

World Environment Situation Room – ork Plan 2020-2021 Work Plan 2020-2021





# I. Context, Mandate, Vision and Mission and Target Audience

The World Environment Situation Room (WESR) is the future United Nations Environment Programme (UNEP) on-line data and knowledge platform. It will enable users to visualize, query, access, link and download data, information and knowledge products regarding the world environment situation in near real-time (http://wesr.unep.org).

This platform will be a primary tool for UNEP's data-driven assessments, foresights, monitoring, communications, and support to UN country teams and related Common Country Analysis (CCA). It will also help visualize progress made regarding the environment-related Sustainable Development Goals (SDGs) and Multilateral Environmental Agreements (MEAs). It will take UNEP into the digital age and establish a leadership role on environmental data. WESR will be customized to fulfil UNEP's mandates on keeping the World Environment Situation under review and fill both an important and unique niche in the emerging digital infrastructure for the planet.

#### Situation: Our Challenge and Opportunity

We are now living in a time of unprecedented climate emergency and climate crisis, facing critical consequences of rising temperatures, climate change, environmental pollution, species extinction and natural resources destruction. The climate emergency has already become one of the biggest humanitarian challenges. The solutions for the climate challenge require strong science-based decision-making and powerful action towards transformational change for the lives of People, Places and Planet. At the same time, there has never been an epoch in human history with such digital capacity, where and when the use of emerging technologies (e.g. information and communication technologies, human computer interfaces, big data, internet of things and machine intelligence) can empower humans towards transformational change.

#### Mandate

The United Nations Secretary-General considers that climate change and the environment represent one of the biggest challenges for Humanity and consequently that the availability of quality, timely and disaggregated data is fundamental to support nations in the achievement of Agenda 2030 and the sustainable development goals. The United Nations Environmental Assembly, in March 2019 has provided through its Ministerial Declaration and Resolutions, a clear and strong mandate, to work with the UN system entities, for UNEP to have a global environmental data strategy by 2025, with progress reports to Member States by 2021 and 2023. As part of the UNEP Medium Term Strategy (2018 – 2021), UNEP is implementing projects A4 – Knowledge Platform on the Environment and Project A5 – Foresight and Emerging issues which constitute the programmatic base for the implementation of the World Environment Situation Room.

#### Vision: 'Environmental Data for Our Future'

In order to tackle the climate crisis and achieve sustainable development, peace and security, and humanitarian action, a single-entry geospatial and intelligent socio-technical distributed platform on environmental data, supporting strategic foresight and early warning for preparedness and prevention – a World Environment Situation Room - is vital for urging the global climate action to impact people's lives now and into our common future.

#### How We Realize this Vision

The vision is realised through a worldwide One Global Partnership with physical rooms acting as permanent Situation Rooms for intelligence and monitoring the environment to tackle the climate crisis, covering the whole world (New York, Panama/ Sao Paulo, Geneva, Vienna, Abu Dhabi, Beijing, Bangkok, Samoa and Nairobi). The WESR will be available through:



Accessible to Everyone, from Everywhere, Anytime.

This socio-technical intelligent platform relies on a world partnership with more than 22 members, including core support at the technological frontier from UNEP's Global Resource Information Database network (GRIDs) – GRID Geneva in Switzerland, GRID Arendal in Norway, GRID Warsaw in Poland, GRID Sioux-Falls in USA, GRID Nairobi in Kenya, EAD Abu-Dhabi in UAE, RADI in China, SPREP in the Pacific. The partnership relies also on other global partners such as Office of Information and Communication Technology (OICT), the UN Statistical Division (UNSD) and Yale University (Yale School of Architecture).

#### Mission

The availability and transparent access and use of quality, reliable, timely and disaggregated data on environment could provide fundamental support to the full implementation of the 2030 Agenda and the Sustainable Development Goals. These global environmental data should prepare for a better understanding of our likely futures and foresight, preparing and protecting the lives of people, places and our planet.

