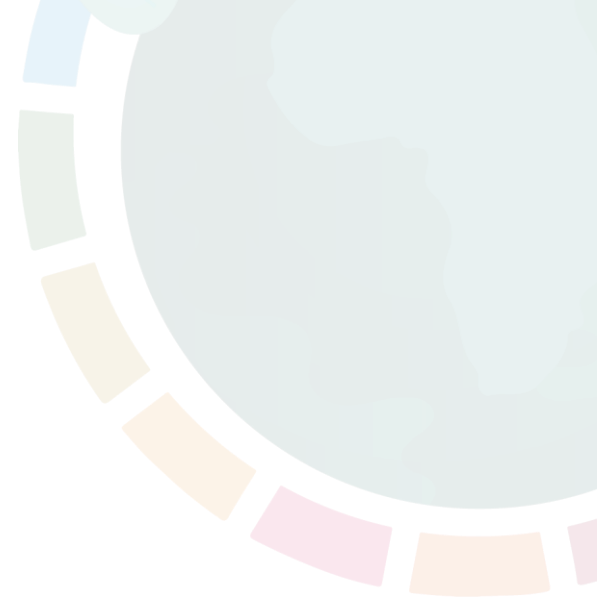# CLIMATE CHANGE, the SDGs & AFRICA

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CLIMATE CHANGE, the SDGs & AFRICA

A concept paper for developing an Africa-wide Digital Education Programme to engage African students in tackling Climate Change and the SDGs

ASSOCIATION OF AFRICAN UNIVERSITIES
ASSOCIATION DES UNIVERSITES AFRICAINES
اتحاد الجامعات الإفريقية

THE SUSTAINABLE DEVELOPMENT GOALS CENTER FOR AFRICA

AASU

gaia
education

Partners' Statement

'Can we have climate change as part of our curriculum, so that future generations can find a way to undo our mistakes?

This eloquent plea by 11-year old Atreyi was one of many children's quotes posted on a wall opposite the Plenary assembly at COP26 in Glasgow in November 2021.

A Joint Ministerial Declaration made by Ministers of Education and Environment at COP 26 on 5th November 2021 captured the urgency, including a commitment to:

'The integration of sustainability and climate change in formal education systems, including as core curriculum components, in guidelines, teacher training, examination standards and at multiple levels through institutions.'

The African Union has taken this to heart. It has agreed various plans and strategies to address these issues, such as the African Climate Change and Resilient Development Strategy and Action Plan 2022-2032, and the Africa Adaptation and Renewable Energy Initiatives.

We have come up with a ground-breaking, visionary concept that by the end of 2024, 1 million African undergraduate students will have followed online courses on Climate Change and the SDGs, designed by African university Champions and Pioneers who have specialised expertise in these areas.

It will be a first for Africa. In fact, it will be a first for any continent in the world.

Our hope and expectation are that every single African student, irrespective of their subject specialization, will be empowered to become a champion for Climate Change.

Through these online courses they will be encouraged to make life choices for themselves, their families, and the communities around them that will be positive for their own environment and the African continent.

Our students are our future. We must invest in their education, and make them aware of the huge challenges of climate change and how to address them. This is vital for their own survival, the survival of their families and communities as well as the development of the continent

This initiative is led by the Association of African Universities, with two other key African Partners: the All-Africa Students Union, and the SDG Center for Africa, with support provided by GAIA Education. The African Regional Network of Centres of Expertise on Education for Sustainabilitywill also be encouraged to participate fully in this initiative.

The programme will be monitored and reviewed, and a report submitted to the UNFCCC, the AUC, African Ministers of Education and Environment, and the Conference of Rectors, Vice-Chancellors and Presidents of African Universities (COREVIP). The recommendations of the review will be incorporated into revised online courses rolled out by universities across Africa..

A basic principle of this concept requires that *each African student must be able to fully benefit from these online courses at no financial cost to themselves or to their families.*

The initial development cost for this initiative, reaching approximately 100,000 students, is estimated at $260,000 i.e. $2.6/student. A massive expansion of this programme to 1 million students in phase two will cost proportionately much less since virtually all of the development costs of designing the online courses will have been covered in phase one.

We are seeking up to $525,000 to cover both the development costs of this online programme and its full, 2-phase rollout. We believe this to be an extremely good value for money compared with the potential impact that such a project could make across Africa.

Our overall goal is to reach Africa's estimated 20 million higher education students over the coming years at a cost of less than $0.25 per student.

As Partners, we are absolutely committed to delivering this project and are prepared to mobilise our own financial and in-kind contributions to make it happen.

Time is against us, and we need to launch the project as soon as possible. 15 professors from universities championing Education for Sustainable Development have already stepped forward to co-create course content with the Partners' support. We now need the resources to make it happen.

