

## I. ORIGINNS AND DEFINITIONS

### 1.1. Origins

Historically, it refers to the dispersion of the Jews after the Babylonian and Roman conquests of Palestine. It really means dispersion or spreading that could apply to people who originally belong to one nation or having a common culture voluntarily or involuntarily disperse. The origin of the word is from the Greek “*diaspeirein*” that means scattering or dispersing.

On scientific perspectives, all leaving being at one time or another undergo dispersal, pollen (diaspore) animal, plants etc

In Africa perspective, it refers to the great dispersion the continent that has experienced as follows:

- (i) **The first bigger wave of dispersal happened when man differentiated from its cousin the apes.**
- (ii) **The second wave is to be found in the involuntary dispersal of African to other continents as highlighted in the following map.**
- (iii) **The third wave is the migration of African (push/pull) factors in the pursuance of academic, economic, political or other complex and overlapping reasons.**

The concept of **African Diaspora** started as philosophical and political movement of African and their descendants to have a voice in the affairs of the world. African has roughly 1 Billion people and a mere 40 million in the Western Hemisphere

### 1.2. Definitions

I noted in this paper the following two dominant definitions

The **African Union** has a broad definition as: "**consisting of people of African origin living outside the continent, irrespective of their citizenship and nationality and who are willing to contribute to the development of the continent and the building of the African Union**". It is against this background that the AU constitutive act declares that it shall "invite and encourage the full participation of the African Diaspora as an important part of our continent, in the building of the African Union."

Barré et al., 2003 defines the scientific Diaspora, intellectual Diaspora, skilled Diaspora or knowledge Diaspora as "**Self organized community of immigrant's scientists, engineers and professionals (highly skilled migrants) living in industrialized countries and working to impact development of their country of origin, particularly in science, technology and education**"

### **1.3 Fragmentation of the African Diaspora**

It is a common place that between 1500 and 1900, Africa has been the theater of massive deportation as follows:

- approximately four million enslaved people from African origin were transported to island plantations in the Indian Ocean,
- about eight million were shipped to Mediterranean-area countries, and
- about eleven million survived the Middle Passage to the New World.

Their descendants are now found around the globe. Due to intermarriage and genetic assimilation, just who is a descendant of the Black African Diaspora with some fragmentation such as:

- **African Americans;**
- **Afro-Caribbean;**
- **Afro-Latin Americans;**
- **Afro-Arabs.**
- **Siddis who are mainly in Pakistan and India and**
- **we have yet to coin the concept of Afro-European**

## **II. CONTRIBUTION OF THE AFRICAN DIASPORA TO AFRICA**

The African Diaspora contributed in the 3 following areas:

## **2.1. Nurturing and conceptualization of a Pan Africanism Movement**

Some authors attributes the idea to have conceived by **Henry Sylvester-Williams** while others see **Edward Wilmot Blyden** as the founding-father of the pan-Africanism as a plat-form to ensure the attainment of the unity of all continental Africa. The same concept played a pivotal role in the advent of the South African Pan African Congress as an instrument to liberate South Africa from the apartheid regime. The main off sprint of the pan-Africanist movement is the Garvey's Universal Negro Improvement Association-African Communities League. Its key figures included among others:

- **Edward Wilmot Blyden has been called the Father of Pan-Africanism.**
- **W. E. B. Du Bois has also been called the Father of Pan-Africanism. Du Bois hosted the highly influential 5th Pan-African Conference in Manchester, UK.**
- **Marcus Garvey, was a Caribbean-born Pan-Africanist, stern advocate for the Back-to-Africa movement, and has also been labeled as a Father of Pan-Africanism. Garvey led the largest organization with Pan-African goals in history.**
- **Jomo Kenyatta ,Julius Kambarage Nyerere , Kwame Nkrumah as well as other leading pan African leaders including Kenneth Kaunda and others eminent African leaders**

One of the greatest contributions of the African intelligentsia abroad was the nurturing of the African Union that was accepted as a consensus position

## **2.2. Contribution to scientific and technological endeavors**

African Diaspora has immensely contributed to science and technology as highlighted in **Annex 1 and Annex 2.**

There newly industrialized countries such as China and India that are increasingly taking full advantage of their Diasporas to develop national scientific and industrial capacities. Yet there are very few African countries that have taken a more pro-active role in involving or associating their Diaspora to position their scientific and technological capabilities. There are however few exceptions that are as follows:

- **South Africa (which has developed the South African Network of Skills Abroad),**
- **Egypt,**
- **Nigeria (the Nigerian satellite facility has been engineered by Nigerian Diaspora and a Nigeria has declared 26<sup>th</sup> July every year AS THE Nigerian Diaspora Day with organization of a conference); and**
- **Morocco.**

We need to learn to learn from these countries comparative edges and understand why some countries (China, India, and Israel) and other emerging industrialized countries are succeeding where African is lagging behind.

