**Interview to Dr Joyce Kanyangwa Luma, World Food Programme**

It is a pleasure to have here Dr Joyce Kanyangwa Luma, who has recently been appointed as the Director of Human Relations and until two months ago was the Director at the Office of the Deputy of the Executive Director in the World Food Programme (WFP). Joyce is a practitioner with more than 20 years' experience in food security and nutrition analysis. She holds a PhD with a major on Food and Nutrition and a minor in Agricultural Economics from the Texas Tech University with a dissertation entitled "Food Consumption, Nutritional Status and Agricultural Productivity of Small Scale Farmers in Eastern Zambia", a MSc in Food and Nutrition from North Carolina Agricultural and Technical State University and B.Sc. in Agricultural Sciences from the University of Zambia in Lusaka.

CRG: Joyce, many thanks for accepting the invitation to be interviewed.

CRG: What decided you to follow the area of nutrition and food security?

**Dr Joyce Luma:** I am delighted to speak to you.
I had never thought I would end up doing nutrition work when I finished high school and was thinking about college. First of all it was not a programme that was being offered at the university of Zambia where I did my undergraduate. When I finished my first degree in agricultural science, I was introduced to a UN Food and Agricultural Organisation (FAO) project that was "integrating nutrition considerations into agriculture" and I was hired to contribute to that work. At that time in Zambia, there were very few nutritionists with graduate qualifications, let alone post graduate credentials and in particular, there were none who had an agricultural background. So, I was offered a scholarship to study human nutrition at Masters Level in the United States. So that was my entry into nutrition…… Until then, I had always thought nutrition was about cooking demonstrations! And not until then, I was intending to study agricultural economics for my masters.

CRG: You have a very interesting background on agricultural science, food, nutrition and economics. Was this choice on purpose? i.e., did you choose them due to their complementarity to understand food security?

**Dr Joyce Luma:** My entry into the nutrition field was very much about linking nutrition with agriculture and so I found it necessary to take courses from both fields. At masters level, I took courses in agricultural economics as my electives and at PhD level, while my major was human nutrition I had agricultural economics as my minor – this meant that I had to take core course and take comprehensive exams in agricultural economics equivalent at masters level. I realised that the combination of courses would enable me, as a researcher at the time, to understand issues related to food security and nutrition in a rural context better. In fact, that combination has been useful to understand broader issues of food security and nutrition in a development context.

CRG: Several international agencies are taking roles on the fight against food insecurity. Let me start asking you what is the specific role of the World Food

Programme? Has is changed over time? Is there any degree of overlapping with other agencies such as FAO?

**Dr Joyce Luma:** WFP role is to end hunger, food insecurity and all forms of malnutrition. The most recent global estimates of the number of hungry and food insecure people stands at 820 million. WFP recognises that no one single organisation can tackle this global challenge alone and therefore coordinates and closely works with other UN agencies as well as civil societies and the private sector to tackle hunger, food insecurity and malnutrition. WFP contributes to the fight against hunger by focusing on providing assistance to the bottom 820 million – the most severely affected – including some populations that may not be able undertake agricultural or livestock production in the aftermath of a crisis for example. FAO and IFAD work with perhaps a tier slightly higher – those groups that are able to participate in agricultural or livestock production.

WFP focus on the most hungry poor has not changed over time. However, WFP has extended its modalities of response to hunger. WFP has expanded the use cash based interventions as opposed to largely in-kind transfers. Furthermore, WFP addresses both immediate needs of the most hungry as well as using food assistance to address the long term needs by solving underlying problems.

WFP assistance is very much about improving people's access to food and getting people off food assistance handouts. WFP therefore works closely with FAO and also IFAD to strengthen the resilience of agricultural and agro-pastoral communities and households. FAO expertise on agriculture and livestock is sought when working on such interventions. We have a strong Rome Based Agencies (FAO, IFAD and WFP) coordination to ensure we are coordinated and to leverage complementarities.

CRG: The definition of food security is contained in its four dimensions: availability, accessibility, utilisations and stability. Do you see all of them as equality important or there is a particularly one, based on your experience, that you would prioritise?

