



Editorial

Quality and food safety during COVID-19

The coronavirus disease crisis (COVID-19) has not been only disrupting our food supply chain systems but is also prompting changes in the way we eat and reveals the many singularities of our relationship to food.

One of the first disruptions quite common during times of crisis is over-consumption of food for many people, due to inactivity, boredom and anxiety. This confirms the importance and value we give to food, and reveals that eating, not only has nutritive, social and identity functions as you will read on page 3 of this bulletin, but also brings us comfort in times of crisis.

The second concern that may result from this pandemic relates to the safety and quality of the food on our tables. Food contains essential nutrients needed for our physical and mental growth and well-being, as described in the article on the management of food supply incidents on page 5 of this bulletin. The article reminds us that many types of incidents can happen during the food chain management process and have an impact on the quality and/or safety of food, making it unfit for human consumption, making the consumer vulnerable to food-borne diseases, and even leading to death in extreme cases.

To prevent and respond to these risks, it is essential that governments put in place food incident management protocols. It is also important to maintain (i) good hygiene practices when preserving, preparing and handling food; (ii) frequent hand-washing hygiene measures that prevent any virus from spreading. It is important to realize that: **to ensure food safety, good hygiene practices and other preventative measures must be carried out by everyone and everywhere, during and well after this pandemic.**

Can one talk about food safety without mentioning the farmers, the first links in the food chain, without whom no production, no food would be available? Although post-harvest losses that occur all along the food chain remain a serious problem to resolve, these farmers work hard to provide us with a constant supply of

quality food, using technical methods, innovative tools, technologies and practices which deserve to be recognized and shared widely. This bulletin showcases how an integrated initiative led by the World Food Programme (WFP) in Côte d'Ivoire is allowing close to 400 small producers to reduce post-harvest losses and to increase their incomes through the use of innovative technologies enhancing preservation and processing. Like the Ivorian producers, close to 500 million small farmers are supplying up to 80% of the food consumed in developing countries around the world.

In light of the COVID-19 pandemic, wise advice suggests we adopt diversified, healthy and balanced diets, that will strengthen our resilience to cope with food and nutritional supply disruptions, whether induced by climate change, social upheaval, or disease such as we are experiencing now.

Let us recall the United Nations Secretary General António Guterres' words, that the pandemic we are experiencing is surely a tragic situation, but it is also an opportunity to come together and turn this crisis into a worldwide impetus to reach the 2030 Sustainable Development Goals, namely SDG 2. According to the Secretary General, we cannot lose sight of the challenges and we must not let ourselves lose the successes obtained from the investments made through the humanitarian action and the Sustainable Development Objectives.

One of CERFAM's contributions will be to foster the promotion of good practices and sustainable solutions to fighting hunger and malnutrition.

The time is right to promote effective eating and drinking habits to adopt or re-adopt to ensure adequate, healthy and sustainable diets during the crisis: (i) drink and eat healthy food; (ii) choose food that supplies energy such as rice, pasta, bread and tubers, as well as food that helps physical growth and repair, like meat, fish, eggs, milk and other dairy product; (iii) take control of our diets by buying local; (iv) eat fruit and vegetables that are well washed and/or prepared; (v) avoid highly processed food that contains a lot of fat, sugar and salt, with no nutritional value; (vi) and more importantly, stay active.

But above all, let's take care of ourselves, of our close ones, of our community and take advantage of this opportunity to evolve towards a lifestyle respectful of our health, that of our loved ones and our planet.

Enjoy your reading!

About CERFAM

As the first WFP Centre of Excellence against hunger and malnutrition in Africa, **CERFAM** is a regional hub for exchanges, partnership-building and South-South Cooperation, which allows developing countries to access the best available expertise, knowledge, and technical assistance to support them in their efforts to advance in the implementation of sustainable development goal –SDG 2.

CERFAM facilitates and mobilizes high-level expertise, promotes hunger and nutrition solutions, through proven practices, innovative approaches, and pioneering networks and communities of practice connecting national, regional, and international stakeholders.

CERFAM has a service offer that is twofold:

- ◇ (i) identify, document, promote, and disseminate good practices and lessons learned at country level in Africa and
- ◇ (ii) act as a catalyst by deploying expertise for the implementation of good practices through capacity building and South-South cooperation.

To provide these services, **CERFAM** relies on four key pillars:

- 1- **Research,**
- 2- **Technical Assistance,**
- 3- **Partnership building,**
- 4- **Communication and Advocacy.**

To read in this issue...

- ⇒ Understand better nutrition and its importance on our plates. **Page 3**
- ⇒ Why food incident management is critical in Africa? **Page 5**
- ⇒ Enhanced Nutrition and Value Chain in Ghana. **Page 7**

Interview ...

- ⇒ About CERFAM Year 1 with Chris Nikoi, Regional Director of the World Food Programme. **Page 11**

Let's talk about good practices...

