Multi-Sectoral Nutrition Action Plan 2018-2025

Harnessing “Grey Matter Infrastructure” to Unlock the Human and Economic Potential of Africa: Catalyzing nutrition smart investments to support a 40% stunting reduction in Africa by 2025

Human Capital, Youth and Skills Development Department (AHHD)

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Executive Summary

The rising share of Africa’s working-age population is increasing its productive potential at a time when most of the advanced economies face an aging population.\(^1\)

Africa will account for 3.2 billion (80%) of the projected 4 billion increase in the global population by 2100. Its working population will increase by 2.1 billion over the same time frame, compared to a net global increase of 2 billion. With declining mortality and fertility, Africa’s share of the global working-age population is projected to increase from 13% in 2010 to 41% by 2100. The magnitude of these demographic developments could be transformational for Africa – but only if the right human capital investments are made as a matter of urgency.

Stunting undermines economic productivity, in turn limiting the development of low and middle income countries.

Interventions to reduce stunting can be highly cost-effective, save lives, and boost per-capita GDP by up to 11%. The African continent has the potential to become a powerhouse of productivity in the 21st century but cannot sustain rates of economic growth and integrate an unprecedented youth population without addressing its high rates of stunting.

To realize its human and economic potential, Africa must invest in nutrition—particularly during the 1,000 days between conception and the age of two—as a crucial foundation for productivity later in life.

Such investments offer among the highest returns on investment in the development field and can be seen as harnessing a population’s brain power, or “grey matter infrastructure” through human capital investment.

Investments in nutrition provide significant economic and social benefits: (i) job creation: Children who are adequately nourished do better in school, earn 20% more in the labor market, are 10% more likely to own a sustainable business, and are 33% less likely to live in poor households as adults; (ii) increased productivity, due to a healthier workforce; (iii) savings of resources currently directed to healthcare, disease treatment and other problems associated with stunting, driven by a decline in infant mortality. Stunted children are twice as likely to die as non-stunted children.\(^4\)

Through its 2018-2025 Multi-Sectoral Nutrition Action Plan, The African Development Bank has prioritized investments that are “nutrition smart”, especially in the five sectors that account for over 30% of government spending in Africa and serve as underlying drivers of nutrition. This is based on a thorough review of evidence that has identified specific interventions in these five sectors that have the greatest impact on nutrition. Nutrition smart investments in these sectors can be leveraged to achieve a double bottom line for every dollar spent.

The African Development Bank is looking for new avenues of collaboration to expand the reach of Banking on Nutrition and achieve maximum impact.

In 2017, more than a third of the world’s stunted children under the age of five lived in Africa with stunting rates ranging from 35.6% in East Africa, to 32.1%, 29.9%, 29.1%, and 17.3% in Central Africa, West Africa, Southern Africa and Northern Africa respectively. AfDB aims to contribute to the achievement of a 40% reduction in the number of children under 5 who are stunted by 2025.

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2  The working-age population is defined as those aged between 15 – 64. The share of working-age population is the working-age population divided by the total population.
Introduction and Context

Youth are Africa’s greatest asset. Africa’s population is expected to peak at 1.6 billion by 2030 – nearly 70% of which will be working-age. The continent’s productive potential will grow at a time when most of the wealthier economies face an aging population. Africa’s share of the global working-age population is projected to increase from 13% in 2010 to 41% by 2100. The magnitude of these demographic developments could be transformational for Africa – but only if the right human capital investments are made as a matter of urgency.

This demographic dividend is a potentially game-changing, one-off opportunity for accelerated growth for many African countries. However, stunting continues to be one of the main barriers that prevent Africa’s children from realizing their full potential. For example, compared with non-stunted children, stunted children score 7% lower on mathematics tests, and are 19% less likely to be able to read, 12% less likely to be able to write a simple sentence, and 13% less likely to be in the appropriate grade for their age. Africa must invest in nutrition to harness brain power, or “grey matter infrastructure” to unlock the human and economic potential of the next generation of workers.

