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Jamaica: Increase Food Availability and Quality to Improve Urban Health

Jamaica is commonly thought of by visitors as a beautiful and luxurious island nation with a sparkling azure sea, lush green forests, extravagant beachside resorts, and some of the most delicious tropical fruits to grace the planet. But underneath this exquisite surface lies the disturbing health issue of malnutrition. Malnutrition, or the lack of proper nutrients needed to sustain a healthy lifestyle, is an issue that is present globally and has been affecting Jamaica for many decades. Like many nations, Jamaica has two primary sub-classes, urban and rural, and both have been struck with malnutrition. Within these two sub-classes, malnutrition has affected agricultural production, the economy, and the quality of life. All of these factors are interconnected, and the resulting product is a cycle of starvation and hunger that has malnutrition as a core driver. One impact of inadequate nutrition is that workers are less able to perform their jobs properly, in turn reducing the amount of food being produced and the amount of income being brought home to families that can then be used to purchase food. Without access to adequate income and sustenance, Jamaican families will find it quite difficult to break the cycle of poverty that has plagued them. So far efforts to eradicate malnutrition throughout Jamaica have been earnest but progress has been uneven. To help counteract the recent decline in nutrition improvements, it is critical that the Jamaican government focus its attention and resources on refining agricultural techniques and technology, investing in more local groups and projects that will increase local food availability and increasing educational opportunities.

In Jamaica, the typical urban household has two or three children and up to three generations of a family living under the same roof. Both men and women tend to work outside the home and earn a wage, while grandparents stay behind to raise and take care of the children. In some richer urban families, it is common to employ at least one domestic helper. Although the quality and variety of the diet for domestic helpers differs from wealthy families, the diet of both classes usually consists of some kind of jerked (spiced) meat, fresh local produce (like bananas, mangos, and citrus fruits), and rice, as well as a big Sunday dinner no matter the social standing of the family. Store-bought food is the staple in the pantries of rural and urban families and across classes, however, access to land permitting, most families own a small garden from which they supplement their diet (Brown). While the garden does increase and add variety to the family diet, because of its small size and the limited ability of urban families in particular to spend time cultivating it, the garden does not completely eradicate malnutrition.

Many Jamaicans, particularly in cities, depend on supermarkets for their food needs. Jamaica boasts several thriving grocery store chains including Empire Sovereign and Carihome Supermarket. Most of these grocery stores are located in urban areas such as Kingston and Montego Bay, with more expensive convenience stores serving rural and inner city markets. Wealthy families are the main shoppers at big supermarkets, while poorer families tend to shop at corner stores and smaller markets which often have a very limited supply of affordable, nutritious food (Brown). Jamaica's supermarkets receive the majority of their food supplies from rural farmers, who compete against imported goods that are cheaper and made with lower cost fertilizer, machinery, transportation, and energy (Rattray). One benefit reserved for local farmers, however, is that local produce is exempt from a tax on raw food, which is applied to imported produce. If raw food taxes were placed on local farmers, local agriculture would never be able to compete with the large overseas corporations, and the local economy would suffer severely (Rattray).

Over the last few years, Jamaica has begun to see the cost of imported foods increase. As the cost of importing food has risen, Jamaicans have increasingly found themselves turning to their agricultural roots

("As Cost of Importing Food Soars, Jamaica Turns to the Earth"). A decade ago Jamaica began a national food security campaign with the slogan, "grow what we eat, eat what we grow." Just as locally grown and organic food in the U.S. is increasingly advertised, grocery stores in Jamaica are also highlighting locally-grown goods with stickers and prominent displays. Urban families with small garden plots and others familiar with farming are taking a front line role in involving young and old in growing food.

Because of the increasing costs of food and limits on family income and resources to adequately feed children, schools serve a vital role in supplementing nutrition. In a poorer urban Jamaican family, the children would most likely attend public school, which is free for the primary level but not for secondary onward (Brown). For a more well-off Jamaican family, the children would most likely attend a private school. Most urban schools offer a midday meal for the students, where most of the students will eat (Encyclopedia Britannica). This is a system that is used to ensure that all children in the primary and secondary levels of schooling receive some form of nourishment during the day.

Jamaica's healthcare system also plays an important role in identifying and monitoring malnutrition across the country. In Jamaica, the health care system has improved dramatically over the years, with a series of Secondary/Tertiary health care facilities that comprise twenty-four hospitals, including five specialized institutions. The Primary system consists of 348 health care centers run by four Regional Health Authorities (UNDP Human Development Report). The Jamaica government is currently working to establish a national health care system (World Bank). However, the government is facing challenges because of staffing constraints, particularly in areas such as dentistry and nursing where Jamaica faces stiff competition against the U.S., UK and Canada for dentist and nursing professionals (UNDP Human Development Report). These primary healthcare positions are critical for bettering the health of all citizens.

