an avenue to advertise their services and connect to different markets. Further, SMEs can look toward better technological infrastructure to begin their stance in the digital market. Delegates can use this source to understand how developing countries can begin to digitize their businesses.

United Nations, Economic and Social Council. (2017). 2017 Special meeting of ECOSOC on Innovations for Infrastructure Development and Promoting Sustainable Industrialization [Report]. Retrieved 10 August 2018 from:

https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/2017doc/2017\_ecosoc\_special\_meeting\_summary.pdf

This report marks important components to building inclusive societies and minimizing the digital divide between Member States. The report states that stakeholders need to build resilient and climate-sensitive urban infrastructure for communities in order for industrial development to flourish in developing nations. Delegates should consider the obstacles in disseminating ICTs and consider solutions to break barriers as communities that are disconnected from critical information and technology miss out on an opportunity to communicate with other entities.

United Nations, General Assembly, Forty-first session. (1986). *Declaration on the Right to Development* (A/41/128). Adopted on report of the First Committee (A/41/925). Retrieved 10 August 2018 from: <u>http://undocs.org/A/RES/41/128</u>

This resolution encourages collaboration between Member States, the UN, and business entrepreneurs and experts. These much needed stakeholders are able to foster a growing network and share ideas, concerns, and solutions in disseminating ICTs around the globe. Delegates should note the need for international cooperation between Member States and other entities for industrial development. A collaborative effort is needed in order to successfully ensure the building of sustainable infrastructure in societies.

United Nations Industrial Development Organization. (2008). *Building E-Competence: Enabling Small Business to Access Opportunities through Information and Communication Technology* [Report]. Retrieved 7 August 2018 from: https://www.unido.org/sites/default/files/2008-10/UNIDO48pp\_SR\_0.pdf

This document highlights the importance of ICT in SMEs and identifies benefits for developing countries in using ICTs. It also highlights challenges to obtain ICTs. Furthermore, the report summarizes UNIDOs approaches in helping developing states to obtain ICTs and provides examples of successful initiatives thus far. Finally, suggestions are provided for improvement. Delegates can use this source as an overview of the use, implementation, and issues in obtaining ICTs.

United Nations Industrial Development Organization & Centre for Private Sector Development Istanbul. (2016). *Effective Policies for Small Business* [Report]. Retrieved 10 August 2018 from: https://www.unido.org/sites/default/files/2009-04/Effective policies for small business 0.pdf

This report provides strategies for improving ICTs in developing countries through policy. Better policies that strategically target SMEs with adequate resources will empower emerging businesses to compete in the international and digital market. Databases with best practice and entrepreneurial information are important assets to any SMEs. Delegates should read this source and consider what else SMEs could use in order to thrive. Further, delegates will be able to see elementary strategies for SMEs to maximize their current technological infrastructure.

United Nations, International Telecommunication Union. (2012). *Measuring the Information Society: Executive Summary* [Report]. Retrieved 7 August 2018 from: <u>https://www.itu.int/dms\_pub/itu-d/opb/ind/D-IND-ICTOI-2012-SUM-PDF-E.pdf</u>



This report provides statistics on communication technologies in Member States and expected future ICT goals for developing countries. The report also highlights the importance of revenue for ICT (especially for developing countries) and holds developed countries as key proponents of increasing shared ICT revenue. Delegates will be able to use this source to better understand the need for ICTs by having a visual of the large divide between developed and developing nations. The larger the digital divide, the more developing nations are alienated from the global market.

United Nations Office of Information and Communications Technologies. (2014). *ICT strategy for the future United Nations* [Report]. Retrieved 20 October 2018 from:

https://unite.un.org/sites/unite.un.org/files/docs/unitednations-ict-strategy.pdf

This report refers to current works and potential initiatives for ICT development and maintenance. The needs for ICTs change as technology advances, therefore it is crucial for all Member States to not only obtain adequate connections to ICTs and resources but also utilize contemporary technologies to adapt to the changing digital world. Thus far, many policies have paved the way for better access and usage of ICTs, such as firewall protections and basic guidelines that all Member States have to abide by in regards to ICT development and establishing a digital platform. Further, this report also highlights some important obstacles in attempting to administer ICTs for all, such as fragmented ICT hubs and lack of oversight.

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# **II. Promoting Sustainable Production and Consumption**

#### Introduction

Throughout history, production and consumption have been important for worldwide economic and social development.<sup>182</sup> The global economy is predominantly based upon the trading of goods and services.<sup>183</sup> Production of goods and services provides employment and income, while their consumption results in a higher standard of living.<sup>184</sup> Industrialization in developing states has played an important role in facilitating economic progress and allowed them to move away from economic activity based primarily upon resource extraction, and toward more innovative activities with a higher productivity.<sup>185</sup> Economic development has reduced the number of people living in poverty today to less than a third of that in 1990.<sup>186</sup> However, it is estimated that approximately 11% of the global population is still living under the global poverty line of \$1.25 income per person per day.<sup>187</sup> Economic progress is necessary to fund public services, such as healthcare and education, which are necessary for achieving social development.<sup>188</sup>

While the current patterns of production and consumption have provided the basis for social and economic progress, they do so at great cost to the planet's environmental health.<sup>189</sup> If these patterns were to continue, economic progress will eventually stagnate due to environmental deterioration exhausting the earth's supply of natural resources.<sup>190</sup> Between 1970 and 2010, the annual global extraction of nonrenewable materials, such as metal ores and fossil fuels, grew from 22 to 70 billion metric tons per year.<sup>191</sup> Not only are non-renewable resources being rapidly depleted, renewable resources are consumed at a rate that permanently damages the earth's ability to replenish them.<sup>192</sup> In 2018, humanity consumed in only eight months what it takes the earth a year to produce.<sup>193</sup> By 2050, it is estimated that the global population will grow to approximately 9.7 billion people.<sup>194</sup> Current resource intensive patterns of production and consumption are unsustainable and will be unable to provide this future global population with a decent standard of living.<sup>195</sup> To ensure that future development is inclusive and does not degrade the environment, production and consumption patterns must become socially and environmentally sustainable.<sup>196</sup> Sustainable consumption and production (SCP) has been defined in a number of different ways, most recently by the United Nations (UN) Environment Programme (UN Environment) as a "holistic approach to minimizing the negative environmental impacts from consumption and production systems while promoting quality of life for all."

The 2030 Agenda for Sustainable Development (2030 Agenda), adopted by the UN General Assembly in 2015, ties SCP into the wider concept of sustainable development through the 17 Sustainable

<sup>186</sup> UN DESA, The Sustainable Development Goals Report 2018, 2018, p. 4.

187 Ibid.

- <sup>191</sup> UN Environment, *Global Material Flows and Resource Productivity*, 2016, p. 5.
- <sup>192</sup> Ibid.

<sup>&</sup>lt;sup>182</sup> Hoballah & Averous, Goal 12—Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development, 2015.

<sup>183</sup> Ibid.

<sup>&</sup>lt;sup>184</sup> Lavopa & Szirmai, Industrialization, Employment and Poverty, 2012, pp. 4-5.

<sup>&</sup>lt;sup>185</sup> Kniivilä, Industrial development and economic growth: Implications for poverty reduction and income

Inequality, 2007, p. 1; Lavopa & Szirmai, Industrialization, Employment and Poverty, 2012, pp. 4-5.

<sup>&</sup>lt;sup>188</sup> UN World Summit for Social Development, *Copenhagen Declaration on Social Development (A/CONF.166/9)*, 1995.

<sup>&</sup>lt;sup>189</sup> UN DESA, *Trends in Sustainable Development: Towards Sustainable Production and Consumption*, 2010, p. iii. <sup>190</sup> Ibid.

<sup>&</sup>lt;sup>193</sup> UN Environment, Consuming Differently, Consuming Sustainably: Behavioural Insights for Policymaking, 2017, p. 1.

<sup>&</sup>lt;sup>194</sup> UN DESA, World population projected to reach 9.7 billion by 2050, 2015.

<sup>&</sup>lt;sup>195</sup> UN Environment, Sustainable Consumption and Production: a Handbook for Policymakers, 2015, p. 7.

<sup>&</sup>lt;sup>196</sup> Hoballah & Averous, Goal 12—Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development, 2015.



Development Goals (SDGs).<sup>197</sup> The SDGs were created in response to the Millennium Development Goals, which helped to reduce poverty and widen access to education, yet future progress was threatened by growing environmental pressure and social inequalities.<sup>198</sup> The 2030 Agenda ensures that economic progress would continue while protecting the environment and ensuring that everyone, especially the poorest and most vulnerable, benefits from economic and social development.<sup>199</sup> SCP is an integral part of accomplishing sustainable development.<sup>200</sup> Despite recent progress, numerous challenges to the implementation of SCP remain, particularly the decoupling of development from natural resource use and reducing pollution and waste.<sup>201</sup>

#### International and Regional Framework

One of the first conferences to explicitly discuss the relationship between economic development and environmental sustainability was the 1972 UN Conference on the Human Environment which adopted the 1972 *Stockholm Declaration*.<sup>202</sup> This declaration stated that current forms of economic activity were having an environmentally unsustainable impact upon the earth's resources.<sup>203</sup> It furthermore contained policy recommendations to protect and properly manage the earth's natural resources, including investment in environmental education and incorporating environmental considerations into national policies.<sup>204</sup>

This was expanded upon in the 1992 UN Conference on Environment and Development, also known as the Earth Summit.<sup>205</sup> This meeting produced many important documents, including the *Rio Declaration on Environment and Development* and Agenda 21.<sup>206</sup> The 27 principles contained within the Rio Declaration state an important message: all states must consider the future environmental impact of economic development policies, and must work to establish standards and systems to prevent further environmental damage.<sup>207</sup> Two principles particularly significant for environmental sustainability were principles 15 and 16.<sup>208</sup> Principle 15 introduced the precautionary principle which stated that states should not embark on any course of action that risks environmental damage.<sup>209</sup> Principle 16 introduced the "polluter pays" principle, whereby those responsible for the creation of pollution should also be responsible for any costs associated with it.<sup>210</sup> Agenda 21 contains three sections, with section two being most relevant for SCP.<sup>211</sup> It calls upon Member States to "promote patterns of consumption and production that reduce environmental stress and meet the basic needs of humanity" and to "develop a better understanding of the role of consumption and how to bring about more sustainable consumption patterns."<sup>212</sup>

In 2001, the international community adopted the *Stockholm Convention on Persistent Organic Pollutants* agreeing upon important standards to phase out the release of hazardous/toxic waste during industrial

<sup>&</sup>lt;sup>197</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, p. 7.