We hope we can count on your full support. The task is daunting, but we believe fervently that the realisation of this goal can make a real, tangible contribution to combating climate change on the African continent. We hope you will share our passion and enthusiasm for this project and very much look forward to closely partnering with you in this common global human endeavour.

Can you help us make Atreyi's dream come true?

Prof Olusola Oyewole, Sec Gen AAU

Caroline Makasa, Ag DG, SDG Centre for Africa

Peter Kwasi Kodjie, Sec Gen, AASU

Sally Bogale, Co-CEO, Gaia Education

Tim Clarke,Trustee, Gaia Education
(Retired former EU Ambassador to the AU)

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ALL-AFRICA STUDENTS UNION
UNION PANAFRICAINE DES ETUDIANTS
UNIÃO DOS ESTUDANTES DE TODA A ÁFRICA
AASU اتحاد طلاب عموم إفريقيا

gaia
education

Introducing a digital education package, with accompanying expert practical support, collaboratively designed to support African university students to engage in leading progress towards achieving Climate Change and SDG targets.

Africa is extremely vulnerable to climate change. Ironically, it is a continent that has done very little to provoke this situation, which threatens the long-term livelihoods of millions of its citizens. Currently, Africa is also a continent that stands little chance of achieving the SDG goals by 2030. Indeed, some predict that in some African nations the SDGs will never be achieved. This is a massive 'wake-up' call to all political leaders.

The **Association of African Universities (AAU)**, teaming up with the **All African Students' Union (AASU)**, **the SDG Centre for Africa (SDGCA)**, and **community-led Education for Sustainable Development international NGO, Gaia Education,** believe it is high time to put in place a truly transformative programme at the heart of African universities, not only to raise students' awareness of Climate change and the SDGs in Africa, but more importantly to provide them with the tools, support, inspiration and connections to become ambassadors, leading Africa's transition to sustainable development in their spheres of influence across the continent.

To achieve this, the AAU proposes the creation of two or more short, free digital courses to be provided to 1 million African university students by end-2024 on the topics of Climate Change and the SDGs. The content will be designed solely for the African context by African pioneers, and have a sense of ownership on the part of African Higher Education institutions. Professors from fifteen leading African universities in the field of sustainable development, with specialist knowledge in these areas, will be brought together for the first time to co-create the course content. Student-liaison support will be provided by the AASU, advisory support on the SDGs from the SDG Center for Africa, and technical support from Gaia Education for online ESD course and platform provision. These specialists, 'champion' universities will pilot the courses with 100,000 students within their universities in Year One of the Project, starting with the foundation courses in September 2023. The courses will be publicised and promoted at COP27 in Sharm-el-Sheikh (November 2022). In year two of the project, a wider promotional campaign to all African universities will be launched, with the aim of rolling it out to over 1 million students from a broader group of universities, as from September 2024.

The ultimate vision of this programme is to ensure that by the end of the decade all 20 million higher education students in Africa have received some basic education on Climate Change and the SDGs, and guidance on what each and every one of them can do to address the issue in the way they conduct their daily lives.

Every single student can and should make a difference.

For those who wish, the programme will signpost more in-depth follow-up courses, expert support, and links to inspirational networks, to help them on their individual learning journey.

Ambitious?

Big challenges require big ideas. And the challenge is immense. 40% of the population in Africa is under 15 – in some nations, it is over 50%. For governments and nation states, meeting the Education SDGs, and notably SDG4.7, which ensures that all learners acquire the knowledge and skills needed to promote sustainable development, will require huge effort. Africa has already, through its Continental Education Strategy for Africa (2016-2025), put in place a continent-wide programme to address the issue, with the AAU being appointed as the coordinator for the implementation of its Higher Education Cluster. The AAU has already devoted considerable time, energy, and resources to it, and this Digital Education Concept paper is designed to fit squarely within this context.

More recently, African leaders have initiated the African Climate Change and Resilient Development Strategy and Action Plan 2022-2032, as well as the Africa Adaptation Initiative and the Africa Renewable Energy Initiative. In the lead up to COP27 further African initiatives may emerge.

COP26 in Glasgow in November 2021 pleaded for renewed energy to accelerate existing efforts. Two of our organisations in this partnership were present in Glasgow and used the occasion to explore many of the ideas presented here with education and environmental leaders. We especially noted the powerful Declaration and commitments made at the Education and Environment Ministers' Summit on November 5th (see Annex 1).

We all know that such pledges need the mobilisation of human and financial resources if they are to bring positive change. One of their pledges is to review their commitments before COP27 in Egypt in 2022. This concept paper is in response to that.