This global action tackling the environmental crisis impacts and counts with active engagement of Youth and new generations, fundamental for digital transformation and our common future. This leverages UNEP initiatives in terms of harnessing the power of big data on the environment for the nexus of the three pillars of the United Nations: sustainable development, peace and security and humanitarian action. For this to happen, it calls for a worldwide partnership including policy makers, scientific community, international organizations, business innovators, citizens and civil society, especially the active engagement and leadership of the youth and new generation.

#### Target Audiences

We have identified 5 actor groups or target audiences:

- · Policy Makers: environmental policy makers at the global, regional and national levels
- · Scientific Community: academics and environmental related scientists and technologists
- · International Organizations: UN System and interested International organizations
- Business and Innovators: business companies with an interest on Environment
- Citizens and Civil Society: civil society including the Youth and new Generations

### **II - Transformational Pathways**

Transformational Pathway I: Integrating Data and Knowledge, 'Acting as One' across UNEP

On 30 September 2018, the Executive Director approved the nomination of focal points for a task team across UNEP comprising all Divisions, Regional Offices and 4 Secretariats of Multilateral Environmental Agreements (MEAs). This task team of 26 focal points has been actively engaged in the integration of until now 'fragmented' contents across UNEP (geospatial, publications, SDG statistics and MEA indicators, global monitoring systems, assessments, citizen science and private data, foresight analyses, among other streams of data).

The Senior Management Team is requested to endorse this 'delivering as one' strategy across UNEP, according to the Governance document attached. (Decision of Endorsement by Senior Management Team) Follow-up on this activity is available at: https://wecollaborate.unep.org/display/wesr



Transformational Pathway II: A Digital Transformation Platform, through a 'One Global Partnership'. The 'One Global Partnership': 17 worldwide partners in 2019, 25 partners (2021), 35 partners (2023). Only through a global worldwide partnership, including member states and their support in terms of common country data analysis and the UN Reform, can we tackle the challenge to provide timely, reliable and disaggregated environmental data to support decision-making, policy and action. This comprises a diversity of partners, GRID centres, businesses, UN system entities, geospatial agencies, NGOs and citizen science.

This network will facilitate the timely access to reliable data (geospatial, satellite imagery, in situ data, statistics and indicators - including SDGs and MEAs) and the transformation of data into information and knowledge supporting assessments, the governance and actions with regard to a wide range of environmental solutions. UNEP's role on Geospatial has been recognized by the more than 25 UN entities who nominated UNEP as the Chair of the UN System Network (GGIM). The current strategy and roadmap for the 'One Global Partnership' is attached, including the funding business model, during an initial action plan (2018-2021) and in the long-term (until 2030). Follow-up of these activities here: https://wecollaborate.unep.org/display/wesr

# III. Impacts on the Ground and Demonstration projects (Use cases)

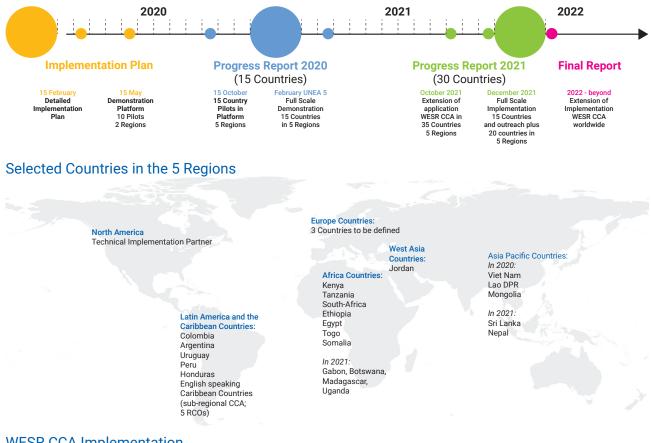
#### WESR-CCA (Countries)

One of the aims of the WESR is to link data to action on the ground. One of the best opportunities for this is through the UN reform and working with the UN country teams to support the cooperation framework, starting by the Common Country Analysis (CCA).