<sup>&</sup>lt;sup>198</sup> UN DESA, The Millennium Development Goals Report 2015, 2015, pp. 8-9.

<sup>&</sup>lt;sup>199</sup> UN DESA, The Millennium Development Goals Report 2015, 2015, pp. 8-9; UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1), 2015, p. 1.

<sup>&</sup>lt;sup>200</sup> Hoballah & Averous, Goal 12—Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development, 2015.

<sup>&</sup>lt;sup>201</sup> UN DESA, 2018 HLPF Review of SDGs implementation: SDG 12 - Ensure sustainable consumption and production patterns, 2018, pp. 1-2.

<sup>&</sup>lt;sup>202</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, pp. 48-52.

<sup>&</sup>lt;sup>203</sup> UN Conference on the Human Environment, *Report of the United Nations Conference on the Human Environment*, 1972.

<sup>&</sup>lt;sup>204</sup> Ibid.

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

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

<sup>&</sup>lt;sup>207</sup> Ibid.

<sup>&</sup>lt;sup>208</sup> Ibid. <sup>209</sup> Ibid.

<sup>&</sup>lt;sup>210</sup> Ibid.

<sup>&</sup>lt;sup>211</sup> Ibid.

<sup>&</sup>lt;sup>212</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, p. 48.



production processes.<sup>213</sup> The 2001 Convention commits Member States to take actions to eliminate Persistent Organic Pollutants (POP's) from production cycles.<sup>214</sup> POP's are a threat to human health and the environment because they do not degrade and can then enter food chains through fatty tissue.<sup>215</sup>

In 2003, the Marrakech Process was launched, with the aim of creating a plan to implement SCP.<sup>216</sup> This process involved input from multiple stakeholders, including governments, the UN system, businesses. and civil society.<sup>217</sup> This led to the adoption of the 10-Year Framework of Programmes on SCP (10YFP) at the 2012 UN Conference on Sustainable Development.<sup>218</sup> The 10YFP promotes the integration of SCP principles into national economic policy while facilitating greater cooperation at national and regional levels.<sup>219</sup> It also provides technical and financial support for developing states, provided through voluntary contributions from states and a trust fund administered by UN Environment.<sup>220</sup> The framework also created the One Planet network, which facilitates technology and best practice sharing through various measures, such as the six coordination hubs focused upon different aspects of SCP implementation.<sup>221</sup>

Accomplishing SCP will have positive and cross-cutting effects upon accomplishment of the 2030 Agenda and the 17 SDGs.<sup>222</sup> Increased resource efficiency is necessary to prevent a lack of resources hindering efforts to reduce poverty and economic inequality (SDGs 1 and 10).<sup>223</sup> Life on land and below water (SDGs 14 and 15) cannot be adequately protected without responsible management of waste.<sup>224</sup> Furthermore, moving toward systems of consumption and production which are less reliant on carbon dioxide emissions will accelerate progress toward achieving clean energy and mitigating climate change (SDGs 7 and 13).<sup>225</sup> Two SDGs with particular relevance for SCP are SDG 12 on "ensuring sustainable consumption and production patterns" and SDG 9 to "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." <sup>226</sup> The indicators for SDGs 9 and 12 are important for understanding the approach taken by the international community to increasing resource efficiency and to reducing waste.<sup>227</sup> These indicators include the material footprint per capita, the number of metric tons of material recycled, and CO<sub>2</sub> emissions per unit of economic value.<sup>228</sup>

#### Role of the International System

The concept of cleaner production was first outlined in 1989 by UN Environment.<sup>229</sup> Cleaner production is based on the principle of having an environmental strategy to prevent production from posing a risk to humans or to the environment.<sup>230</sup> This concept was expanded to Resource Efficient and Cleaner Production (RECP), which serves as a guiding principle for many activities of UNIDO working toward

<sup>&</sup>lt;sup>213</sup> UNIDO. The POP priority: UNIDO and the Stockholm Convention. 2017. p. 7.

<sup>&</sup>lt;sup>214</sup> Ibid.

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

<sup>&</sup>lt;sup>216</sup> UN Environment, Marrakech Process on Sustainable Consumption and Production.

<sup>&</sup>lt;sup>217</sup> UN Environment, Marrakech Process.

<sup>&</sup>lt;sup>218</sup> UN Environment, Marrakech Process on Sustainable Consumption and Production.

<sup>&</sup>lt;sup>219</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, p. 52. <sup>220</sup> Ibid.

<sup>&</sup>lt;sup>221</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, p. 52; One Planet Network, A platform for Sustainable Development Goal 12, 2018.

<sup>&</sup>lt;sup>222</sup> Hoballah & Averous, Goal 12—Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development, 2015.

<sup>223</sup> Ibid.

<sup>&</sup>lt;sup>224</sup> Ibid.

<sup>&</sup>lt;sup>225</sup> Ibid.

<sup>&</sup>lt;sup>226</sup> UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1), 2015, p. 24: UN Conference on Sustainable Development, A 10-year framework of programmes on sustainable consumption and production patterns, 2012, p. 2.

<sup>&</sup>lt;sup>227</sup> UNSD, Summary Table of SDG Indicators (as of 8 Nov 2017), 2017, pp. 13-18.

<sup>228</sup> Ibid.

<sup>&</sup>lt;sup>229</sup> The World Bank Group, *Cleaner Production*, 2012, p. 1.

<sup>&</sup>lt;sup>230</sup> Ibid.



production which is less dependent on the extraction of natural resources.<sup>231</sup> UNIDO works in cooperation with UN Environment to advance the principles of cleaner production in a range of different projects.<sup>232</sup> In 1994, both organizations launched the International Programme of National Cleaner Production Centres (NCPC's), which operates in 63 states.<sup>233</sup> These NCPCs assist businesses in implementing best practices in chemical processes.<sup>234</sup> This programme was designed based on the recommendations of the 1992 Earth Summit.<sup>235</sup> The successor project, the UNIDO–UN Environment Programme on RECP in Developing and Transition Countries expanded its focus to include resource efficiency.<sup>236</sup> UNIDO and UN Environment work with governments and the private sector to make them more economically competitive through the use of openly accessible Environmentally Sound Technologies (ESTs).<sup>237</sup> ESTs increase production efficiency and help properly manage the small and medium-sized enterprises environment which advances overall human development.<sup>238</sup>

NCPCs have now become a part of a network established in 2010 by UNIDO and UN Environment called RECP*net.*<sup>239</sup> This network spreads awareness of RECP, shares best practices, and assists its members in implementing them.<sup>240</sup> Members consist of organizations which are assessed as being core providers of RECP services.<sup>241</sup> UNIDO and UN Environment also work with the European Union, and the Regional Action Centre for Sustainable Consumption and Production on the project *Switchmed.*<sup>242</sup> The objective is to assist companies in the southern Mediterranean region to transition toward SCP.<sup>243</sup> To accomplish this, *Switchmed* reached out to companies interested in making their production methods more sustainable, 75 were selected and given training in how best to comply with international regulatory standards.<sup>244</sup>

Most recently in 2018, the High-Level Political Forum on Sustainable Development (HLPF) reviewed the implementation of SDG 12 on sustainable production and consumption.<sup>245</sup> It notes that while progress has been made, "implementation efforts are seriously under-resourced."<sup>246</sup> It notes with concern that there is a lack of coordination across and between governments with regard to their national implementation mechanisms, and that while the amount of natural resources per unit of economic value has decreased, the absolute amounts of natural resources used per year has increased.<sup>247</sup> This in turn endangers efforts to reduce overall natural resource consumption.<sup>248</sup> It further notes that there is not enough compliance with international treaties on hazardous materials, such as the Stockholm Convention.<sup>249</sup> To address this, the review emphasizes multi-stakeholder partnerships, including with the

- <sup>234</sup> UNIDO, National Cleaner Production Centres (NCPCs), 2018.
- <sup>235</sup> UNIDO & UN Environment, Joint UNIDO-UNEP Programme on Resource Efficiency and Cleaner Production (RECP), p. 2.
- <sup>236</sup> Ibid.

- 238 Ibid.
- <sup>239</sup> UNIDO & UN Environment, *RECPnet: The Global Network for Resource Efficient and Cleaner Production*, 2015, pp. 2-3.
- <sup>240</sup> Ibid.