The ideas presented here are ambitious, practical, and can make a tangible contribution to honouring the declaration pledges.

We believe that if the ideas set out in this concept paper are supported in the coming months, and adequate resources are mobilised, it is completely feasible to roll out the online education programme to the first million African students by the end of 2024.

Who are the partners for this proposal, and what do they bring?

The Association of African Universities (AAU) is the leading advocate for Higher Education in Africa. Our mission is to enhance the quality and relevance of higher education in Africa and strengthen our contribution to Africa's development.

The AAU will hold primary responsibility for managing and delivering the goal of the project. Experienced in bringing support and training to our network of universities across Africa, we hold a unique vision of how to support our members to achieve this goal. We have invited and will support professors from the fifteen champion universities in the field of Education for Sustainability to take the lead in co-creating course content and to pilot the rollout to 100,000 of their students. We will promote the courses to the wider network of member universities using our AAU database of Heads of Students Affairs Units, with the aim of reaching 1 million students in 2023. We will seek funding support, in cooperation with the other project partners, for further rollout of the programme in phase Two. Our intention is to ensure that all follow-up programmes are available to all of those who require them.

The All-Africa Students Union (AASU) is the largest student movement in Africa and a dominant force on the Continent and beyond. It plays a key role in organising student affairs across Africa – from the basic level to Institutions of higher learning.

The AASU will not only bring the students they support, but will also ensure that the co-created package is tailored to their students' needs, by taking into account cultural and geographical contexts, as well as the age demographic and learning approaches of the target group

The Sustainable Development Goals Centre for Africa (SDGCA) is an autonomous not-for-profit international organization with its headquarters in Kigali, Rwanda. The overall goal of the Centre is to support African governments in accelerating the achievement of the Sustainable Development goals (SDGs).

This goal will be realised through undertaking research and policy advice, technical support and capacity building, as well as knowledge generation and information sharing.

The SDGCA will ensure that the technical SDG content of the courses is fully in line with continental norms and best practices, will identify follow-up actions with universities, and will support with funding proposals and reports.

Gaia Education is an international Education for Sustainable Development NGO experienced in providing online and face-to-face participants with the knowledge and skills to design a thriving society within planetary boundaries, no matter where they are in the world. It has established a participant-led, community-based curriculum for harnessing Climate Change and SDG targets, distilling the learning of celebrated centers for transition and sustainability across the globe.

Its four-dimensional curriculum framework takes into account the social, economic, ecological, and cultural priorities for each context, enabling all communities – be they city neighbourhoods or rural villages - to work towards sustainability.

15 African 'Champion' universities have been invited to participate in this programme. The Partners are happy that the Pan African University has agreed to be one such 'Champion'- it is recognised for its high level of excellence and continental and regional reach. Each university will bring their special knowledge and experience of these topics to the table and generate two or more MOOCs from this wealth of resources to be piloted in the 2023 academic year in their own universities. In 2023, this material will be reviewed and assessed with a view to it being rolled out to universities across the whole continent in 2024.

	University	Country
Prof. Abdel Latif	Pan African University	Algeria
Prof. Hillary Masundire	University of Botswana	Botswana
Prof. Charles Awono Onana	University of Yaounde I	Cameroon
Prof. Kone Daou	Université Felix Houphouet Boigny	Cote d'Ivoire

Prof. Meteini	Ains Shams University	Egypt
Prof. Sileshi Nemomissa	Addis Ababa University	Ethiopia
Prof. Johnson Nyarko Boapong	University of Cape Coast	Ghana
Prof. Sunita Fackinath	University of Mauritius	Mauritius
Prof. Hussein Shimelis	University of Kwazulu-Natal	South Africa
Prof. Chipo Mubya	Chinhoyi University of Technology	Zimbabwe

Other institutions which we intend to associate with this programme include: **the African Union Commission, the African Capacity Building Foundation; the Scientific and Technical Research Commission; and the International Centre for Girls and Women's' Education in Africa.**

How will the programme be financed?

The partners are currently approaching a range of key institutions, and individuals to seek their support, including the current COP Presidency, the UNFCCC, the AUC, and the IPCC. They are also approaching many specialised funding agencies and foundations, such as such as the Africa for Energy Foundation, the Africa Climate Foundation; and the private sector such as SASOL South Africa and the Mastercard Foundation (with their Africa headquarters in Rwanda).

Big doesn't mean bureaucratic

Of course, there are potentially many players, and it would not be impossible for the whole concept and its implementation to be submerged in bureaucracy. The AAU will ensure that a light-touch management system is put in place so that the number of key decision-makers is reduced to a minimum, and there is total transparency and information flow. The digital age allows this to be relatively easy to systematize.

