The Africa Challenge: The Mission

How Africa lit up the world

It's 2025, and Africa is booming. Conflict has been resolved, democratic leaders have established unprecedented calm. And as the fight against disease gains momentum, it's African scientists who offer salvation to the rest of the world. Fantasy? Jeffrey Sachs, the architect of the UN's plans for banishing poverty in Africa, doesn't think so. He explains how it could happen

The year 2025 marked the fourth year of the global avian-flu pandemic. Experts had warned of the threat for decades, but to no avail. When it struck, the world was not prepared. Leading research laboratories in Europe, China and the United States were disrupted from the start by the deaths of leading scientists and by growing disorder on the streets. With millions dead within the first months, desperate gangs were demanding instant solutions, when none existed. And then, at the darkest moment, salvation arrived... from Africa.

The 21st-century plague had largely bypassed Africa, and the continent's research labs continued their work in relative peace. Africa's tropical ecology favoured its residents, since the reservoir of avian flu was bird species of the temperate climes. And it was from Africa's most famous biomedical research centre, the Rwanda Institute of Infectious Disease, that the world was saved. The new miracle vaccine, AFV06, developed under the leadership of Dr Kwesi Obawang, went into production in February 2025, with delivery in June and mass distribution by October. By New Year's Eve, the spread of the influenza had ended. The Rwandan president, Beatrice Musanberta, whose family had been wiped out during the Rwandan genocide in 1994, praised her country's scientists, declaring: "From the heart of darkness has come light. This is a light that must be shared."

In year-end prayers, songs of thanks for Dr Obawang and his team reverberated through the churches, mosques, temples and city plazas of the world. The most popular of these was the classic "One", written decades earlier by U2's Bono: "We're one but we're not the same, We get to carry each other, carry each other..."

Yes, the world was one interconnected whole, with infectious-disease pandemics and wondrous cures circling the globe with blinding
speed. At the same time, the world was not the same. In previous decades, tropical diseases such as malaria had created havoc. Now the tropics proved that they could offer salvation. And most impressively for a crowded planet, this was the third time in as many decades that scientists from one part of the world had provided the advances needed to save another territory.

In 2008, Dr John Morton of the US National Institutes of Health came to Kigali to help start clinical trials on the Aids vaccine. Thus began the Rwanda institute. In the following decade, Chinese scientists based at the institute devised an inexpensive synthetic version of their antimalarial drug artemisinin. And now it was the turn of African scientists to spare the world a killer disease running out of control.

Few would have guessed in 2005, as the leaders of the world’s richest countries struggled to reach agreement over the future of Africa at the G8 summit in Gleneagles, that this moment would come. Many dismissed Africa as a basket case. The continent was hungry, disease-ridden and largely isolated from high-tech international trade. Exports were concentrated in a few tropical commodities such as cotton, tea, coffee, sugar and bananas, and a few mineral resources, precious metals, and hydrocarbons. Many Europeans, Americans and Japanese questioned why their leaders should spend time, much less finances, on Africa, stuck in poverty, corruption, and violence. There seemed no way to overcome the continent's sordid bad governance, disease and rapid population growth. With a disdain hardly remembered today, many argued it was necessary to leave Africa to its fate. Saving children would eventually require even more "dole" from the rich.

Yet if the pessimists had had more historical knowledge, they would have realised that the Afro-pessimism of 2005 was little different from the Asia-pessimism of 1965, when many believed that China, India and other low-income Asian countries were destined to suffer a Malthusian fate of overpopulation, famine and turmoil. In the years to the 1960s, China and India had both reeled from repeated famines and failed monsoons. They seemed not unlike Africa in the late 20th and early 21st century, with large parts of the population living in extreme poverty, defined as having an income below $1 per day, and constantly vulnerable to disease, drought and starvation.

Just at that point, an Asian green revolution introduced high-yield varieties of rice, wheat and other staple foods to millions of farmers. Food production soared, and hunger and rural poverty began to decline. The population in rural areas declined too, with fewer farmers needed to feed the whole country. Booming food production led to falling food prices, providing the "market signal" for the farmers’ children to head for the cities. With urbanisation came the boom in industry and services that produced the "miracle" growth rates after 1980.