244 Ibid.

<sup>246</sup> Ibid.

<sup>247</sup> Ibid.

<sup>248</sup> Ibid.

<sup>&</sup>lt;sup>231</sup> UNIDO & UN Environment, Joint UNIDO–UNEP Programme on Resource Efficient and Cleaner Production (RECP) in Developing and Transition Countries, 2009, p. 2.

<sup>&</sup>lt;sup>232</sup> UNIDO & UN Environment, *RECPnet: The Global Network for Resource Efficient and Cleaner Production*, 2015, pp. 2-3.

<sup>&</sup>lt;sup>233</sup> UNIDO & UN Environment, Joint UNIDO-UNEP Programme on Resource Efficiency and Cleaner Production (RECP), p. 2; UNIDO, Annual Report 2017, 2017, p. vii.

<sup>&</sup>lt;sup>237</sup> UNIDO & UN Environment, Joint UNIDO–UNEP Programme on Resource Efficient and Cleaner Production (RECP) in Developing and Transition Countries, 2009, pp. 7-8.

<sup>&</sup>lt;sup>241</sup> Ibid.

<sup>&</sup>lt;sup>242</sup> UNIDO, Promoting sustainable production and consumption in the Southern Mediterranean region, 2018.

<sup>&</sup>lt;sup>243</sup> Ibid.

<sup>&</sup>lt;sup>245</sup> UN DESA, 2018 HLPF Review of SDGs implementation: SDG 12 -Ensure sustainable consumption and production patterns, 2018, pp. 1-2.

<sup>249</sup> Ibid.



private sector, because of the capital and technologies it possesses.<sup>250</sup> The review also discusses the need to provide greater support to the One Planet network, particularly in its *One Plan for One Planet: Strategy 2018-2022*.<sup>251</sup> One Planet's five-year strategy concentrates on SDG 12 through four objectives: creating an implementation mechanism for SDG 12, providing tools and solutions to help with the transition to SCP, leading a cohesive implementation of SCP, and demonstrating SCP's environmental and social benefits.<sup>252</sup>

#### Decoupling Industrial Development from Natural Resources

UNIDO works closely with Member States to reduce their ecological footprint, increase energy efficiency, and to move toward a circular economy.<sup>253</sup> In a circular economy, products are designed to last longer and for their parts to be reused in some way once that product has reached its end of life.<sup>254</sup> The aim is that all of the material contained within the cycle is reusable or recycled, enabling production to operate with very low inputs of raw materials.<sup>255</sup> One important way in which UNIDO helps states to reduce their ecological footprint is by supporting the establishment of eco-industrial parks.<sup>256</sup> UNIDO, together with the World Bank Group and the German Development Institute, developed the *International Framework for Eco-Industrial Parks*.<sup>257</sup> These parks are then established by governments and the private sector in accordance with this framework.<sup>258</sup> They offer companies from different industries a place to collaborate on ideas and to integrate their activities closely with one another in order to promote resource efficiency.<sup>259</sup>

UNIDO also works to foster the development of new green industries and supports greening of industries, which refers to reducing the environmental footprint of existing industries.<sup>260</sup> The primary way UNIDO accomplishes these two objectives is the Green Industry Initiative.<sup>261</sup> To implement this, UNIDO raises awareness, develops frameworks, and conducts research.<sup>262</sup> For example in Benin, fish is a very important source of protein, but the methods of cooking produced large amounts of carcinogenic pollutants being breathed in by those engaged in the cooking process.<sup>263</sup> UNIDO, together with the Food and Agriculture Organization, developed and delivered new ovens which use 50% less fuel to cook the fish and produce less pollutants.<sup>264</sup> Furthermore, UNIDO helps manufacturers to save energy through the implementation of Energy Management Systems (EnMS).<sup>265</sup> EnMS provide a clear framework for measuring energy use, with targeted action plans to improve and track usage over time.<sup>266</sup>

Despite the initiatives undertaken by UNIDO and other international actors, there are many obstacles to decoupling economic development from natural resource usage.<sup>267</sup> These include a lack of funding,

<sup>256</sup> UNIDO, Annual Report 2017, 2017, p. 23.

<sup>261</sup> Ibid.

<sup>&</sup>lt;sup>250</sup> UN DESA, 2018 HLPF Review of SDGs implementation: SDG 12 -Ensure sustainable consumption and production patterns, 2018, p. 6.

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

<sup>&</sup>lt;sup>252</sup> One Planet Network, One Plan for One Planet: 5 year strategy 2018-2022, 2018, p. 3.

<sup>&</sup>lt;sup>253</sup> UNIDO, Annual Report 2017, 2017, p. 22.

<sup>&</sup>lt;sup>254</sup> UNIDO, Circular Economy, 2017, pp. 1-3.

<sup>&</sup>lt;sup>255</sup> Ibid.

<sup>&</sup>lt;sup>257</sup> UNIDO, Eco-industrial parks, 2018.

<sup>258</sup> Ibid.

<sup>&</sup>lt;sup>259</sup> UNIDO, *Eco-industrial parks*, 2018.

<sup>&</sup>lt;sup>260</sup> UNIDO, UNIDO Green Industry: Policies for supporting Green Industry, 2011, pp. 9-11.

<sup>&</sup>lt;sup>262</sup> UNIDO, Green Industry Initiative, 2011, p. 29.

<sup>&</sup>lt;sup>263</sup> UNIDO, *Making it Green*, 2016, p. 16.

<sup>264</sup> Ibid.

 <sup>&</sup>lt;sup>265</sup> UNIDO, The UNIDO Programme on Energy Management System Implementation in Industry, 2015, p. 2.
<sup>266</sup> Ibid.

<sup>&</sup>lt;sup>267</sup> UN DESA, 2018 HLPF Review of SDGs implementation: SDG 12 -Ensure sustainable consumption and production patterns, 2018, p. 6.



coordination across stakeholders, and public awareness of the issues.<sup>268</sup> Furthermore, investments in resource productivity are usually beneficial in the long run, making businesses reluctant to invest for fear of being disadvantaged in the short run.<sup>269</sup> The costs of environmental damage are usually not borne by those responsible, meaning that there are few incentives to maintain healthy ecosystems.<sup>270</sup> There are also many challenges in implementing a circular economy.<sup>271</sup> It is extremely challenging to design a production process which allows resources to be almost endlessly recycled, particularly for complex products, such as electrical items.<sup>272</sup> States, particularly developing ones, require significant support, such as the sharing of best practices, for their industries to be able to begin to put this concept into practice.<sup>273</sup>

#### Waste Management and Pollution Reduction

Increases in urbanization have seen a corresponding increase in the volume of waste produced per person.<sup>274</sup> In 2012, 1.3 billion tons of solid waste were generated by cities.<sup>275</sup> By 2025, this figure is projected to increase to 2.2 billion tons.<sup>276</sup> All of this waste that is not reused or recycled represents a loss of resources, which could be used instead of raw materials.<sup>277</sup> Increased awareness and better management is required to reduce, reuse, and recycle waste generated from current production and consumption methods.<sup>278</sup> Traditional forms of economic development have also been responsible for an increase in pollution, much of which can be hazardous to human and environmental health.<sup>279</sup>

One example of UNIDO's activities to promote proper waste management is its e-waste related projects.<sup>280</sup> E-waste, which originates from electronic goods such as fridges, televisions, and computers, is particularly difficult to manage because of the many different types of materials it contains.<sup>281</sup> Therefore, UNIDO works closely with governments to identify finance mechanisms, design e-waste collection schemes, and prevent dumping of e-waste.<sup>282</sup> Additionally, at the 2017 UN Ocean Conference, UNIDO, together with Small Island Developing States, promoted waste-to-energy solutions for organic waste, to prevent it from going to landfill and to lessen dependence on fossil fuels.<sup>283</sup> Furthermore, UNIDO helps developing states to develop, carry out, and review their National Implementation Plans in accordance with the Stockholm Convention to eliminate the use of POPs.<sup>284</sup> For example, in the past, the Former Yugoslav Republic of Macedonia (FYROM) used PCBs (polychlorinated biphenyls) as coolant fluids to manufacture electrical transformers.<sup>285</sup> This generated waste that poses a hazard to human and

<sup>270</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, pp. 80-90.

276 Ibid.

<sup>&</sup>lt;sup>268</sup> UN DESA, 2018 HLPF Review of SDGs implementation: SDG 12 -Ensure sustainable consumption and production patterns, 2018, p. 6; UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, pp. 80-90.

<sup>&</sup>lt;sup>269</sup> UN Environment, *Decoupling 2: technologies, opportunities and policy options*, pp. 66-67.

<sup>&</sup>lt;sup>271</sup> UNIDO, *Circular Economy*, 2017, p. 11.

<sup>&</sup>lt;sup>272</sup> Ibid.

<sup>&</sup>lt;sup>273</sup> UNIDO, Green Industry Initiative, 2011, p. 19; UNIDO, Circular Economy, 2017, p. 11.

<sup>&</sup>lt;sup>274</sup> UNIDO, UNIDO Green Industry Initiative for Sustainable Industrial Development, 2011, p. 17; Hoornweg & Bhada-Tata, What a Waste: A Global Review of Solid Waste Management, 2012, p. x.

<sup>&</sup>lt;sup>275</sup> Hoornweg & Bhada-Tata, What a Waste: A Global Review of Solid Waste Management, 2012, p. vii.

