



# Establishing an **SDG Incubation Center (SDGs-Inc.)** in Senegal



# Introduction

Although sub-Saharan Africa is the region with the lowest rate of enrollment in higher education (8.2% compared to 33% worldwide), the phenomenon is increasing in private and public universities in various countries. Africa is producing more than 10 million graduates annually from over 668 universities. However, despite the rapid economic growth recorded in recent years, less than half of these graduates can find decent jobs. In Ghana, it is estimated that about 50% of the graduates from Ghanaian universities and poly-technical institutions will remain jobless two years after their national service, and that 20% of them will remain unemployed three years later. Tertiary educational institutions in Nigeria produce up to 500,000 graduates and only 53% of them would find jobs. Public and private universities in Senegal, produce 100,000 graduates annually.

According to Senegal's Minister of Higher Education, the unemployment rate of graduates is estimated at 31%. If the rate of unemployment among graduates continues to increase, the 40% of the annual budget that Senegal spends on education stands the risk of being a wasted investment. Unemployment among university graduates is one of the major factors that hinders the development agenda of most of African countries. Owing to political and/or financial reasons, some public and private institutions prefer to recruit personnel with no specialization, rather than employing highly trained specialists. This

phenomenon is certainly undermining the capacity of higher institutions of learning to adequately respond to the challenges posed by sustainable development. The causes of unemployment are diverse and include the mismatch between higher education and the labor market, the discrepancies between the profiles of graduates, their skills and the experience required by employers.

To fill this gap, employers often require 3 to 4 years of professional experience, which fresh graduates often lack. In fact, university students have very little or no knowledge about applying their research or entrepreneurial skills to promote creativity and innovation or solve developmental problems. The Sustainable Development Solutions Network (SDSN) and Millennium Promise (MP) will engage their different approaches but with a commonality of vision, to promote and implement the Sustainable Development Goals (SDGs) at the local and national levels in order to address the challenges facing fresh graduates from universities in sub-Saharan Africa. This ambition will be achieved through the proposed SDG incubation Centers.

While the SDSN was established as a global expert network to generate knowledge and create solutions to development challenges, MP as an International NGO, has positioned itself as an indispensable vector in transporting solutions to impact *sustainably on the socio-economic and environmental conditions* of the rural poor Africans.



## The SDG Incubation Center (SDGs-Inc) concept

In recent years, advances in Information and Communication Technology (ICT) have taken the credit for the tremendous improvements that occurred in the wellbeing of people around the world and particularly among the rural poor communities in terms of better access to information, increased employment, and enhanced efficiency in public services. The ICTs have helped in improving public services, such as education, health care, agriculture, trade/e-commerce, transportation and electrification, among others. They have evolved as effective tools in development dynamics and created enormous opportunities for the sharing and use of information in economic and social activities. In this regard, MP has developed SDGs-Incorporated (SDGs Inc.) as a distinctive initiative to support the development and promotion of ICT-based solutions, services and systems to accelerate the achievement of the SDGs at the district level.

The SDGs-Inc. will serve as an interface between the Universities, members of SDSN and the job market, in which outstanding graduates from the Universities are hosted as interns for a maximum period of one year. Graduates completing training from these Universities will work under the supervision of senior staff from both SDSN and MP on issues relevant to sustainable development and MP's strategic programme areas.

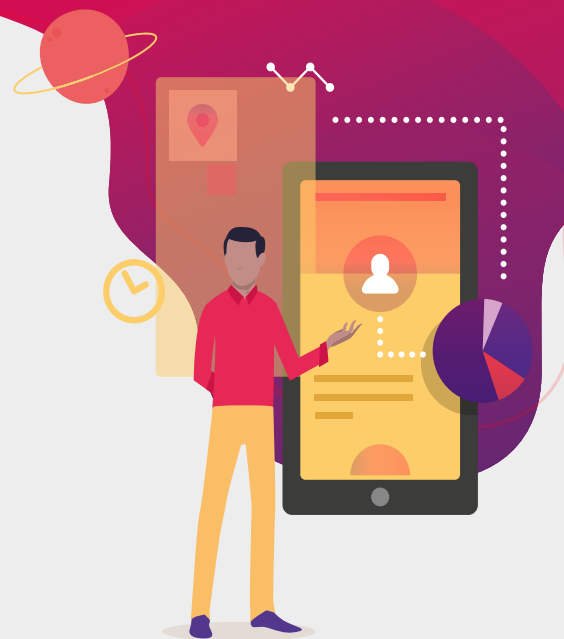
The incubator will seize the opportunity of developing ICT innovations to help bridge the gap between the labor market and the academia in terms of experience, professional and entrepreneurship skills and technicity, thereby improving the graduates' chances of gaining decent employment.