**Dr Joyce Luma:** All four dimensions are important but their importance varies from one context to another. Food must be produced and be physically available first before it can be accessible (the ability to procure or purchase) to populations. The food must be accessible in adequate amounts for a healthy and productive life – at all times, which implies that it has to provide all the necessary macro and micronutrients for different individual's needs.

Stability is the time dimension in the definition of food security – at all times. Food must be physically available, accessible and fully utilised at all time. "People must be certain where their next meal comes from"

Availability, accessibility and stability are necessary conditions for achieving utilisation. While these three are necessary, there are not sufficient conditions for achieving utilisation - and at this point we are looking at nutrition. At the individual level, to achieve utilisation other factors are at play such the health of an individual as well as care. We have not achieved food security even if there is surplus food and yet people are malnourished. Utilisation is the apex or the ultimate and is the outcome of the other three necessary conditions – without which it is not possible to achieve the apex. Therefore, I like working at

the most proximate (utilisation or nutrition) to an individual as it allows to measure the well-being people – with the understanding that all dimensions are needed. At this level, it is also possible to consider issues related to the double burden of malnutrition. The concern at this level is no longer not about only enough but also excess consumption of the macro-nutrients (fat, protein and carbohydrates). This level emphasises the need to addressing the various constraints and challenges within each dimension in order to realise a health and productive life.

CRG: How do you see the nutritional situation of Africa? How homogeneous is it? What measures do you consider key to improve the nutritional status of the population?

**Dr Joyce Luma:** The major concern for Africa is that we have seen a reversal of positive trends to achieving food insecurity. Africa is not necessarily homogenous. A combination of factors contribute to food insecurity in Africa – these include climate related shocks for example as much of Africa primarily depends on rain fed agriculture. Frequency of climatic shocks increase and the variation in climate patterns also increased. There are a group of countries that face conflict and have been protracted crisis in combination with repeated shocks in the Horn and Sahel. The Horn of Africa for example has a group that have suffered repeated climatic shocks. Yet, we have countries such as Ethiopia and Kenya, which tend to manage these crises effectively. Over the years, their capacity to manage crises has improved and we are seeing less famine related conditions due to drought. Yet, next door in Somalia, we continue to face high levels of malnutrition and hunger, including famine conditions as recent as 2016 – here weak governance and continued instability make it difficult to design and manage robust programmes. Similarly, South Sudan, which has been in conflict for several years, with a weak Government in place faced a famine in 2016. Government ownership of programmes makes a big difference as we have seen in Kenya and Ethiopia. In both of these countries, the Governments put up some of their own funding to support their programmes, which makes it attractive for the donor countries to provide additional funding.

In West Africa, we have the Sahel, which has been affected by repeated climatic shocks. The jihadists in parts of the Sahel have further complicated the repeated shocks.

The Southern Africa tends to be hit by repeated climatic shocks as well. A regional drought affected most of the countries. Further a cyclone led to flooding in Mozambique and affected parts of Zimbabwe. While Southern Africa is relatively stable, weak Governance is a common feature among these countries.

CRG: You were representative in Ethiopia, a country that has been growing a fast pace. Has this growth been reflected in an improvement on the nutritional status of the population?

**Dr Joyce Luma:** Ethiopia has one fastest growing economies in Africa, which have resulted in declining poverty levels and malnutrition. Poverty declined from 55% in 2001 to 23.5% in 2015 and chronic malnutrition declined from 57% in 2000 to 38% in 2016. The population with access to improved sanitation increased from 7% to 42% in the same period. These are major achievements. Yet further improvements are constrained by repeated climatic shocks and instability continues to be constrained by poor health environment. A high proportion of households do not have access to potable water as well and more than 50 % of the population have limited access to good sanitation.

CRG: What was your experience on South Sudan, where you led the WFP between 2014-2017? How difficult is to try to improve the population food security in the midst of a civil war? Are there lesson for other places also under conflict such Yemen?