While some progress has been made in recent years, the trend across the continent is currently going in the wrong direction. Africa is the only region in the world where the number of stunted children has risen. From 2000 – 2017, the number of stunted children in Sub-Saharan Africa increased by 16%, reaching 58.7 million. Studies examining the “cost of hunger” in eleven regional member countries found that malnutrition costs between 1.9% to 16.5% of GDP.

Children who lack key nutrients during the 1,000 days from conception to the age of two become permanently “stunted” – being shorter, weaker, more vulnerable to disease and less cognitively able. By focusing on this critical window of opportunity, approximately 24 million fewer children will be stunted in 2025 and go on to lead healthier and more productive lives.

Stunting is caused by multiple factors, such as not enough vitamins, proteins and fats in the diet compounded by poor hygiene and sanitation causing diseases which make the body actually lose nutrients. While nutrition-specific services run by the health sector (such as supplements for pregnant mothers) are a necessary part of reducing stunting, they are not sufficient. Effective action needs other sectors such as agriculture, water, sanitation, hygiene, social protection and education to become “nutrition smart” – redesigning their programs for maximum nutritional impact. This enables each sector to deliver a much greater social and economic return on investment, at only marginal extra cost.

The Concept of “Grey Matter Infrastructure”

For decades, investment in Africa’s physical infrastructure—such as roads, bridges and dams—has been seen as vital to promoting economic growth. More recently, focus has also turned to human infrastructure, given that strong economies also require a productive workforce. As the global economy shifts from physical labor to knowledge work, the next generation of workers will need to reach their full cognitive potential in order to be productive—and countries will need to invest accordingly. The term grey matter infrastructure, which refers to a country’s collective brainpower, captures this increasingly important concept championed by Dr. Akinwumi Adesina, President of the African Development Bank Group.

Strategic Approach

Nutrition is inextricably linked to the Bank’s High 5 priorities, and nutrition smart investments could be catalytic for realizing the Bank’s equitable growth agenda.

Feed Africa

Stunting rates are falling across Africa, but not quickly enough, and 224 million people are hungry or malnourished. Mainstreaming nutrition into Feed Africa leverages investments in support of African agricultural transformation with a clear double objective of improving human nutritional status, while achieving the farm or agri-business level objective of increasing productivity, income and profits.

Improve the quality of life for the people of Africa

The development of a child’s brain provides the fundamental basis for the cognitive, emotional and social capacities that enable the child to fully function as a person. A large proportion of children across Africa suffer impaired brain development because of three key factors: undernutrition, insufficient social stimulation from care-givers and the experiencing or witnessing of violence. AfDB investments in health, water, sanitation and hygiene, education and social protection are instrumental to improving quality of life. Improving access to nutrition interventions in the health sector targeted to populations most in need can deliver significant benefits. These interventions are most successful when complemented by access to clean water, hygienic sanitation facilities and behaviour change programming addressing inappropriate feeding and care practices and when near universal coverage is attained within a contiguous area. This approach will maximize synergies to deliver health benefits, improved nutrition outcomes and promote quality of life.
Africa has an enormous potential to enhance agricultural production. Africa is home to more than 60% of the reserves of arable land in the world. Much of this land - representing 25% of the fertile land in the world - is largely untapped. However, the continent’s agriculture sector faces significant challenges making the most of this tremendous resource, including low agricultural productivity, high post-harvest losses and poor infrastructure, especially in rural areas. Mobilizing additional resources and leveraging Bank investments in Agropoles, Agro-processing zones and integrated Agro-Industrial Parks can help support regional member countries in unlocking this potential. This approach, combined with an emphasis on the processing of nutritious foods, could be transformational in breaking the productivity gap in development, promoting employment, reducing food costs and supply uncertainties, and improving the diet of Africans.

