AFRICAN UNION الاتحاد الأفريقي



UNION AFRICAINE **UNIÃO AFRICANA**

Addis Ababa, ETHIOPIA

P. O. Box 3243

Telephone: 517 700 Fax: 517844

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The Commission of the African Union presents its compliments to the Ministries of Foreign/External Affairs and International Cooperation of all Member States and has the honor of informing the latter of the African Girls Can Code Initiative 2018-2021 (AGCCI). The AGCCI is a partnership between the Commission of the African Union, UN Women and International Telecommunications Union (ITU). The initiative aims to expose and equip a cohort of young girls from across member states with digital literacy, coding and personal development skills, sparking an interest in ICT as an early career choice, and allowing African girls to benefit from the global digital boom.

The Commission takes this opportunity to elaborate on the AGCCI which will have two components:

- Firstly, the AGCCI will consist of annual coding boot camps for girls and young women aged 18-20. The first boot camp will be held in Addis Ababa, in the last week of August 2018, with 120 girls and young women selected from across AU member states.
- Secondly, the AGCCI will aim at mainstreaming of ICT, coding and gender into the national curricula in partnership with ministries of education, and ministries of ICT.

It is expected that through the initiative, girls will acquire skills and information on digital literacy, coding and making, and access to further information and resources to help them produce innovative solutions for societal issues. The skills and information acquired will broaden career opportunities and inspire entrepreneurship for the participants, thus increasing job creation for themselves and others.

The Commission of the African Union is therefore requesting your kind assistance to pass this note verbal to the Ministry dealing with girls' education who we further request to identify two girls to participate in the inaugural AGCCI coding camp which will take place from 20- 31 August 2018. The names of the nominated candidates should be sent by no later than 25th July 2018 with the Acting AUC Director of Social Affairs: cissem@africa-union.org; and CC: ThunduN@africa-union.org; rukayahsarumi@gmail.com and FouadN@africa-union.org. For your information, please find enclosed the selection criteria for the coding camp participants together with the AGCCI concept note.

The Commission of the African Union avails itself of this opportunity to renew to the Ministries of Foreign/External Affairs and International Cooperation of all Member States the assurances of its highest consideration

Addis Ababa, 19 June 2018

Ministry of Foreign Affairs/ External Cooperation To:

(a) member states

Cc: Ministries responsible for Social Development is ues # all member states

- All African Embassies in Addis Ababa





AFRICAN GIRLS CAN CODE INITIATIVE! (AGCCI) 2018-2022







INTRODUCTION

"Computing is too important to be left to men"

ICT is key to women's empowerment; the sustenance of a healthy job market; and is vital to the economic growth of Africa.

African Girls Can CODE Initiative (AGCCI) 2018-22 identifies two areas that are critical to achieving the desired objective for girls and women's empowerment, development and employment:

- Bridging the technological divide by providing tangible programmes to increase women's access to modern technology.
- Empowerment through access to Education and Employment providing young girls and women with pathways to contribute and
 participate in material ways to Africa's innovation, industrialization and growth by mastering ICT.

AGCCI will be implemented by UN Women and International Telecommunication Union (ITU) in collaboration with the African Union Commission and is designed to expose and equip young girls with digital literacy, coding and personal development skills. The four-year programme will train young girls to become programmers, creators and designers, placing them on track to take up educations and careers in ICT and coding through the following four overall components:

- 1. Coding Camps in countries across Africa targeting young girls aged between 17 20 years from all African countries
- 2. Mainstream ICT, coding and gender into the national curricula
- 3. National media campaigns involving role models (e.g. women in ICT, female teachers in schools)
- 4. On-line platform for the girls attending the Coding Camps where they will stay connected and discuss and inspire each other

The initiative uses a "spark interest" approach which seeks to nurture young girls to develop interest in coding and making at early stages of their career choices. Upon completion of the program, each girl is equipped with enough knowledge about digital literacy, coding and making skills and how to access online and other resources to further goals to create innovative solution around societal challenges. Such knowledge and skills will enhance their career opportunities and inspire them to be entrepreneurs in their own right, hence creating jobs for themselves and others as well.

BACKGROUND

AU's Science, Technology and Innovation Strategy for Africa (STISA-2024) states that "an enabling environment for STI development on the African continent" is one of the pillars for achieving the vision for Agenda 2063.²

Prioritizing education in ICT is necessary to foster a culture of scientific interest, inquiry, invention and achievement that would support the AU's ambitious goals for this century, A trained and highly skilled class of technologists and scientists across the continent will not only lead in achieving an African renaissance, but will also provide the knowledge base to sustain it.

UNESCO's "The Gender Gap in Science" report cites that globally, only 28.4% of people engaged in STEM careers are women and in Sub Saharan Africa only an average of 30.0% are women. It is important that girls learn to code. Teaching girls to code is needed to close the gender gap in the tech world, and the overall gender digital divide.³

Across the African continent, youths comprise nearly 60% of the population. This number by itself make the case for prioritizing the training of youth in ICT. This education will not only be a means to empower them but also the key to unlocking Africa's development potential across sectors.