The G8 summit leaders showed a rare prescience in 2005 when they acknowledged the growing body of evidence that Africa's poverty trap could be overcome with well-targeted and timely investments, just as Asia's poverty trap had been. At the start of 2005, a UN Millennium Project report, Investing in Development, had stressed this possibility. So had Tony Blair's historic Africa Commission. In their private discussions, too, the G8 leaders admitted how little their countries had actually helped Africa, despite all the high-minded rhetoric. It was
indeed time to adopt a new strategy.

Most importantly, they decided that in addition to agreeing a package of debt relief, they would invest in practical solutions to the continent's challenges. If Africa was not growing enough food, they would invest in increased farm productivity. If Africans were dying of disease, they would invest in safe drinking water, disease prevention and health systems.

If Africans were unable to participate effectively in international trade and investment, the G8 leaders would reform the international trading system and help Africa improve its international competitiveness through investments in education and basic infrastructure such as power, roads and port facilities. Africa's suffering had been put down to bad governance and corruption, but in fact poor governance was as much a result of its poverty as it was a cause. Many Asian countries with even greater corruption had achieved rapid economic growth, while Africa's well-governed countries — democracies such as Ghana, Senegal and Tanzania — had stagnated. A deeper explanation of Africa's poverty trap was needed.

One way to understand Africa's plight was to understand why Asia had escaped from poverty, while Africa had not. Asia's green revolution, building on Japanese and US agricultural science, addressed crops relevant to Asia — rice and wheat — but not the crops of most significance to Africa, such as sorghum, millet, cassava, bananas and maize. Moreover, Asia depended on the vast irrigated river plains. Africa, alas, did not have the same potential for large-scale irrigation. Another key difference was disease. Africa's malaria burden and, later, its AIDS pandemic, proved overwhelming until after 2005. The success of malaria control in Asia was largely a matter of geography. Africa's climate and mosquito species had left it uniquely vulnerable.

A third difference lay in transport conditions. Asia's economic boom was built upon its coastal cities, or cities with ready access to coastal ports and ocean trade routes. Osaka, Pusan, Taipei, Jakarta, Penang, Hong Kong, Singapore, Kuala Lumpur, Bangkok, Mumbai, Calcutta, Shanghai, and many other population centres with access to sea-based trade, were the location of the manufacturing miracle. But most of Africa's population lived in the interior, too far from sea ports to offer opportunities for manufacturing-based, export-led growth. Africa's difficulties — low food productivity, a high disease burden and high transport costs — had their roots in geography, ecology and climate, but this did not mean the situation was hopeless.

The brilliance of the G8 in 2005 was to recognise that for every obstacle there was a solution. Now the rich world was finally prepared to live up to its long-standing and long-ignored promise to provide 0.7% of GNP as official development assistance. It agreed to cancel in full Africa's unpayable debts. On their part, African leaders would have to pursue good governance, including transparency, participation, and anti-corruption measures.

Africa's post-2005 recovery began in its smallholder farms, where perhaps three-quarters of the population lived. The trick was to help these farmers raise their yields, so they would have enough to eat, could earn income on the market, and begin to shift from subsistence
to cash-earning — fruit export, dairy production, and non-farm activities. Farmers were given chemical fertilisers and agro-forestry systems to replenish their soil nutrients. They were able to buy improved seed varieties and adopt the latest water-management technology, such as drip irrigation, irrigation powered by treadle-pumps, and rainwater harvesting. The threat of killer droughts was tamed. Africa's green revolution triggered virtuous circles. Farmers enjoyed better incomes, and their children were better fed. Surplus crops guaranteed midday meals for all schoolchildren. The shift from staple-crop production to food-processing (such as exporting tropical fruits and juices to Europe) led to a boom in rural incomes. Urbanisation accelerated, and with it Africa's international trade in manufactures and services.

The G8 financing package included investing in disease control and transport. Until 2005, malaria had killed some 3m children every year, and there were 1 billion clinical cases annually. The G8 crash programme included free distribution of anti-malaria bed nets to all low-income Africans by 2008, an estimated 75m bed nets a year. At the same time, the pharmaceutical industry, in collaboration with the Chinese government, scaled up the production and free access to artemisinin-based antimalarial medicines. Within three years, deaths from malaria had declined by 80%.