It is estimated that 95% of African households rely on biomass fuels (wood, crop residues and animal dung) as their primary source of energy. Environmental factors such as indoor biomass fuel use constitute the second leading risk category for stunting in Sub-Saharan Africa. Climate-smart and nutrition-smart Bank investments in advancing universal access to affordable, safe and sustainable sources of clean energy including clean cookstoves and other productive technologies can dramatically reduce fuel consumption and exposure to harmful cookstove smoke. This approach results in a double win of achieving green growth and improving health and nutrition outcomes.

The Bank is leveraging its regional focus to provide opportunities to address challenges that affect nutrition such as barriers and incentives for the production, regulation and trade of safe and nutritious foods. Priority interventions to be championed include: the harmonization of quality assurance standards for food processing and fortification; standardization of food labeling and advertisement regulations; and elimination of trade tariffs across regional member countries. These efforts could contribute to the growth of micro, small and medium sized enterprises in the agriculture and agro-industry sector that deliver nutrition impact and greater social and economic returns on investment.

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Through its 2018-2025 Multi-Sectoral Nutrition Action Plan, the African Development Bank commits to scaling up the proportion of investments that are nutrition smart, especially in the five sectors that account for over 30% of government spending in Africa and serve as underlying drivers of nutrition.

Building upon a review of the Bank’s sectoral portfolios, a thorough review of evidence, key needs at the country level and the roles of global and regional stakeholders in nutrition, Banking on Nutrition has a three-part approach:

1. **Mainstreaming nutrition into the Bank’s portfolio and pipeline**, including Regional and Country strategies, lending programs, non-lending programs, and other activities.

2. **Working to increase the production and consumption of safe and nutritious foods**, through partnerships with regional member countries and regional and private sector partners.

3. **Encouraging regional member countries** to prioritize nutrition smart lending requests and investments that deliver greater social and economic return alongside achieving nutrition impact, representing a *double win*. 

The Ambition

The proportion of nutrition smart investments by sector:

- **Health**: 50%
- **Agriculture**: 50%
- **WASH**: 15%
- **Social Protection**: 10%
1. Mainstreaming nutrition into the Bank’s portfolio and pipeline

Based on a thorough review of evidence, we have identified specific interventions in the five sectors that have the greatest impact on nutrition, and investments in these sectors can be leveraged to achieve a double bottom line for every dollar spent. Examples of nutrition smart interventions that can be incorporated into the Bank’s pipeline and lending requests from regional members countries are outlined below.

### Health

A number of priority health interventions significantly impact on the nutritional status of the population, while many of the high-impact, nutrition-specific interventions (as identified in *The Lancet Series on Maternal and Child Undernutrition, 2013*) are most feasibly delivered through health services. Interventions are most cost-effective when targeted to populations most in need and when they are approached appropriately in the context. Using health system platforms to deliver nutrition interventions maximizes synergies to achieve common goals of reduced morbidity and mortality, and improved nutritional status. Nutrition interventions delivered through the health system include:

**DIRECT NUTRITION INTERVENTIONS**

Promotion of breast feeding and complementary feeding practices including early initiation within the first hour of life, exclusive breastfeeding for the first 6 months of life (without water), and the introduction of appropriate complementary foods and feeding practices from 6-24 months along with continued breastfeeding.

**HEALTH SECTOR INTERVENTIONS**

- Delivering direct nutrition services through the public health system and integrating good nutrition counselling within existing health services including antenatal care, delivery, postnatal care, reproductive health and family planning.
- Delivering integrated management of acute malnutrition.
- Integrating nutritional assessments in public health programs to identify nutrient/protein deficiencies in diets and design appropriate corrective actions.

**MICRONUTRIENT INTERVENTIONS**

Delivery of micronutrient supplements including iron-folate, multiple micronutrients and calcium; fortification of staple foods and condiments with vitamins and minerals like iron, zinc, vitamin A, and folic acid; and home-based fortification with multiple micronutrient powders.