As Africa continues its path of rapid urbanization, there will be increasing demand for infrastructure (transport, energy, water, sanitation) as well as digital-based services in health, education, art, the environment and other public services. The cities will depend on professionals like architects, engineers, town and urban planners, as well as technicians who are experts on maintenance of infrastructure and even climate change.

All these sectors require scientific research and professional skills, as well as mid to high-level technical and artisan skills. If young girls and women do not have the training and access to ICT they will be left behind. ICT is and will be even more part of everyday life in the future.

Learning to code is needed because 90% of future jobs will require ICT skills, and some two million new jobs will be created in the computer, mathematical, architecture and engineering fields⁴. So, if African girls and women are to be part of the fast-growing sectors in the future job market, they need to be able to develop the ICT skills needed.

African Girls Can CODE Initiative (AGCCI) will create an environment that encourages girls and women to venture in ICT careers, by arming them with essential skills that would deem them competent to forge careers in ICT. It will also equip them with the know-how to be enterprising and gain financial security.

¹ Late computer scientist Karen Spärck Jones

² AU's Science, Technology and Innovation Strategy for Africa (STISA-2024)

³ http://uis.unesco.org/sites/default/files/documents/fs34-women-in-science-2015-en.pdf

World Economic Forum (2016): The Future of Jobs (http://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf)





PROGRAM SUMMARY

In short, the girls participating at the Coding Camps will be role models for their peers and in their communities, the media attention will make the opportunities in coding and making very visible and finally policy-makers across Africa will be inspired to lead on developing the ICT sector for girls and boys.

AGCCI's main objectives:

- 1. Equip young African girls with digital literacy skills.
- 2. Expose girls to coding and programming.
- 3. Promote and support the young girls' entry into the sector of ICT and coding.
- 4. Encourage leadership and confidence in young African girls.
- 5. Showcase innovations and projects done by these young innovators.
- 6. Create national attention on girls, ICT and coding through media
- 7. Collect good practice on how to develop and scale up the African Girls Can Code Initiative
- 8. Inspire and support policy-makers and legislators to mainstream ICT, gender and coding into national curricula

ELEMENTS

- 1. AGCCI Coding Camps: During 2018-22 a total of 14 international Coding Camps will be held across all African regions and directly involving more than 1,000 girls. The first Coding Camp will be held in Addis Ababa in summer 2018 with up to 120 young girls aged 17-20 years from all AU member countries. The grand finale of this first project period will be in 2021-22 where four regional Coding Camps will be organized in Southern, Eastern, Western and Northern Africa with 100 girls at each camp and where the final Coding Camp with 100 girls will be held in Addis Ababa in January 2022. This will allow the camp to become part of the main AU Summit, normally held each year in January. This will further the chances that AU Summit participants from AU member states (Heads of State, Ministers, policy-makers) will be inspired by the program and promote girls in ICT in their own countries. Besides the international Coding Camps, four camps will be held across Ethiopia with a total of 800 Ethiopian girls. The main aim of the national and international Coding Camps is to inspire the young girls to build their computing and ICT skills and hands-on experience in the STEM disciplines through interactive basic coding and making using SCRATCH programing language⁵.
- 2. Mainstream ICT, gender and coding into the national curricula: AGCCI will work closely with Ministries of Education in countries across Africa to mainstream ICT, gender and coding into the national curricula. This part of the Initiative might allow millions of both urban and rural girls to learn IT skills from the early stages of their primary, middle and high school education. In this way ICT will be engrained in young girls and they will reap the benefit of the global digital boom. This will also promote that more young girls in the future will have the opportunity to seek an education and a career within coding. This mainstreaming combined with an increased interest for coding and ICT among the young girls partly because of the media attention on the Coding Camps can create a situation where supply and demand of ICT educations are in harmony.
- 3. Media campaign with role models (e.g. women in ICT, teachers, ICT entrepreneurs, artists, politicians, community leaders, corporate leaders): Inspiring young girls and women to choose educations and careers within coding and ICT. In collaboration with professional media bureaus and prominent male and female role models, the campaign will inspire a debate on the broader issues of the gender digital divide and girls, ICT and coding, inspire girls and young women to seek an education and a career in ICT and coding as well as creating attention among policy-makers on these issues. Coding Camp activities and stories of the participating girls will also be shared on country media outlets and social media.
- 4. On-line platform including mentoring: Here the training will continue and the girls will stay connected and discuss and inspire each other after the camps. The platform will contain a mentorship part where mentors with a good understanding of gender and ICT can support and encourage the girls. This platform will become even more useful when more and more camps are held over the years and more girls will join the on-line community.

BENEFICIARIES

The initiative generally targets young girls across Africa whom will be exposed to ICT and coding through the education system where these issues have been integrated in the countries' national curricula. The Coding Camps specifically will target young girls aged 17-20 from all AU Member States. The Coding Camps will cover all four official languages of the African Union.