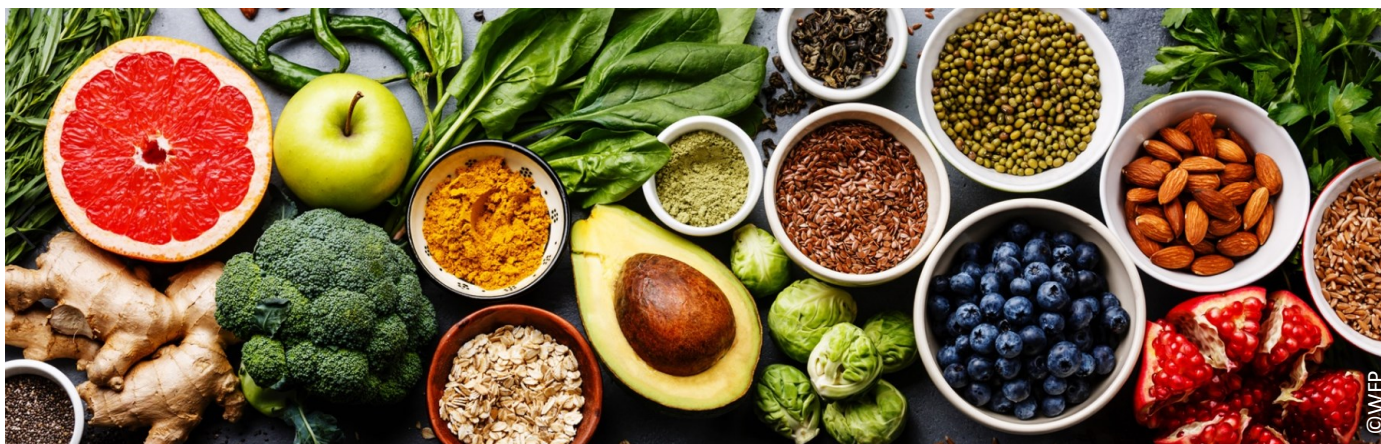
- ⇒ A WFP initiative to reduce post-harvest losses and increase the incomes of small farmers in Côte d'Ivoire. **Page 13**

Zoom on...

- ⇒ CERFAM's operations management unit. **Page 15**



Food quality, nutrient sources and bioactive compounds: what are their effects on health and nutrition?



A diversified and healthy diet also consists of fruits and vegetables and can cover all our nutritional needs

The food we eat, and then digest, provides us with energy, macro and micro-nutrients, as well as bioactive compounds. All these elements are determinants of our nutritional and health status. Let us review the role of food and the role played by the adoption of a healthy and diversified diet with Dr. Claire Mouquet-Rivier, Research Officer of the Institute for Research for Development (IRD), collaborating with the French Agricultural Research Centre for International Development (CIRAD) on the topics of Nutrition, Food and Health.

Let us begin with nutrients and bioactive compounds

Nutrients

Nutrients are substances obtained from food that are needed for the development and maintenance of our body. Food digestion begins in the mouth and continues in the stomach. The intestine then acts by releasing the nutrients from the food matrix, allowing the nutrients to be absorbed through the intestinal wall. There are two types of nutrients: macronutrients consisting of proteins, lipids and carbohydrates (otherwise known as sugars) and micronutrients which consist of vitamins and minerals.

Micronutrients are essential to a healthy diet and have a major effect on our health. The criticality of given micronutrients have long been recognized by WHO as they are often lacking in our diet: these are iron, zinc, Vitamin A and iodine. And there is a growing interest in the importance of the B and D Vitamins. Deficiencies in these micronutrients are often seen in the most vulnerable populations whose diets lack variety.

“This is why in many West African countries, governments have implemented compulsory fortification policies for basic foodstuffs : iodized salt, wheat flour or corn fortified with iron, zinc and vitamins Bs, or oil with vitamin A.”

Bioactive compounds

Without being indispensable, the "nutrient-resources" act on our metabolism and can help it remain healthy. They act in several ways. Foreexample, they can act as antioxidants, anti-inflammatory agents, boosters of immunity, antibiotics that help eliminate pathogens, or act as prebiotics that enhance the growth of good bacteria in the intestinal microbiome.

Ingested nutrients, absorbed nutrients

Nutrients and bioactive compounds are found naturally in raw foods. However, when foods are processed, they can be partially lost, broken down or destroyed by the heat and to finish off, become encased in a food matrix that is more or less structured, which interacts with others, and defines their capacity to be absorbed by the intestinal wall to enter the blood and contribute to the metabolism. In addition, the amount of absorbed nutrients is always less than the amount ingested, and it is sometimes difficult to know the nutritional value of a certain food based only on its nutritional composition.

Differences in the source of the nutrients must also be considered. For example, the amount of iron in a plate of black-eyed peas, even though it may be the same as that of a plate of beef stew, is not as useful to the body (about 5 times less!), as there is less intestinal absorption.

However, in the context of developing countries, vegetable proteins are more affordable to most of the population, namely for economic reasons. They are also more easily stored than animal proteins which often need to be kept cold.

A good diet must be diversified

There is no such thing as a "miracle" nutrient which provides all the nutrients and bioactive compounds that we need to live and be healthy. However, there are "resource foods" which are foods or food groups rich in micronutrients, such as **leafy vegetables, fruit and vegetables, dairy or meat products and even lentils.**

So, the ideal would be to have a diet that is sufficiently varied in order to meet all our nutritional needs and not only those with limited micronutrients.

In order to assess the variety of foods consumed by populations, it was necessary to define the indicators for the number of different food groups consumed in one day by a target group, such as the scores of varied foods among child-bearing women, and children aged 6 to 24 months.

Statistical analyses of a large number of food consumption surveys conducted in different countries were then used to define minimum thresholds, to prevent the high risk that micronutrient requirements are not met.

These thresholds state that for women 5 out of 10 food groups and for children 4 out of 7 food groups should be consumed on a daily basis.



Dairy products are also considered as resource foods, rich in micronutrients

The challenges of maintaining a diversified diet

Having a sufficiently diversified diet requires on the one hand that varied foods are available in sufficient quantity and quality all year round and physically and financially accessible at the main household supply points.

On the other hand, populations must be made aware of the issue and resist being attracted to the many processed foods that fill the marketplace. These are often loaded with sugar, salt and very energized, marketed with attractive colored wrapping, and lack nutrition value due to the intense processing and packaging.