### Agriculture

Agriculture remains a major source of income in Africa. However, untapped potential has resulted in persistent poverty and deteriorating food security. *Feed Africa* adopts a nutrition smart approach with a clear double objective of improving human nutritional status while achieving the farm or agri-business level objective of increasing productivity, income and profits. Priority sets of nutrition smart interventions providing the vitamins, proteins and fats required in diets and targeting the poorest households include:

**BIOFORTIFICATION**

Substituting micronutrient-poor staple food crops with varieties of biofortified nutrient-rich crops including high-iron beans, orange flesh sweet potato, yellow/golden cassava, quality protein maize, rice fortified with zinc, and biofortified pearl millet.

**DIRECT NUTRITION INTERVENTIONS**

Promotion of breast feeding and complementary feeding practices including early initiation within the first hour of life, exclusive breastfeeding for the first 6 months of life (without water), and the introduction of appropriate complementary foods and feeding practices from 6-24 months along with continued breastfeeding.

**ANIMAL REARING**

Increasing livestock ownership to fill dietary gaps through local production. Rearing of goats and poultry provide a variety of protein and micronutrients difficult to obtain in adequate quantities from plant source foods alone, especially as milk and eggs are one of the lowest cost sources of protein among plant and animal source foods. Fish is another inexpensive source of high-quality protein with the potential to improve the diets of even the poorest households.

**HOME GARDENING**

Scaling up home gardens, linked to behavior change communications strategies promoting improved diets to improve year-round availability and consumption of nutrient-dense fruits and vegetables and animal products.
Often, the same communities affected by undernutrition also have limited access to safe water and sanitation services, which facilitates ingestion of fecal-oral pathogens that cause infections and affects the absorption of nutrients. In the WASH sector, opportunities exist to improve the socio-economic and environmental conditions of the rural and peri-urban population that contribute to stunting through improved access to sustainable WASH infrastructure and services while also enhancing service delivery capacity in the sector. However, these WASH interventions must attain near universal coverage within a contiguous area to deliver health benefits and improved nutrition outcomes. Priority interventions include:

### WATER SUPPLY QUALITY AND QUANTITY
- Water safety planning, constructing or improving water supply systems and services, providing safe and reliable piped water to users’ homes, constructing and/or rehabilitating public water points, boreholes, protected dug wells, etc.
- Promoting the use of proven water treatment methods, such as filtration, boiling or solar and piped distribution and safe storage in clean, covered containers.

### SANITATION
- Providing access to hygienic sanitation facilities that safely remove and treat feces, linked with behavior change communications strategies to address open defecation.
- Improving environmental hygiene practices e.g. keeping animals away from the areas where food is prepared, child play areas and water sources.
- Improving solid waste disposal and management, and controlling disease vectors such as flies, mosquitoes, cockroaches and rats by covering food, improving drainage and safely disposing of garbage and non-refusable materials into a waste receptacle or protected pits.

### HYGIENE PROMOTION AND EDUCATION
Education on hand washing with soap and water at critical times, promoting safe food hygiene practices, and behavior change programming addressing the key behavioral determinants for the target population.

### IMPROVING DIETS
Incorporating food transfers, micronutrient supplements, and nutrition education classes into program design.

### IMPROVING HEALTH AND CARE PRACTICES
- Delivering health/hygiene education and sanitation services.
- Providing skills training and assets transfer to program beneficiaries.

### ENABLING SCHOOL ENVIRONMENT
- Ensuring the availability of diverse food, including fruits, vegetables and legumes.
- Regulating the promotion, marketing and sales of foods and beverages that are high in fats, sodium/salt and sugar.

### HEALTH AND NUTRITION SERVICES
- Providing micronutrient supplementation, point-of-use fortification of school meals, iodized salts and fortified cereals.
- Fostering health-promoting behaviors and activities such as provision of clean drinking water, handwashing facilities, appropriate sanitation infrastructure and deworming.

### INCREASING/STABILIZING HOUSEHOLD INCOME
Providing social assistance through conditional cash transfers, insurance, input subsidies and public work programs.

### FOOD AND NUTRITION EDUCATION
- Promotion of school gardens, including small livestock raising and cultivation of nutrient-dense crops, fruits and vegetables.
- Nutrition education and demonstration classes on harvesting, preservation and reducing food waste.

