

The Nutrition Profession in Africa: Meeting the Current and Future Challenges

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Abstract The relevance of nutrition to national development is very strategic; even though many sub-Saharan African countries do not consider nutritional challenges as critical. Poor disposition to nutrition in many African countries are aggravated by the quality of nutrition professionals in the region. There is lack of reliable information regarding the number of people working as nutrition professionals and the quality of the training received. Majority of countries in Africa cannot boast of world-class nutrition training institutes and linkages with standard foreign institutes are few. The dearth of highly qualified nutrition professionals has resulted into poor nutrition programme planning, implementation and evaluation. In some cases, the outcome of many nutrition intervention programmes is at variance with the set goals due to faulty programme planning and design. It is obvious that urgent consideration should be given to capacity building of nutrition professionals in developing countries, especially in those countries where the problem of malnutrition has remained unabated for many years. Developmental assistance from donor countries and other global bodies should have nutrition components. Capacity building in nutrition stands as one of the most cost-effective veritable tools to enhance national progress. However, the UNICEF's Conceptual Framework on the Causes of Malnutrition may need to include lack of capacity building for nutrition professionals as part of the strategies to tackle the underlying causes of malnutrition in developing countries. Availability of competent professionals in the field of nutrition may be the beginning of profitable journey to solving many problems confronting the continent of Africa.

Keywords *Nutritional Challenges, National Development, Nutrition Professionals, Capacity Building and Malnutrition*

1. Introduction

The abstract nature of nutrition as a field of endeavour does much to explain its poor image among other professions. Despite the importance of the profession to all aspects of national development, the nutrition profession has a poor status in many African countries [1]. The multi-disciplinary nature of

nutrition as a profession has made it vulnerable to usurping by professionals in related fields. At first glance, this might appear to be to the advantage of the profession, but the reverse is usually the case. Everybody feels associated with nutrition but few want to give better recognition to the profession and help with its development.

Poor understanding of what nutrition entails has contributed to some of the challenges confronting the profession at the national level. The inability of many national governments to distinguish between agriculture and nutrition is a major challenge. Moreover, many governments cannot distinguish between food and nutrition and, hence, much support is given to agriculture but little or none to nutrition programmes. The notion is that once food is produced, then, people will have enough to eat. However, food production is not synonymous with good nutritional status [2].

The issue of the brain drain is another serious challenge affecting the nutrition profession. Top quality nutrition graduates from Africa typically apply to universities or institutions outside Africa for graduate studies. Many of them do not return to their home countries after the completion of the studies.

Institutional capacity for training people in the field of nutrition in sub-Saharan Africa is very limited. Moreover, the quality of training is often technically deficient. It has been negatively affected by non-uniformity of curricula being used in various schools of nutrition. This has prevented students from acquiring similar basic knowledge in the field. As a result graduates from different nutrition institutions, with the same qualification – at least on paper – may display different levels of understanding of the subject. These differences in the curricula in schools of nutrition make the field of nutrition less professional! Some nutrition schools focus mainly on biomedical aspects of nutrition and do not include the social science components in their curricula. Graduates from such institutions will therefore find it very difficult to adopt social sciences approach to programme planning, implementation and evaluation. The likely aftermath of the deficiencies in training will include poor remuneration for some nutrition professionals who are working as civil servants. Another consequence of poor curriculum development is that nutrition professionals are often poorly qualified for leadership positions where they can be involved in policy development. As a result, very few nutritionists from countries like Kenya and Malawi have occupied political positions in African countries where they can be actively involved in policy development. Exposure of nutritional professionals to leadership training will assist in the development of competent nutritionists who will be skilled in policy issues and lobbying techniques to promote nutrition.

Some established institutions in Africa are beginning to see the problems associated with the shortage of nutritionists and are therefore embarking on some programmes that can assist in dealing with the problem. The field of nutrition has sometimes been treated as an “orphan”, without a domicile! For instance, in Nigeria, nutrition has been transferred between different government ministries; it was recently “finally” transferred to the Ministry of National Planning. However, another move is already in the offing to place nutrition directly under the presidency.

