Why is Higher Education Important for Nutrition?

Article 26 of the Universal Declaration on Human Rights, adopted in 1948, proclaims, “everyone has the right to education.” Since then, the right to education has been widely recognised and developed by a number of international normative instruments elaborated by the United Nations. The right to education has since been reaffirmed in other treaties covering specific groups (e.g., women and girls, persons with disabilities, migrants, refugees, indigenous peoples, etc.) and contexts (e.g., education during armed conflicts).

Both individuals and society benefit from the right to education. It is fundamental for human, social and economic development and it is a key element to achieving lasting peace and sustainable development. It is a powerful tool in developing the full potential of everyone and ensuring human dignity, and in promoting individual and collective well-being. In brief, education is an empowerment right; it lifts marginalized groups out of poverty; it is an indispensable means of realizing other rights; and it contributes to the full development of the human potential.

There are three primary areas that highlight the crucial role higher education plays in increasing Africa’s competitiveness, addressing malnutrition and achieving sustainable development:

1. Development of knowledge and skills in science, technology, innovation and research, especially in areas of public health nutrition, agriculture and water resource management.
2. Curriculum development, training and increasing number of teachers for primary and secondary education, as well as for the vocational schools.
3. Increasing number of leaders of the country and society who direct and manage political parties, governmental bureaucracies, economic institutes and private industries, and create employment opportunities for nutrition experts to guide nutrition interventions—all important stakeholders of sustainable development.

Impact Pathways from Higher Education to Nutrition

The AfDB Higher Education, Science and Technology (HEST) strategy was designed to assist regional member countries in three major areas:

1. Strengthening national and regional centres of excellence in the following selected priority areas: agriculture and livestock, health sciences and health delivery support services, engineering, business enterprises, energy, and training of teachers and educational managers.
2. Building and/or rehabilitating the existing science and technology infrastructure, including tertiary education institutions.
3. Strengthening links with the labour market so trained students can use their knowledge and skills productively. The HEST strategy recognizes the need for a multi-sectoral approach to effectively link graduates (in this case, food and nutrition graduates) to employment opportunities, which will lead to income opportunities as well as foster a holistic approach of tackling malnutrition by ensuring specialists are deployed to different sectors. These are areas of opportunity for AfDB nutrition smart investments in the five priority sectors to influence good nutritional outcomes.
The impact pathways from various higher education interventions to nutrition are illustrated in Figure 1 below:

**Figure 1**
Impact pathways from higher education to nutrition

- **Sector Interventions**
- **Support National and Regional Centres of Excellence**
  - Strengthened capacities of graduates to promote nutrition in their profession / field of expertise
- **Support Infrastructure Development and Training**
- **Strengthen Labour Market Linkages**
  - Increased nutrition-related job opportunities in relevant public and private sectors

- **Immediate Outcomes**
  - Industry
    - Businesses (especially food industry) adopt nutrition smart strategies
  - Agriculture
    - Nutrition smart agricultural strategies implemented by public and private actors
  - Social Protection
    - Services target the most vulnerable population groups and are delivered to maximise their nutrition impact
  - Households
    - Acquire knowledge and skills to adopt healthy nutrition practices
  - Education
    - Teachers at all levels of the educational system are equipped to disseminate up-to-date nutrition information
  - Health
    - Professionals and systems provide good nutrition services and support
  - WASH
    - WASH programmes are implemented with a nutrition smart approach

- **Intermediate Outcomes**
  - Income Growth

- **Long-Term Impact**
  - Adequate Dietary Intake
    - Good Nutritional Status
      - Good Health Status (reduced infection / disease)

**Source:** Created for ADB Nutrition Smart Higher education Projects (Nutrition International, 2019)
(Adapted from the UNICEF Conceptual Framework of Child Malnutrition, 1997)
A: Support National and Regional Centres of Excellence
The AfDB aims to reinforce networks of higher education, science and technology institutions by harmonizing and linking training programmes in different African countries so national institutions can benefit from the staff and curriculum of excellent tertiary education institutions and vocational training centres. This provides an opportunity for the Bank to strengthen networks of institutions that have remarkable records of training on human nutrition and dietetics, food science and technology, and home economics among other nutrition-related courses.

B: Support Infrastructural Development and Training
The Bank supports the construction, upgrade and rehabilitation of selected higher education institutions—in particular, research schools and centres—and provides resources for laboratories. This is also crucial for increasing food and nutrition expertise in Africa. It is important to advocate for support of the incorporation of food and nutrition as a university programme at different levels (i.e. undergraduate, masters, PhD) in more African universities, and to support employment of the required nutrition expertise to meet this need. Scholarship opportunities can be another avenue to support student enrolment in food and nutrition programmes. Furthermore, food and nutrition research work needs strengthening by establishing well-equipped research centres and increased publication and dissemination of research information to inform decision-making. This is a critical link that must be strengthened.

C: Strengthen Labour Market Linkages
Africa is estimated to have had 226 million youth in 2015, a figure projected to increase by 42% to 321 million by 2030. In 2016, youth unemployment in North Africa was more than three times higher than adult unemployment. The lack of job growth has slowed poverty reduction efforts. Slow job growth has primarily affected women and youth (between the ages of 15-24). In this regard, the Bank is committed to strengthening the links of the graduates to the labour market.

One of the key entry points is working with the private sector to spur economic and social growth. This will include creating opportunities in sectors that can contribute to significant reduction in stunting in Africa, including agriculture (i.e. the entire nutrition smart agricultural value chain), industrialisation and manufacturing, social protection, health, etc. Strengthening links to employment for graduates with nutrition-related expertise in these sectors will go a long way in improving nutrition outcomes as well as tackling malnutrition from multiple directions. Furthermore, there is need to promote and support measures to increase women’s participation in science and technology-related training and research activities in all institutions, as well as to facilitate improved linkages of young women to employment opportunities.

