Speaker Summary Note

Session: **Africa**

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Title: **Rethinking on How We Do Business: Regional and actors perspectives**

Background

All living organisms require nutrients to survive and this is the whole essence of nutrition. The human body requires about 42 different nutrients and most of them are essential. These must be obtained through agriculture production. Nutrition of people living in Africa depends largely on the nutrients derived from plants and to a limited extent from animal foods. All the foods we eat, either from plant or animal origin are produced using the elements present in the soil and through photosynthesis. Crops extract nutrients/elements from the soil to make the grains, tubers, roots, vegetables and fruits for food. Nutrients contained in the foods depend on the quantity and quality of the elements present in the soil and on the extent to which plants are able to extract or mine these nutrients from the top soil. Therefore, the health of the top soil determines the health of the people. "Quality of life is a health issue; but good health and nutrition is food depended and good quality food depends on soil health and agricultural practices"

Many of the activities performed in the rural and urban communities of developing countries involve human labour, which still provides much of the power needed for economic productivity. Thus, factors, which affect human labour, such as high incidence of Protein Energy Malnutrition (PEM) and micronutrient malnutrition as well as diseases affect productivity and influence economic development. Improved health and nutrition, as related to labour productivity can increase household income, contribute to economic growth, and result in improved livelihoods. Malnutrition is currently recognized as one of the major factors influencing health and labour productivity in many rural communities of developing countries. For many farmers, family labour still represents their main or only asset for agricultural production. This factor has often been neglected in the development planning process and nutrition interventions.

Regional Initiatives

There have been numerous initiatives in Africa including Comprehensive African Agriculture Development Programme (CAADP), Presidential Initiative to End Hidden Hunger in Africa (PIEHA) 2002, Competitive

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Commercial Agriculture in Africa, Rural Structural Programme, Regional Integration, African Capacity Development Operation, and Knowledge Partnership for Africa, Nile Basin Initiative, Africa Pollinator Initiative, Kilimo Kwanza (Agriculture First) and many more. The focus for most of these initiatives has been to increase agricultural productivity through provision of inputs (seeds, fertilizers, and pesticides), financing agriculture and development/improvement of markets. Very few of these initiatives have focused on or included aspects related to improving human labour productivity of which the most important components include health and nutritional status of producers.

Initiatives to leverage agriculture for nutrition have included Biofortification through crop nutrient improvement for example promotion of High Quality Protein Maize (HQPM), Orange fleshed sweet potatoes, high protein rice, high iron and zinc beans and palm oil production, small ruminant and indigenous chicken improvement project. Nevertheless, the approaches used for the promotion of these crops again demonstrate the top down approach to solving food problems. Do we want consumers to depend on sweet potatoes or maize alone for protein and β-carotene? This type of approach defeats the entire purpose of dietary diversification and applying agricultural biodiversity to address malnutrition in Africa. Besides, the information packages for promotion of these crops contain information on different varieties, the recommended appropriate production practices, suitable agro-ecologies and post harvest handling practices but very little information is provided on nutrition or health benefits of the varieties or crops.

Priorities and Levers for Action

Sectoral approach

The sectoral approach to addressing agriculture, health and nutrition issues has led to divisions, fragmentation in service provision and implementation of activities and possession of knowledge. Each of these sectors often times has its own agenda and activities and sometimes the activities may be conflicting. There is a need to rethink on how the sectors can be better organized to better serve the human race at all levels; national, regional and international; and they should be integrated in such a way that we have a better service delivery system at country and community levels. We should always remember that at the community level there are no sectors; there are livelihoods and life. Holistic approach by looking at people's requirements should be the way to go. Nevertheless, the holistic approach to community problems should take into consideration of the potential of the people in communities to improve their own lives. These are important partners in this endeavor.

