Introduction

Africa has the potential to become a powerhouse of productivity in the 21st century but without addressing the continent’s high rates of stunting, Africa will not be able to sustain rates of economic growth and integrate its unprecedented youth population. To realize its human and economic potential, Africa must invest in nutrition—particularly during the 1,000-day window of opportunity between conception and the age of two years—as a crucial foundation for productivity later in life. Such investments offer among the highest returns on investment in the development field by harnessing the population’s brain power, or “grey matter infrastructure” through human capital investment.

Stunting undermines economic productivity, in turn limiting the development of low- and middle-income countries. Stunting is caused by multiple factors, such as not having enough vitamins, proteins and fats in the diet, which is compounded by poor hygiene and sanitation causing diseases that cause the body to lose nutrients. While nutrition specific services run by the health sector (such as providing 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 and hygiene (WASH); social protection; and education to become nutrition smart- redesigning their projects for maximum nutritional impact. Interventions to reduce stunting can be highly cost-effective, save lives, and boost per-capita gross domestic product (GDP) by up to 11%.

Through its 2018-2025 Multi-sectoral Nutrition Action Plan, the African Development Bank (AfDB) 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—Agriculture, Education, Health, Social Protection and WASH. 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 and support a 40% stunting reduction in Africa by 2025.

Context

Nutrition smart investments can be catalytic for realizing the Bank’s equitable growth agenda. The AfDB’s 10-year strategy places the Bank at the centre of Africa’s transformation by ensuring that growth is shared by all African citizens and countries, and that it is economically empowering and environmentally sustainable. Both objectives of the 10-year strategy provide opportunities for making nutrition smart investments:

- **Inclusive growth**: equitable growth means more quality job opportunities and higher incomes for vulnerable groups, which are often over-burdened with undernutrition, and especially for women, who play a pivotal role in household and child health outcomes. The increased industrialization and trade also sought by this objective can increase access to safe, diversified and nutritious foods.
- **Green growth**: sustainability is at the heart of a food- and nutrition-secure continent. A transition to green growth will protect livelihoods, improve water and energy security, provide sustainable infrastructure, promote the sustainable use of natural resources, and spur innovation, job creation and economic development.

“The greatest contributor to economic growth is not physical infrastructure, but brainpower: what I refer to as “grey matter infrastructure.”” - Dr. Akinwumi A. Adesina
Nutrition is at the Heart of the Ten-year Strategy and High 5’s

Nutrition is inextricably linked to the Bank’s High 5 priorities and nutrition smart investments in each of the five priorities can contribute to better nutrition outcomes and results for each High 5. Figure 1 below provides the nutrition-related context and outlines examples of nutrition interventions in each of the Bank’s High 5 priorities.

### Table 1: African Development Bank High 5 Priorities

<table>
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<tr>
<th>Priority</th>
<th>Description</th>
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| **Feed Africa** | Although stunting rates are falling across Africa, the actual number of stunted children is increasing, and 260 million Africans 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 farming or agri-business level objective of increasing productivity, income and profits. Priority sets of nutrition smart investments providing the vitamins, proteins and fats required in diets and targeting the poorest households include:  
• Biofortification  
• Diversified production of nutrient-dense crops  
• Rearing of livestock and fisheries |
| **Improve 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 caregivers, and experiencing or witnessing violence. AfDB’s investments in health, WASH, education and social protection are instrumental to improving the quality of life. Priority sets of nutrition smart investments include:  
• Strengthening health system platforms to deliver nutrition interventions, which will maximize synergies to achieve common goals of reduced morbidity and mortality, and improved nutritional status  
• Improving access to clean water, hygienic sanitation facilities, and behaviour change programming addressing inappropriate feeding and care practices  
• Increased quality employment opportunities and incomes for youth and women  
• Increased knowledge about nutrition and behaviour change programming addressing the key behavioural determinants for the target population |
| **Industrialize Africa** | Africa has an enormous potential to enhance agricultural production, especially because it 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. Priority sets of nutrition smart investments include:  
• Mobilizing additional resources and leveraging Bank investments in agropoles, agro-processing zones and integrated agro-industrial parks  
• Scaling up processing and availability of safe, diverse and nutritious foods thereby promoting employment, reducing food costs and supply uncertainties, and improving the diet of Africans |
| **Integrate Africa** | The AfDB is leveraging its regional focus to provide opportunities to address challenges that affect nutrition such as barriers and incentives for production, regulation and trade of safe and nutritious foods. Priority sets of nutrition smart interventions include:  
• Harmonization of quality assurance standards for food processing and fortification  
• Standardization of food labelling and advertisement regulations  
• Elimination of trade tariffs across regional member countries  
These efforts could contribute to the growth of micro, small and medium size enterprises in the agriculture and agro-industry sector that deliver nutrition impact and greater social and economic returns on investment. |
| **Light Up & Power Africa** | 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. Priority set of nutrition smart interventions include:  
• Climate-smart investments in advancing universal access to affordable, safe and sustainable sources of clean energy including clean cookstoves and other productive technologies to dramatically reduce fuel consumption and exposure to harmful cookstove smoke  
This approach can result in a double win of achieving green growth and improving health and nutrition outcomes. |
Building upon a review of its sectoral portfolios, the AfDB has defined the proportion of nutrition smart investments by sector. Some of the Bank's projects already designed with nutrition smart features are presented in Table 2 below.