These products can lead to numerous problems such as obesity, diabetes, hypertension, etc.

Populations must choose to voluntarily adopt a diet that is varied, healthy and sustainable.

How to combine the nutritional function with pleasure and identity functions?

The role of food in consumption is not simply to ensure that we are fed, this is not usually what influences our purchases. The role of food in consumption is also social and cultural: the way a meal is eaten is often linked to our status in society.

The sharing of a meal, whether in a family or a group, provides a mean of communication and socialization.

Very often, the type of food we eat is associated with a certain population or ethnic group, and takes on the culture of each. There is also the sensory aspect to consider, whereby a certain food can trigger distaste or pleasure, depends on the chemistry of a person.

Thus, the maintenance and promotion of **traditional recipes** in diets could be an effective way to meet the nutritional needs while maintaining these roles.

Why Food Incident Management is critical in Africa?



Food is used for growth and maintenance of the organism and provides the energy necessary for its vital functions.

Foods may contain the nutrients necessary for human physical and mental growth and well-being, however, incidents can occur at any stage of the food supply chain (production, transformation and consumption) and impact the quality or safety aspects of the products, rendering it at times unfit for human consumption.

A food incident is a situation within the food supply chain where there is possible or confirmed risk associated with the consumption of a specific food.

Manufacturing, transportation and storage practices can affect the properties and safety of the food and result in its contamination with microorganisms such as bacteria, fungi (leading to mycotoxins) or viruses.

In critical cases, foodborne diseases and even deaths can be consequences of a food incident.

According to WHO's first ever estimates of the global burden of foodborne diseases¹, almost 1 in 10 people fall ill every year from eating contaminated food, and some 420,000 people die as a result. Children under 5 years of age are at particularly high risk, with 125,000 children dying from foodborne diseases every year. WHO African and South-East Asia Regions have the highest burden of foodborne diseases. According to the World Bank², the total cost of foodborne disease in low and middle income countries (LMICs) is estimated at **US\$110 billion per year, out of which US\$16.7 billion in Sub-Saharan Africa.**

Foodborne illnesses are however preventable. The hazards presenting a potential risk for human health may occur at the different stages of the food chain. Ensuring food safety encompasses risk mitigation along the whole process of food production, packaging, selection, handling, transportation, storage, preparation and consumption.

Food incidents within one country or region can have disastrous consequences. Besides the health and wellbeing of the population, they can also affect the food distribution channels in the area and the reputation and confidence attributed to one food producer, supplier or even government.

Food safety plays an important role in achieving continental commitments and strategies such as the Agenda 2063 and the Malabo Declaration as it has become an important precondition for access to global food markets, and increasingly, for high-value domestic markets in developing countries.

The African Union Commission has made food safety a priority area to address within the continent by establishing an Africa Food Safety Agency (AFSA)³, first continent-wide food safety authority. AFSA is expected to meet by the end of 2021 and to adopt strategies to improve oversight of food safety in farms, factories and markets.

Countries and regions should ensure they have the necessary frameworks in place to be able to detect, handle and effectively tackle such incidents with strong support from the private sector which is a main player in the food markets and often has protocols in place.

For entities dealing with food products, it is critical to build strong agendas for:

- Standardisation, to ensure and facilitate trade
- Control, to reinforce the standards and
- Management of food products, to contextualize the two previous points.

Indeed, these functions – which can also be grouped into one body - can help manage the food safety of the produce available within one country or region and ensure early detection of an issue. **During an incident investigation, a trained taskforce should be assembled to contact all relevant stakeholders and determine at which point in the supply chain the incident happened, evaluate the extent of the damage and the risk, how to mitigate it and prevent it from re-occurring.** This taskforce should have access to various specialists such as epidemiologists or toxicologists to pinpoint the issue. Depending on the risk of the incident (minor, major or critical), higher level of hierarchy can be involved. It is important that a protocol including roles and responsibilities and communication procedures is in place, to facilitate immediate action in case of a food incident.

In the World Food Programme (WFP), in the quest to develop a holistic and integrated Food Safety and Quality Management System (FSQMS), a Food Incident Management (FIM) Memorandum has been implemented. The organisation has defined a clear management protocol and has been strengthening the technical skills of its staff in several regions to be able to respond to an incident if it appears.

The first step was the creation of Food Incident Committees to be activated on a need basis, each having a chair and an owner. The members must represent the different bodies affected, at governmental level it may include representatives from the Min. of Agriculture, Fisheries, Industry, Trade etc.

The management of the incident follows standard process chart as represented in exhibit 1, which can be adapted to any private or public body. UNICEF applies similar process for instance.

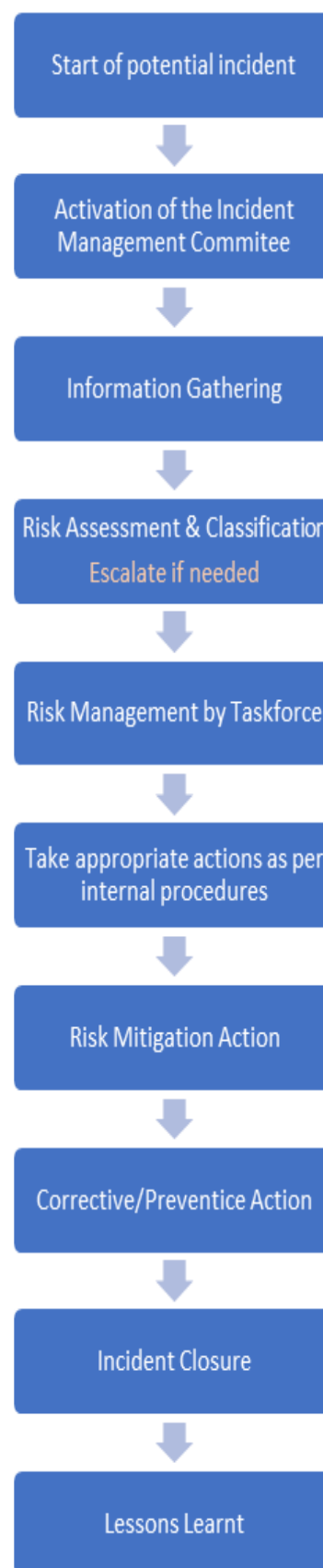
In West and Central Africa, while many countries have set up and activated such committees, many are still in the process of establishing these systems.