This is an ambitious concept and will need to be rolled out over several years. But with adequate resourcing, the partners' view is that it is entirely feasible. The take-off of online learning, provoked in part by COVID 19, is a real game-changer. The AAU, the AASU and the SDGCA are very experienced in managing communications with large networks, and Gaia Education is a leader in this field, continually honing its product range and technical capabilities over the last twenty years. The programme partners are confident that the distribution of tailor-made online education packages throughout the African University network can bring radical positive changes. Of course, there are considerable challenges in making online education accessible to all in Africa.

But the partners are convinced that this will be feasible for university-level students.
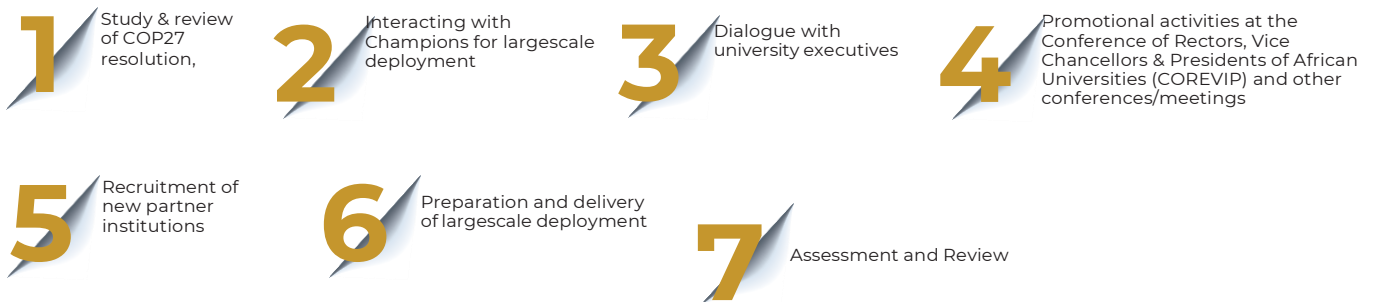
Creation of the course content (Phase One)

The process for engaging the fifteen lead universities to co-create course content will proceed as follows:

1 Champions universities invited

2 Exploratory dialogue amongst champions

3 Digital meetings for the development of the curriculum

4 Face-to-face meeting for curriculum development & review

5 Curriculum to be produced in English, French, Arabic, Swahili, and Portuguese

6 Curriculum development completion

7 Curriculum dissemination

8 Curriculum pilot with **100,000** students

The course will be produced in English, French, Arabic, Swahili, and Portuguese.

Largescale course deployment (Phase Two)

Subsequent to the completion of the first phase of engagement by November 2022, the AAU will carry out multiple activities to expand and consolidate the scope of the work in 2023. The process will proceed as follows:

1 Study & review of COP27 resolution,

2 Interacting with Champions for largescale deployment

3 Dialogue with university executives

4 Promotional activities at the Conference of Rectors, Vice Chancellors & Presidents of African Universities (COREVIP) and other conferences/meetings

5 Recruitment of new partner institutions

6 Preparation and delivery of largescale deployment

7 Assessment and Review

Project Management

For the proposed division of management responsibilities, please follow **this link** or see Annex 2

Timeline

Please follow **this link** or see Annex 4 to find a high-level timeline for the development and rollout of the project.

Impact

The short-term impact of the courses will be measured via short feedback surveys and interviews of participating students, with an interim study of the impact the students have had in their contexts as a result of the programme – whether they have followed up on connections to activities, events, projects or networks. Longer-term impact measurement will potentially be developed by the students at the participating universities themselves, as part of their studies.

It may be that the course will promote the need for research and identification of further needs,

Budget

Year One Budget (Phase one) - development of the course, piloting with over 100,000> students and promotion at a cost of $2.57 per student:

Activity	Cost (USD)
Course and platform Development costs	145,951
Development Travel costs	32,115
Management support Activities	40,572
Marketing Activities costs	15,420
Monitoring, Learning and Evaluation	1,848
Travel and accommodation costs	21,991
TOTAL	**257,897**

Year Two Budget (2023) - promotional activities and rollout of course to 1 million university students across Africa, at a cost of $0.27 per student:

Activity	Cost (USD)
Ongoing Costs (including additional platform licensing & course development costs)	123,154
Management support Activities (including Tech. support to facilitate high student numbers)	45,509
Marketing Activities (including Dissemination & conference costs)	94,620
Monitoring, Evaluation and Learning Activities	1,848
TOTAL	**265,131**

Cost of the Online MOOCs

The Orientation courses will be provided free to all students.

The content and costing of the follow-up modules are still to be defined. They will be produced in response to the feedback provided by participants from the initial courses. A key principle is that they must be affordable to an average student. This will require external financing, which is still to be mobilised.