**The data bases of African scientists in the EU are still fragmented and more studies need to be undertaken to come up with a comprehensive data bases of national of scientist abroad as a pre requisite for the EU-Africa cooperation framework. We need horizontal and vertical incorporation of data bases with the view of mapping highly skilled manpower human resources that could play a pivotal role in re-engineering the development processes**

### **2.3. Contribution to economic empowerment**

The transfer from the African Diaspora is currently the most outstanding contribution. A study commissioned by the Rome-based International Fund for Agricultural Development indicates the following:

- **There are more than 30 million individuals living outside their countries of origin**
- **They contribute more than \$40bn annually in remittances to their families and communities back home.**
- **For the entire sub-Saharan African countries, remittances increased from \$3.1bn in 1995 to \$18.5bn in 2007, according to the World Bank, representing between 9% and 24% of GDP and 80-750% of ODA.**

The official statistics for 2009 are likely to show that migrants' remittances fell sharply, as the global recession severely eroded job opportunities abroad. That makes it all the more important that African countries to an

innovative financial mechanism that can leverage remittances effectively as the global economy recovers.

Contrary to its forerunners, the **African Diaspora** have positioned itself as a driven force toward the economic empowerment of their countries of origin through their valuable **remittances** to country's valuable economic sectors.

We could learn from the key drivers behind the successful remittances to leverage these success stories to capacity building of science and technological capacities in Africa. There are some policies and institutional changes, to recognize and take advantage of the role of the Diaspora within government planning, Proposal for dual citizenship and engagement of the Diaspora through conferences and skills and investment seminars, either at home or in the major capitals abroad have been envisaged by the Kenyan Government. Equally the Tanzanian Government in 2007 established an inter-ministerial committee to look into issues pertaining to the Tanzanian Diaspora, including the development of a framework for Diaspora involvement, review of laws that hinder Diaspora involvement and review of dual citizenship. All these efforts are aimed at achieving the following:

- **Transform brain drain into “brain gain” and “brain circulation” within African countries and between Africa and Europe;**
- **Develop a comprehensive Africa- Europe networks and partnership framework; and**
- **Initiate new fundraising mechanism to channel to specific emerging technologies in the nascent science, research parks, technologies and innovation parks.**

### **III. CONTRIBUTION OF THE AFRICAN DIASPORA TO EU- AFRICA COOPERATION**

We need to undertake an in-depth analysis on what has been initiated, what have worked and what were the key drivers as follows:

#### **3.1. Rockefeller's Foundation's African Dissertation Internship Awards Program. (ADIAP),**

This program was undertaken in collaboration with the **African** Academy of Sciences with the view to enhance the quality of the overseas education received by African graduate students enrolled in universities in the United

States and Canada, and to maximize its relevance to the process of economic development in Africa.

The program enables African doctoral candidates to return to Africa to conduct dissertation research in association with a local university or research institution, thereby facilitating the transition to a productive professional career upon return to Africa.

### **3.2. The Advanced Training for Leadership and Leadership and Skills (ATLAS)**

Between 1990 and 2003, AAI administered the Advanced Training for Leadership and Skills Project (ATLAS), a project funded by the United States Agency for International Development (USAID), which aimed to strengthen leadership and technical abilities and enhance the professional excellence and leadership capabilities of individuals serving in African public and private sector entities, such as universities, research centers and other key development institutions.

ATLAS, like its predecessor **African Graduate Fellowship Program (AFGRAD)** which ran from 1963 to 1990, promoted cooperation among U.S. universities, USAID Missions and African countries to provide advanced academic and professional training for African students. The ATLAS/AFGRAD program sponsored over **3,200 African professionals to obtain Bachelor's, Master's, and Ph.D. degrees at over 200 U.S. universities.** Approximately 85-90% of all ATLAS/AFGRAD Fellows successfully completed their degree programs and returned to their countries of origin, creating a well-qualified cadre of alumni in Africa.

In addition to academic training in the U.S., the ATLAS program provided an extensive professional enhancement program for alumni of AFGRAD, ATLAS, and other USAID-funded programs that included management training seminars, workshops, professional conferences, national and regional symposia in Africa, networking events, the annual publication of the *Directory of Fellows*.