It is important to ensure that relevant personnel is trained and necessary capacity strengthening measures taken to ensure proper actions are implemented should such incidents happen.

CERFAM’s action is focused around capacity strengthening and has the ambition to position itself as a strong and well-established regional hub for exchanges and partnership-building that allows developing countries to access expertise, good practices, knowledge and technical assistance to support them in their efforts to accelerate the implementation of SDG2 and AU Agenda 2063.

With the support of partners, CERFAM can provide support to leverage laboratory expertise in order to strengthen national capacities to detect such deviations at an early stage, but also provide innovative training & learning strategies in Food Incident Management.

Exhibit 1: Standard process chart to manage the food incidents



¹ WHO estimates of the global burden of foodborne diseases, 2015

² World Bank: The Safe Food Imperative: Accelerating Progress in Low- and Middle-Income Countries, 2019

³ AU’s Side Event on the Africa Food Safety Agency - 3rd AU-EU Agriculture Ministerial Conference, June 2019

Enhanced Nutrition and Value Chains (ENVAC) in Ghana



The ENVAC project promotes the development of maize, soybean, cowpea and rice value chains in Ghana

Enhanced Nutrition and Value Chains in Ghana is an agriculture and nutrition value chain development project initiated by the Office of the United Nations World Food Programme (WFP) in Ghana and funded by Global Affairs Canada (GAC). The five-year project (2016- 2021) is implemented across five regions of Ghana.

Why is this project needed and what are the problems it seeks to address?

Ghana graduated to low-middle income country status in 2011. Yet the country is still confronted with recurrent and pervasive malnutrition challenges, especially in the Northern region. While progress was registered in reducing prevalence of wasting and underweight in children, prevalence of stunting remains high in the Northern region. Micronutrient deficiencies known as “hidden hunger” (lack of iron, Vitamin A etc.) remain widespread and are driven by inadequate dietary diversity and infectious diseases, among others.

Inadequate nutrient intake is linked to lack of nutritionally balanced diets at the household level or improper feeding practices which affect maternal, infants and child health. Meeting the health and nutrition needs of vulnerable persons such as infants and young children, women, and people living with HIV/AIDS requires the adoption of integrated and multisectoral nutrition and food security approaches including the provision and consumption of fortified nutritious food commodities accompanied by targeted Social Behavioral Change Communication as means to raise awareness and promote the adoption of healthy, nutritious and diversified diets. However, local production of nutritious food commodities is quite limited and their importation, often constrained by time and logistical problems.

Enabling environment

The Government of Ghana has rolled out several policies aimed at stepping up its support to private sector to foster

the development of agriculture and agri-business. Accordingly, several international development actors have contributed to building the capacity of smallholder farmers’ organizations to increase production and strengthen their linkage to markets. USAID Agricultural Development and Value Chain Enhancement I & II and WFP’s Purchase for Progress (P4P) Initiative, have all been geared toward developing technical skills and providing smallholder farmers with technical and material/equipment resources to enable them to strengthen their participation in the maize, soybean, cowpea, and rice value chains in Ghana.

Efforts have been made to create an ever-enabling environment for private sector to thrive. This is especially true for companies involved in processing and manufacturing specialized nutritious food commodities. The ENVAC Project seeks to strengthen the capabilities of agro-industrial and linkages that improve opportunities for added value and fostering agro-value chains.

Project goals & objectives

The ENVAC project is pursuing two major goals:

Improved consumption of nutritious foods, adoption and utilization of good nutrition practices among vulnerable people in the target districts/regions at first and the general Ghanaian population at large through increased availability of safe and nutritious food staples.

Improved sales of staples from targeted Smallholder Farmers, particularly to industrial food processors through enhanced local food processing capacity for nutritious foods (Super Cereal & other blended flours) and improved quality control & standards, monitoring & evaluation and gender integration.

ENVAC seeks to meet its goals through four pillars :

1. Increase local production, improve quality & market integration of nutritious food staples;
2. Enhance local processing capacity for fortified and other nutritious foods such as fortified/blended flours;
3. Improve adoption and utilization of good nutrition practices and;
4. Improve Quality Control & Standards, Monitoring and Evaluation and Gender integration across all project activities.



At the end of this value chain, there will be fortified food commodities readily available and affordable to contribute to preventing stunting during the first 1,000 days of life using food based and SBCC approaches. Throughout its life cycle the project will target each year **20,000 pregnant & lactating women, 20,000 children aged 6-23 months, and 5,000 adolescent girls.**

How does it work?