Some of the Partners have already indicated that they are willing to provide both financial and 'in-kind' support, which can be offset against these budgets.

Annex 1

CO-CHAIRS CONCLUSIONS OF EDUCATION AND ENVIRONMENT MINISTERS SUMMIT AT COP26
05.11.21

https://ukcop26.org/co-chairs-conclusions-of-education-and-environment-ministers-summit-at-cop26/

Preamble

·   We, Ministers of Education and Ministers responsible for addressing climate change of Parties to the United Nations Framework Convention on Climate Change (UNFCCC), jointly adopt this declaration on the occasion of COP26 in Glasgow, United Kingdom.

·   Recognising the critical role played by education and learning in the transition towards a climate positive future and the urgency of embedding climate considerations into all levels of education, we commit to collaborate and invest in education for a sustainable future.

·   Our commitment stems from evidence presented in the Sixth Assessment Report published by the Intergovernmental Panel on Climate Change (IPCC) confirming the unequivocal human influence on global warming and the continued acceleration of global environmental degradation.

·   In Glasgow we met to examine, how inter-ministerial cooperation can enhance multi-stakeholder partnership at the country level to bring socio-economic transformation for climate resilience.

·   Recalling Article 6 of the UNFCCC and Article 12 of the Paris Agreement, we welcome the adoption of the Berlin Declaration on Education for Sustainable Development as well as the Catania Declaration of G20 Ministers of Education that emphasize the importance of education to address the climate crisis and promote sustainability and the new COP26 work programme on Action for Climate Empowerment. We celebrate the organization of the Youth4Climate event in Milan, Italy, as part of the Pre-COP, and the Mock COP26 conference in 2020 underlining youth voices and activism in the face of the climate emergency.

·   We welcome the progress made in recent years to mobilize education to address climate change. However, we recognise the large remaining gaps in providing everyone with knowledge, skills, values and attitudes needed to effectively participate in the transition towards climate positive societies. Recognising that climate change and extreme weather already impact the education system in developing countries, undermining children and teachers' safety, and access to basic education.

Our commitment

·   We recognise education as a society-wide learning process that can equip everyone with knowledge, skills, values and attitudes needed for urgent action to combat climate change.

·   We commit to the integration of sustainability and climate change in formal education systems, including as core curriculum components, in guidelines, teacher training, examination standards and at multiple levels through institutions.

·   We similarly commit to the integration of sustainability and climate change in professional training, public awareness and information activities, and other areas of

Annex 2

PROPOSED MANAGEMENT RESPONSIBILITIES

Management of the project		
Partners	**Responsibilities**	**Actions/Activities**
AAU	• Overall co-ordination and management • Creating and Chairing the Steering Committee which will supervise the project • Selecting participating universities • Contact with the identified focal points in each participating university • Certification where appropriate • Monitoring and Evaluation in liaison with all the partners • Identification with the universities of potential follow-up programmes in line with the Joint Ministerial Declaration of 5th November 2021	• Establish a Steering group, its Mandate and programme of online meetings • Establish criteria for selecting universities, initiate contacts, finalise the first phase list of participating universities • Establish with universities the focal points for the courses • Make videos of interviews with key AAU personnel for the MOOCs • Set up an internal mechanism for rolling out the MOOCs • Establish appropriate system for the due certification of the MOOC courses by the AAU • Establish appropriate M & E system. • Initiate discussion with universities on other aspects of the Declaration
AASU	• Management of all aspects related to student participation in each participating university • Awareness -raising and student participation • Provision of stories, videos, case studies of relevance to the MOOCs • Ensuring the MOOCs are tailor-made to the needs and interests of the students • Analysis of student feedback • Engagement with students on follow-up tasks/measures • Identification with student bodies of community networks that could/should be associated with the project	• Establish internal system to manage the project • Create a network with participating university student unions to publicise and raise awareness on the MOOCs • Engage with GAIA Education technical team on ensuring the MOOC content reflects real student interests and needs. Help provide videos, case studies etc • Set up student feedback mechanism to allow future courses to taker account of comments received • Explore with local student bodies whether specific NGOs and community associations should be associated with the project