### SOCIAL PROTECTION
Social protection can positively impact nutrition by improving dietary quality, increasing income and improving access to health services. In addition to the direct links related to the diversity, safety and quantity of food consumed by each individual, social protection can also influence other determinants of nutrition, including practices related to care, sanitation, education and inadequate access to resources. Nutrition-related impact is achievable through a variety of social protection instruments targeting the nutritionally vulnerable including:

Schools offer a unique delivery platform for other interventions that provide multiple benefits for children and their communities and help the next generation. School-based food and nutrition interventions offer a unique opportunity using a systemic, multi-sectoral lifestyle approach to achieve health and promote healthy diets. It recognizes not only the 1,000 days from pregnancy to a child’s second birthday as an essential window of opportunity, but also the subsequent 7,000-day period as crucial to helping the child reach their development potential. School-based food and nutrition interventions include:

### WASH
Schools offer a unique delivery platform for other interventions that provide multiple benefits for children and their communities and help the next generation. School-based food and nutrition interventions offer a unique opportunity using a systemic, multi-sectoral lifestyle approach to achieve health and promote healthy diets. It recognizes not only the 1,000 days from pregnancy to a child’s second birthday as an essential window of opportunity, but also the subsequent 7,000-day period as crucial to helping the child reach their development potential. School-based food and nutrition interventions include:
2. Working to increase the production and consumption of safe and nutritious foods

Guided by the African Development Bank’s framework to safe and nutritious food systems, priority attention will focus on integrating nutrition smart interventions into projects in the Bank’s extensive agriculture pipeline. In particular, this will involve leveraging flagship initiatives including Technologies for African Agricultural Transformation (TAAT), the Staple Crop Processing Zones Program, and Integrated Agro-Industrial Parks.

**Technologies for African Agricultural Transformation (TAAT)** projects promote technologies that increase the production of safe and nutritious foods. This includes scaling up biofortified nutritious crops that are context-specific through value chain development, including enhanced fortification and micronutrient supplementation (especially during the 1,000-day window) and diversifying crops alongside the development of commodity value chains.

**The Staple Crop Processing Zones Program** focuses on agro-based spatial development initiatives designed to concentrate agro-processing activities within areas of high agricultural potential to boost productivity and integrate the production, processing and marketing of selected commodities. These zones also promote local and regional trade to increase access to nutritious foods and dietary diversity, promote post-harvest loss prevention practices and food safety measures, and promote nutrition-sensitive agricultural value chain practices.

**Integrated Agro-Industrial Parks** are geographical clusters of independent firms grouped together to gain economies of scale and positive externalities by sharing infrastructure and taking advantage of opportunities for bulk purchasing and selling, training courses and extension services. Additionally, the Agro-Industrial Parks are a part of the global Staple Crop Processing Zone (SCPZ). The purpose of these parks is to attract the private sector to set up food processing plants in areas of high agricultural production and thereby add value to agricultural produce, link farmers to processing plants, reduce post-harvest losses, create wealth for farmers, create jobs and drive rural economic growth.
The AfDB’s Framework to Safe and Nutritious Food Systems

1. **Food production**
   - Biofortified crops
   - Horticulture
   - Livestock, poultry, fishery (including animal byproducts such as eggs and dairy)
   - Pulses and legumes
   - Roots and tubers

2. **Food handling, storage, and processing**
   - Post-harvest management/handling
   - Food fortification
   - Production of nutrient-dense processed foods

3. **Food trade and marketing**
   - Food labeling
   - Regional trade for African consumption

4. **Consumer education, preferences, and demand**
   - Social marketing campaigns
   - Nutrition education and behavior change communication
   - Social protection programs

**Cross-cutting issues**

5. **Women’s empowerment**

6. **Food safety**

7. **Agribusiness environment**

8. **Nutrition in agriculture plans**

Source: Adapted from UN FAO, “Nutrition-sensitive agriculture and food systems in practice.” 2017
3. Encouraging regional member countries to prioritize nutrition smart lending requests and investments

