REGIONAL GUIDE

AFRO: AFRICAN REGION

2019 AMWHO AT UNC REGIONAL CONFERENCE

SUMMARY

The World Health Organization's (WHO) Regional Committee for Africa (AFRO) contains 47 Member States across the African continent. As a region that incurs repeated epidemics and instability, it is imperative that the AFRO Committee understand how these factors relate to public health outcomes for the most effective interventions. Food is a commodity that is essential to survival and public health, yet the production and distribution of food is often hindered by unstable environments. With the guidance of the Sustainable Development Goals, the AFRO Committee is prioritizing the hunger that plagues many of its countries.[1] Goal 2 strives to end all forms of hunger through an assurance of adequate food for people around the world, and this vision is much needed in the AFRO region.

The AFRO Committee is committed to ending hunger by 2030 through measures addressing food security, nutrition, and sustainable agriculture. Food insecurity may be caused by unpredictable weather, disease, unstable governments, and violence. As African countries face many of these conflicts, the AFRO region suffers high rates of malnutrition and its health consequences. Employing sustainable measures at the root of production is perhaps one method of addressing the food predicaments of the AFRO region. NGOs such as the Bill and Melinda Gates Foundation are actively organizing efforts to combat hunger and empower communities within the region. Noting the successes and failures of active organizations can offer insights for policy development. When developing policies, delegates should consider the various factors that contribute to food insecurity, malnutrition, and the environment.

Food is a central part of living that engulfs the collective consciousness of the AFRO region in the World Health Organization. Local people's continued access to nutritional food and availability of resources to combat potential illnesses relating to food consumption is grounded in the stability of regions at large and are manifested in government priorities. Both food deserts and food swamps impact the people of AFRO in establishing and retaining this crucial access. Culture additionally plays a hand in the conceptions of acceptable eating practices. Interventions thus far have encountered a common set of problems, including ineffectual government implementation of new food policy, resource constraints, and environmental fluctuations. Thus, delegates must take into consideration the unique ground conditions in various areas within the AFRO region when formulating effective interventions. This will ensure that the WHO's initiatives do not go against the grain of history and culture and that indigenous barriers to long-term health in the region are being fully addressed. For this conference, the three sub-themes of focus will be Food Security, Sustainable Food Systems, and Food-Related Illnesses.

SUSTAINABLE FOOD SYSTEMS

Sub-Saharan Africa contains almost half of the world's uncultivated land, which can be utilized for increased food production.[7] The African economy is mainly driven by the agricultural sector, which consists of a large population of farmers, making up about 60% of the continent's population.[7] In order to feed a rapidly growing population, African farmers often prioritize high-yielding crops such as grains at the expense of nutritional quality. Furthermore, by 2020 these populations will face increasing challenges as 75% of agricultural land could be degraded in part due to poor farming method.[8] As a result, the AFRO region would greatly benefit from increased agricultural innovation and a greater focus on sustainable food systems.

An example of a country plagued by poor nutritional quality as a result of food production is Ethiopia. Ethiopian farmers benefit from widespread arable land, consistent rainfall, and favorable temperatures.[9] As a result, wheat and maize production, Ethiopia's main food staples, are increasing.[9] Despite the successful agricultural outcomes, less than 20% of Ethiopian children maintain a diet that meets all their nutritional needs.[9] To address this nutritional deficit, a new study demonstrates that increasing the soil quality where crops are grown can increase the nutritional value of the crop.[9] The study suggests that soil rich in organic matter can increase nutrients, such as zinc and protein, in wheat.[9] In Ethiopia, perhaps, soil quality can be enhanced by planting trees, minimizing plowing which disrupts soil composition, and planting legume crops.[9] Fertilizers could also help increase soil quality to increase nutrients. However, Sub-Saharan farmers have limited access to both fertilizers and good soil quality.[8] African farmers often pay double the price of fertilizers than European farmers do.[9] Fertilizer use and production is also associated with ecological concerns, as it requires fossil fuel assistance, can lead to invasive species, and taint water quality.[8] Therefore, finding alternatives to fertilizers would increase economic sustainability for African farmers, while also minimizing ecological impact.[9] The Food and Agriculture Organization of the United Nations (FAO) suggests increasing production of legume crops for the AFRO region, such as chickpea and common bean.[8] Legume crops have nitrogen fixing qualities that would enhance soil quality and fertility.8 These foods are also beneficial to human nutrition, containing high levels of protein and unique amino acids.8 When compared to cereal crops, legumes have higher levels of zinc and folate, important sources of iron.[8]

SUSTAINABLE FOOD SYSTEMS

These suggestions and evidence-based research are implemented by organizations such as Farm Africa and N2Africa, which promote sustainable environments and high productivity for farmers. Farm Africa promotes farming techniques such as using sustainable soil to improve productive output.[10] This organization is active in Ethiopia, Kenya, Tanzania and Uganda to help farmers choose and maintain crops best suited for their environments to ensure high yields for multiple harvests.[10] In addition, the N2Africa program, funded by the Bill and Melinda Gates Foundation, focuses on educating smallholder farmers on the benefits of legumes on soil quality.[11] This "research-in-development" program trains stakeholders and implements specific options by project area to help farmers increase their production.[11] Both organizations aim to create ecologically and economically sustainable environments for African farmers and consumers.

While the soil quality alone is not a sufficient replacement of all nutritional needs, it may be a beneficial technique for regions that rely heavily on high-yielding staple crops.[9] Sustainable agriculture practices are beneficial for the environment as well as the economy. Policies should empower farmers throughout production while also considering the ecological impacts of implementation. Governments should note the successful programs of NGOs when developing policies and strategize methods for long-term maintenance of similar ideas. Considering multi-faceted policy approaches may be most beneficial for lasting sustainability in the AFRO region.