2. Continental Experience in Institutional Capacity Building in Nutrition

It is important to mention some experiences in Africa and some other developing countries with regards to institutional capacity building in the field of nutrition. Information obtained from the International Union of Nutritional Sciences (IUNS), United Nations University (UNU), and the African Nutrition Leadership Initiative Report of 1999 provides an in-depth historical perspective on this. For the last few decades several national, regional and international initiatives have drawn attention to the need for institutional capacity building in the area of food and nutrition, with a specific focus on developing countries. Since the establishment of the UNU in 1975, it has given highest priority to capacity building, especially in the south of Sahara [3].

A joint UNU and Administrative Committee on Coordination/Standing Committee on Nutrition (ACC/SCN) working group convened in 1984 to address the strengthening of institutions concerned with food and nutrition [3]. The working group recommended that high priority be given to the development of capacity of institutions that have the potential to become centres of excellence. The issue was further discussed at the IUNS meeting in 1989 held in Seoul, South Korea. The subject of institutional capacity building was the title of a workshop held by the IUNS and UNU in 1996. By 1997, it was reported that over 600 researchers and young scientists, over 40% of the UNU fellowships awarded, had received post-graduate training in the area of food and nutrition [3].

The results of institutional capacity building in Africa are of great concern as generally the impact of these initiatives has not been felt significantly in the continent that still plays host to high proportions of malnourished children and mothers in the world. Despite the reported fact that almost 27% of the UNU nutrition fellowships were awarded to people from Africa, only 1.5% of the fellowships were implemented at UNU-associated institutions in Africa. In 1988, a joint UNU and AAU (African Association of Universities) collaboration was initiated involving seven African countries, which aimed at strengthening national capacity in food and nutrition. However, the initiative was terminated in 1994 because an evaluation indicated limited impact on strengthening capacity for research and advanced training [3].

The Swedish International Development Agency (SIDA) has been involved in the strengthening of a number of food and nutrition institutions in Africa; for example, the Ethiopian Health and Nutrition Institute, the Zambian National Food and Nutrition Commission, the Tanzanian Food and Nutrition Centre, and the National Nutrition Unit of the Zimbabwe Ministry of Health and Child Welfare. The outcome of the experiences of Zimbabwe and Tanzania has been considered generally positive in some aspects of the capacity-building process [3].

There have been some forms of support from foreign institutions, one of which is the Applied Nutrition Programme (ANP) of the University of Nairobi, which was launched in 1985 with the support of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), the German Agency for Technical Cooperation. Nearly 100 students from Eastern, Central, and Southern Africa have gone through the Masters of Science in Applied Nutrition programmes; trained by highly qualified professionals. The ANP serves as a good example of how to build up institutional capacity [3]. It is also important to mention the roles of some Europe and North America-based Universities in ensuring that budding talents in the field of nutrition from Africa are developed to build up the local capacities in the profession. These institutions include Wageningen Agricultural University in Netherlands, Emory in USA and Southampton in the UK among many others. The only challenge with these available opportunities has been that many of the trained African professionals prefer to stay back and pick up employment in the institutions where they were trained or seek for international jobs outside the continent resulting into loss of promising manpower and thereby defeating the main essence of the opportunity for the training, which is to build the local capacity of nutrition professionals! Presently, this problem has been partially controlled through partnership programme with some African Universities; as we currently have in countries including Benin, Ghana, South Africa, Tanzania, Zimbabwe and other notable Nutrition Institutes as in the Ethiopian Health and Nutrition Research Institute. The graduates are being mandated to return to their countries and work. However, the effectiveness of this approach has not been evaluated. Anecdotal information, however, reveals that more efforts on capacity building in nutrition have been directed towards the Eastern and Southern African countries than any other region in the continent.

While the efforts of institutional capacity building in Africa have generally not been evaluated to determine the success rate; similar initiatives in Latin America and Asia have been relatively successful. In these regions a number of key regional and national food and nutrition oriented institutions have been established in Central America and Panama, and Thailand. Available

opportunities for capacity building of African nutritionists in these institutions have not been explored. A number of lessons can be distilled from the experience of building or strengthening institutions from the developed world. The fundamental lesson learned has been that political will must exist. Government support is indispensable for any capacity building to be successful. Other essential ingredients include:

- a) Development of a core group of professionals who are well trained, has multiple skills, and are highly motivated.
- b) Availability of critical mass of well-trained people, with a strong and visionary leader, and long-term budgeting commitment from both the member countries and external financial contributors.