With direct and indirect support to Farmer Based Organizations (FBO), Nucleus farmers, and Aggregators targeting up to 10,000 smallholder farmers and their families, ENVAC enables them to produce, manage and avail quality cereals and pulses. Primary crops supported are **Maize, Soybean, Cowpea, and Millet; followed by Cassava, Yam, and Orange-Fleshed Sweet Potato.**

The project facilitates the linkage between ENVAC FBOs and two Ghanaian-owned industrial food processors: Premium Foods Ltd and Yedent Agro Food Processing Company Company Ltd. WFP provides technical know-how with training and capacity strengthening on safety, traceability, and quality control. The companies were supported financially and technically to purchase and install modern equipment to produce extruded corn-soya blend products.

New factories were tested in 2019 and technical support to set up food safety and quality management systems based on HACCP¹ and GFSI² is ongoing. To date, both Yedent and Premium Foods have high production capacities and the potential to meet regional market demand for Super Cereal and Super Cereal Plus, specialized nutritious foods used by WFP to prevent and treat moderate acute malnutrition.

Ultimately this market linkage strategy contributes to increased incomes for farmers, traders, processors, and other actors intervening along the agro-value chain. Furthermore, **this strategy contributes to improving food security, poverty reduction, and enhanced Smallholder Farmers' Market Integration in Ghana.**

In addition to providing direct support to FBOs and processors, ENVAC project also contributes to the capacity strengthening of WFP's public and private sectors partners. **By mobilizing internal and external expertise, ENVAC collaborates with institutions such as Ghana Standard Authority (GSA), Food Research Institute (FRI), Ghana Food and Drugs Authority (FDA), universities, public and private laboratories.** Support is also provided to the development and enhancement of protocols and tools relating to food technology issues and to policy framework strengthening.

Where does the project stand today ?

WFP Ghana has signed a Memorandum of Understanding with the FDA to promote food safety and quality and support the nutrition value chain actors on food safety and quality. The agreement entails inspections at production sites and retail facilities, laboratory analysis of product samples from the field, tailor-made training of retail shop owners based on findings from previous visits and post-training follow-ups.



FDA's CEO and WFP's country director signing an agreement

The initiative benefits from a strong field level partnership with Partners in Food solutions (PFS), an independent non-profit organization aiming to strengthen food security, improve nutrition and increase economic development across Africa by expanding and increasing the competitiveness of the food processing sector. The partnership contributed to Premium Foods factory obtaining an HACCP certification. Today, **the project aims to support the FDA to strengthen its laboratory testing capabilities and logistics base to carry out more effective and efficient quality assurance and monitoring.** It seeks also to foster collaboration with PFS **to improve efficiency and drive lower production costs of supported industrial processors** to improve their competitiveness.

¹ Hazard Analysis and Critical Control Points; A system that consists of an approach aimed at ensuring food safety

² Global Food Safety Initiative.

« Maria Aba Lovelace-Johnson (Ms), ENVAC Focal Point, talks about the project »



Maria Aba Lovelace-Johnson (Ms), Chief Regulatory Officer, Head Food Enforcement Department, Food and Drugs Authority

1. Could you please introduce yourself and your role with the ENVAC project?

I am Maria Aba Lovelace-Johnson, a Certified Food Safety Management Systems Consultant and a Certified Food Safety Management Systems Lead Auditor. I hold a BSc. (Hons) degree in Biological Sciences, an MSc. degree in Food Technology - Quality Assurance and a Master's degree in Governance and Leadership. I have undergone a number of Food Safety training Programmes including HACCP and Food Safety Risk Analysis. I have been with the Food and Drugs Authority (FDA) since 1998, and have in the past twenty-two (22) years, risen through the ranks. I am currently a Chief Regulatory Officer and the Head of Food Enforcement Department in FDA. I represent the Food and Drugs Authority (FDA) on the Enhanced Nutrition and Value Chains (ENVAC) Project as the Focal Point. As such, I collate manufacturing facility inspection as well as that of the retail outlets. I gather, verify and submit field samples to the respective laboratories for analysis. I also interpret laboratory analysis reports for food products under the project to ensure the aims and objectives of the Project are met.

2. What impact has the ENVAC project had on food security and nutrition in Ghana so far?

The ENVAC Project focuses on the northern part of the country which has not received much attention on matters relating to nutrition since hunger and malnutrition still persist primarily in northern Ghana. A part of the project involves improving food safety and quality within the WFP Ghana's nutrition programme which served over 24,694 women, children and adolescent girls with direct food assistance through vouchers in January 2020 aimed

to reduce stunting and other forms of malnutrition. As part of activities to improve food safety, the Ghana Food and Drugs Authority (FDA) inspected all 38 retail facilities used to serve beneficiaries of the nutrition programme. During these sessions many food safety and quality issues were identified and corrected. These inspections and recommendations from the FDA ensure safer nutritious foods for the direct beneficiaries of the ENVAC project and also other members of their communities who purchase other food products in these retail facilities and ultimately improve nutrition and food security in these communities. The project considers the fact that the initial 1,000 days of one's life, referred to as a critical window of opportunity of the child's life, plays a pivotal role in the overall growth and development all through adulthood. In view of this, the FDA has worked assiduously with the WFP to ensure the safety, efficacy and quality of the products in question. The routine inspection of the manufacturers indicate that the food processors under the project are compliant. The next step is the provision of intensive training to the retailers; however, this has been put on hold as a result of the COVID-19 pandemic.

3. Do you plan to collaborate with other FDAs in West and Central Africa?

The Food and Drugs Authority (FDA), after probing that the manufacturing facilities involved in this project, comply with good manufacturing practices, can recommend that they produce for the rest of West and Central Africa. There is the opportunity for the organization of a common training programme involving all FDAs located in West and Central Africa, where the modalities for inspections are laid and a common checklist developed. Once this is achieved, a product manufactured in any West and Central African country can be exported to a sister country as long as it has a regulatory attestation and a certificate of free trade and manufacture from the country of origin. The FDA Ghana, being one of the very few Regulatory Agencies in the world that practices the system of pre-market approval/market authorization, can collaborate with other countries in West and Central Africa to assist them master this system that has proven to be very beneficial to the people of Ghana.