<sup>&</sup>lt;sup>277</sup> UNIDO, UNIDO Green Industry Initiative for Sustainable Industrial Development, 2011, p. 17.

<sup>278</sup> Ibid.

<sup>&</sup>lt;sup>279</sup> UN Environment, Sustainable Production and Consumption: A Handbook for Policymakers, 2015, p. 7.

<sup>&</sup>lt;sup>280</sup> UNIDO, Electronic Waste, 2018.

<sup>&</sup>lt;sup>281</sup> UNIDO, The UNIDO Programme on Energy Management System Implementation in Industry, 2015, p. 2.

<sup>&</sup>lt;sup>282</sup> UNIDO, UNIDO's involvement in E-waste management, 2015, pp. 1-3.

<sup>&</sup>lt;sup>283</sup> UNIDO, UNIDO promotes waste-to-energy solutions at the United Nations Ocean Conference, 2017.

<sup>&</sup>lt;sup>284</sup> UNIDO, The POP priority: UNIDO and the Stockholm Convention, 2017, p. 11.

<sup>&</sup>lt;sup>285</sup> UNIDO, Making it Green, 2016, p. 15; UNIDO, The POP priority: UNIDO and the Stockholm Convention, 2017, p. 11.



animal life.<sup>286</sup> UNIDO raises awareness of the danger of PCBs and provides technical assistance to ensure that the FYROM government and businesses are able to properly dispose of PCBs.<sup>287</sup>

One challenge to proper waste management is that states, particularly developing ones, lack the infrastructure capacity to manage increasingly complex waste streams.<sup>288</sup> One potential solution could be public-private partnerships.<sup>289</sup> In addition, developed states often export their waste to be recycled in facilities which prioritise cost over environmental impact.<sup>290</sup> Furthermore, many Member States do not comply with all monitoring requirements for many existing international treaties and conventions on hazardous waste disposal.<sup>291</sup> With emerging technologies, such as nanomaterials, there are also regulatory issues, such as a lack of proper classification and methods of proper waste disposal.<sup>292</sup>

#### Conclusion

UNIDO works closely with UN bodies, Member States, and the private sector to advance SCP principles.<sup>293</sup> There are a variety of different concepts and approaches, but all with the same aim: to allow economic development to take place without causing harm to human or environmental health and preserve the planet for coming generations.<sup>294</sup> Neglecting the environmental impact of economic development will prevent future economic development from being able to lift more people out of poverty, and could lead to increased conflicts over scarce resources.<sup>295</sup> There already exist many ways in which resource efficiency and waste and pollution management could be improved, but the challenge lies in implementation, especially given the many different challenges faced by states in different regions, such as a lack of knowledge transfer, resources, and coordination between different stakeholders<sup>296</sup>. Fully implementing the recommendations contained within the 10YFP will not only be a very significant step toward accomplishing not only SDG 12, but the entirety of the 2030 Agenda.

#### Further Research

Delegates are encouraged to reflect upon how to best balance the competing demands of poverty reduction and environmental preservation. Taking into consideration that all Member States have unique challenges related to safeguarding their environment, delegates should investigate how international regulatory frameworks interact with those on a regional and national basis. How can UNIDO continue to strengthen its cooperation with partners such as UN bodies, governments and the private sector? Are there any particular areas of cooperation which have not yet been fully considered? What is the best approach to integrate all of the different activities in order to move toward the circular economy? How can UNIDO continue to contribute to the execution of the 10YFP? Finally, how can the indicators contained within the SDGs be translated into tangible policies on an international, regional and national level?

# **Annotated Bibliography**

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<sup>289</sup> Switch Asia, Improving waste management is key to advance SCP in Asia, 2016.

<sup>&</sup>lt;sup>286</sup> UNIDO, *Making it Green*, 2016, p. 15.

<sup>&</sup>lt;sup>287</sup> Ibid.

<sup>&</sup>lt;sup>288</sup> Hoornweg & Bhada-Tata, What a Waste: A Global Review of Solid Waste Management, 2012, p. 6.

<sup>&</sup>lt;sup>290</sup> UN EMG, United Nations System-wide Response to Tackling E-waste, 2017, p. 6.

<sup>&</sup>lt;sup>291</sup> UN DESA, 2018 HLPF Review of SDGs implementation: SDG 12 -Ensure sustainable consumption and production patterns, 2018, p. 2.

<sup>&</sup>lt;sup>292</sup> Ibid., p. 5.

<sup>&</sup>lt;sup>293</sup> Hoballah & Averous, Goal 12—Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development, 2015.

<sup>294</sup> Ibid.

<sup>295</sup> Ibid.

<sup>296</sup> Ibid.



#### 13 September 2018 from:

https://sustainabledevelopment.un.org/content/documents/20066196532018backgroundnotesSDG12.pdf This report analyzes the progress made toward the targets of SDG 12. It notes that although progress has been made, there remain significant barriers to further progress, including a lack of reporting by states and insufficient compliance with various environmental conventions designed to address the issue of pollution. This source is very helpful for understanding the challenges Member States should consider when designing policies to implement SCP.

Hoballah, A. & S. Averous. (2015). Goal 12—Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development [Journal Article]. *UN Chronicle*, Volume LI (4) 2014. Retrieved 27 July 2018 from: <u>https://unchronicle.un.org/article/goal-12-ensuring-sustainableconsumption-and-production-patterns-essential-requirement</u>

This article from the UN Chronicle gives an eloquently written overview of sustainable consumption and production, why it matters, and its history within the UN. It also links SCP into the wider context of sustainable development. Delegates will find this source useful to know why SCP is important for accomplishing the SDGs and how the UN system as a whole is responding to it. They will also learn about the specific targets contained within SDG 12.

United Nations Conference on Sustainable Development. (2012). A 10-year framework of programmes on SCP (A/CONF.216/5). Retrieved 07 July 2018 from: <u>http://undocs.org/A/CONF.216/5</u>

The 10YFP represents a comprehensive approach to implementing SCP. It gives context to SCP and why it is necessary to achieve the wider aims of sustainable development. It furthermore suggests policy approaches for states to consider in implementing SCP. This source is valuable for delegates to understand the approach of the international community to this issue and for them to understand how current initiatives build upon conventions decided by previous conferences. This source also represents an important source of information for those wishing to understand efforts to implement the principles of SCP on an international scale.

United Nations Department of Economic and Social Affairs. (2010). *Trends in Sustainable Development: Towards Sustainable Production and Consumption* [Report]. Retrieved 31 July 2018 from: <a href="https://sustainabledevelopment.un.org/content/documents/15Trends\_in\_sustainable\_consumption\_and\_p">https://sustainabledevelopment.un.org/content/documents/15Trends\_in\_sustainable\_consumption\_and\_p</a> roduction.pdf

This report from UN DESA illustrates how the concept of sustainable production and consumption has evolved from sustainable development, as well as the various linkages which exist between its different aspects, such as climate change mitigation, and economic decoupling. This source explains the wider context around the necessity for SCP and the various issues with implementation. It also provides delegates with the information necessary, including statistics on resource use, and environmental impacts for a comprehensive view of this topic. Delegates will benefit from an insight into the trends driving current economic consumption and production patterns.

United Nations Environment Programme. (2015). *Sustainable Consumption and Production: a Handbook for Policymakers*. Retrieved 06 July 2018 from:

https://sustainabledevelopment.un.org/content/documents/1951Sustainable%20Consumption.pdf

This handbook was created by UN Environment. Part A details what SCP is, why it is important, and how to implement it. Part B will be of particular interest to delegates because of its focus on sustainable consumption and waste management. The focus on policy is also valuable, providing a good starting point from which delegates can construct their own proposals. This source also provides understandings of the role played by UN Environment in monitoring and facilitating efforts to transition toward SCP.



United Nations Environment Programme. (2016). *Global Material Flows and Resource Productivity* [Report]. Retrieved 28 August 2018 from: <u>http://www.resourcepanel.org/reports/global-material-flows-and-resource-productivity-database-link</u>

This source monitors how the usage of natural resources has developed over time and provides a lot of useful information about resource efficiency. Delegates will benefit from having a look through it in order to get a better context as to what is driving recent changes in resource consumption. It provides the reader with approaches to increasing decoupling economic development from natural resource consumption, such as increased material efficiency, and policy formulation. This report also takes a regional approach to show the reader the large differences that exist in natural resource consumption between the different regions of the world.

United Nations Industrial Development Organization. (2011). UNIDO Green Industry: Policies for supporting Green Industry [Report]. Retrieved 06 July 2018 from:

https://www.unido.org/sites/default/files/2011-05/web\_policies\_green\_industry\_0.pdf

Green Industry is necessary for industrial development to continue to benefit the international community. The principle behind the Green Industry Initiative is allowing industry to operate without consuming an excessive amount of natural resources or polluting the environment. This report looks at these issues from a different perspective, focusing upon the creation of an enabling environment and promoting industry-led initiatives. This document provides an understanding of green industry, which is necessary to grasp the approach UNIDO takes in promoting SCP.

United Nations Industrial Development Organization. (2016). *Making it Green* [Report]. Retrieved 06 July 2018 from: <a href="https://www.unido.org/sites/default/files/2017-01/UNIDO-MakingItGreen-OnePage\_0.pdf">https://www.unido.org/sites/default/files/2017-01/UNIDO-MakingItGreen-OnePage\_0.pdf</a> This report was written for UNIDO's 50th anniversary and begins with an insight into how UNIDO promotes inclusive and sustainable industrial development. It is the numerous examples of actions undertaken by UNIDO in states all across the world which makes this source useful to delegates. Also, this resource provides concrete case studies of how various economic activities have been made more resource efficient, less polluting, and more sustainable.