**Table 2: AfDB nutrition smart investments**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Target</th>
<th>Example of projects with nutrition smart features</th>
</tr>
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<tbody>
<tr>
<td>Agriculture</td>
<td>50%</td>
<td><strong>Pôle Agro-Industriel dans la Région du Bélier (Côte d'Ivoire)</strong>&lt;br&gt;Aims to contribute to food security and nutrition. Actions to enhance value chain are accompanied by training and equipping health workers to screen and treat malnutrition, as well as mass media nutrition campaigns. Stakeholder mapping identified a nutrition coordination group.</td>
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<tr>
<td>Health</td>
<td>50%</td>
<td><strong>Improving Health Access and Systems Strengthening (Sudan)</strong>&lt;br&gt;Nutrition actions include:&lt;br&gt;1. Integration of nutrition training for healthcare staff and community workers as part of health system programmes&lt;br&gt;2. Targeted distribution of supplements and fortified foods&lt;br&gt;3. Integration of nutrition sensitization campaigns as part of health awareness campaigns</td>
</tr>
<tr>
<td>Social Protection</td>
<td>10%</td>
<td><strong>Support Programme for Reconstruction of Grassroots Communities (Central African Republic)</strong>&lt;br&gt;Nutrition is one of the three outcomes and is measured by food availability and food security. Nutrition smart actions include:&lt;br&gt;1. Support to farming, animal husbandry and fish farming&lt;br&gt;2. Processing and storage technology&lt;br&gt;3. Nutrition surveillance/monitoring mechanisms</td>
</tr>
<tr>
<td>WASH</td>
<td>15%</td>
<td><strong>Climate-Smart Rural Water Supply and Sanitation Dev. (Gambia)</strong>&lt;br&gt;Nutrition actions include:&lt;br&gt;1. Integration of nutrition into broader primary school programmes including teacher training, school feeding and provision of improved WASH facilities&lt;br&gt;2. Reduction of women's workload through the deployment of appropriate technology and infrastructure, as well as skills development</td>
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Planning and Designing Nutrition Smart Investments

Figure 1 below outlines a planning model for designing nutrition smart investments.

Figure 1: Planning and designing nutrition smart projects

African countries are losing 11% of their annual GDP to costs related to malnutrition. This loss is not spread evenly among households and nutrition data should inform CSP objectives of reducing inequality and inequitable access to basic services, which are underlying drivers of malnutrition. Nutrition should be integrated into Country Strategy Papers (CSPs) and Regional Integration Strategic Papers (RISPs) under the following conditions:

- When national, regional or sectoral strategies prioritise nutrition
- When national stakeholders prioritise nutrition
- If the CSP provides entry points for integrating nutrition
- If malnutrition is identified as a barrier to development
- If the pipeline includes one or more projects in the five priority sectors relevant to nutrition

For more information, please refer to the Integrating Nutrition into AfDB Country Strategy Papers (CSPs) and Integrating Nutrition into AfDB Project Cycle briefs available at nutrition@afdb.org.
Figure 2 below is a conceptual framework that outlines how the five priority sectors—Agriculture, Education, Health, Social Protection and WASH—contribute to improved nutrition outcomes.