There is much variation in successive institution capacity building initiatives. However, it appears that in Africa success is more likely when the initiative is implemented at academic institutions than at government institutions [3].

3. Current Situation of Capacity Building in Nutrition in Africa

There are very few bodies in Africa that are actively involved in building the capacity of young people and developing their leadership potentials. Of notes are the African Nutrition Leadership Forum, which is based in South Africa and Federation of African Nutrition Societies (FANUS) also plays vital leadership roles in promotion and capacity building in nutrition in Africa. These bodies have the capacity to train young leaders and exposure them to the field in order to be able to take well-informed steps in the development of policy. More national and international bodies with nutrition orientation and agenda need to be co-opted and sensitized to provide more support that will improve the training of nutrition professionals. Apart from the ANLP, others may need to do more in terms of playing a leadership role in the promotion and development of nutrition in Africa.

Other regional bodies are presently preoccupied with mainstreaming nutrition in the national development agenda. These include the Africa Nutritional Epidemiology Conference (ANEC), Information Technology in the Advancement of Nutrition in Africa (ITANA), Food Science Network for Africa (FOSNA), West Africa Health Organization (WAHO) and the Economic Commission of West African States (ECOWAS) Nutrition Forum. These bodies may need to look at providing assistance to both young and middle age graduates in acquiring training in certain vital areas, namely nutrition advocacy, communication skills, and governance. However, there has been some insinuations that middle age or older graduates are always more eager to return to their countries after the training than the younger graduates who may decide not to return after the training. This may be attributed to the fact that many of them have not established family ties who may serve as a pulling factor to return to their countries after the training.

3.1. The Need for Capacity Building in the Nutrition Profession in Africa

Nutritional problems around the world are rapidly evolving alongside changes in global socio-economic conditions and the interconnected nature of national economies, demographic transitions, and continued population growth. These rapid changes pose many challenges to human health. This creates much need for involvement by nutrition professionals. These professionals must be well-equipped to meet the needs of the fast-changing world. In the face of this development, investment in human and institutional capacity in the field of nutrition should be a priority [4]. Unfortunately, such investment has been inadequate and uneven in many regions.

There are critically important issues to consider in capacity building of nutrition professionals. The first is to ensure that the training is organized so that it makes a tangible difference in solving nutrition

problems. In addition, there is a need to build or strengthen institutions and in particular, it is vital that institutions are sustainable. A variety of approaches have may be suggested for advanced training leading to degree programmes in nutrition. For a successful outcome of institutional capacity building, good programme planning should be supported by setting clear and achievable goals.

In line with the above, research is the cornerstone of scientific and scholarly work and should be vigorously pursued as a component of capacity building. It is an essential component of any strategy that aims to improve the nutrition situation in Africa. However, the capacity of research institutions is generally quite weak across Africa [4]. One of the reasons for this is because many young nutritionists find it extremely difficult to publish their research findings in well-respected journals. Other barriers are limited access to scientific journals and the cost of internet services and payment for the publication of the accepted manuscript in a reputable journal.

One of the effective ways to build capacity is to develop partnerships with institutions in developed countries. Unfortunately, relatively few nutrition institutions in Africa have been successful along this line. Even where this has been accomplished, there is still a negative side to this as some of the trainees may be granted employment by the host country and this obviously does little to help with capacity building in Africa.

South Africa is the major exception to many of the above problems. That country has numerous high-quality universities and many highly respected nutrition professionals. It also has a highly commendable level of interaction between its universities and other institutions and partners in highly developed countries.

4. Strategies to Address Current and Future Challenges in the Field Of Nutrition

Meeting the challenges faced by the nutrition profession in Africa will require a great deal of work and this may include:

- Young institutions of learning need to collaborate with the older and more developed ones; and
- Regional bodies can enter into partnerships with established international bodies.

In addition, there is a great need for self-development efforts by people as individuals.