Period		Work plan for network
<b>2020-2021</b> Selection (done*) and support to at least 15 countries for the CCA process in 4 regions. Demonstration an capacity building. Finalisation of a WESR-CCA platform.		Selection (done*) and support to at least 15 countries for the CCA process in 4 regions. Demonstration and capacity building. Finalisation of a WESR-CCA platform.
<b>2022-2023</b> Selection and support to 30 countries for the CCA process in 5 Regions.		
2024-2025	5	WESR-CCA fully operational for all countries.

\*countries selected: LAC: Argentina, English speaking Caribbean. Africa: Kenya, Tanzania, South Africa, Ethiopia, Egypt, Somalia, Mali and Côte d'Ivoire. Asia: Vietnam, Lao, Mongolia. West Asia: Jordan. Europe: pending.

#### Roadmap for WESR CCA



#### WESR CCA Implementation

#### Phase 1

- Make available an initial core set of basic data and analytics on environmental SDG indicators, where already available, for all the UN System and for all UN Member States.
- Engage with UN Country Teams and UN Resident Coordinators in at least 15 pilot countries to enhance the WESR platform and tailor it to the needs and priorities of UN RCs in support the UN CCA and UNSDCF.
- Organize regional consultations in two regions to share the WESR and to enhance, validate and tailor the platform to further meet UN System country-level needs in each region and country. Within 18 months from signature.

#### Phase 2

- Refinement of the data and analytics on environment on the WESR country pages, including through bringing in national level data products.
- Engage with UN Country Teams and UN Resident Coordinators in an additional 20 countries to pre-deploy support for the CCAs.
- Provide continued support to the initial 15 pilot countries supported in Phase 1.
- Organize regional consultations in two regions to share the WESR and to enhance, validate and tailor the platform to further meet UN System country-level needs in each region and country. Within 24 months from signature

#### Strategic Value Proposition (In Consultation with Regions)

- Permanent engagement with UN Country Teams and UN Resident Coordinators in at least 15 pilot countries and outreach to 20 additional countries to enhance the WESR platform and tailor it to the needs and priorities of UN RCs in support the UN CCA and UNSDCF.
- Organize regional consultations and technical workshops in two regions to share the WESR and to enhance, validate and tailor/customize the platform to further meet UN System country-level needs in each region and country.
- Ensure involvement of national entities and organizations in the consultation process and engagement with Regions, RC Offices and Country Teams.
- Refinement of the data and analytics on environment on the WESR country pages, including through bringing in regional and national level data products.
- Provide continued technical support to the initial 15 pilot countries.
- Leverage the technical support and WESR CCA platform (direct contribution to UN Reform) to support State of Environment Reporting in Countries, support to NDP in countries as well as Voluntary contributions and Agenda 2030 and SDGs.

# Key focus on Engagement with Regional Offices, UN Resident Coordinator Offices and Country teams

- Organize Regional Workshops for Outreach and Communication of the results in the five regions to share the WESR and to enhance, validate and tailor the platform to further meet UN System country-level needs in each region and country.
- Organize a deep dive presentation for the Committee of Permanent Representatives (CPR) in Nairobi.
- Permanently, outreach using UN Environment platforms as well as social media tools as per interaction with the UNEP Communication Division.
- Permanently, outreach using the Regional Offices communication channels
- Outreach and Communication of the initiative through the various high-level events included in the Outreach and communication Plan of the wider initiative of the World Environment Situation Room (e.g. UN Oceans Conference in June, in Lisbon, High Level Political Forum event in July, in NY, the Dubai World Expo in October 2020, and the UNEA-5 events in February 2021, in Nairobi)

#### **Demonstration Projects - Use Cases**

Integration of the WESR with existing UNEP projects, data, information and knowledge will be implemented in three stages:

- Links to external applications and data this is the first ad initial way of integrating existing material, more of a stock taking and enlisting environment related information.
- Interoperability this will integrate data and information in a deeper, more way and employ APIs to access back end data and services.
- Hosting this is the final and deepest stage of integration where analysis and real-time operations will be possible directly in the WESR functionality.