United Nations Industrial Development Organization. (2017). *Circular Economy* [Report]. Retrieved 06 July 2018 from: <u>https://www.unido.org/sites/default/files/2017-07/Circular\_Economy\_UNIDO\_0.pdf</u>

The circular economy is a powerful tool for achieving clean and sustainable production and consumption. This document explains the fundamental principles of the circular economy, before going on to illustrate the benefits to its adoption in a number of different areas. This document also explains the barriers to implementing a circular economy in different states and then highlights actions undertaken by UNIDO and partners to overcome them. Reading this document will allow delegates to see all of the different elements of the circular economy and how they tie directly to the committee and into this topic.

United Nations Industrial Development Organization. (2018). *Annual Report 2017*. Retrieved 05 July 2018 from: <u>https://www.unido.org/api/opentext/documents/download/10021153/unido-file-10021153</u>

UNIDO's annual report for 2017 contains different aspects of the work undertaken during the year. Topics covered include: shared prosperity, regional perspectives, and advancing economic competitiveness. Chapter 4: Safeguarding the Environment is of particular interest for this topic. This chapter discusses the importance of particular aspects of protecting the environment, including decoupling economic growth from environmental degradation and phasing out toxic pollutants. This source will inform delegates on methods of decoupling economic development from natural resource use, and will provide ideas for them to build upon in committee.

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# III. Empowering Women Through Entrepreneurship

#### Introduction

Empowering women to achieve their full economic potential through forms of entrepreneurship can only be achieved by addressing the barriers that take away that opportunity.<sup>297</sup> These barriers include gender inequalities, inadequate access to resources such as financial aid, networking, and lack of proper skills training.<sup>298</sup> Women's economic empowerment can be achieved by investing in the development of women's entrepreneurship, which in turn it will encourage economic advancement and increased representation for women in the global markets.<sup>299</sup> It will also encourage the development and creation of entrepreneurs, who can lead their own businesses and become leaders within their communities.<sup>300</sup> Women who participate in the informal economy face additional barriers that include inadequate labor protection policies, benefits, and unstable income.<sup>301</sup> The United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) has indicated that in developing regions 75% of women's work outside of the agricultural sector is as part of the informal economy through domestic labor, petty goods and service traders, and industrial outworkers.<sup>302</sup> Acknowledging these barriers, the United Nations Industrial Development Organization (IUNIDO) in partnership with organizations such as UN-Women, International Labor Organization (ILO), and civil society have established frameworks and initiatives that center around women's economic empowerment through entrepreneurship development.<sup>303</sup>

General Assembly resolution 66/288, "The Future We Want" (2012) highlights the barriers and inequalities against women and their economic development that hinder the opportunity to contribute to the global economy and leadership roles.<sup>304</sup> These barriers include the inability for women to participate in global economy and opportunities for empowerment within their communities.<sup>305</sup> The UN has continuously strived toward the empowerment of women in their economic development and promotion of their economic rights.<sup>306</sup> UNIDO has shown commitment to women's economic empowerment through its mandate by promoting inclusive and sustainable development (ISID) for all.<sup>307</sup> This mandate is incorporated through all areas of UNIDO's work, and is emphasized in one of their core thematic priority areas which is, "creating shared prosperity,"<sup>308</sup> The importance of combatting gender divisions by promoting increased opportunity for women through education and entrepreneurship development is also highlighted in UNIDO's focus area of providing cross-cutting services.<sup>309</sup> These services assist in implementing UNIDO's ISID mandate through the creation of knowledge frameworks, partnerships, and industrial policies that address the need for women's economic empowerment.<sup>310</sup> UNIDO's "advancing economic competitiveness" thematic priority area acknowledges that women need to be recognized as economic role models through by strengthening their entrepreneurial skill sets, knowledge, and business investments.<sup>311</sup> By targeting these areas and increasing investments in women's entrepreneurship development, it will enhance sustainable industrialization and promote global sustainable development.<sup>312</sup> UNIDO strives to empower women through these targeted areas, through initiatives such as UNIDO's

<sup>301</sup> UN-Women, *Women in Informal Economy*, 2018

<sup>310</sup> UNIDO, Our focus: Cross-Cutting Services, 2018.

<sup>&</sup>lt;sup>297</sup> UN DESA, Sustainable Development Knowledge Platform: SDG 5, 2018.

<sup>&</sup>lt;sup>298</sup> UN-Women, *What we do: Economic Empowerment*, 2018.

<sup>&</sup>lt;sup>299</sup> Ibid.

<sup>&</sup>lt;sup>300</sup> UNIDO, Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women Projects, 2018.

<sup>302</sup> Ibid.

<sup>&</sup>lt;sup>303</sup> UNIDO, *Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women Projects*, 2018. <sup>304</sup> UN General Assembly, *The Future We Want (A/RES/66/288)*, 2012.

<sup>&</sup>lt;sup>305</sup> Ibid.

<sup>&</sup>lt;sup>306</sup> UN General Assembly, United Nations Millennium Declaration (A/RES/55/2), 2000.

<sup>&</sup>lt;sup>307</sup> UN-Women, About us, 2018.

<sup>&</sup>lt;sup>308</sup> UNIDO, Our focus: Creating shared prosperity, 2018.

<sup>&</sup>lt;sup>309</sup> UNIDO, Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women, 2018.

<sup>&</sup>lt;sup>311</sup> UNIDO, Gender Equality and Empowerment of Women Strategy, 2016-2019: Report by the Director-General (GC. 16/8), 2015, p. 7.

<sup>&</sup>lt;sup>312</sup> UNIDO, Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women, 2018.



Policy on Gender Equality and the Empowerment of Women and through UNIDO's Gender Equality and Empowerment of Women Strategy 2016-2019.<sup>313</sup> These initiatives highlight UNIDO's commitment to the empowerment women's economic development, by establishing gender mainstreaming strategies and enabling an environment for women's growth and leadership through entrepreneurship and the development of small enterprises.<sup>314</sup>

#### International and Regional Framework

The UN system aims to create a prosperous and equally empowering world, where every individual has the right to their own self-determination.<sup>315</sup> Article 1 of the *Declaration to the Right to Development* (1986) recognizes that every individual is granted the human right to pursue their personal development and economic freedom.<sup>316</sup> Emphasis on the promotion of personal development, specifically the development of women, was established in the *Beijing Declaration and Platform for Action* (1995).<sup>317</sup> This declaration outlines the importance of promoting the empowerment of women through their economic contributions.<sup>318</sup> Emphasis is placed on the desire from the international community in ensuring that equal access to resources and services are available to women.<sup>319</sup>

Adopted during the 15<sup>th</sup> session of the UNIDO General Conference, the *Lima Declaration and Plan of Action on Industrial Development and Co-operation* (2013) introduced UNIDO's principle focus of ISID, which serves as a standard in the mandate of UNIDO and the implementation of programs within the body.<sup>320</sup> The UNIDO Inclusive and Sustainable Development Report states that "women are important agents of economic and social development."<sup>321</sup> UNIDO recognizes the leadership capabilities women hold and assists in the investment into women's entrepreneurial and technical skills development, business development, and global empowerment.<sup>322</sup> By supporting the creation of gender policies such as the *Gender Equality and Empowerment of Women Strategy, 2016-2019*, UNIDO is empowering women to become agents of change.<sup>323</sup> The creation of this strategy provides a detailed plan of how the organization plans on monitoring its objective to achieve women's empowerment and to implement is accountability measures.<sup>324</sup> To achieve this goal, UNIDO plans on implementing programs focused on skills training, increasing the number of services available to women in business, and increasing their contributions to global economies through entrepreneurship.<sup>325</sup>

Furthermore, the *Convention on the Elimination of All Forms of Discrimination Against Women* outlined in Article 13 and 14 that Member States must take all measures to ensure they are protecting women from all forms of discrimination that would have an effect on their ability to equal and just economic opportunities.<sup>326</sup> Lack of legislation that protects women's economic freedom, inadequate access to resources, and poor representation in economic markets are cited as forms of discrimination that work

<sup>&</sup>lt;sup>313</sup> UNIDO, *Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women*, 2018. <sup>314</sup> Ibid.

<sup>&</sup>lt;sup>315</sup> UN General Assembly, *Declaration on the Right to Development (A/RES/41/128)*, 1986.

<sup>&</sup>lt;sup>316</sup> Ibid.

<sup>&</sup>lt;sup>317</sup> UN Fourth World Conference on Women, *Beijing Declaration and Platform for Action*, 1995.

<sup>&</sup>lt;sup>318</sup> Ibid.

<sup>&</sup>lt;sup>319</sup> Ibid.

<sup>&</sup>lt;sup>320</sup> UNIDO General Conference, *Lima Declaration: Towards Inclusive and Sustainable Industrial Development* (GC.15/RES.1), 2013.

<sup>&</sup>lt;sup>321</sup> UNIDO, Introduction to Inclusive and Sustainable Industrial Development, 2015.

<sup>&</sup>lt;sup>322</sup> Ibid., p. 12.

<sup>&</sup>lt;sup>323</sup> Ibid.

<sup>&</sup>lt;sup>324</sup> UNIDO, Gender Equality and Empowerment of Women Strategy, 2016-2019: Report by the Director-General (GC. 16/8), 2015, p. 4.