**Dr Joyce Luma:** South Sudan is landlocked and food deficit, which means that most food must be brought into the country. The country has one of least developed infrastructure; The road networks are poor; only a stretch of about 193 Kilometres is paved and the rest are badly maintained gravel roads. During the rainy season some parts of the country are cut-off for more than six months, and coupled with insecurity, it is very costly to move cargo across the country. It is extremely difficult to keep the food supply stable (two dimensions are not fully achieved) which makes it difficult to assure food access – prices are extremely high, which contributes to vulnerability (third dimension). Furthermore, poor sanitary environment including lack of access to potable water and inadequate access to health services (fourth dimension) contribute to high levels of malnutrition.

South Sudan has been in a civil conflict since December 2013. And I arrived in Juba in May 2014. As a result of the conflict almost half of the population has been displaced – more than 2 million people are in refugee camps and the rest internally displaced. The displaced population are unable to economically support themselves due to repeated fighting and multiple displacement. Prior to civil conflict South Sudan was on trajectory of improved food security. In October 2013, an Integrated Phase Classification (IPC) showed low levels of acute food insecurity levels; 18 percent were classified to be facing acute food insecurity (phase 3 or crisis phase)) and there were no population in the emergency phase 4 - no phase 4 (emergency) These low levels of food insecurity were quickly reversed by the conflict. By May 2014, food insecurity jumped up – 30% (3.5 million people) were classified as in acute phase and emergency phases (IPC 3 and 4) –populations who have no idea where their next meal will come from. By 2017, 6 million or 56 percent of the population were in crisis or emergency phases and a small population were in catastrophic phase (equivalent to famine) . The South Sudan crisis continues to get worse. Whereas the conflict started in the center of the country it spread quickly to the northern eastern part of the country in 2014/15, by 2017-19, the entire country was engulfed in fighting. Civil conflict is complicated by inter-communal clashes, whereby one community raids another for cattle. While the inter-communal fights have always existed in South Sudan, they have been complicated by the use of guns and the civil war/

WFP along other international organisations have large scale operations to provides assistance to growing number of people requiring food assistance During my tenure in South Sudan, WFP was providing assistance to more 4 million people inside the country. WFP works closely with other UN agencies to ensure a comprehensive approach to address food insecurity and malnutrition in South Sudan. We have a memorandum of understanding with UNICEF in South Sudan to ensure that we can combine our resources to address nutrition problems. For example, UNICEF treats children with severe malnutrition and WFP provides nutrition support to children with moderate acute malnutrition. WFP and UNICEF often have joint teams that travel into the remote areas of the country – where as WFP provides food to the families and also provides a nutrition package to children, UNICEF vaccinates children, provides water treatment to ensure that households have access to water. The combine effort ensures that households have access to food (food access dimension) and utilisation is improved through water treatment and immunisation.

Even during this period of conflict, WFP has continued to undertake long term activities – building access roads to ensure that those areas that are relatively stable could have access to markets. WFP supports roads construction in areas that have a high agricultural activity to support farmer's access to markets. Furthermore, WFP and FAO closely collaborate to support small scale farmer to grow crops. WFP works with communities to rehabilitate – for example several thousands of metres of dykes have been constructed to prevent flooding and thus allowing households to use the land for farming while FAO teaches them agricultural skills. Having said that it was always challenging to continue to undertake development work. For example, WFP had to abandon road constructions in South Western part of the country as it was no longer safe for the construction staff.

The conflict did not affect only development activities. Even movement of food on the roads was at risk. In 2015, several trucks were looted while moving food to the northern part of the country. In 2016, we lost more than 4000 metric tons of food worth several millions of dollar due to massive looting when fighting broke out in the Juba. We also lost several trucks and other assets, worth more 8 millions of dollar. We lost several staff in line of duty – this was the most devastating part of the work…. "Humanitarians losing their lives while saving lives of others".

The South Sudan is one of the most expensive operation due to poor roads as I mentioned but also due to poor security eg lootings. Often, we had to cancel deliveries as there was fighting in one part of the country. Each time we cancelled a delivery, it added to the cost of the operation. Due to the fighting and impassable roads in the rain season, we relied heavily on the use of air transport to deliver food to the hard to reach areas. Air drops are common. WFP also runs the humanitarian air transport – ferrying by air humanitarians from one location to another. We also moved food using barges on river Nile. We have to negotiate our way across to safely pass whether by road, air or water as there many armed actors across the country. I could go on and on

speaking about South Sudan but the above gives you an idea of the complexity of the operation.