In addition to issues of limited staff, Jamaican hospitals are confronted with limited supplies, and often must rely on donations by outside sources to furnish them with the necessary equipment to offer primary and critical care. ("Jamaica-Star"). Jamaica sources medical equipment and donations from national and international companies as well as from aid agencies in the form of technology and volunteers. Several colleges in the United States, such as Nova Southeast University, offer trips to Jamaica to provide medical treatment (along the lines of the non-profit agency, Doctors without Borders). In the case of Nova, they offer general medical care to any group in urban Jamaica that needs it, as well as providing training in nursing and other medical jobs.

Jamaica is still years behind where it could be in its economic development, reflected in part by its minimum wage, which is quite low in comparison to countries like the United States. As of September 3, 2012, the wage rate was J\$125 an hour, which equaled approximately US\$1.25 an hour (Balford). These low wages directly affect the amount of food that can be bought to nourish families; if the workforce and students are not receiving the proper nutrients, their work quality and productivity are bound to suffer.

A second driver of Jamaica's economic development challenges is the disparity in poverty levels between rural and urban populations. Jamaica is the third largest island in the Caribbean, behind Cuba and Hispaniola (home to Haiti and the Dominican Republic). Approximately two-thirds of the population lives in rural areas. Although most of the island's inhabitants live in the countryside, Jamaica's economy is heavily centered in the cities, driven by tourism, manufacturing, and money sent to families from abroad, as follows: manufacturing- 13%, Finance (including tourism and money sent from abroad to families)- 50%, mining (principally bauxite)- approximately 5%, farming- 16%, and trade- 16% (Encyclopedia Britannica). An article in one of Jamaica's largest newspapers, The Gleaner, noted that "it is in the countryside, not in the inner city, that most of those who fall below the poverty line live" ("Urban Crime has Rural Roots"). In spite of the media and political spotlight that urban poverty and crime often attract, "the really serious poverty in Jamaica lies hidden in the countryside." As such, providing

sustainable economic development opportunities in rural areas is crucial to developing Jamaica's economy as a whole.

Agriculture and increased access to affordable and nutritious food are a key component of developing rural areas. The Food and Agriculture Organization ("FAO"), an agency of the United Nations initiated a project in 2009 to help both rural communities and the urban poor increase their production and consumption of local crops such as roots (for example, carrots) and tubers (for example, yams). Through the project, greenhouses, seeds and training practices on organic farming, small-scale irrigation and proper storage were provided to schools and farmer groups ("FAO Initiative on Soaring Food Prices"). The project was done for two years on a pilot scale, but the expansion of projects such as this throughout Jamaica can help lower the disparity in poverty levels between urban and rural populations.

A third factor holding back Jamaica from developing its economy is that it is not fully utilizing all of its natural resources. One important resource that serves as a barrier in increased development is agricultural productivity. Of the two-thirds of Jamaicans that live in the countryside, nearly 20% of this population earns their living from agriculture. Jamaica's low agricultural productivity is partly due to the large, global stage on which Jamaica's agriculture finds itself competing (Walters-Gregory). Jamaica is working to improve its agricultural standards and as of October 5, 2012, the government released an official statement saying that they are addressing some of the issues that Jamaica is grappling with so that the nation can increase its global competitiveness (Walters-Gregory). With improved agricultural productivity, more food and money would be generated, allowing for more families to either buy food to receive the proper nutrients or produce more nutritious food to eliminate malnutrition.

In addition to Jamaica's barriers in food production, they also face constraints in attracting capital and attracting employees from developed countries. As of February 21, 2013 the unemployment rate in Jamaica was 13.7% ("Jamaica Gleaner"). Comparatively low wages versus the U.S., even for white-collar and professional jobs, make it difficult to attract and retain employees that can advance the economy. Low minimum wage rates of approximately US\$1.25, make it even harder to purchase food or other goods necessary to live a healthy lifestyle. Most Jamaicans begin working at age 14, and a large portion of the money they make from that point on is used to pay for food, with many families unable to afford luxury goods such as washing machines or computers (Brown). These reduced wages and limited job opportunities inhibit the ability to purchase a variety of nourishing foods.

Maslow's *Hierarchy of Needs* has theorized that one of the basic psychological needs to survive is food (Huitt). Jamaica's poverty rate is quite high with one in every four children living below the poverty line (UNDEF). Over the years this rate has fluctuated significantly, drastically lowering between 1990 and 2007 from 28.4% to 9.9%, then increasing to 12.3% in 2008, and then again to 16.5% in 2009 (UNDP). Eradicating malnutrition throughout Jamaican communities would increase the labor forces' ability to work, which would improve household income as well as community and national income, in turn bringing many people above the poverty line. Other issues that drive malnutrition's ability to flourish are diseases such as HIV, AIDS and malaria (UNDP Human Development Report). These diseases coupled with malnourishment are severely crippling the labor force and reducing the amount of earnings that could be spent buying food for families or improving public services (UNDP Human Development Report).