<sup>&</sup>lt;sup>325</sup> UNIDO, Introduction to Inclusive and Sustainable Industrial Development, 2015, p. 12.

<sup>&</sup>lt;sup>326</sup> UN General Assembly, Convention on the Elimination of All Forms of Discrimination Against Women (A/RES/34/180), 1979.



against the empowerment of women and their entrepreneurial abilities.<sup>327</sup> In addition, UNIDO's commitment to empowering women's entrepreneurship is highlighted in their *Policy on Gender Equality and Empowerment of Women*.<sup>328</sup> Adopted in 2015, this policy identifies the positive impact that the empowerment of women will have on economic growth and achievement of ISID in the industrial sector by mainstreaming women's participation in the economic sector.<sup>329</sup>

The 2030 Agenda for Sustainable Development (2015) further emphasized women's empowerment and the pursuit of economic freedom by recognizing their vital role in economic, social, and political decisionmaking process.<sup>330</sup> UNIDO has expressed its full commitment to the implementation and achievement of these goals.<sup>331</sup> For instance, increased development and the integration of inclusive and sustainable development is directly reflected in SDG 9, to "build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation."332 UNIDO focuses on creating inclusive and productive global industrialization through the development of services and capacity-building programs such as Medium-Term Programme Framework and Entrepreneurial Curriculum Programme.<sup>333</sup> This framework which focus on the development of entrepreneurial businesses, with a large focus on the encouragement of ones led by women.<sup>334</sup> Recognizing the transformation needed in creating inclusivity and equality in the industrial sector. UNIDO established gender policies and strategies that focus on the achievement of SDG 5, which strive to achieve gender equality and women's empowerment.<sup>335</sup> Target 5.A of SDG 5 establishes the responsibility of the UN and all supporting bodies to "undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other property, financial services, inheritance and natural resources, in accordance with national laws."336

The *Addis Ababa Action Agenda* (2015) was the outcome document of the Third International Conference on Financing for Development.<sup>337</sup> This gathering emphasized the commitment from the UN system and supporting bodies in creating an environment for sustainable development and for highlighting the challenges in promoting the empowerment of women through participation in the world's economy.<sup>338</sup> Stress was placed on the importance of promoting ISID through all levels of development, with emphasis on the partnership between the UN system and UNIDO to advance the relationship between infrastructure, ISID, and innovation.<sup>339</sup> These partnerships allow for the creation of an enabling environment that promotes women's empowerment and equitable economic growth.<sup>340</sup> Importance is placed on investment of financial, economic, and social policies for women's empowerment and the opportunity for women to take a leadership role within the economy through entrepreneurship and business management.<sup>341</sup>Initiatives such as the Comprehensive Africa Agriculture Development Programme, which operates under Office of the Special Advisor on Africa (OSAA), commit to the incorporation of UNIDO's ISID strategy policy frameworks that supports small-holders and women

<sup>&</sup>lt;sup>327</sup> UNIDO, Gender Equality and Empowerment of Women Strategy, 2016-2019: Report by the Director-General (GC. 16/8), 2015, p. 7.

<sup>&</sup>lt;sup>328</sup> UNIDO, Policy on Gender Equality and Empowerment of Women, 2015, p. 2.

<sup>&</sup>lt;sup>329</sup> UNIDO, Policy on Gender Equality and Empowerment of Women, 2015, p. 2.

<sup>&</sup>lt;sup>330</sup> UN General Assembly, *The Future We Want (A/RES/66/288)*, 2012.

<sup>&</sup>lt;sup>331</sup> UNIDO, Who we are: 2030 Agenda and the SDGS, 2018.

<sup>&</sup>lt;sup>332</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

<sup>&</sup>lt;sup>333</sup> UNIDO, Who we are: 2030 Agenda and the SDGS, 2018.

<sup>&</sup>lt;sup>334</sup> Ibid.

<sup>&</sup>lt;sup>335</sup> UN General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

<sup>&</sup>lt;sup>336</sup> Ibid.

<sup>&</sup>lt;sup>337</sup> UN General Assembly, Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313), 2015.

<sup>&</sup>lt;sup>338</sup> Ibid., p. 6.

<sup>&</sup>lt;sup>339</sup> Ibid., p. 8.

<sup>&</sup>lt;sup>340</sup> Ibid.

<sup>&</sup>lt;sup>341</sup> Ibid.



farmers.<sup>342</sup> In partnership with the All-Russian Non-Governmental Organization of Small and Medium Businesses (OPORA Russia) Committee on Women Entrepreneurship Development, UNIDO held an International Forum addressing "Increasing the Contribution of Women to Economic Growth and Prosperity: Creating an Enabling Environment" in May of 2018.<sup>343</sup> This forum recognized that to increasing economic growth and development, it is necessary to invest into legislative protection and the creation of a supporting environment that promotes women's empowerment and entrepreneur development.<sup>344</sup>

#### Role of the International System

UNIDO emphasizes the importance of education, skills training, and access to services to create an favorable environment for women in which they can contribute to the community through empowering entrepreneurship.<sup>345</sup> The UNIDO Institute for Capacity Development aims to strengthen partnerships with academic institutions to provide skills training and increase capacity-building potential.<sup>346</sup> To increase UNIDO's global impact, and the progress toward ISID, UNIDO has partnered with international development organizations, non-governmental organizations (NGOs), and civil societies.<sup>347</sup> The Food and Agricultural Organization of the United Nations (FAO) and UNIDO have joined efforts to improve investment and advancement of the agribusiness and agro-industry development, <sup>348</sup> These investments have lead into the creation of frameworks and programs such as, Medium-Term Programme Framework 2018-2021 and the Agribusiness Development Branch.<sup>349</sup> These programs and frameworks provide resources to support the development of small and medium-sized enterprises (SMEs) and to foster entrepreneurial skill sets.<sup>350</sup> SMEs make up 90% of the global business, and the investment into these enterprises can positively advance and expand the global economy.<sup>351</sup> Additionally, UNIDO's Medium-Term Programme Framework (MTPF) 2018-2021 is a comprehensive strategic to support SMEs while promoting ISID.<sup>352</sup> The vision of the framework is to successfully implement the outcome of the Lima Declaration, specifically highlighting the empowerment of women to take on leadership roles for economic ownership opportunities within their countries.<sup>353</sup>

As global champion for gender equality, UN-Women works toward the empowerment of women through social and economic development and prevention of discrimination and barriers.<sup>354</sup> One of the four strategic priorities of UN-Women is to achieve income security, decent work and economic autonomy for women worldwide by investing into female entrepreneurs and leaders.<sup>355</sup> Seeking to remove the barriers that halt the progression toward women's empowerment, UN-Women has developed a variety of flagships which work in progressing equality, empowerment, and the development of women's entrepreneurship.<sup>356</sup> Women Entrepreneurs for Sustainable Energy is a flagship collaborated between UN-Women and United Nations Environmental Programme (UN Environment) that promotes gender inclusive energy policies, skills training, and access to financial support that increases the productivity of women in the energy sector.<sup>357</sup> By increasing the number of women entrepreneurs in the energy sector,

353 Ibid.

<sup>&</sup>lt;sup>342</sup> Ibid., p. 7.

<sup>&</sup>lt;sup>343</sup> UNIDO, UNIDO event at SPIEF 2018 to focus on increasing women's contribution to economic growth, 2018. <sup>344</sup> Ibid.

<sup>&</sup>lt;sup>345</sup> UNIDO, Our focus: Advancing economic competitiveness, 2018.

<sup>&</sup>lt;sup>346</sup> UNIDO, Our focus: Cross-cutting services, UNIDO Institute for Capacity Building, 2018.

<sup>&</sup>lt;sup>347</sup> UNIDO, Our focus: Cross-cutting services, Partnerships with international development organizations, 2018.

<sup>348</sup> Ibid.

<sup>&</sup>lt;sup>349</sup> UNIDO, Our focus: Advancing economic competitiveness, 2018.

<sup>350</sup> Ibid.

<sup>351</sup> Ibid.

<sup>&</sup>lt;sup>352</sup> UNIDO, Medium term-programme framework 2018-2021: Comprehensive proposals by the Director-General (IDB.45/8/Add.2), 2017.

<sup>&</sup>lt;sup>354</sup> UN-Women, Annual Report (2017-2018), 2018.

<sup>&</sup>lt;sup>355</sup> UN-Women, *About us*, 2018.

<sup>&</sup>lt;sup>356</sup> UN-Women, *How we work: Flagship programme initiatives*, 2018.