African leaders have elevated nutrition as a driver for economic growth and sustainable development. The African Leaders for Nutrition (ALN), an initiative of the African Development Bank and the African Union, was endorsed by the Assembly of Heads of State and Governments of the African Union (AU) at the 30th Ordinary AU Summit, held in Addis Ababa, Ethiopia on 31 January 2018. The initiative aims to catalyze and sustain high-level political leadership and commitment to end malnutrition in Africa. With a particular focus on the first 1,000 days of a child’s life, the initiative aims to influence and generate nutrition smart investments that will build a foundation for productive human capital in Africa.

Overall, the goal of the ALN Initiative is to spark and drive progress to deliver on existing continental and global nutrition targets. This will be achieved through strengthening political engagement, building partnerships and widening evidence through nutrition advocacy tools that encourage accountability and accelerate action. The nutrition smart investments advocated by the initiative deliver greater social and economic returns alongside achieving nutrition impact, representing a double win.

ALN has a two-part approach:

1. **Broadening evidence and encouraging accountability**, through the development of an Economic Investment Case for Nutrition & Case Studies, and deployment of a continental Nutrition Accountability Scorecard as an advocacy tool that tracks the current state and progress of nutrition in Africa against the background of continental and globally agreed nutrition targets and commitments.

2. **Strengthening political engagement and building partnerships**, through enlisting a platform of heads of state, ministers, and eminent leaders as champions to spur and build a high-level political movement and leadership for nutrition while drawing on their unique experiences, competencies and capabilities to spark dialogues that highlight nutrition in Africa, to the world.
Implementation arrangements

Partnerships
The Multi-Sectoral Nutrition Action Plan recognizes that the Bank cannot achieve maximum impact by acting alone. Opportunities for partnerships have been identified with existing and new stakeholders including Regional Economic Communities (RECs) and other regional institutions, donors and the private sector. The Bank will engage with stakeholders across the continental, regional and country levels based on a partnership framework outlined on the following page.

Communications
The Bank will develop an effective communications strategy to support the implementation of the Multi-Sectoral Nutrition Action Plan. The communications strategy will target the key stakeholders within and outside the Bank, and will ensure that the vision, objectives and activities of the action plan are widely disseminated. Effective communication channels for routine internal and external reporting on implementation progress and results at headquarter, regional and country level will also be developed.

Regional dissemination events of the Multi-Sectoral Nutrition Action Plan will be organized by the Bank, targeting Bank staff, government counterparts and other stakeholders in the five regions, and with appropriate coverage from all available forms of media. The action plan will also be available on the external AfDB website and Banking on Nutrition partners’ websites.

Capacity building
Capacity building will be a key requirement for effective implementation. To ensure an integrated approach and institutional ownership, the Bank will embed capacity building activities into the relevant Bank processes. This will include raising awareness of the importance of nutrition and ensuring that it is adequately included in project pipelines, Country Strategy Papers (CSPs) and Regional Integration Strategy Papers (RISPs). The Banking on Nutrition partnership will support the development and roll-out of accompanying operational tools and guidelines to enhance the capacity building activities for participating departments and field offices.

Learn more
To learn more about the Banking on Nutrition initiative or for guidance on designing nutrition smart programs, please contact:

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# Multi-Sectoral Nutrition Action Plan partnerships at the global, continental, regional and country levels

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- **Multilaterals**
- **Bilaterals**
- **Foundations**
- **Civil Society**

- **Regional**
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- **Country**
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**AfDB’s engagement across different levels**
About this publication
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The AfDB Group is a multilateral development bank whose shareholders include 54 African countries and 26 non-African countries. The AfDB Group’s primary objective is to contribute to the sustainable economic development and social progress of its regional members, individually and jointly. It does this by financing a broad range of development projects and programmes through public sector loans, including policy-based loans, and through private sector loans and equity investments; by providing technical assistance for institutional support projects and programmes; by making public and private capital investments; by assisting countries with development policies and plans; and by supplying emergency assistance.