CRG: One of the debates in international development is the future of smallholder farmers and whether they can be up to the challenges related to food security (i.e., increase their production to match the population growth). I noted that your PhD dissertation dealt with the connection between farmers' productivity, consumption and nutritional status in Zambia. How strong is that connection and do higher incomes necessarily are translated into better nutrition?

**Dr Joyce Luma:** The smallholders have many challenges – first they continue to use inadequate farm practices. They have limited access to technology – although I must say they are better connected than before and therefore have more access to information than when I wrote my PHD thesis. Many rely on rudimentary technology and do not have adequate access to improved inputs. Their over reliance on rainfed agriculture makes them very vulnerable to low productivity, more so now as we see the increased impact of climate change. For many, increased production is achieved by cultivating more land – which requires more labor.

Individuals undertaking physically demanding activities have higher nutrition needs – energy and other essential nutrients. The dilemma for small holders is that the period when they need to be very active on their farms is the same period when their food resources is lowest and it is the same period when they face infections such as malaria and other parasitic diseases…productivity is constrained primarily by labor demands, … weakened labor due to insufficient food consumption and poor health. Higher income households are not only able to have sufficient income to purchase inputs but they also are able to higher labor, which improves productivity. . There is marked improvement in malaria prevention in many countries but the scourge is still high.

CRG: The double burden of malnutrition and hidden hunger are being heard with more frequency in the context of food insecurity. Based on your experience how important are they in today's developing countries?

**Dr Joyce Luma:** We have seen increased levels of obesity even in countries that have high levels of chronic malnutrition. Studies have shown a close association between chronic malnutrition and obesity. Many studies show stunting to have long lasting effects - for example resulting in poor cognitive development as well impaired metabolism and lower energy expenditure. Such changes are long lasting. Therefore, children that have suffered chronic malnutrition are likely to be obese adults, particularly as people in developing countries are more sedentary than before and no longer doing the heavy manual work on the farms while at the same time exposed to higher food intake.

CRG: Gender analysis is now part of almost all projects related to the international development. How is the gender approach being applied to the humanitarian work of the World Food Programme?

**Dr Joyce Luma:** WFP's starting point to providing food assistance is the identification of the most vulnerable population to hunger and malnutrition and then the next step is to identify **who are the most hungry and malnourished**. This second part of the analysis includes gender analysis – the understanding of gender dimension of hunger and its causes. Data collected from households surveys are dis-aggregated by gender while qualitative approaches include focused discussions with women and men to further understand the underlying causes of disparities in food insecurity and nutrition. From these analyses, we know that women have the highest rates of food insecurity and malnutrition. They have the least access to education and least access to both economic and other social resources; they are not fully involved in decision making at both the household level and in programs that are designed for the poor.

WFP has also adopted the application of the gender and age marker – a tool that ensures that our programs at the country are underpinned by gender analysis and more important that the programs addresses gender issues that have been identified. All WFP programs are rated from 0 to 4, with zero being the worst and unlikely to go through our program review process (PRP) as well as the executive board and four, being the highest, which means very high expectations of gender transformation. Programs are tracked to determine the extent to which they have achieved gender transformation programming in nutrition, school feeding, social protection, resilience intervention and other programs. In addition to the targeting by gender dimensions, WFP has adopted a comprehensive approach to ensuring the management of its intervention takes into account of gender and that women and men beneficiaries are equally engaged in committees that make decisions on how the activities are designed and implemented.

CRG: The first time that we met, you were in charge of the Vulnerability Analysis and Mapping at the WFP. How important is the access of good quality data for the food security operations and effective information systems?

**Dr Joyce Luma:** Good quality data is critical for informing good decisions on food security and nutrition. WFP relies on VAM analysis to inform decision on targeting – that is which parts of the country have largest concentrations of the most hungry and what populations groups are most affected, how are they affected, when they are affected and how long they are likely to be affected. Analysis further guide on how best to intervene. It is critical to have system in place for monitoring changes in food security, whether due to economic, climatic or man-made shocks, to enable an early response and minimize widespread suffering. Food Security Monitoring system are an important tool for an effective intervention. Monitoring systems agencies to design a set of interventions are at the early onset of a crisis, thus enabling mitigation before the shock becomes a major disaster.