<sup>&</sup>lt;sup>357</sup> UN-Women, Flagship program: Women Entrepreneurship for Sustainable Energy, 2016.



gender specific barriers can be broken down and empowerment the women as leaders can flourish.<sup>358</sup> In March 2018, the Commission on the Status of Women (CSW) an intergovernmental body primarily focused on promoting gender equality and the empowerment of women under UN-Women, held their 62<sup>nd</sup> session with a focus on transformative impacts for rural women.<sup>359</sup> In realizing the obstacles rural women face to access to opportunities for prosperity and empowerment, CSW encouraged the development of greater emphasis on rural women's entrepreneurship opportunities to empower their livelihoods.<sup>360</sup>

#### Creating an Enabling Environment for Women's Development

The empowerment of women through the development of their entrepreneurial abilities starts by ensuring there is an enabling environment by promoting frameworks focused on enhancing capacity-building for women.<sup>361</sup> These frameworks must nurture and encourage the development of entrepreneurial skills which will then progress economic empowerment for women.<sup>362</sup> Highlighted in the *Addis Ababa Action Agenda* and UNIDO's Gender Equality and 2016-2019 Empowerment of Women Strategy, frameworks must focus on empowering women through equal rights in global markets equal opportunities such as networking, education and training, and participation in leadership roles.<sup>363</sup> To increase networking opportunities, UNIDO joined efforts with the UN Environment to launch the Green Industry Platform.<sup>364</sup> This initiative focuses on promoting and encouraging female entrepreneurs in the green industry by connecting them to independent businesses and government representatives in a space that allows for networking, mentorship, and sharing of success stories among fellow female entrepreneurs and leaders.<sup>365</sup> With the support of this initiative, the Yiyuan Environmental Group, a female-lead green industry entrepreneur based in China, was able to promote their model and seek mentorship for their patented water conservation technology which later gained large recognition and the Cartier Women's Initiative Award for the Asia-Pacific region.<sup>366</sup>

UNIDO aims to improve women's entrepreneurial skills through capacity-building to inspire women to pursue their own entrepreneurial ambitions.<sup>367</sup> The Entrepreneurship Curriculum Program (ECP), launched by UNIDO, invests into resources such as curriculum and education guides, mentors, monitoring and evaluation tools, and business tips to "create a conductive environment for an entrepreneurial society where initiatives by existing and potential entrepreneurs can unfold."<sup>368</sup> UNIDO's ECP was successfully implemented in countries such as Mozambique, Uganda, Timor-Leste, Rwanda, Angola, and Tanzania; this program helped develop positive attitudes toward the creation of women's entrepreneurial initiatives and created an environment where women thrived as entrepreneurs and were supported by their communities.<sup>369</sup> In Mozambique, ECP was successfully introduced in schools to help students learn about business opportunities and their growth potentials in their community.<sup>370</sup> UNIDO's ECP in partnership with ILO project Women Enterprise Development and Gender Equality in Mozambique, a project that provides an enabling environment for women to strive as entrepreneurs.<sup>371</sup> Through this project, Mozambique women were provided with educational resources through school curriculums that focused on building knowledge surrounding business strategies, technical skills, and the

<sup>358</sup> Ibid.

<sup>&</sup>lt;sup>359</sup> UN-Women, *Commission on the Status of Women: Home*, 2018.

<sup>&</sup>lt;sup>360</sup> UN-Women, Commission on the Status of Women: 62<sup>nd</sup> Session Agreed Conclusion, 2018.

<sup>&</sup>lt;sup>361</sup> UN General Assembly, Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313), 2015.

<sup>362</sup> Ibid.

<sup>&</sup>lt;sup>363</sup> Ibid., p. 3.

<sup>&</sup>lt;sup>364</sup> UNIDO, Guide on Gender Mainstreaming, Agribusiness Development Projects, 2015, p. 10.

<sup>365</sup> Ibid.

<sup>&</sup>lt;sup>366</sup> Ibid.

<sup>&</sup>lt;sup>367</sup> UNIDO, Our focus: Creating shared prosperity, 2018.

<sup>368</sup> Ibid.

<sup>&</sup>lt;sup>369</sup> UNIDO, Guide on Gender Mainstreaming, Agribusiness Development Projects, 2015, p. 14.

<sup>&</sup>lt;sup>370</sup> UNIDO, Empowering Women: Fostering Entrepreneurship, 2014.

<sup>&</sup>lt;sup>371</sup> ILO, The Enabling Environment for Women in Growth Enterprises in Mozambique, 2011, p. 10.



fostering of entrepreneurial activities.<sup>372</sup> This project empowers women to take ownership of their economic growth through the development of entrepreneurial attitudes.<sup>373</sup> Success in this project has been experienced by over 120,000 Mozambique female students taking part in this educational curriculum, with successful businesses created within their rural communities.<sup>374</sup> The impact of this program further resulted in the introduction of a nationwide strategy into Mozambique's education curriculums that mainstreams equal gender participation in urban and rural spaces.<sup>375</sup>

In Tanzania, UNIDO's ECP program inspired the creation of an umbrella program known as Tanzania Women Chamber of Commerce which matches the objectives outlined in ECP to empower women by formalizing business women's associations, networking, and encouraging prosperity of women entrepreneurs.<sup>376</sup> UNIDO's capacity-building efforts were further reflected in the rapid success of a locally based Tanzanian agribusiness company called NatureRipe Kilimanjaro; the knowledge and confidence gained from UNIDO's ECP and Tanzania Women Chamber of Commerce led for the female founder to be named the East African Businesswoman of the Year in 2017.<sup>377</sup>

Strengthening Women's Entrepreneurship in Rural Regions

Rural areas in least developed states face many challenges due to poverty, inadequate infrastructure and access and investment from global markets, which in turn economic prosperity.<sup>378</sup> Women are more likely to be impacted by these challenges, yet they account for 70% of the agriculture labor force and contribute significantly toward the socio-economic development of the regions that surround them.<sup>379</sup> By empowering rural women to harness their agricultural skills and providing proper education and training, economic growth can pave the path economic entrepreneurial opportunities.<sup>380</sup> For instance, UNIDO's Agribusiness Development Branch (AGR) assists in the development of agriculture skills to generate employment and promote entrepreneurship.<sup>381</sup> Many rural regions in developing states are the suppliers of raw materials that include textiles, forestry materials, and leathers.<sup>382</sup> UNIDO's AGR focuses on increasing opportunity for individuals living in rural areas by integrating specific policies that help women develop their own business, such as production materials that are commonly available within their rural communities.<sup>383</sup> Under this initiative a project was launched in Pakistan that provided rural women with the opportunity to learn technical and production skills, along with business management to encourage the creation of their own businesses.<sup>384</sup> By giving the opportunity for women to excel in an economic aspect, women were able to create their own small businesses for mosaic work, jewelry, textiles, and fashion.385

Another example is UNIDO's Bangladesh Quality Support Program, supported with funding from the European Union, which provides training and capacity-building for the Department of Fisheries.<sup>386</sup> Through training courses, women farmers were able to learn methods in handling seafood products, and match the product line with the international market demands.<sup>387</sup> This program provided the opportunity

379 Ibid.

<sup>&</sup>lt;sup>372</sup> UNIDO, Entrepreneurs blossoming in Mozambique, 2018.

<sup>373</sup> Ibid.

<sup>374</sup> Ibid.

<sup>&</sup>lt;sup>375</sup> UNIDO, *Empowering Women: Fostering Entrepreneurship*, 2014.

<sup>&</sup>lt;sup>376</sup> UNIDO, Stories: Businesswomen inspires entrepreneurs in Tanzania, 2018.

<sup>377</sup> Ibid.

<sup>&</sup>lt;sup>378</sup> UNIDO, Agribusiness Development: Transforming rural life to create wealth, 2013, p. 1.

<sup>&</sup>lt;sup>380</sup> FAO, Empowering Women to End Hunger and Poverty, 2017.

<sup>&</sup>lt;sup>381</sup> UNIDO, Guide on Gender Mainstreaming, Agribusiness Development Projects, 2015, p. 7.

<sup>&</sup>lt;sup>382</sup> UNIDO, Agribusiness Development: Transforming rural life to create wealth, 2013, p. 3.

<sup>&</sup>lt;sup>383</sup> Ibid.

<sup>&</sup>lt;sup>384</sup> Ibid., p. 25.

<sup>&</sup>lt;sup>385</sup> Ibid., p. 25.

<sup>&</sup>lt;sup>386</sup> UNIDO, Guide on Gender Mainstreaming, Agribusiness Development Projects, 2015, p. 10.

<sup>387</sup> Ibid.



for women to be empowered to take control of the income for their household through the development of independent businesses in the fisheries sector.<sup>388</sup>

#### Conclusion

Entrepreneurship is a tool that plays a very important factor in the empowerment of women and leadership role in development.<sup>389</sup> UNIDO's ISID mandate provides a standard for the introduction and participation of women in the global economy through entrepreneurship.<sup>390</sup> With the implementation of frameworks and policies that create an enabling environment, women will be able to foster the skills they need to create their own businesses.<sup>391</sup> Creating an enabling environment can allow women to develop their business skills, benefit from market advice, and gain the support necessary to development their enterprises, which will encourage the creation of other women-owned businesses and boost their empowerment.<sup>392</sup> Women entrepreneurs in rural areas must have frameworks built to protect the rights of business owners while also supporting their livelihoods; this has been supported by entities such as AGR and ECP.<sup>393</sup> Advancement toward ISID and the *2030 Agenda for Sustainable Development* can be achieved through capacity-building, technical skills training, and business management opportunities,.<sup>394</sup> Women, especially those in rural areas, need to have a larger representation as entrepreneurs and innovators that will increase their participation in international discussions as the drivers of industrialization and sustainable development.<sup>395</sup>

#### Further Research

As delegates move forward with their research, they should consider these questions: What other policies and frameworks can be introduced for the empowerment women using UNIDO's ISID mandate? What other strategies can UNIDO explore to support the UN system the implementation of ISID? What larger role do civil societies play in the empowerment of women through entrepreneurship? Are there any evaluation tools that can be introduced to help track the progress of UNIDO's Gender Equality and Empowerment of Women Strategy, 2016-2019, within individual Member States? What flagship frameworks or programs can be improved to further empower women? What national and international policies can be improved upon to ensure Member States are creating an enabling environment for women's empowerment and entrepreneurship development? What more can UNIDO do to advance agribusiness development, specifically as a tool to empower women and their economic development? How can UNIDO further harness the green industry to enhance rural women's opportunities for entrepreneurship? How can the private sector play a role in advancing the development of agribusiness in rural areas?