Agricultural planning "with a nutrition and health lens"

The goal of agriculture should be to grow food for health and nutrition. Planning for food production should be based on the nutrient requirements of the population (nutrient balance sheets). Currently, minimum nutrition consideration is included in planning for agriculture (crop/livestock) production. Efforts to improve agriculture have basically focused on yield or other characteristics such as efficiency of crop production, but very little on nutritional quality of crops. For example, how much of the vitamins are needed? What crops or animals would provide these vitamins, and how should they be produced? So far the practice has been to look at the energy levels only. We need to factor in other nutrients especially micronutrients levels in determining nutrient production levels in a given country (per capita levels of production of micronutrients). Recently specific crops have been bred for nutrition (maize, rice, sweet potatoes); yet, we do not know for example, by tipping the balance of nutrients in a crop, how does it influence nutrient utilisation in the body? Similarly, health planning should indicate the effective demand for nutrients for treatment and prevention of malnutrition.

Indicators for agriculture, nutrition, health

Indicators for measuring the agricultural sector performance should include assessment of health and nutrition attainment. In this regard, nutrition economics will be relevant here. The measure of yield per hectare should be translated in terms of nutrition and health. How much nutrition is or will be derived

from a one hectare yield of a given crop? How much health will be or is attained from a one hectare yield of a given crop? I would like to borrow from Mark Fulford concept of nutritionally and healthy focused agricultural production; "producing for the purpose of health and nutrition," i.e. "High nutrition agriculture" or "high health agriculture"

Training

Compartmentalization of knowledge acquisition: Training of agriculturalist, nutritionist and health personnel has been in compartments with very limited inter linkages. It is high time that training programmes should strive to link up the three sectors, considering that the goal of each of the sectors is to improve human well-being. Training institutions should develop inter/trans/cross/multi-disciplinary training programmes to produce graduates/professionals who can effectively translate the linkages between agriculture, health and nutrition in the field, in their capacity as extension workers or health care providers or nutrition counselors. For graduates/professionals who are already working in the field, they should be given an opportunity to build their capacity through short courses or seminars on agrinutrihealth (agriculture, nutrition and health) in order to provide better and comprehensive services.
Most of the health problems experienced by people in Africa are related to food-body interactions (inadequate food/nutrient intake).We need to get to a point whereby doctors would be able to prescribe food as part of a treatment regime. Currently, food bio-prescription (based on processed foods) is done for people living with HIV and AIDS but not for diseases such as malaria and other infections. When doing dietary surveys we often get answers from respondents that they would only eat fruits if the doctor prescribes. In this regards, health personnel would be very instrumental in linking agriculture to health and it will help to stimulate agriculture production and consequently improve nutritional status of the people. In the future we will need doctors who are equipped with knowledge and skills to provide food prescription. Therefore there is a need to rethink on how medical training is conducted and if necessary to review the training curriculum.

Research

In Africa nutrition, agriculture and health problems are huge and require multiple ways of solving them. Therefore we need holistic and integrated approach to research; interdisciplinary, trans-disciplinary and multidisciplinary research agenda or protocols.

Information and skills

Information on each of the three sectors agriculture, health and nutrition has often been presented separately without making reference to the other sectors. There is limited information linking the three areas. There is a need for more information (education/knowledge) about the linkage between agriculture, health and nutrition; also on improved skills towards sustainable agriculture for improved nutrition and health. What information should we send out to the general public and farmers in particular, on the linkage between the three sectors? How can we make farmers think about health and nutrition when engaging in agriculture production? We also need to provide appropriate and adequate information and communication along the whole spectrum of agricultural value chain for enhanced nutrition and health. Print materials are still very useful in rural areas but with advancement in information and communication technology, other innovative ways like mobile phones can be used to communicate messages to the general public about the role of agriculture in improving nutrition and of improved nutrition and health on agricultural productivity.

Strengthening agriculture, nutrition and health agenda

The three sectors are very important for economic development of Africa and tend to involve a wide spectrum of partners, Public, Private, and Commercial who should be linked and coordinated to enable them to move forward this agenda. Nevertheless, the most crucial partners are the communities, where action ought to take place. Therefore, involvement of communities or villages to ensure greater participation and outcome is crucial. Nevertheless, it should be noted that nutrition, health and agriculture challenges are not the same in all communities. Differences exist both within a single community and from one population group to another. Thus, contextualization of nutrition, agricultural and health issues, as well as identification, prioritization of the issues to meet the specific needs of each location would be necessary and ultimately, mainstreaming of nutrition issues in community or village agriculture and health development plans.