Availability of data has increased many folds from the time I was in charge of Vulnerability Analysis and Mapping (VAM). For many years, we were relying on data that was collected physically through face to face interviews surveys and other assessment approaches to increasingly through the use of technology.

By the time, I was leaving VAM in 2014, we were relying on various approaches including through remote means such as mobile devices, social media as well as greater use of the satellite for the analysis of events in difficult to reach places. We are able to reach communities and households without having to travel to areas of study. We can track food access by monitoring a few key variable remotely. We are also using large data to analyse trends..

Because there are various sources of data that help triangulate we are much better at isolating data of poor quality than before. Having said that, we are very much aware that certain data sources, especially social media can be biased. Vulnerable populations may not have access to social media. Connectivity is poor and networks do not cover the most remote poor areas. It is important that data collected through social media are contextualised to reduce misinforming decision makers. The populations that we wish not to be "left behind" are the least connected and therefore the data collected through remote means may not describe their context correctly and we are likely to miss these populations.

CRG: Also on data needs, in your experience how bad is the availability of information for nutritional interventions in developing countries?

**Dr Joyce Luma:** While we can celebrate about availability of data through the various sources, nutrition data continues to be the least available and always late in coming. The collection of nutrition requires carefully designed methods and very well trained people in taking anthropometric data or body measurements and asking about the age of the children. The collection of nutrition data therefore still requires traveling to location of collection. Carefully designed sampling frames are a hard rule in nutrition and which include collecting from a large number of children. Data are collected at the individual level – rather than the household. Nutrition data are therefore costly to collect. These data are least available in countries and geographic locations where they are most needed – in countries that are poor. I recall in South Sudan, we struggled in making a case for famine as we needed 1. an estimate of food insecurity, and the data was available for most areas 2. An estimate of nutritional status by geographic area – we did not have good data in the areas, particularly those where fighting was taking place repeatedly. The rigourus approach for collecting nutrition data makes it extremely difficult. Yet, these are the areas with the highest levels of malnutrition. How do you measure children when mothers and their children are fleeing and 3. Mortality data – these are also not collected often.

CRG: You were part of the academia at the start of your career. How can the academia support institutions such as the WFP and FAO on their fight against food insecurity and malnutrition.

**Dr Joyce Luma:** Academia have expertise that can positively contribute to the work undertaken by WFP and FAO in the fight against food insecurity and malnutrition – through research; The academia remains update in various area and we can tap into their knowledge to advance hunger and nutrition

programmes. We can collaborate on a number of research topics. We are striving for better analytical tools for food security and nutrition. We could have professors and students carry out analysis that could contribute to the understanding of how our interventions are contributing to SDGs – which interventions are most effective for instance. The academia can also test out some of their work through our programmes. WFP accepts interns who are working on various programmes. In some cases, these interns are closely working wither professors. A systematic relationship with universities would be useful. Some universities could partner by focusing their collaboration in a discipline, for example nutrition or logistics, etc while it is also possible to partner focusing on a country – either working on a discipline or multiple topics within a country. I think longer term collaboration would be more impactful -and a win-win for both the academia and WFP.

CRG: The students in our programme are keen not only on learning about food security but also in starting a career on international development and or food security study. What would be your advice to them, what path to follow?

**Dr Joyce Luma:** Start early approaching WFP, FAO or any other agency – by applying for internships. Internships give you the exposure international development work and I know that many interns later come back to be junior consultants who later become long term staff. I would also like to say be willing to work in difficult areas. Be willing to work in some of the most difficult places – Yemen, Iraq, Syria, South Sudan, etc. The UN has strong security system that monitors the situation closely. When a location becomes too dangerous for its staff, you will be pulled out to a location of safety! If you are not able to get into the UN system, try with NGOs first!

CRG: Once again many thanks for agreeing to participate in this interview and sharing your experience with us.