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UNIDO's ECP in partnership with ILO's Women's Entrepreneurship Development and Gender Equality empowers women entrepreneurs by striving to remove political barriers and address unequal rights. This report highlights the importance of creating an inclusive

388 Ibid.

<sup>&</sup>lt;sup>389</sup> UNIDO, Introduction to Inclusive and Sustainable Industrial Development, 2015.

 <sup>&</sup>lt;sup>390</sup> UNIDO, Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women Projects, 2018.
<sup>391</sup> UN General Assembly, Addis Ababa Action Agenda of the Third International Conference on Financing for

Development (Addis Ababa Action Agenda) (A/RES/69/313), 2015, p. 7.

<sup>&</sup>lt;sup>392</sup> UNIDO, Who we are: 2030 Agenda and the SDGS, 2018.

<sup>&</sup>lt;sup>393</sup> UNIDO, Guide on Gender Mainstreaming, Agribusiness Development Projects, 2015.

<sup>&</sup>lt;sup>394</sup> UNIDO, Our focus: Cross-Cutting Services, Gender Equality and the Empowerment of Women, 2018.

<sup>&</sup>lt;sup>395</sup> UN-Women, What we do: Economic Empowerment, 2018; UNIDO, Guide on Gender Mainstreaming, Agribusiness Development Projects, 2015.



atmosphere for women's economic development. This source will aid delegates to further understand what resources and legal frameworks are required to create an enabling environment for the economic development of women, specifically through entrepreneurship.

United Nations, Entity for Gender Equality and the Empowerment of Women. (2018). *Annual Report* (2017-2018). Retrieved 21 August 2018 from: <u>http://www2.unwomen.org/-</u>/media/annual%20report/attachments/sections/library/un-women-annual-report-2017-2018en.pdf?vs=2849

UN-Women is a leading organization in the progress toward the achievement of gender equality and the empowerment of women. In this Annual Report, two priority areas of the organization focus are highlighted, which are enhancing women's economic empowerment and increasing women's leadership and participation. Both of these focuses tie into empowerment of women through discovering and enhancing entrepreneurial skillets and business. This source provides statistics from the 2017-2018 year, results, and shares testimonies from approaches taken globally. Delegates will find this source helpful in further their understanding of what UN-Women does within the international system of the UN, and their work toward achievement equality and empowerment for women.

United Nations Industrial Development Organization, General Conference. (2013). *Lima Declaration: Towards Inclusive and Sustainable Industrial Development* (GC.15/RES.1). Retrieved 5 July 2018 from: <u>https://www.unido.org/sites/default/files/2014-04/Lima Declaration EN web 0.pdf</u>

In this source, the outcomes of UNIDO's fifteenth session of the General Conference are highlighted. UNIDO's mandate of "inclusive and sustainable development" is introduced here, and an overview of the adoption of this mandate is provided. This source emphasizes the need to incorporate economic, social, and environmental influences in our advancement of sustainable development. Through the implementation of ISID frameworks as the standard in pushing for inclusive development, this will encourage the participation of groups that are often excluded from economic prosperity, such as women. This declaration is a founding principle of UNIDO's goal of ISID, and provides overview of the objectives hope to be achieved through the implementation of this mandate throughout the organization. This source will provide delegates with a full understanding of UNIDO's mandate and how the organization plans to implement it.

United Nations Industrial Development Organization. (2013). *Agribusiness Development: Transforming rural life to create wealth* [Report]. Retrieved 7 July 2018 from:

https://www.unido.org/sites/default/files/2013-01/UNIDO Agribusiness development 0.pdf

This source provides understanding to developing of agribusiness within UNIDO's organization and the global areas in which the development is focused. As discussed in this source, agribusiness development can lead to progressive sustainable development, which can be achieved through agro-industrial capabilities, as described in UNIDO's Agribusiness Development Branch. Rural areas can benefit from women who succeed in entrepreneurial activities and can help to bring sustainable economic opportunity and growth to their communities. Entrepreneurial activities include work on forest products, agro-machinery, food technology, food security, and rural enterprises. In regard to entrepreneurial skill development, this source provides deep insight to a multitude of areas where UNIDO is creating an ISID impact and empowering individuals to socio-economic development.

United Nations Industrial Development Organization, General Conference. (2015). *Gender Equality and Empowerment of Women Strategy, 2016-2019: Report by the Director-General (GC.16/8).* Retrieved 4 July 2018 from: <u>http://undocs.org/GC.16/8</u>

UNIDO's mandate is to create inclusive sustainable industrial development, which further recognizes the importance of achieving gender equality and fostering women's empowerment. This source provides in-depth detail into the fourth-year strategy created



by UNIDO in achieving this goal. Within this source, you will find the multi-approaches, thematic priority areas, program management actions, organizational actions, and the reporting and evaluation frameworks. This source provides a full report of UNIDO's focus, and action plan to implement his strategy. This source will help guide delegates in understanding how Member States can incorporate this strategy within their legislation.

United Nations Industrial Development Organization. (2015). *Guide on Gender Mainstreaming: Agribusiness Development Projects* [Report]. Retrieved 19 August 2018 from: <u>https://www.unido.org/sites/default/files/2015-</u>

01/Guide\_on\_Gender\_Mainstreaming\_Agribusiness\_Development\_Projects\_0.pdf

This guide provides and in-depth look into what is required by UNIDO to accelerate the achievement of inclusive and sustainable development, and the maintenance of the other focuses within its mandate. This report further highlights the action plan needed for gender mainstreaming of development branches such as in UNIDO's Agribusiness Development Branch. AGR acts as a hub in providing resources such as training, networking opportunities, and the development of entrepreneurial businesses. Noting the need in empowering women to pursue entrepreneurial businesses, this branch also provides a listing of UNIDO programmes working to accomplish this. Also, this source will help delegates in understanding the steps needed in order to achieve a market that has equal representation of genders, and the associated frameworks needed to ensure its sustainability. Delegates will also be able to understand the mechanisms used within UNIDO to analysis, assessment, and track results of this guide.

United Nations Industrial Development Organization. (2015). *Introduction to Inclusive and Sustainable Industrial Development* [Report]. Retrieved 6 July 2018 from:

https://isid.unido.org/files/DG Brochure February 2015 Web.pdf

UNIDO's ISID mandate has been adopted as the standard for encouraging inclusive industrialization. This report outlines the different approaches adopted by UNIDO to ensure all aspects of social, economic, and environmental dimensions are addressed to encourage sustainable development. Under the social and economic dimension, UNIDO invests into programmes that encourage the empowerment of women through the development of their entrepreneurship. Within this source delegates will find examples of implemented programmes and success stories that showcase the positive impact entrepreneurship has had on women across the world. Delegates will also find the joint efforts with other organizations that have introduced flagships and program frameworks within different regions and sectors of development.

United Nations Industrial Development Organization, Industrial Development Board. (2017). *Medium term-program framework 2018-2021: Comprehensive proposals by the Director-General* (*IDB.45/8/Add.2*). Retrieved 4 July 2018 from: http://undocs.org/IDB.45/8/Add.2

The Medium-term program framework, 2018-2021, is a strategic agenda brought forward by UNIDO to aid in the achievement of its goal of creating an ISID environment. Additionally, UNIDO is working toward establishing a global market that practices ISID, which also pushes the implementation of the 2030 Agenda for Sustainable Development. This report highlights the core values of UNIDO and the focus through the progression of the four-year strategy. As delegates conduct their research, this source will provide a full understanding of UNIDO's ISID standards and partnership goals.

United Nations Industrial Development Organization. (2018). *Our focus: Creating shared prosperity* [Website]. Retrieved 7 August 2018 from: <u>https://www.unido.org/our-focus/creating-shared-prosperity</u> *This source provides a comprehensive understanding of the work of UNIDO and the future objectives of the organization. This source outlines and provides a detailed explanation of the four main focuses of UNIDO, which are: creating shared prosperity, advancing economic competitiveness, strengthening knowledge and institutes, and cross-cutting services. Within each focus is a description of the current initiatives and partnerships between UNIDO and supporting bodies, as well any relevant frameworks* 



and policies. The information provided in this source will be help with understanding the current work of UNIDO and the main focuses of the organization. Additionally, delegates will be able to understand the relationship between the main focuses and the current frameworks and policies that have been established.

United Nations Industrial Development Organization. (2018). *Our focus: Gender equality and the empowerment of women; gender-related projects* [Website]. Retrieved 17 October 2018 from: <a href="https://www.unido.org/our-focus/cross-cutting-services/gender-equality-and-empowerment-women/gender-related-projects">https://www.unido.org/our-focus/cross-cutting-services/gender-equality-and-empowerment-women/gender-related-projects</a>

A major focus of UNIDO is the implementation of cross-cutting services that promote the capacity-building and empowerment of women. Through different frameworks and programmes, UNIDO is working toward encouraging the development of women's entrepreneurship globally through partnerships and the integration of ISID. This source provides a list of projects UNIDO is involved to promote women's empowerment through entrepreneurship. Delegates will find this source helpful as they research the partnership of UNIDO with other UN supporting bodies and Member States.

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