Currently the WESR demonstration platform already includes content (climate, biodiversity, pollution, disaster risk, water, SDG, etc.). Some content is newly developed for WESR platform, for example, tracking trend of forest fires. However, most of the content is already existing and needs to be integrated from either UNEP entities, or from main data providers.

Integration of Data Content in 2020	Completed by
Definition of a data governance, and nomination of managers for each environmental theme, responsible for the selection of the content.	April 2020
Selection of new themes to be integrated	May 2020
Availability of all SDG environmental indicators	June 2020
Availability of all MEAs indicators	June 2020
Publications, reports, assessments from UNEP	June 2020
Air Quality Worldwide	October 2020
Sustainable Consumption (SCP-Hat)	October 2020
Forest Fires (trend analysis and near real-time)	October 2020
Atlas or Hotspots of Global Change	October 2020
Monitoring of Illegal Killing of Elephants (for CITES)	October 2020
Environmental Stress Index	October 2020
Stratospheric Ozone	October 2020
WESR for CCA (15 countries)	See impacts
Ocean data in view of the UN Decade for Ocean Sciences	December 2020
Air and Water Quality in 3 African Cities	January 2021
Other demonstration content for UNEA-5	January 2021

#### Example of 2021 content activities:

Activities

Develop a joint API for InforMEA and WESR

Joint Biodiversity Platform: Development of a platform on Biodiversity to avoid duplication and join efforts (and resources) from UNEP (including WCMC), EU/JRC, IUCN. In support of the CBD, IPBES, environmental SDGs, related MEAs, UN country teams and countries. Meeting at EU/JRC (2-5 March 2020) was postponed due to Corona Virus. Actors include UNEP (WCMC, GRID-Geneva), EU/JRC, IUCN.

CBD was contacted and fully supported.

# **IV. Technical Implementation**

Generating the World Environment Situation Room as the new data, information and knowledge platform for UNEP will require significant technical developments to connect UNEP's resources to the ecosystems of big data. Main developments include:





IT infrastructure

Development of data platforms (geospatial, remote sensing in situ data, statistics & indicators, country profiles)





Knowledge repository





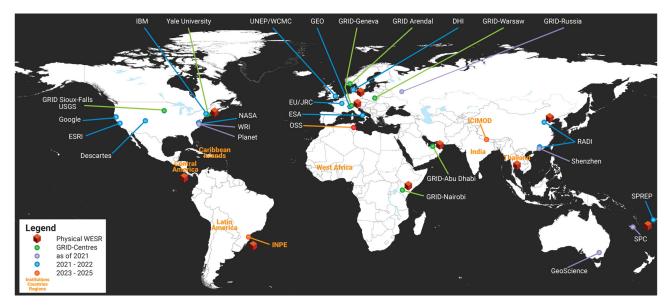


Visually appealing layout with user-friendly interface.

2020 Technical implementation activities	Completed by
Selection of a cloud provider and related procurement process	April 2020
Selection of a web-designer and related procurement process	April 2020
Installation of the IT architecture in the UNEP cloud	June 2020
Generation of a data platform for dissemination of an initial core set of basic data and analytics on available environmental SDG indicators for all the UN System and for all UN Member States. Pilot platform operation for demonstration	June 2020
Development of a search tool	July 2020
Web-design layout	July 2020
Development of an API for geospatial data	August 2020
Migration of WESR in the new web design	September 2020
Development of an intelligent WESR-CCA dashboard	October 2020
Updated statistics data platform of the WESR-CCA platform with customized	January 2021



#### One Global Partnership (world-wide)



Collecting, processing, analysis of Big Data is a significant endeavour that UNEP cannot do alone. The 'One Global Partnership' is the worldwide partnership co-developing with UNEP. This Initiative aims to promote transparent access and sharing of 'environmental data' supporting policy and action for sustainable development and humanitarian action at the global, regional and national levels.