FOOD SECURITY

The AFRO region faces severe food insecurity that impacts about 153 million people.[1] This statistic suggests that approximately 1 in 4 people over the age of 15 described themselves as "hungry but did not eat or went without eating for a whole day" as a result of a lack of resources.[1] As such, this statistic reflects one of the highest rates of hunger in the world. Although several AFRO countries have high agricultural potential, the AFRO region is a net importer of food.[1] In conjunction with higher importation rates, AFRO commodity export prices are decreasing, ultimately creating financial strains.[1] Furthermore, on a household level, Sub-Saharan African families face larger economic barriers to food than most other regions around the world do.[1] The Domestic Food Price Index of 6.0 in Sub-Saharan Africa indicates that food prices are 6 times higher than non-consumption goods.[1]

Countries in the AFRO region are disproportionately affected by poverty and its consequences, specifically with disease burden. In 2014, the average income in Sub-Saharan Africa was three times lower than the incomes of Asia and Latin America.[1] A high HIV/AIDS prevalence along with recurring Ebola outbreaks limit ability to work and obtain stable household incomes.[2] As a result of efforts to contain infectious disease, trade and food access may be hindered.[2] Restricted access to food, especially during times of illness, creates a multi-faceted public health burden.

Farmers in the AFRO region are disproportionately affected by adverse weather such as unpredictable rainfall, floods, and droughts.[2] Around 40% of maize fields encounter occasional droughts and around 25% of maize fields suffer frequent droughts.[3] Farmers may lose up to half of their harvest due to drought, a proportion that is expected to increase as climate change worsens.[3] The Bill and Melinda Gates Foundation, USAID, and Monsanto are among some of the partners leading a program called Water Efficient Maize for Africa.[4] Through genetic engineering and selective breeding, scientists have developed a drought-resistant maize seed.[4] These seeds have increased harvest yields by 20-30%.[4] The development and implementation of genetically durable crops has the potential to alleviate financial burdens on local farmers and reduce food insecurity for millions of people.

An additional complication in food access is local people's diminished access to food as a result of political or environmental instability in the regions in which they live. For example, in the Democratic Republic of the Congo, wars have led to humanitarian disasters and deaths that stem from hunger and disease associated with the crippling of local health institutions, as well as the disruption of food markets.[5] The International Food Policy and Research Institute concluded that hunger and conflict are bidirectional; while conflict causes diminished food access, food can be weaponized in volatile relations.[1] Food security policies that work to enhance the resilience of nations in which they are enacted are highly context-specific, and in the AFRO region, destabilizing forces include non-state actors involved in armed groups, terrorist groups, and government turbulence.[2] The region has seen violence as instigated by social inequality; poor nations' inability to uphold law and order, especially during election times in democratized nations; and other forms of systemic inequalities that have not yet been

FOOD-RELATED ILLNESSES

Foodborne illnesses are a significant cause of morbidity that has threatened to dissuade socioeconomic development worldwide. However, the true effect of chemical and parasitic contaminants was not fully investigated until recently, and the results were alarming. In 2015, the World Health Organization released its brief on foodborne illnesses, clearly demonstrating that the AFRO region has to prioritize its efforts against these illnesses.. Despite children making up 9% of the global population, about 30% of deaths stemming from foodborne illnesses occur among children under the age of 5.[3] In the AFRO region, the average child suffers from five episodes of diarrhea per year, mainly because of contaminated infant food.[3] This raises a particular public health concern because children are highly susceptible to major alterations in their physiology, and the effects of foodborne illnesses, if untreated, can delay mental or physical development. The AFRO region faces diarrheal diseases caused by norovirus, Campylobacter spp, Salmonella Typhi, Taenia solium, hepatitis A virus, and aflatoxin.[2] Much of these contagions are spread through the culturally accepted "street food," which is often made from unsanitary water and on unclean workstations.[2] Although these foods support local economies and facilitate food access through lower prices, the health impact is not to be ignored.

Additional factors increasing the risk associated with foodborne illness are the infrastructural systems surrounding unsafe water used in foods, poor hygiene, lower levels of literacy and education, and insufficient food legislation with proper implementation and enforcement. According to the 2007 AFR/RC57/4, "Food Safety and Health: A Strategy for the WHO African Region," a major problem surrounding improvement of these food conditions is the lack of effective multilateral collaboration in enacting policy, enforcing them, and administering resources when needed.[1] The seriousness of foodborne illnesses is linked to their potential long-term exacerbation into cancer, kidney or liver failure, and brain or neural disorders.

AFR/RC57/4 aimed to assist individual African nations to design effective legislation that is fully cognizant of the above problems and is drafted according to the wishes and unique infrastructural situations of each Member State.[1] While much change has been achieved through this strategy for risk management, intersectoral cooperation, and community participation in their health, priority given to food safety remains somewhat low due to competing priorities within the food system. The Codex Trust Fund has been an operating group for forty-four Member States in the AFRO region to strengthen capacity building and achieve collective progress on this front. In addition to this regional effort, the WHO has released pamphlets and fact sheets that summarize the most basic and crucial lessons in relation to maintaining food purity, such as washing hands and sanitizing work stations, separating raw and cooked foods, cooking foods thoroughly, keeping food at safe temperatures, and using safe water and raw materials. This initiative could be supplemented with a wider educational net to disseminate research-gathered information on food hygiene control. Thus far, there have been few successful policies on curbing food-borne illnesses.[4] However, WHO-spearheaded approaches may come from education, enforcement of policies, ideation of policies, encouragement of collaboration among agencies within Member States at their

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