Advancing Partnership agenda at CERFAM

CERFAM and ICED have signed a partnership agreement to join forces to promote evidence-based practices to accelerate progress towards SDG2 outcomes in Africa



The partnership will enable the implementation of activities that have an impact on food security, nutrition and food systems in Africa.

On April 14, 2020, the Regional Centre of Excellence against Hunger and Malnutrition (CERFAM) and the International Centre for Evaluation and Development (ICED) signed a memorandum of understanding (MoU) to advance practice of monitoring and evaluation, in support of sustainable and resilient development in Africa. The MoU was signed by Issa Sanogo, Director of CERFAM and David Ameyaw, Executive Director of ICED, an international and independent think tank, specialized in innovation and research in monitoring and evaluation for development.

This partnership will jointly promote the production and dissemination of a solid set of good practices based on evidence-based research and innovation in evaluation in Africa.

Through the establishment of this partnership, the two institutions intend to collaborate actively in thematic and mutual interest areas, including rural development, management of post-harvest losses, community resilience, food and nutritional security, home-grown school feeding based on local products.

The objective is to strengthen the effectiveness of their development efforts in order to contribute effectively and efficiently to the achievement of the Sustainable Development Goals and the Agenda 2063 of the African Union, in partnership with other academic experts, the private sector, civil society, governments and interregional institutions in Africa.

The partnership between **CERFAM** and **ICED** will focus on the implementation of activities in the priority intervention areas, among others: (i) improving the production of evidence and results-based management through research, evaluation, monitoring and technical support to encourage the effective and efficient design

and implementation of national policies and programs; (ii) assess new opportunities, identify sources of funding and advocate for impact evaluations of policies and programs against hunger and malnutrition; and (iii) jointly implement activities that involve research, studies and evaluations in thematic areas that have an impact on food security, nutrition and food systems in Africa.

For CERFAM and ICED, this partnership will serve as a platform and sounding board for advocacy, communication and mobilization of human, technical and financial resources to strengthen knowledge management, exchange and implementation of good practices in the areas of food security and nutrition in Africa.



Home-grown school feeding, as well as food and nutritional security are part of the thematic areas of intervention of CERFAM and ICED.

About year one of CERFAM, interview with Chris Nikoi, World Food Programme Regional Director for West and Central Africa



Chris Nikoi, World Food Programme Regional Director for West and Central Africa

1. What is the regional Centre of Excellence against Hunger and Malnutrition and why is its work important?

CERFAM was born out of a shared vision by the Government of Côte d'Ivoire and the World Food Programme (WFP), to end hunger and curb malnutrition in West and Central Africa and across the African continent at large. To do this, CERFAM, as a Centre of Excellence, serves as a platform for sharing sustainable hunger solutions across the continent and beyond, in a way that reinforces the leadership and ownership of developing countries to take those solutions forward. The vision for CERFAM is to create partnerships beyond traditional boundaries and to support the development of solutions that are adapted and relevant to local contexts and realities.

2. One year after its launch, what have been the key achievements of the regional Centre of Excellence against Hunger and Malnutrition ?

In a short period of time, CERFAM has been able to set up a functional structure and pursue active engagement and partnerships in the fight against Hunger and Malnutrition, under the vision of the Africa Union's Agenda 2063 and the universal 2030 Agenda for Sustainable Development. As part of WFP's Regional Bureau for West and Central Africa, and benefitting from the considerable support by Côte d'Ivoire and an array of leaders and institutions across the African continent and beyond, CERFAM has been able to draw on the knowledge from within WFP and across a number of sources to support efforts for creative locally-owned hunger solutions.

For example, the CERFAM team organized a number of knowledge exchange events for Governments, including two high-level workshops: one on how to utilize Zero Hunger National Roadmaps, and the other on how to manage post-harvest losses. Each brought together more than 60 experts and government officials from more than 12 countries in Africa and elsewhere, to identify and capture best practices, and subsequently develop a website and knowledge exchange platform. By putting in place clear national plans to end hunger and malnutrition and sharing critical knowledge on how to go about it, empowers Governments to take forward those solutions in a clear and structured manner.

The CERFAM team also supported South-South cooperation technical support missions, an example being that to the Republic of Congo, which brought together experts from Côte d'Ivoire and Benin to look at ways in which to improve the cassava value chain. This is a critical staple in the Republic of Congo and many African countries and, means to improve its utilization can have wide-ranging benefits both for producers and consumers.



3. What are the key challenges faced in efforts to achieve zero hunger and how can CERFAM contribute to those in the medium to long term?

2020 marks the start of the Decade of Action to achieve the Sustainable Development Goals by 2030. However, the impact of the **COVID-19 pandemic** and sizeable socioeconomic impact it will bring, risks resulting in the loss of significant development gains made by countries in Africa, who are already challenged by high levels of poverty, and food insecurity and malnutrition. We are already seeing some of the socioeconomic consequences that are affecting the price of key commodities, access to markets and people's livelihoods. Africa has faced many previous crises and has shown remarkable resilience. Drawing on those learnings will be critical for the current crisis.

As a Centre that enables the capture and dissemination of learnings between countries to support finding hunger solutions, CERFAM has a critical role to play by drawing both from WFP's body of knowledge and from that of countries, partners and institutions across the continent on how to mitigate the challenges to food security and nutrition that the socioeconomic impacts of the global pandemic will bring. CERFAM has a key role to play in acting as a convening platform with Governments for learning exchange and to look for the most appropriate, effective and sustainable local hunger solutions.