**Figure 2: Conceptual framework outlining the contribution of the five priority sectors to improved nutrition outcomes**

- **Long Term Impact**
  - **Good nutritional status**
  - **Adequate dietary intake**
  - **Good health status (reduced infection/disease)**

- **Intermediate Outcomes**
  - **Agriculture**
  - **Social Protection**
  - **WASH**
  - **Health**
  - **Education**

- **Immediate Outcomes**
  - Household access to safe and diverse FOOD
  - Adequate maternal & child CARE practices
  - Access to safe water, sanitation & adequate HEALTH services

- **Sector Investments**

- **Potential Resources**
  - Quantity, quality, and control of RESOURCES – environment, technology, economic, human, physical, social capital, etc.

**Keys:**
- = Potential resources & enabling environment
- = AfDB nutrition related priority sectors
- = Food & nutrition related outcomes
- = Health related outcomes
- = Caregiving & practices related outcomes
- = Nutritional status impact
Examples of Interventions in Each Sector

**Agriculture**
- Large-scale food fortification
- Diversifying production into fruits, vegetables, fish, meat, eggs, dairy
- Substituting micronutrient-poor staple food crops with biofortified nutrient-rich crops
- Scaling up home gardens, with behaviour change communication
- Agro-processing zone projects to improve processing, storage and distribution
- Raising consumer awareness, with a focus on infant and young child feeding practices

**WASH**
- Access to safe and reliable water
- Access to hygienic sanitation facilities
- Improving environmental hygiene practices such as keeping animals away from food preparation areas and children’s play environments
- Education on hand washing with soap

**Health**
- Promotion of breastfeeding and complementary feeding practices
- Integrating nutrition counselling in routine health services
- Integrating nutritional assessments in public health programmes
- Community-based approaches, with a focus on infant and young child feeding practices
- Delivery of micronutrient supplements

**Social Protection**
- Designing food transfers, micronutrient supplements and nutrition education classes into social protection programmes
- Improving health and care practices through health and hygiene education, sanitation services, skills training and asset transfers
- Social assistance: conditional cash transfers, insurance, input subsidies and public work programmes

**Education**
- Support centres of excellence for food and nutrition learning
- Support infrastructure and training: construction, upgrade and rehabilitation of higher education institutions
- Support the incorporation of food and nutrition as a university programme at different levels (i.e. undergraduate, masters, PhD)
- Scholarship opportunities for the nutritionally vulnerable population
- Strengthen links to employment for graduates with nutrition-related expertise
- School-based food and nutrition interventions
AfDB Multi-sectoral Nutrition Investments

Figure 3: Framework for AfDB multi-sectoral nutrition investments

Level 1: Global Development Progress
- Feed Africa
- Improve Quality of Life for the People of Africa
- Cross-Cutting 10 Year Strategy

How the Bank is contributing to stunting reduction in Africa

Level 2: AfDB Targets
- Promote nutrition smart agricultural production and consumption
- Promote nutrition specific interventions in the health sector
- Promote nutrition smart social protection (including health & education)
- Promote nutrition smart WASH

Level 3: Operational Performance Priorities
- Workplace nutrition education & programmes
- Nutrition integration in Bank projects
- Nutrition capacity development
- Knowledge management/Data analysis:
  - HMIS for nutrition
  - Indicators for nutrition
  - Reporting for results against targets

Level 4: Internal Organisational Efficiency
- Institutional Structures
  - Task force for Nutrition (TFN)
  - Nutrition Team/Nutrition Focal Persons
  - Regional Development, Integration and Business Delivery Hubs
- Resource Mobilisation
- Business Processes / Compliance Mechanisms
  - Readiness Reviews
  - Toolkits and guidelines
  - Accountability for results
- Staffing / Human Resources
  - Nutrition Team
  - Nutrition Focal Persons

Core Sector Indicators
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