Currently, 19 partners have already established formal Agreements, Memorandum's of Understanding or Contract arrangements with UNEP which in a variety of competences support the Big Data initiative. Currently the 19 partners of the One Global Partnership are mostly concentrated in the Global North, it is important to extent the number of partners to the Global South and developing countries as well as large countries (e.g. India, Australia and Russia). To this end, discussion have been initiated. A GRID-Russia is under discussion with the UNEP Europe Office. Identification of potential centres in the south includes: INDP (Brasil); ICIMOD (Nepal); OSS (Tunisia), SPC (New Caledonia), Geoscience Australia (Australia). Extension of the network is done in collaboration with the Regional Offices.

Period	Work plan for network	
<b>2020-2021</b> Consolidation of current network (19 partners); identification of new partners in the global south, 3 new partners in the global south		
2022-2023	22-2023 Consolidation of the network (22 partners); identification of new partners in the global south, 3 new partners in the global south	
2024-2025	Consolidation of the network (25 partners); identification of new partners in the global south, 3 new partners in the global south.	

# **VI. Communication and Outreach**

Year	Month	Meeting/Event	Location	
2019	September	High Level Dialogue with Resident Coordinators in Africa [54 countries]	Nairobi, Kenya	
	November	African Ministerial Conference on the Environment [54 countries]	Durban, South Africa	
	December	UN Climate Change Conference (COP 25) [193 countries]	Madrid, Spain	
2020	20-24 January	World Economic Forum (WEF)	Davos, Switzerland	
	6-8 February	World Urban Forum (WUF)	Abu Dhabi, United Arab Emirates	
	12-13 May Science Technology and Innovation (STI) Forum   2-6 June UN World Oceans Conference   7-16 July High Level Political Forum (HLPF) – Side Event of HLPF to Launch of 9 World Environment Situation Rooms (physical rooms)		New York, United States of America	
			Lisbon, Portugal	
			New York, United States of America	
	20 October	Dubai World Expo 2020	Dubai, United Arab Emirates	
	9-19 November	26th Session of the Conference of the Parties (COP 26)	Glasgow, United Kingdom	
2021	22-26 February	United Nations Environmental Assembly (UNEA) [193 Countries]	Nairobi, Kenya	

# **VII. Fund raising and Resource Mobilisation**

Currently WESR is not a part of the regular UNEP budget (with exception of 2 Million USD a year of RB and EF staff), hence it requires a significant effort of fund raising. To date the financing is as follows:

Sources of funds for 2020-2021	Dedicated to	Amount (USD)*
Ministry of Foreign Affairs of Denmark	Phase 1 (2020) support to CCA (including 260,000 for technical development)	650,000
Ministry of Foreign Affairs of Denmark	Phase 2 (2021) support to CCA (including 160,000 for techni- cal development)	650,000
Swiss Earmarked funds (2020)	MEAs and SDGs indicators	88,450
GRID-Geneva, staff paid on core funds Swiss FOEN and University of Geneva (2020-21)	WESR core platform developments and IT architecture.	436,000
Nordic Funds 2019-2020	WESR core platform developments and IT architecture. And GEMs and Knowledge Management	300,000
China South – South Funds - Digital Data Belt and Road Initiative	WESR core platform developments and IT architecture.	100,000
China South-South Funds (Foresight) not including 440,000 allocated to Regional Outreach and ROA activities.	Support to Addis Ababa, Nairobi and Cape Town, air and water quality monitoring	560,000
	Total raised	2,784,450
	Still to be raised for 2020-2021	715,550

A decision is requested from the Executive Office and the Senior management Team of UNEP, in terms of allocation of earmarked funding from overall Environment Fund of UNEP annual budget. This amount estimated in around 750,000 USD per year to keep WESR up to date and run analysis (e.g. DPSIR). This is proportional to the strategic importance of the Flagship Initiative, providing overall across UNEP knowledge and Environmental Data services, and has been prioritised by Member States in their Ministerial Declaration and Resolutions (UNEA-4).