The Aids pandemic started to subside by late 2007, through expanded access to anti-retroviral drugs and improved prevention efforts. The HIV vaccine provided the coup de grâce. And improved nutrition meant there was less illness and death from countless other life-threatening conditions. From a life expectancy of 42 years in 2005 in Africa, it soared to 55 years by 2010 and to 65 years by 2015. And as children began to survive, the population growth rate plummeted. This so-called "demographic transition" was speeded in Africa, as it had been in Asia, with the push in girls' education, women's rights, the availability of contraception and family-planning.

The decline in population growth, combined with higher food yields, solved many of Africa's ecological crises. Before 2005, the rainforest had been sacrificed at an alarming rate, as farmers cleared forest lands to plant new crops. Now they could stay on their existing lands, coaxing three or more times the yield. The rainforests with their unique flora and fauna were saved.

Equally miraculous was the effect of the road-building effort undergirded by G8 financing. For decades, 100m east Africans had depended on a ramshackle, two-lane road from the port at Mombasa, Kenya, through Uganda, Rwanda, Burundi and eastern Congo. Parts were washed away every rainy season, leaving tens of millions cut off from international trade. All this changed with a properly built highway, with sharply lower transport costs, augmented by fibreoptic cables that brought internet, telephony and broadband data transmission to the interior.

The revival of African economies coincided with the deep tectonics reshaping the global population. East Africa's recovery joined in the rise of Indian Ocean trade. West Africa's recovery coincided with a boom in the North and South Atlantic, with focal points in North America, western Europe, Brazil and west Africa.

When the Rwandan president Paul Kigame declared in 2005
Rwanda's intention to invest heavily in science and technology, the world took little notice. Yet Kigame was right. Africa's future, like the world's future, would depend on science to grow food, fight disease and preserve our fragile ecosystems. And Africa, we now know, would be in the forefront. The Bill and Melinda Gates Foundation can proudly claim to have had this vision. It gave early support for African science, especially biomedical science. It funded the first HIV vaccine, and the clinical trials of the vaccine based at the Rwanda Institute of Infectious Disease. Later, Chinese funding of malaria research at the institute gave a further push. But the takeoff of this knowledge economy was broader based. African parents, like parents everywhere, sacrificed mightily to ensure their children could get a university education. Private and public universities throughout the continent began a rapid upward climb.

Africa's recovery had gathered considerable speed by 2015. The millennium development goals were nearly all achieved. The early successes of countries such as Ghana, Senegal and Tanzania were inspirational. With rising economies, and especially hope, peace flowered. Economists and PhD students began to debate the real sources of the African renaissance. Was it the green revolution? The end of Aids and malaria? Or the emergence of a generation of female leaders, many of whom had fought anti-corruption agendas and had ushered in an impressive attention to Africa's social needs? Was it the vigour of the democracies in Ethiopia and Nigeria, built on the foundations laid by the prime minister Meles Zenawi and President Olusegun Obasanjo in the early years of the new century? Was it because donor countries finally lived up to the 0.7% aid commitment? Or debt cancellation? Such debates were like asking a farmer if the key to his or her success was the sunlight, the water, the soils or the seeds. The answer, of course, was "All of the above."

Yes, Africa could well save the world, if we choose not to let impoverished people die by the million. Investing in the continent is investing in our own security and prosperity too. The means to enable Africa to escape from extreme poverty already exist. Modest investments, at 0.7% of our national income, would enable all impoverished parts of the world, including Africa, to begin to climb the ladder of development, and to do so in an ecologically sustainable manner. This climb, in turn, would bring to the rest of humanity improved security, slower population growth, enhanced environmental sustainability, and a much greater chance for peace.

Perhaps the most basic truth is that, in our genes and our history, we are all Africans. A small band of Homo sapiens left Africa around 70,000 years ago and populated the world. It is time, at the G8 summit, to acknowledge how our past — and especially our future — depends on that wondrous continent and its inhabitants, our brothers and sisters on a crowded planet.

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