PROGRAM METHODOLOGY

Each Coding Camp will involve 10-20 trainers depending on the number of participants (50-120 girls). The trainers will be required to arrive at the camp four (4) days before the commencement of the camp to have a three-day Training of Trainers (ToT). This is important to have a smooth experience of the camp and consistent quality of training. The continental representation of the trainers translates in having a continental representation of ICT champions and skilled trainers as well and they will also assist in the post-camp mentorship support program. To provide a wholesome learning experience over the 15 days Coding Camps, the learning tracks have been specifically selected

With Scratch, you can program your own interactive stories, games, and animations— and share your creations with others in the online community. Scratch helps young people learn to think creatively, reason systematically, and work collaboratively— essential skills for life in the 21st century. Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab. It is provided free of charge.





and designed to fully immerse the participants in the learning whilst developing their confidence, leadership and problem-solving skills. Participants will fully engage in the three general tracks at different times of the camp: 1) Digital Literacy including staying safe on-line; 2) Scratch Program; 3) Personal Development including Gender Equality and Women's Empowerment (GEWE).

SUSTAINABILITY

AGCCI will sustain its impact in the following ways:

Mainstreaming of national curricula: The sustainability of the programme will be promoted by mainstreaming ICT, gender and coding in the national curricula. With a successful integration and implementation, the national education systems will sustain and enhance the impact of the programme further after the four years of programme implementation.

National media campaigns: With the use of role models from different sectors, the campaigns will promote women and girls in ICT and stir a broader debate on gender roles, ICT and coding. It will also target tech companies and tech clubs, initiate a change in awareness among these stakeholders.

On-line platform: The online platform will include mentoring and help the participating girls develop their ideas and projects further, support their confidence and leadership and strengthen their positive perception on girls' roles and opportunities in innovation and ICT.

Connecting the girls to the ICT sector: AGCCI will connect the participating girls to tech clubs, tech companies and tech CSOs in their home country to promote that they use the skills from the camp. During the Coding Camps the girls will have confirmed contacts at these different partners, who will all have agreed to be part of the AGCCI database.

Access to technology: As part of the Coding Camp each participant will be given a laptop to keep for further training. Creating contacts between the young girls and the technology partners in their home countries will also create opportunities for the girls to access technology after attending the AGCCI programme.

MEDIA

With support from professional media bureaus and prominent male and female role models, AGCCI will create debate on gender roles, the gender digital divide and the importance of girls in ICT and coding. By using the local media bureaus, the media campaign will be developed according to local conditions and fit to the channels that are most widespread and effective in the specific country. AGCCI will break female stereotypes and create social change by empowering and inspiring girls to choose education and careers in ICT and STEM. Collaboration with MultiChoice (Africa's largest video entertainment and internet company) could give AGCCI a continental-wide visibility on the DSTV platform.

An important part of the media campaign will be to involve prominent male role models from different sectors. These men will act as champions for promotion of women's involvement in ICT and coding. So by showcasing the talents and skills of the girls, the media campaign will sensitize boys and men.

BUDGET and FUNDING

The total 4-year budget for African Girls Can CODE Initiative (2018-2022) is 7,500,000 USD.

Denmark is funding a first phase of the programme in 2018-19 with 10 million DKK (1,65 million USD) covering both international and national Coding Camps, mainstreaming of gender and ICT in national curricula and media campaigns in African countries.

Public and private donors will be approached for potential partnerships. Several donor countries (for example Belgium and UK) are focusing on issues like Digital for Development (D4D) and Techvelopment.

36 African countries have a fund under the Universal Service and Access Fund (USAF), of which 25 funds are active. To promote ownership and collaboration with the individual countries, ITU and UN Women will seek to develop strategic partnerships with these countries on the implementation and funding of the Coding Camps. Besides this, funding from public and private donors will be approached.

African Girls Can CODE Initiative

Addis Ababa, ETHIOPIA

To be considered for the First African Girls Can Code Initiative, AGCCI, Coding Camp, you must be:

- A Citizen of an African Country
- Enrolled as a full-time student in the academic year 2017-2018
- Be in Grade 11 with one year of high school remaining
- Be a female

SELECTION CRITERIA

The decision to accept a student to the First African Girls Can CODE Initiative, Coding Camp is based on the following criteria:

- 1. High academic achievement- Ranking from first to third (Accompanied by a report card) and by testimony to your scholarly excellence provided by letter of Recommendation from a teacher.
- 2. Interest in Science Technology Engineering Math, ICT and related subjects.
- 3. Agree to be AGCCI ambassadors by sharing ideas and experiences in your school
- 4. Have valid passport for at least 6 months from beginning of Camp.
- 5. Have no medical restriction to travel by air and provide a certificate of good health
- 6. Provide a written permission from parents or legal guardian to travel to Ethiopia for two weeks and participate in the coding camp. This must be in the form of a letter and by filling the attached consent form.
- 7. Provide a valid phone number and mailing address

African Girls Can CODE Initiative will provide all participants with the following:

- 1. Round trip economy class airfare to Addis Ababa, Ethiopia from their home country
- 2. Lodging for two weeks in Ethiopia
- 3. All meals
- 4. Two weeks training in the basics of coding and activities that builds their self-esteem.
- 5. Training materials