### **3.3. Leveraging African Diaspora contribution to EU-African cooperation**

There are several challenges Africa is facing towards the sustainability of scientific and technological enterprise. These encompass the following:

- Scientific institutions are operating at its sub-optimal capacity as a result of drastic cuts in government spending.
- The human capacities as well as the scientific equipments are all ageing with a potent generational gap,
- Africa's best scientific talent continues to leave in large numbers, creating a shortage of capacity that is compounded by the “brain drain” problem

These underscore the contribution of the African Diaspora very relevant in the context of the EU-Africa cooperation. However we have to consider the following issues:

- **First and foremost, the "African scientific Diaspora cannot be seen as a panacea or a direct substitution to the shortcomings and weaknesses of national scientific communities in the African continent.**
- **Secondly, the Diaspora model is appealing to decision-makers as it offers a short-cut and a low-cost solution to offset the prevailing short fall of manpower in African countries**
- **Thirdly, the option is thrilling to African expatriates to have golden opportunity to contribute to the development of their mothers land while remaining abroad and thereby overcoming the feeling of guilt to country current economic decay.**

Leveraging African Diaspora contribution to EU-African cooperation requires the following set of actions that are summarized in a nutshell in the following Table 1:

Table 1: Specific areas, actions required and responsible organization

	<b>Specification</b>	<b>Action required</b>	<b>Responsible Organization/Time line</b>
<b>1</b>	Database	<b>Collect data</b> and knowledge-based evidence on highly skilled migrants in specific country of the EU take stock of best practices of	

		<p><i>brain gain</i> mechanisms.</p> <p><b>Create a data base</b> of highly qualified nationals abroad and keep it up-to-date</p>	
2	Mapping	Mobilize and organize these individuals into specific areas the critical to the EU-Africa cooperation	
3	Twinning/ Networking	<p>Establish reconnection between Diaspora with relevant scientific, economic and industrial sectors at their home county or within the sub-region; and</p> <p>Encourage interactions between them and the upcoming EU-Africa strategic cooperation and involve them in research projects of FP 7 as well as attending summer courses in Africa and mentoring top notch African young scientist</p> <p>Establish a EU Network of Scientific Diasporas for the promotion of cooperation and free circulation of knowledge based on development impact approach</p>	
4	Funding	Provide adequate investments through European Development Fund (EDF) and other EU funding instruments already identified	
5	Political	Use the agreement between EU	

	support	and Africa (Lisbon Accord 2007) to secure great mobility of experts between Africa and the EU  African Union umbrella  High level policy-dialogue in Science and technology	
6	Coordination	Have a dedicated organization for coordination of the above activities  <b>Contribute to the policy dialogue</b> through the creation of an action oriented tool kit with good practices and best scientific development cooperation polices	

#### **IV. WAY FORWARD FOR THE EU-AFRICA STRATEGIC PARTNERSHIP IN SCIENCE AND TECHNOLOGY**

The EU-Africa summit, held in December 2007 in Lisbon, provided a sound foundation for the new **Africa-EU strategic partnership**, marking a qualitative leap in relations between the two continents. The Joint Africa-EU Strategy provides an overarching long-term framework for Africa- EU relations, while its first action plan specifies concrete proposals for 2008-2010, structured along **8 Africa-EU strategic partnerships** which will require the contribution of the African Diaspora

Europe is the biggest provider of development aid in the world.

*"We should, we can, we must and we will"*

Stevie Wonder, July 12, 2006

## **ANNEX 1: Selected Internet Resources African Americans in Science and Technology**

### **Science Reference Section Science, Technology, and Business Division; Library of Congress**

Black History Inventors - Black History Month

[http://inventors.about.com/od/blackinventors/a/Black\\_History.htm](http://inventors.about.com/od/blackinventors/a/Black_History.htm)

The Black Inventor Online Museum

<http://www.blackinventor.com/>

Black Nurses in History - UMDNJ Camden Campus Library

<http://www4.umdnj.edu/camlbweb/blacknurses.html>

Computer Scientists of the African Diaspora

<http://www.math.buffalo.edu/mad/computer-science/index.html>

Directory of Black Entomologists in North America

<http://www.life.umd.edu/entm/black.htm>

Early African Americans in Otolaryngology

[http://www.entnet.org/museum/exhibits/africanamerican\\_page1.cfm](http://www.entnet.org/museum/exhibits/africanamerican_page1.cfm)

The Faces of Science: African Americans in the Sciences

<https://webfiles.uci.edu/mcbrown/display/faces.html>

The History Makers.com - African American History Archive

<http://www.thehistorymakers.com/>

Just Garcia Hill Biography Project

<http://justgarciahill.org/jghdocs/webbiography.asp>

Kellogg African American Health Care Project: The Oral Histories

<http://www.med.umich.edu/haahc/theoral.htm>

The Mathematical Association of America: Index of Biographies

[http://www.maa.org/summa/archive/ar\\_index.htm](http://www.maa.org/summa/archive/ar_index.htm)

Mathematicians of the African Diaspora

<http://www.math.buffalo.edu/mad/>

NASA Quest: African American Astronauts

[http://quest.nasa.gov/qchats/special/mlk00/afam\\_astronauts.html](http://quest.nasa.gov/qchats/special/mlk00/afam_astronauts.html)