SDG Centre for Africa	• Support for the technical content of the SDG and Climate Change MOOCs to ensure it is tailor made to Africa student needs • Support for the identification of follow up actions and ongoing work with the universities on implementation of the SDGs	• Establish an internal mechanism for engaging in the project • Provide input on the technical content of both MOOCs • Explore wider issues related to implementation of the Ministerial Declaration
African Capacity Building Foundation	• identification of potential support programmes for students wishing to pursue their studies and careers in subjects relating to the SDGs and Climate Change • support for universities which wish to establish training and capacity-building programmes in relation to the SDGs and Climate Change, including gaining entrepreneurial innovative skills for the green economy	• Establish an internal mechanism for exploring how to best contribute to the project • Explore wider issues around capacity building for students wishing to specialise in Climate Change and SDG issues • Explore training and other issues in relation to the green economy that could become part of a broader second phase of the project
GAIA Education	• Overall responsibility for providing the technical content of the MOOCs under the authority of the AAU • Helping to ensure that the responsible focal points in each participating university have access to the appropriate technical skills to manage the MOOCs locally. This would include preparation of Training of Trainer programmmes. • Responsibility in close co-ordination with the other partners to raise funds to allow the MOOCs to be provided at zero cost to each student. • Monitoring and evaluation of the courses	• Establish within GE an internal structure to manage the project • Establish a system with all the partners to ensure smooth communication • Ensure that all comments/inputs on the MOOCs are fully taken on board • in parallel to the two MOOCs themselves create a Training of Teachers MOOC to be given to the focal points of each participating university. • Ensure that whatever MOOC delivery platform is used is robust and capable of dealing with several thousand course participants • Establish a protocol on the ownership of the IP of the course materials which is accepted by all partners • Explore the demand and interest in producing supplementary MOOCs in related fields such as

	• Preparation of follow-up courses in related fields, such as renewable energy, water management, waste management, food security and nutrition. • Foster networks with organisations and universities that work on similar issues within Europe, Asia and elsewhere : exchange of experiences and methodologies • Document progress, post - reports online • Consider establishing a One Africa Online Platform to allow student and civil society bodies to share knowledge and information on Climate Change and the SDGs.	renewable energy, water management, waste management, food security and nutrition • Analyse similar programmes that are currently being tested on other continents to look at potential win-wins for exchanging knowledge and win-wins. • Establish a reporting system in close liaison with the partners • Explore with partners the possibility of creating a One Africa Online platform to allow student and civil society bodies to share knowledge and information on Climate Change and the SDGs.

CONCEPTUAL SKELETON CONTENT FOR SUSTAINABLE DEVELOPMENT GOALS INTRODUCTORY ONLINE COURSE

Whilst the content of the short courses will be designed by the 'champion' universities brought together for the programme, ere we present a concept of how an SDG-focused course could look, to aid understanding of what is proposed.

No.	Section theme	Topics covered	Time	Ideas for Resources/Links
1	What is the purpose of this 1-hour orientation course on SDG action?	• Outline the relevance of this course to the Lagos Plan of Action 2063 and the CESA, and the mandate of the AAU to deliver the SDG Educational goals. To raise students' awareness of SDG challenges and support them to take action as individuals. • Need for all students, whatever their speciality or interest, whether linguists, scientists or engineers, to understand SDGs, adapt lifestyles, & contribute in their sphere of influence (home, university, community). • Hope that some students will become SDG Ambassadors, contributing to Africa's transition to greater sustainability and resilience.	5 mins	Key speaker/s from AAU, AASU, SDGCA, champion universities in video? Inspiring images of students as future of African sustainability.
2	Introduction to the SDGs	• Why created and by whom • Table showing 17 SDGs • Overlap of SDGs for sustainable development	8 mins	 Introductory video

#	Topic	Content	Time	Resources
3	Challenges & opportunities facing the African continent in relation to SDGs	• Summary of SDG and climate change challenges and progress in Africa. • African Renaissance - examples of exciting successes so far achieved	15 mins	Case Studies showing journeys through challenges to success. E.g. could create/collect articles on projects such as http://www.williamkamkwamba.com/ Green Schools, Zimbabwe (SCOPE) Recycling Waste Project Tanzania Eco-villages in Senegal Fabe International, Nigeria, Khainza Energy Uganda, Trash to Music Mauritius.
4	How to plan and take action to achieve SDG targets.	• Inspirational quote about every individual needing to contribute to achieving SDG goals in Africa. • Acknowledgement that it can be overwhelming.' How can I make a difference? • Provide simple design framework to targets. E.g. Gaia Education's '4Worldview, Social, Ecological, & Economic dimensions of sustainability). • How to use chosen framework to simplify, prioritise and harness SDGs for sustainable design.	10	• Video story showing example of using framework for sustainable design to solve challenge in their community/university/home. • Case study of community using framework to design and create greater sustainability. E.g. Gaia Education/WWF Zambia project which supports communities using this approach: • ZYCALA Zambia