Interview realized with the collaboration of the Regional Bureau of Dakar (RBD).

How to Protect yourself from Novel Corona Virus Infection?

The COVID-19 virus is spread by direct contact with respiratory droplets produced by an infected person (when they cough or sneeze) and by contact with surfaces contaminated by the virus. Below are some instructions to follow in order to take care of your health and protect others:

Protect yourself and others from getting sick

Wash your hands



- after coughing or sneezing
- when caring for the sick
- before, during and after you prepare food
- before eating
- after toilet use
- when hands are visibly dirty
- after handling animals or animal waste

Good practices against hunger and malnutrition

In Côte d'Ivoire, an integrated approach led by WFP has enabled nearly small-scale producers to reduce post-harvest losses and increase their incomes thanks to innovative technologies adapted to the rural context



The women of the KATANA group of Sohoun, beneficiaries of the project "Promotion of nutrition-sensitive agriculture in support of women's groups in the Poro and Bagoué regions, in Côte d'Ivoire"

The post-harvest loss situation in Côte d'Ivoire

About 30 to 40% of vegetable production is lost after harvesting due to lack of knowledge and poor post-harvest managing techniques and storage capacity to minimize these losses. According to studies conducted by the International Institute for Rice Research (l'Institut international de recherche sur le riz (IRRI), 3 to 20% of post-harvest losses are related to storage problems. To address this problem, the World Food Programme (WFP), in collaboration with the Ivorian Ministry of Agriculture and Rural Development and other partners, have decided to work together to address the problem of post-harvest production in order to reduce the large losses and their exposure to dangerous toxins that affect the health of the Poro, Tchologo and Bagoué regions, by way of an integrated approach project based on the learning and adoption of best practices.

An integrated WFP project to help reduce post-harvest losses

The WFP has been supporting small farmers, mostly women, in Côte d'Ivoire since 2017. The WFP goals were to: (i) **improve and diversify diets** (ii) **promote best practices in nutrition, hygiene and food safety**, as well as (iii) **increase the income of small farmers**.

" This approach with groups of women and youth is initiated in response to the need to reduce the post-harvest losses and to improve food and nutritional security of rural communities "

WFP assistance in post-harvest management was given to around 400 farmers, out of a total of 1,045, composed of around 80% women and 20% young people in ten selected localities in the north of the country (Korhogo).

The WFP has thus introduced initiatives to reduce the post-harvest losses of maize, beans, groundnuts and rice. Assistance was also provided for the small farmers to build infrastructures, to obtain materials and equipment, as well as tools to process and preserve.



Thanks to the solar dryers and to the reinforcement of the capacities received, the beneficiaries offer dried produce of better quality.

Using innovative technologies adapted to the rural context

The hermetic bags and silos

Those in charge of the project and members of the selected groups received training from AGROTECH, a WFP private sector partner, on ultra-hermetic storage technologies by modified atmosphere. The airtight bags turn out to be an optimal solution which reproduces the conditions of hermetic storage with the aid of triple bagging.

Its advantages are: insecticide treatment is not needed, it is easy to use, fast, affordable and efficient when properly used, can be re-used and can be adapted to storing large and small quantities of maize, rice, cowpeas and groundnuts.

It has been observed on the ground that this experience is an opportunity to address the post-harvest losses by learning more about the quantity and quality of the preserved products. Hence, after 80 days of preserving and experimenting with PICS and grain pro bags to store maize and rice, revealed outstanding results and no damage.

Solar dryers, mills and hullers

The project provided 6 solar dryers to dry vegetables and installed 10 hulling mills to process and transform the food. Thanks to these equipment and the increased knowledge and capacity gained, the beneficiaries are planning to have better quality dried vegetable products, particularly dried peppers, Soumara powder (processed néré grains) and dried okra; the groups also learned how to process paddy rice thanks to artisanal steamers and to process groundnuts into oil and groundnut paste, by using modern equipment and accessories.

The beneficiaries also mastered other aspects, such as improvements in knowledge and technical know-how, the ability to preserve and keep food for much longer, the capacity to store their food stocks in good conditions for sale during favourable market conditions in order to increase their incomes to meet their needs.



A view of a huller and mills allowing beneficiaries to transform and better store food products.

What do the beneficiaries think of the project and the technologies?

"I've participated in the training on the use hermetic sacs and silos, which was an unbelievable experience. I have always stored my produce in ordinary bags that I kept in my pantry, as I learnt from my parents. But the losses were enormous after only a few months. All efforts to prevent these losses were to no avail. We were given a demonstration during our training: using a plain bag and an hermetic sac in which groundnuts were preserved for three months. The difference was clear to see, the hermetic sac was something of a miracle. It makes me bitter and sad to think of the many losses I've seen since my childhood.

Today, the group is aware that preserving the quality of food produce leads to better consumption, but above all it leads to good customers. For me, this support from WFP has been the most beneficial to me since the start of the project" expressed Soro Mahoua, KATANA group secretary in Sohouo, northern Côte d'Ivoire.

"Thanks to the techniques learned with the WFP, we harvested a large quantity of produce. Some of the produce is used to feed our children at home; another part goes to the primary school canteen in the village, and the rest is sold; which allows us to increase our income and provide a varied diet to the children " reported Soro Siata, cooperative secretary.



Zoom on the CERFAM's Operations Management Unit



The Unit facilitated technical assistance and capacity building by experts from Côte d'Ivoire and Benin for farmers in Congo Brazzaville in the development of the cassava value chain through technologies and innovative techniques.