The following should be viewed as the key strategies in building the field of nutrition:

- Harmonization of the basic nutrition curricula in schools and colleges that run nutrition programmes.
- Setting up of a minimum standard to qualify as a nutritionist.
- Developing a strong advocacy for nutrition through lobbying the political stakeholders.
- Defining the main roles for nutritionists within the context of the national civil service.

It should be noted that in facing current and future challenges, there is a need for adequate training in the following key areas: nutrition advocacy, development of communication skills, nutrition programme planning, implementation, and monitoring and evaluation.

In order to advance this agenda and advocate for nutrition promotion there is a need for a systematic approach to policy development and capacity building. This can be achieved through formal and informal meetings between concerned professionals and other stakeholders.

Nutrition challenges vary from country to country in Africa. Therefore, any approach to institutional building must be based on reliable information. This requires a situation analysis that provides information on institutional capacities and identifies areas that require strengthening, and determines the level of knowledge and skills, financial support, and physical assets.

5. Upgrading of Nutrition Education

The introduction of a uniform curriculum for nutrition programmes in schools will set the pace for uniform examinations for graduating students. This may ultimately usher in registration of successful students with the national nutrition board (or an agency mandated to register professionals in various countries).

The suggested uniform curriculum should include the courses listed below in addition to those that are specific to various institutions:

- Classes of foods, characteristics of foods
- Food science and technology
- Food safety and environmental health
- Ecology of food and nutrition
- Feeding practices of different age groups (lifecycle nutrition)
- Food and agricultural systems
- Ecology of health and disease
- Nutritional physiology and biochemistry
- Nutritional behaviour and social science aspects
- Nutrition-related disorders
- Nutritional assessment
- Nutrition and reproductive health
- Nutritional epidemiology – population level description of distribution of nutrition problems
- Clinical nutrition
- Introduction to Basic Economics Principles – micro and macro concepts
- Introduction to Political science
- Introduction to Human psychology
- Introduction to Anthropology
- Communication behaviour and Nutrition Education
- Ethical issues in nutrition research
- Nutrigenomics
- Research design/methods/interpretation, including epidemiological methods and nutrition surveys
- Basic statistics
- Health education approaches
- Management – programme planning, monitoring and evaluation
- Leadership attitudes and skills as part of programme management skills
- Communication, negotiation, motivation, collaborative problem solving, concepts, and skills
- Principles of reflective Nutrition/Dietetics practice
- Nutritional Concerns of National Security Agencies
- School Feeding and Nutrition Programmes
- Hospice Nutrition
- Introduction to international food culture
- Planning, Monitoring and Evaluation of Community/National Nutrition Programmes
- International Politics and Human Nutrition

- Nutrition in Emergency and Refugee Camps
- Nutrition and Millennium Development Goals
- Computer education/information technology

6. Building Research Capacity

There is a dire need for increasing research capacity. In this regard, the principal objectives may include:

- Strengthen the ability to respond to national and regional research needs
- Increase the proportion of nutrition research conducted by national or regional institutions, and
- Identify, focus and find solutions to the nutritional problems of most national and regional significance

With adequate planning and mobilization of relevant resources, it is possible to achieve all these set of objectives. Clear understanding and involvement of all the stakeholders in developmental agenda, especially the political bigwig will promote efforts towards capacity building in nutrition research. This should be fostered by investment in establishing standard institutions to promote cutting-edge researches and provide the enabling environment for manpower training for future nutrition programmes in Africa.

However, it is envisaged that if all the institutions presently running nutrition programmes in Africa are to be given the opportunity to present candidates for training opportunities in some of the world class institutions outside Africa; or if some resources are made available for such programmes, it can never be enough. Since resources for training and development of manpower in the field of nutrition are inadequate, the little available should be judiciously utilized. Therefore, it becomes very necessary to develop criteria that can be used for the selection of highly qualified professionals or institutions that will be supported from such limited available resources. These criteria may include good track record of the professionals (usually determined by number of research publications, years of working experience and involvement in collaborative researches, etc.), and/or the institutions concerned (e.g. academic standard of the institutions determined by global rating of the institution), the strength of the local national nutrition bodies (e.g. fully registered and recognized body by the national government, affiliation to regional or continental body and evidence of linkage with international institutions in terms of research or other forms of partnership) and some evidence of national government commitments to nutrition, which can be determined by finding out if nutrition is instituted as a separate body/unit among many agencies of government or if it is not recognized in the national scheme of things. Furthermore, research centres/institutions that will be chosen for capacity building must have a multi-disciplinary orientation, in keeping with the standard of disciplines required to address most nutrition problems, while at the same time each unit in the nutrition department should develop its own area of specialization.