5	Taking action	• Brief exercise for student using framework to design for 2 change opportunities they could lead in their community/university/home - e.g. Zero Waste, Saving Water, Generating renewable energy, Growing food. • Reflecting on which SDG/s covered by their design for change.	15 mins	Interactive exercise section.
6	Signposting page	• Thanking students for participating, and signposting support for continuing action. • Highlighting resources, case studies, networks etc students can access for support.	5 mins	Webpage which they can access beyond course. Could show: • Resource library for sustainability ideas (e.g. with water/agriculture/settlements/social resilience etc). E.g. Global Ecovillage Network, Africa Resource Library • Networks (e.g. Regional Centres of expertise Network) • Case studies (articles created/collected on successful change stories). • Websites/Blogs/vlogs of African influencers in sustainable change. • Available Continuation courses (e.g. GE's Panorama, LWSCC, Ecosystem Restoration Design, Renewable Energies for Sustainable Development)
7	Auto-evaluation form	• Questionnaire collecting feedback on how useful the course was, what the students learned, if they would be interested in becoming SDG Ambassadors, or taking part in more online courses etc.	2 mins	SurveyMonkey-style automated form.

Annex 3b

CONCEPTUAL SKELETON CONTENT FOR CLIMATE CHANGE INTRODUCTORY ONLINE COURSE

Whilst the content of the short courses will be designed by the ' champion' universities brought together for the programme, here we present a concept of how a Climate Change-focused course could look, to aid understanding of what is

No.	Section theme	Topics covered	Time	Ideas for Resources/Links
1	Purpose of orientation course on Climate Change Action	• With COP27 in Egypt, Nov27, Africa is central to global efforts to combat climate change. • The African Union brought African nations together in Sept. 2021 to strategies on how the continent can tackle the emergency. • All African students can and should understand the threat of Climate Change, adapt lifestyles, contribute at home, in university, in their communities, and be part of the change process. ' It is your future that is at stake!' • Encourage students to become Climate Change Ambassadors, contributing to Africa' s transition to greater sustainability and resilience.	5 mins	Key speaker/s from AAU, AASU, SDGCA, and ' champion' universities in video. Inspiring examples of Africans voicing their concerns: • Vanessa Nakate of Uganda. • Elizabeth Wathuti of Kenya.

| 2 | Introduction to Climate Change and Africa | 15 mins | • Explanation of Global Warming
• Africa's situation. Despite producing only 5% of global emissions, Africa is one of the most vulnerable continents. Melting of Kilimanjaro's ice cap is a symbol of that process
• 4 key sectors of focus – challenge and opportunity:
  o Green Economy
  o Renewable Energy
  o Food Security
  o Water Management
  o Contrast of Urban and Rural Challenges
• Difference between adaptation and mitigation | Introductory videos

Case studies showing drastic consequences of climate change:

• South Africa water shortage; flooding; drought
• Desertification and the Great Green Wall
• Mount Kilimanjaro's melting ice caps
• Opportunities in zero carbon/renewable energies for the continent

Case studies showing problems & possible solutions for rural and urban areas within sectors of focus. e.g. :

• Green Economy: recycling, eco-innovation, waste reduction;
• Renewable Energy: 600 million Africans have no access to electricity; huge potential of solar, biogas, wind;
• Food Security: Composting; crop rotation;
• Water Management: Rainwater harvesting on public buildings; |

#	Topic	Content	Duration	Resources
3	African State action on climate change	• Summary of AU strategy • Overview of African governmental Climate Change Strategy and action taken • How can universities support these efforts? • Exercise: What is your university doing?	15 mins	Videos. .Links to transnational/national policies for CC adaptation/mitigation. Articles of discussions on the role of African universities. E.g. University World News .Examples of pioneering African Universities. The Green Nudges Programme for Universities Exercise – Exploration of how your university is taking action.

4	Become a Climate Change Ambassador	• Acknowledge that the challenges can be overwhelming.' How can I make a difference?
		• Examples of COP26 CC Ambassadors
		• Examples of UN and AU Youth Ambassadors
		• COY16 in Glasgow
		• Examples of ' 10 Effective Actions' (AinShams University) – and others
		• African Renaissance - examples of innovative community actions
			18	' 10 Effective Actions' diagram from, e.g. AinShams University Ambassador Course.
				
				Examples of climate campaigning across Africa.
				
				Case Studies showing community adaptation and mitigation examples. E.g.:
				  • Decentralised renewable energies
				  • local economies

			Time	
4	Become a Climate Change Ambassador	Become an Ambassador! – small exercise linking to, e.g. Ain Shams' Climate Ambassadors' training programme (if permission given)		• greening schools etc • Charcoal use/beekeeping - reforesting Exercise: e.g.: • Calculate your climate footprint (Find locally relevant version of this) • Give locally relevant toolkit for creating change (e.g. Adapted version of this UN one.) • Discuss and tackle an issue in your own community.