Only a few local projects have been set up throughout urban Jamaica to address nutrition and access to food; one local project that has been established and is thriving is the Salvation Army, which provides large quantities of food to local families (Brown). This project has the potential to be scaled up tremendously. According to the Salvation Army's website, the Salvation Army only has six locations on the island, and all of them are within the Kingston city limits or very close to an urban area. This is a logical choice considering urban areas have more trouble accessing fresh produce and other nutritious

foods, and urban areas are usually more populated. However, it would benefit more of the population for the Salvation Army, or an equivalent non-profit, to at least double their presence with locations throughout all corners of the island. If the Jamaican government were to pursue food access by increasing local food distribution networks, the food distribution projects could be designed flexibly on a small scale or large scale, could be structured to engage the local population in planning and implementing solutions, and could offer the potential to increase both job opportunities and access to food for families and the community.

Another method to support nutrition beyond access to food is to enhance the range and amount of agricultural produce. Agricultural production can be spurred through technology and new farming techniques. For instance, local communities can consider low-cost, low environmental impact measures such as aquaculture, community gardens (where an abandoned urban or rural plot of land is given to the local community to tend) and solar power to increase the amount of food grown. These techniques and technologies enable better management of the terrain, and engage the community in becoming actively involved as producers and consumers of what is grown.

Just as with the government, families can also utilize multiple tools to fight malnutrition. Instead of gravitating towards low paying jobs as after-school options, children can work side by side with grandparents, siblings and neighbors in community gardens on the weekends. Admittedly, community gardens will only marginally increase the amount of food being produced. This slight addition, however, in readily available, freshly-harvested food may be *the* deciding factor for many impoverished families. Additionally, students that have received an education in both academic studies and land skills, will grow and eventually enter the labor force as more educated, productive and environmentally-conscious workers and consumers.

Schools offer another potential avenue for local families and the government to use to address malnutrition. Teachers can use school gardens to educate students about the importance of proper nutrition, and to broaden students' exposure to technology in the cultivation and improvement of agricultural production. Engaging students in gardening and providing them lessons that they can use at home would be very advantageous, as currently most public schools are relying on community gardens to feed students during the lunch hour, with school gardens playing a limited or non-existent role (Brown). School gardens offer valuable laboratories where students can learn and experiment with new techniques on raising plants and combatting diseases. Relying on school gardens would then enable community gardens to turn less of their attention towards feeding students, since students would now grow some of their own produce in school, and redirect it towards feeding the community or even banding together and creating small-scale businesses to increase local revenue.

The Jamaican government, in partnership with the local private sector and non-profit agencies, has developed a long term National Development Plan for the country called Vision 2030 Jamaica. The goal of this Plan is for Jamaica to transform itself from a developing country to a developed country by 2030. To help achieve this objective, Jamaica has joined the United Nations' campaign to end poverty, called the UN Millennium Development Goals (MDG). The MDG campaign has a total of 14 goals ranging from achieving universal primary education to promoting the health of the world's people and environments. Under the MDG program, Jamaica is successfully addressing its severest forms of economic inequality. According to the 2009 UN MDG Report on Jamaica, Jamaica is making strides in eradicating extreme poverty and hunger, as well as having all children receive at least a primary level of education. However, progress is still needed in reducing under-nutrition, particularly in the rural areas. One impact of malnourishment in the country is that the mortality rate for children under-five is lagging significantly versus Jamaica's target: Jamaica's target improvement is to reduce childhood mortality by 67% between 1990 and 2015, however, the childhood mortality rate has only decreased 14% during the 14-year period, or approximately 1% per year on average ("Jamaica's Progress towards the Millennium

Development Goals"). Jamaica's progress in improving maternal health, another MDG goal, shows a similar story as childhood mortality, with the actual reduction rate being 20% over the past 14 years versus a target of 75% during 1990 to 2015. The provision of more nutritious food for pregnant mothers as well as community-based garden and education programs are important steps Jamaica could take to make significant progress in addressing its MDG goals and objective of eradicating malnutrition.

Jamaica is a beautiful nation with a rich culture and history. Although still a developing country economically, Jamaica ranks high in the health status of its population, largely because of low cost healthcare, and a strong primary health care system that extends deeply into rural and urban areas. While Jamaica's public health care system is generally strong, pockets of the population remain vulnerable to malnutrition. The UN's Millennium Development Goals have helped provide a policy anchor for Jamaica to use to eliminate poverty. The MDG goals create a unifying platform that motivates Jamaica and other developing nations to stay on track in their path to development. One of the obstacles that Jamaica faces in its quest for development is malnutrition, which impedes many families in living healthy lives and hinders Jamaica's progress in competing on a global scale. Jamaica has begun implementing several programs in its fight against hunger. Expansion of grassroots efforts such as community and school gardens and utilization of new technologies and techniques in agriculture will help improve the quantity, quality, and variety of food needed to create a stronger and healthier nation.

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