### *Focus of the SDG Incubation Center (SDGs-Inc)*

The SDGs-Inc. will help MP to move faster in attaining the SDGs at the sub-national level in rural Africa by improving service delivery in:

- **Health**
- **Education**
- **Sustainable agriculture**
- **Infrastructure**
- **Assessment of landscape characteristics and dynamics and territorial (district level) information system, including real time information system.**

The SDGs-Inc. will focus mainly on developing or adapting ICT and Geographic Information Systems (GIS) science-based tools, applications systems, and protocols relevant to the sustainable transformation of the living conditions of rural poor communities in Africa. Some of MP's key initiatives will include:



- *ICT applications on horticulture (vegetable production);*
- *Livestock and fisheries value chains;*
- *Irrigated rice value chains;*
- *Education at the secondary and vocational training school levels;*
- *Taxes collection;*
- *Characterization and monitoring of material and immaterial heritage;*
- *Health and nutrition (m-health and telemedicine);*
- *Territorial information systems;*
- *Data bases and web-based platforms;*
- *GIS and remote sensing, including the use of drones for landscape characterization, assessment and analysis.*

The SDGs-Inc. will help MP to build a Center of excellence for ICTs and GIS in which ICT application and GIS data bases will be developed and implemented with overarching goals to achieve the SDGs at the local level. This will help to provide opportunities for graduates to gain experience, sharpen their skills and generate new knowledge and innovation as well as build new software, databases etc. Most importantly, it will increase the graduates' chances of employment in the highly competitive job market.

Furthermore, the concept would cover diverse thematic related to SDGs, but its focus will remain on improving the chances of fresh graduates to obtain decent and well-paid jobs. This will be done by using science-based innovations, knowledge and technologies generated by SDSN members institutions (universities, research institutions and private companies) to create impact on socio-economic and environmental conditions of the rural and urban poor in Africa.

The concept will also focus on the processing of agricultural products.

## **Geographical focus**

The SDGs-Inc. project will launch the pilot phase in Senegal by targeting public and private Universities that are members of SDSN and awarding degrees in ICTs, GIS, remote sensing and statistics. Based on the outcome of the pilot phase and funding opportunities, the initiative will be extended to Ghana and Mali. The project will be hosted by MP in its office in Dakar, while the development of applications and tools will be designed, tested and validated in MP Senegal's project sites in Potou, Diourbel and Dakar. This initiative would be scaled up to other Islamic Development Bank (IsDB) funded MP sites in Tiby- Mali, Banko - Guinea and Karamoja - Uganda, while taking into consideration IsDB's interest in integrating ICT and GIS tools in their project activities.

Additional modules of the incubation Centers would be hosted by universities or research centers with strong support from MP to ensure connectivity with the development issues of the communities. In the coming days, MP will play a major role in promoting SDGs-Inc. as an additional engine to propel rural development.

## **The approach**

MP will identify and develop formal relationship with leading universities in Senegal that are offering specialized training in the use of Remote Sensing and GIS for environmental and natural resource analysis and management, ICT, statistics, agronomy, livestock, aquaculture, education and health. Graduates will be recruited through a competitive process by a panel composed of erudite university professors and MP experts who will supervise the students. Graduates will be provided monthly stipends for transport fares and meals for a maximum period of one year. Graduates will have the option to drop out from the program's courses at any time following a two-week notice for any reason and MP can also terminate the internship for

lack of performance, disciplinary or funding considerations. MP may retain candidates depending on the availability of funds.

## **Partners**

In addition to the targeted universities, MP will collaborate with research and development institutions working with SDG-related thematic sectors, including companies providing telecommunication services, such as Tigo, Expresso, Orange; Autorite de Regulation des Telecommunications et des Postes (ARTP) ( as well as private companies dealing in mobile phones, computers, electronic software, local governments and non-governmental organization, etc., according to the needs. Furthermore, MP will develop formal relationship with these partners based on clearly stipulated roles and responsibilities of the parties involved. Finally, MP will forge a strong partnership with the Center for Sustainable Development (CSD) India program in a bid to capitalize on ICT development in rural India.