5	Signposting page	• Thanking students for participating, and signposting support for continuing action.
		• Highlighting resources, case studies, networks etc students can access for support.
		• Possibility of creating a One Africa Forum for exchanges on CC and related topics
			5 mins	Webpage which they can access beyond course.
				
				Could show:
				• Resource library for sustainability ideas (e.g. with water/agriculture/settlements/social resilience etc). E.g. Global Ecovillage Network Africa Resource Library Networks (e.g. Regional Centres of Expertise Network)
				• Case studies (articles created/collected on successful change stories).
				• Websites/Blogs/vlogs of African influencers in sustainable change.
				• Available Continuation courses e.g.
				  o Gaia Education's Panorama, LWSCG, Ecosystem Restoration Design, Renewable Energies for Sustainable Development,
				  o Ain Shams Ambassador course.

| 6 | Auto-evaluation form | • Questionnaire collecting feedback on how useful the course was, what the students learned, if they would be interested in becoming Climate Change Ambassadors, or taking part in more online courses etc. | 2 mins | SurveyMonkey-style automated form. |

Annex 4
PROPOSED TIMELINES

Please follow this link and see below for provisional timelines for the development and rollout of the project in two phases.

Phase 1:

	Activity - Phase One		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
1.1	Steering group meetings	AAU/SDGC/AASU/Gaia	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly	2-weekly
1.2	Participate in the selection of 15 pilot universities	SDGC/Gaia/AASU	Start M1	End M2										
1.3	MOU signed by all champion Universities	AAU	Start/End M1											
1.4	Development, Distribution, marketing and management plans completed by partners	AAU/SDGC/AASU/Gaia						Start M6	End M7					
1.5	University planning meetings (with 15 pilots)	AAU		Start M2		End M4								
1.6	Identification of best practices by African countries in the implementation of the SDGs	SDGC					Start 5							End M12
1.7	Promotion of package to wider networks of universities	AAU/SDGC/AASU/Gaia						Start M6					End M11	
1.8	Draft course content – to be reviewed by all project partners	AAU/SDGC/AASU/Gaia				Start/End M4								
1.9	Face-to-face meeting for curriculum review and development	AAU					Start/End M5							

ID	Activity	Responsible	Timeline
1.10	Curriculum development completion (Redraft final content)	AAU/SDGC/AASU/Gaia	Start/End M6
1.11	MOOC Marketing, Communications and Participation Drive	AASU	Start M5 — End M12
1.12	Foster networks with organisations and universities that work on similar issues within Europe, Asia and elsewhere	Gaia	Start M6 — End M12
1.13	Transfer of course content to digital course format	AAU/SDGC/AASU/Gaia	Start M6 — End M7
1.14	Review and Revision of digital course by Universities and support partners	AAU/SDGC/AASU/Gaia	End M7
1.15	Redrafting of online course	Gaia	End M8
1.16	Establishment of Feedback mechanism for Assessing Students	AASU	Start M5 — End M6
1.17	Pre-test and Validation of MOOC's amongst 25 sampled students in 15 selected universities.	AASU	Start/End M7
1.18	COREVIP/Meetings/conferences for promotion of package	AAU	Start/End M5
1.19	Pilot digital Course Launch	SDGC/Gaia/AASU/AAU	Start — End

	Task	Lead							
1.20	Technical Support provision	Gaia						Start M6	
1.21	Prepare blogs/policy briefs about the programme and disseminate them	SDGC						Start M6	End M12
1.22	Monitoring/evaluation (inc. student feedback) & Review of pilot	Gaia						Start M6	End M12

	Activity Phase Two		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
2.1	Platform upgrade & ongoing Technical Support	Gaia	Start M1											
2.2	Promotion of package to wider networks of universities	AAU/SDGC/AASU/Gaia	Start M1											
2.3	Continue blogs/policy briefs about the programme and disseminate them	SDGC	Start M1											
2.4	Continue fostering networks with organisations and universities that work on similar issues within Europe, Asia and elsewhere	Gaia	Start M1											
2.5	Large Scale Distribution, marketing and management plans completed and launched by partners	AAU/SDGC/AASU/Gaia	Start M1											
2.6	Dialogue with university executives	AAU		Start M2		Start M4								
2.7	COREVIP/Meetings/conferences for promotion of package	AAU		Start M2		Start M4								
2.8	Recruitment of new partner institutions	AAU		Start M2		Start M4	End M5							
2.9	Launch of continent wide package	AAU/SDGC/AASU/Gaia								Start M8				
2.1	Monitoring/evaluation & Review	Gaia								Start M8				End M12
2.11	Dissemination of results	AAU/SDGC/AASU/Gaia								Start M8				End M12
2.12	Project sustainability planning	AAU/SDGC/AASU/Gaia							Start M7					End M12