It should be reiterated that the nature of nutrition as a multi-disciplinary field should not be undermined within the context of capacity building in nutrition research. This brings to fore the need for graduate students to be very versatile and exposed to other disciplines that will position them to face any challenge in the course of solving nutrition problems. It is important for graduate students/researchers in the field of nutrition to create a niche of specialties from the beginning of their career so that they have an area of concentration to follow. However, in a developing world like many African countries, evidence-based researches and problem solving studies will be highly favoured as against basic researches, which may not be greatly valued at the present dispensation in many developing nations of Africa. Problem solving researches/studies in nutrition can actually be a good

social marketing strategy to create better support for the development of more interest and manpower in the field of nutrition.

The development of mentoring relationships and faculty exchanges is equally of much value as part of capacity building in nutrition research. Enhancing research capacity through the improvement of highly specific skills may be obtained through good mentoring process.

7. Dietitians and Nutritionists

The main focus of this paper has been on nutrition professionals in the broad meaning of the term. It is however, important to state that the challenges facing Africa with regard to nutrition professionals are more acute with respect to dietitians than for nutritionists in general.

Presently, in many African countries, nutritionists do not necessarily have a formal qualification in nutrition. Membership of national nutrition societies come from a variety of different professionals, including medical doctors, home economists, nurses, biochemists, and physiologists working in specialized areas of nutrition. Dietitians, by contrast, normally have a degree in nutrition and specialized training in an area of nutrition practice, such as clinical nutrition or public health nutrition. It is highly recommended that before anybody can claim to be called a nutritionist in Africa, the individual must have a minimum qualification of a diploma in nutrition. The present situation of nutrition as a profession in Africa may be traced to people who have never received any formal training in nutrition but teach the subject in higher institutions of learning or working in government establishments and non-governmental organizations as nutrition officers. These people may not have all the expertise required to move nutrition beyond the present status. In the contrary, Dietetics which is part of nutrition; appears to be better coordinated in Africa. This is because members have to undergo training with a uniform curriculum and certified by the national body before they are registered and allowed to practice.

It is important to note that Nigeria and South Africa are the only two countries from Africa that are members of the International Confederation of Dietetic Associations (ICDA) (<http://www.internationaldietetics.org>). By contrast, roughly 21 African countries do have an active nutrition society.

In conclusion, it is hereby re-emphasized that the survival of nutrition in Africa is hinged on sound capacity building, which goes beyond the frontiers of national government. It cannot be over-emphasized that nutrition is a vital part of national development agenda. The more equipped the capacity of the professionals in the field, the better it becomes for the national governments; who will benefit immensely from the expertise of these professionals. It is succinctly suggested, however, that the highly referenced UNICEF Conceptual Framework (UNICEF, 1990) [5] for causes of malnutrition may need to include capacity building of nutrition professionals as part of the underlying causes of malnutrition. National and international development programmes without due considerations for nutrition may not achieve their goals as expected and the time to build the capacity of the professionals in this field should not be delayed further.

References

- [1] Martorell K. *The Nature of Child Malnutrition and Its Long-Term Implications*. *Food Nutr Bull*. 1999. 20; 288-92.
- [2] Oyewole O.E., 2007: *Male Involvement in Household Nutrition Security in Oyo State, Nigeria*. PhD Dissertation, University of Ibadan, Nigeria.

- [3] Kuzwayo P., 1999: *UNU/IUNS African Nutrition Leadership Initiative Report*. Consultation Held in Cape Town, Republic of South Africa.
- [4] IUNS, 1999: *UNU/IUNS African Nutrition Leadership Initiative Report*. Consultation Held in Cape Town, Republic of South Africa.
- [5] UNICEF, 1990: *Strategies for Improving the Nutritional Status of Women and Children in Developing Countries*. A UNICEF Policy Review, New York, USA.