

# Banking on Nutrition:

## Harnessing “Grey Matter Infrastructure” to Unlock the Human and Economic Potential of Africa

### Why is the African Development Bank prioritizing nutrition?

Interventions to reduce malnutrition can be highly cost-effective, can save lives, and can 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 its 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.

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 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.<sup>1</sup> Studies examining the “Cost of Hunger” in eleven regional member countries found that malnutrition costs between 1.9% to 16.5% of GDP.

### The Opportunity

UP TO

**11%**

The potential boost to GDP from successful nutrition

**20%**

The potential increase in future earnings per child by reducing stunting

### The Challenge

UP TO

**16.5%**

The amount of GDP currently lost due to malnutrition

**58.7M**

The total number of stunted children in Sub-Saharan Africa

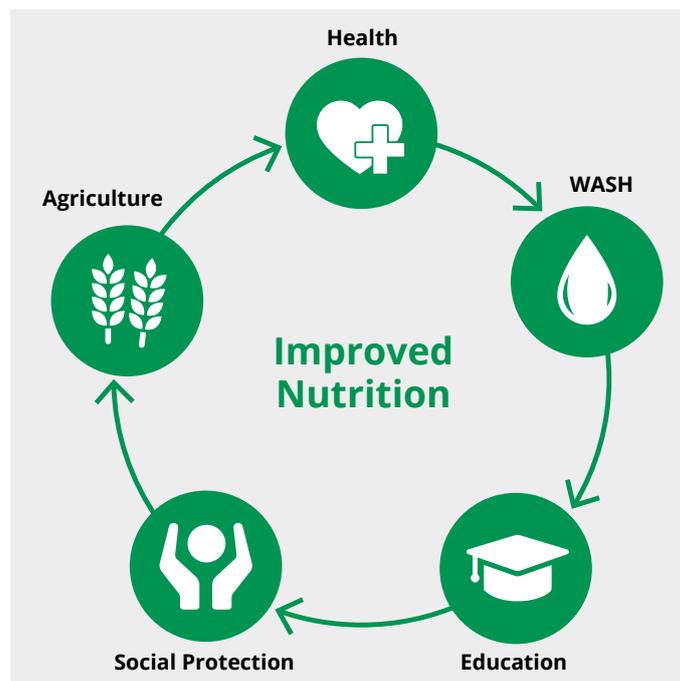
### Cross-Sector Approach

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.

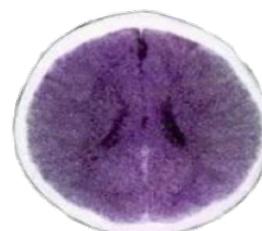
This enables each sector to deliver a much greater social and economic return on investment, at only marginal extra cost.



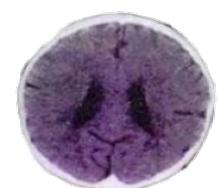
### A critical window of opportunity

Children who lack key nutrients in 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.

### 1000 Days Brain scan - two 3 year old children



Normal



Malnourished

<sup>1</sup>UNICEF, WHO and World Bank, 2018

## AfDB's Approach

Banking on Nutrition is a program helping to generate long-term economic growth across Africa by unlocking the nutrition potential of the African Development Bank's investment portfolio.

It involves redesigning the Bank's investments in areas such as agriculture, water, sanitation, hygiene, social protection, health and education to become "nutrition smart" and deliver a greater social and economic return alongside achieving nutrition impact, thus representing a double win for AfDB and its member countries.

The program was launched in May 2016 by AfDB President Akinwumi Adesina in partnership with Big Win Philanthropy and Aliko Dangote Foundation. It has a three-part approach:

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

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**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.

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**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.

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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.

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## The Ambition

The proportion of nutrition smart investments by sector:



Health



Agriculture



WASH



Social Protection

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 member 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.

### 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.

## WASH



Often, the same communities affected by undernutrition also have limited access to safe water and sanitation services, which facilitates ingestion of faecal-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 faeces, 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, mosquitos, 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.

## 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:

### 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.

### INCREASING/STABILIZING HOUSEHOLD INCOME

Providing social assistance through conditional cash transfers, insurance, input subsidies and public work programs.

## Education



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:

### 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.

### 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.

### 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.

## Call to Action: Partner with the African Development Bank

The African Development Bank is looking for new avenues of collaboration to expand the reach of Banking on Nutrition and achieve maximum impact. Examples of AfDB's nutrition smart investments include:

- The \$20.8 million **Infrastructure Rehabilitation for Food Security Project (PRIASA II) in Sao Tome and Principe**, which has a double bottom line of supporting economic development through better access to agricultural markets and improving nutrition.
- The **Programme to Build Resilience to Food and Nutrition Security in the Sahel (P2RS)**, a \$36 million multinational program in 7 countries, with nutrition-related activities including: mother-to-mother support groups for the promotion of adequate infant and young child feeding practices; creation of home gardens for the most vulnerable households; and provision of equipment for the production of local infant nutritious foods.
- The \$38.5 million **Gambia Climate Smart Rural WASH Development Project**, which is designed to improve the socio-economic and environmental conditions of the rural and peri-urban population through improved access to sustainable WASH infrastructure and services.

## 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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