Infrastructure and energy are required for education to take place in most instances. Governments must commit more resources to the construction of learning facilities; not just classrooms, but other components like sanitation facilities, research centres, libraries, play areas, and feeding facilities among others. There is a clear need for clean energy for lighting, cooking, learning processes in schools and other learning institutions.

Priority Actions for Nutrition Smart Higher Education Programmes

Higher education programmes and investments can strengthen impact on nutrition if they:

1. **Incorporate explicit nutrition objectives and indicators** into the programme design.
2. **Empower women** by promoting and supporting measures to increase women’s participation in science and technology-related training and research activities. This can also include provision of scholarships for food and nutrition training.
3. **Incorporate nutrition training in the curriculum** of other relevant university courses in agriculture, health and development, among others.
4. **Involve private sector partners in the nutrition field** to support higher education capacity development and provide job opportunities for nutrition graduates.
Case Study of AfDB’s Nutrition Smart Higher Education Project

Burundi, 2019: Project to Support the East African Nutritional Sciences Institute – EANSI “PA-EANSI”

In Burundi, the rate of chronic malnutrition is one of the highest in Africa and the world, reaching 56% in 2016-2017. Generally, the chronic malnutrition rate of 35.6% in the region of East Africa remains high by WHO standards (the highest regional rate in Africa). On the other hand, Burundi has 5.1% prevalence of acute malnutrition, while anaemia affects 61% of children and 35% of women. Ironically, the country faces shortage of qualified human resource specialists to address nutrition issues in the health and food security sectors and technical experts to help improve the quality of agri-food products. This situation is compounded by limited opportunities for continuing professional development programs for staff of the two main ministries concerned with nutrition namely the Ministry of Health and the Ministry of Agriculture.

In 2014, the East African Community (EAC) decided to set up centres of excellence in biomedical sciences with a recommendation for Burundi to focus on nutrition. A national Nutrition Centre was established in 2016 in response to the double burden of malnutrition in the region with acute malnutrition at 6% (moderately high by WHO standards) and the rate of overweight among children at 4.4%. A sub-regional centre of excellence in nutritional sciences known as the East African Nutritional Sciences Institute (EANSI) was also established and ratified by a decree issued on February 28, 2018. The national centre aligned with regional vision catalysed the inclusion of nutrition indicators in the country’s development policy papers, such as Burundi Vision 2025, the National Burundi Development Plan (2018-2027), the Strategic Nutrition Plan (2019-2023) and the Multi-sectoral Strategic Plan for Food Security and Nutrition (PSMSAN).

The high rates of malnutrition in East Africa raises an urgent need for human resources qualified in nutrition to support effective translations of these policies into concrete results. The project will enhance nutrition security, contribute to the development of human capital and economic growth in Burundi in particular, and in the East African Community region in general, by improving access to high-level training and quality research in nutritional sciences.

**Project:** Burundi, 2019: Project to Support the East African Nutritional Sciences Institute – EANSI “PA-EANSI”

**Objective:** Enhance nutrition security and economic growth in the East African Community region through improved access to high-quality training and research in the nutrition sciences.

**Nutrition Smart Features**

**Targeting:** Burundi’s population estimated at 11 million, of which 50.22% are women and about 29% are children under five, who are the most vulnerable groups.

**Interventions:**
- Development of pedagogic models for five training courses: clinical nutrition, nutrition and public health, agri-food technology, food quality, and food security and climate change
- Support to nutrition research

**Socioeconomic returns**
- Increased economic growth and nutrition security
- Increased national and institutional pedagogic capacity
- Infrastructure development

**Nutrition impact**
- Reduced chronic malnutrition rate among children under five
- Increase population access to quality nutrition services
- Increased # or % health facility staff trained in nutrition

**DOUBLE WIN**
Monitoring and Evaluation Indicators

Examples of Core Sector Indicators:

- Access to higher education:
  - Percentage (%) of population with increased and equitable access to higher education food and nutrition courses, programmes and curricula with improved nutrition content

Examples of Custom Project Outcome and Output Indicators:

- Enrolment:
  - Percentage (%) increase in enrolment of males and females into higher education institutions for nutrition-related courses and programmes

- Access:
  - Percentage (%) increase in access to student loans and scholarships for nutrition-related programmes

- Nutrition integration in courses:
  - Number (#) of higher education courses (i.e. non-nutrition) integrating nutrition into the curriculum

- Nutrition integration in programmes:
  - Number (#) of higher education programmes (i.e. non-nutrition) integrating nutrition into the curriculum
  - Number (#) of institutions with “Nutrition” as a degree option, such as clinical nutrition or community nutrition

- Employment:
  - Rate of employment of higher education graduates in nutrition-related specialties

- Private sector support:
  - Number (#) of private sector organizations supporting nutrition-related higher education courses and programmes

- Private sector employment:
  - Number (#) of private sector organizations providing employment opportunities for graduates in nutrition-related fields of study

Note: For more details, please refer to the AfDB Nutrition Learning Resources available at nutrition@afdb.org.

Collaborating Partners

Collaborating partners will be country and context specific but will always include the Ministry of Education. They may also include:

- Ministries of Science, Technology and Innovation
- National higher education regulators
- National research institutions
- Relevant United Nations agencies, especially United Nations Educational, Scientific and Cultural Organization (UNESCO)
- Education-related research centres
- Non-governmental organisations (NGO) working in areas of higher education
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