Composition of the Unit

CERFAM's organizational structure includes two main programmatic units, namely the “**Strategic Planning, Programme Design & Partnership**” and the “**Operations Management Unit**”.

The Operations Management Unit oversees the implementation of Research and Technical Assistance.

The unit is headed by Dr. Christiani Buani, who worked with the World Food Programme Centre of Excellence in Brazil, before joining CERFAM. The unit comprises of Mr. Pierre Tahe, and Mr. ChunKit Steven Li. The unit benefits also from the support of Ms. Levke Rickmers from WFP Chad on a three-month staff exchange.

Main areas of work

The programmatic focus areas of the Operations Management Unit include, among others, home-grown school feeding, postharvest management and rural development, food quality and safety, community resilience, multisectoral nutrition interventions, and institutional coordination and collaboration.

The unit is responsible for knowledge management which includes the identification, documentation and dissemination of good practices, the mobilization of expertise for implementation and upscaling of these good practices, the provision of technical assistance, advisory support on policy and programme implementation, capacity strengthening activities, especially under South-South cooperation framework.

Through South-South cooperation, the unit responds to demand with the best available knowledge and expertise.

Managing knowledge with good practices

Knowledge Management is a key component for learning and sharing evidence-based research to inform decision makers on designing and implementing effective policies and programmes. The aim is to make effective and efficient technologies and good practices accessible and support the wide dissemination of “African Solutions”, adapted to context and needs.

What are good practices actually?

Good practices refer to interventions, business practices, processes or methodologies that have a proven or potential impact on food insecurity or malnutrition. The focus is on practices that are simple, relevant, cost-effective, adaptable, impactful, replicable and scalable with a real potential to bring about the transformations needed to inform locally owned and durable hunger solutions. When they are anchored to a robust evidence base, **good practices constitute powerful means to facilitate sharing of experience, expertise, knowledge and know-how.**

To facilitate the identification, documentation, and dissemination of good practices, CERFAM has developed a guideline of good practices, which is the result of an extensive desk review, analysis and consultations with experts.

The guideline served as the basis for the setup of a digital knowledge exchange platform (KEP), to be launched soon and which will support the dissemination of good practices beyond static repository of studies and publication in order to contribute to improving engagements and transforming “knowledge” into concrete actions.

Equipped with these expertise and tools, the Operations Management Unit joins force with other units to accomplish CERFAM's mission and vision, to advance progress towards ending hunger and malnutrition in line with the African Union Agenda 2063 and the Agenda 2030 of the United Nations.

Some activities spearheaded by CERFAM Operations Management Unit



Organization of a technical assistance mission to Congo Brazzaville in November and December 2019, for the improvement of the cassava value chain. The mission which involved experts from Côte d'Ivoire and Benin, enabled the beneficiaries to manufacture equipment and transform cassava into diversified products such as attiéké and gari. This initiative is an illustration of the importance of facilitation for the mobilization of technical assistance through innovative technologies and techniques.

Seven machines were fabricated and the line of production enhanced, which strengthened the competitiveness of these farmers in terms of productivity and quality.



Organization in November 2019 of a workshop on the management and reduction of post-harvest losses using innovative technology. The event, which took place in Abidjan, brought together representatives from different sectors based in Africa and China to share their good practices and innovations with other participants. All agreed on the essential role of South-South cooperation to foster opportunities for partnerships and strategic alliances.

The Operations Management Unit



Christiani BUANI joined CERFAM as Head of Operations Management Unit, on 1st May 2019. She holds a Phd in International law from the University UniCEUB, in Brasilia and a master degree in Law of International Relations from University Paris II. She has been working for the World Food Programme as a programme policy officer for more than 9 years in zero hunger initiatives, school feeding, food and nutrition security, south-south cooperation and capacity strengthening. She supported the set-up of the Brazil Centre of Excellence against hunger.



Pierre TAHE joined CERFAM as National Programme Policy Officer on November 1st, 2019. He has more than 15 years of experience both at national and international level in the implementation of WFP's humanitarian programme and policy activities. Pierre holds a Master degree in Project Management from the Institut Privé de Technologies Appliquées du Ministère de l'Enseignement Supérieur, de Recherche et de l'Innovation en République du Niger and a Master degree in Public Administration from the National Administration School (E.N.A) of Côte d'Ivoire.



Steven CHUN-KIT LI joined CERFAM as Programme Policy Officer on July 1st, 2019. Prior to joining CERFAM, he worked at the Consulate General of France in Hong Kong as Communications Officer. Steven brings experience gained from internships in the development sector with GIZ in China and UNIDO in Mali. Steven holds a bachelor's degree in European Studies from the University of Sorbonne Nouvelle Paris in France.



Levke RICKMERS joined CERFAM on April 1st, 2020 for a three-month staff exchange. She is based in the WFP Chad Country Office where she works as a Programme Officer. During her stay at CERFAM, Levke will focus on the capitalization methodology and how to apply it to the Chad context particularly for Home-Grown School Feeding activities and the lean season response. Levke holds a specialization in Nutrition in Emergencies from Tufts University as well as a master degree in development studies from the Graduate Institute in Geneva, Switzerland.

CORONAVIRUS OUTBREAKS



WHAT IS CORONAVIRUS?

- Coronavirus is a large family of viruses that cause a variety of diseases including colds to serious illnesses such as SARS and MERS-CoV).
- Coronavirus is a new strain of the virus that has never been detected or detected in the human body.

SIGNS & SYMPTOMS



Fever



Cough



Hard to breathe

REGIONAL CENTRE OF EXCELLENCE AGAINST HUNGER AND MALNUTRITION

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