The National Academies African-American History Program

<http://www.nas.edu/aahm/portrait.html>

The National Black Nurses Association

<http://www.nbna.org/>

National Dental Association

<http://www.ndaonline.org/>

National Medical Association

<http://www.nmanet.org/>

National Organization for the Professional Advancement of Black Chemists and Chemical Engineers

<http://www.nobcche.org/>

The National Society of Black Engineers

<http://www.nsbe.org/>

National Society of Black Physicists

<http://nsbp.org/cgi-bin/nsbp.cgi?page=home>

National Technical Association

<http://www.ntaonline.org/>

Physicists of the African Diaspora

<http://www.math.buffalo.edu/mad/physics/index.html>

US Black Engineer Magazine

<http://www.blackengineer.com/artman/publish/index.shtml>

ANNEX 2: The African **diaspora** in **science and technology**: an annotated directory. ... scientist/engineer, who won the 1989 Gordon Bell Prize in computer science. ...

Newsletter of the African Mathematical Union's Commission on the History of Mathematics in Africa. The newsletter includes bibliographies, book reviews, web sites, meetings, research reports, addresses of scholars. Part of [Mathematicians of the African Diaspora](#). Both sites are maintained by Professor Scott W. Williams, Mathematics Dept., State Univ. of New York at Buffalo. [KF]  
[http://www.math.buffalo.edu/mad/AMU/amuchma\\_online.htm](http://www.math.buffalo.edu/mad/AMU/amuchma_online.htm)

[Debas, Haile T.](#)

Executive Director, UCSF Global Health Sciences and formerly Professor of Surgery, U.C. (San Francisco, Medical School). Former Chancellor, University of California Medical School (San Francisco). From Eritrea.

<http://www.surgery.ucsf.edu/faculty/hdebas.html>

<http://www.ucop.edu/ucophome/commserv/press/debase.ht>

[ml](#)

[http://www.ucsf.edu/daybreak/1998/07/01\\_debas.html](http://www.ucsf.edu/daybreak/1998/07/01_debas.html)

Use the UCSF Search for further articles.

## **Diarra, Cheick Modibo**

UNESCO Goodwill Ambassador, former technical manager for the Mars Exploration Directorate, Jet Propulsion Laboratory, NASA, Pasadena, California. [UNESCO Biography](#). ?

See also: P. B. Esposito, W. G. Bollman, L. A. Cangahuala, S. Demcak, **C. Diarra**, A. Halsell, E. Graat, M. D. Johnston, R. Mase and D. Roth, [Navigating Mars Observer: Launch Through Encounter and Response to Spacecraft's Pre-Encounter Anomaly](#), Cocoa Beach, Florida, USA, 14-16 February, 1994. 14 pp. In Adobe PDF format.  
<http://techreports.jpl.nasa.gov/1994/94-0266.pdf>

## **Emeagwali, Philip - 1989 Gordon Bell Prize**

Articles, interviews by and about Dr. Emeagwali, Nigerian computer scientist/engineer, who won the 1989 Gordon Bell Prize in computer science. "The [Gordon Bell Prize](#) competition recognizes outstanding achievements in the application of parallel processing to practical scientific and engineering problems" - <http://emeagwali.com/>

## **Ethiopian North American Health Professionals Association, ENAHPA**

"a non-profit organization established in November of 1999 in Detroit Michigan - USA, by Ethiopian-born Physicians, Dentist, Nurses, Pharmacists, Healthcare and Non-Medical Professionals now living and working in the United States

and Canada." Members volunteer one to two weeks each year working in Ethiopian hospitals and clinics. Describes projects, essays such as "Reversing the Brain Drain; A Personal Testimony", speeches such as "Forging Synergy within the Ethiopian Diaspora". Based in Bloomfield Hills, Michigan. [KF] <http://www.enahpa.org/>

### **International Society of African Scientists**

"non-profit organization founded in 1982 to promote the advancement of science and technology among peoples of African descent...The current membership represents a wide range of nationalities from Africa, the Caribbean and the Americas. Membership is open to all who share the goals of the Society." Has the abstracts of its 1998 conference, "Biotechnology & Biodiversity - a challenge for the development of agricultural, bio-medical & pharmaceutical sectors in Africa and the Caribbean." Based in Wilmington, Delaware. <http://theisas.com/>

### **MANSAG, Medical Association of Nigerians across Great Britain**

Established 1997. "the only body representing Nigerian Medical doctors and allied professionals in the British Isles. Our recent projects ..... the provision of medical books to Nigerian Universities as well as the donation of a truckload of medical equipment to primary care centres in Nigeria." Holds an annual conference. [KF] <http://www.mansag.org/>

### **National Society of Black Engineers**

Professional association with over 15,000 members. Based in Alexandria, Virginia. <http://national.nsbe.org/>