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Bolivia,Factor 11: Malnutrition

### **Bolivia: Awareness to Stop Malnutrition**

In Bolivia,the average urban family has 2.6 children in each household.("The World Factbook — Central Intelligence Agency", 2017)Family is one of the most important aspects of the Bolivian culture,with the elderly being involved with the children more than the parents.Low class families usually have more children than upper class families.Many children die of infancy.Most women work at home.Many run small businesses from home because many lack modern conveniences to make life easier for them.

The diet of a average Bolivian family consists of potatoes,rice,fruit,soup and dairy.Many varieties of corn and potatoes is easily accessible in just about in region.Chicken and beef are mostly used when meat is cooked.However, education is promoted to the youth though illiteracy rate are steadily increasing in the low classes of society.(*Republic of Bolivia*, 2006)

Even though, education is promoted to the youth though illiteracy rate are steadily increasing in the low classes of society.Schooling is obligatory for children ages 5-18.However,conditions are very poor.On the other hand, families middle class and upper class try their best to send their children to private or parochial schools.(*Republic of Bolivia*, 2006)About half of all children stop schooling around the age of 14.("The World Factbook — Central Intelligence Agency", 2017)Many children leave school to labor for their family and schools are typically far away.(*Republic of Bolivia*, 2006)

Access to health care in Bolivia is poor.(*Republic of Bolivia*, 2006)Even though,contaminated water has been prominent risk on Bolivia for a while now,it's steadily improving in urban areas.Although,in rural areas about 25% of rural area population water is severely contaminated.("The World Factbook — Central Intelligence Agency", 2017)Nurses and doctors are only taught a bare minimum of medical skills.

Infant mortality rates are high because of disease and poverty.In addition,only about half of population has access to sufficient health care.(*Republic of Bolivia*, 2006)Sexually transmitted diseases have becoming a growing threat to the population.According to the CIA World Factbook, about the adult prevalence rate of HIV is 29% or about 18,200 adults.("The World Factbook — Central Intelligence Agency", 2017)In the mid 80s,the HIV epidemic started in Bolivia.It was highly concentrated with more men than women.In 1991,a study was done on sex workers in Latin America saw a 17.9% prevalence rate of syphilis.Even though,Bolivia has become a more developed country,syphilis and HIV rates decrease,it remains high risk in groups like inmates and prostitutes than in pregnant women.(Gerbase et al., 2017)

Towards the west of the country,there are two towering Andean ranges parallel from north to south.The largest plateau in the Andes is Altiplano.About 60% of Bolivia's farmers live in the plateau.Though many have a hard time building a sustainable income because the land is dry and cold land that has the least fertile soil and rain in the region .("New Agriculturist: Country profile - Bolivia", 2013)In Bolivia, about 34 percent of the land is used agriculturally.("The World Factbook — Central Intelligence Agency", 2017)The average farm size is about 5-10 hectares.Some commonly grown crops are coca(which is used to produce cocaine),potatoes,sugarcane,beans,quinoa,coffee,maize,wheat,rye and oats.Most farmers practice traditional methods.Usually, fields are terraced,many farmers use slash and burn agriculture and foot ploughs are used.Therefore,with using these outdated methods farmers perform inadequate harvests.To help supplement a low income from growing inadequate crops,farmers have many llamas and

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alpacas, they are mostly helpful during poor farming seasons. ("New Agriculturist: Country profile - Bolivia", 2013)

In Bolivia, the agriculture industry is about 13 percent of the economy. ("The World Factbook — Central Intelligence Agency", 2017) One of the biggest ecological worries in Bolivia is soil fragmentation because of overgrazing and poor development strategies such as slash and burn farming. Over the last decades, use of hazardous fertilizers and excessive mistreatment of renewable resources has destroyed sustainability of many lands. This has created a vast deficiency between supplements included and supplements taken from the dirt. Therefore, nearby horticultural groups encompassing Bolivia deliver reliably low harvest yields a seemingly endless amount of time, burdening the strength of neighborhood agriculturists, their children, and the land they live on. ("Environmental Sustainability Issues in Bolivia", n.d.)

Nearly one in three children under 5 in Bolivia have stunted growth, because of persistent malnutrition. They have the second rate of malnutrition. Poverty, lack of proper nutrition, lack of awareness and less than subpar health care are most to blame. For example many families in Bolivia's El Alto are available to Andean fruits and vegetables, most eat starchy fatty diets with rice and potatoes. This leads to stunted growth and obesity mostly among children and women. Most people aren't aware of their health. ("IDB - Bolivia fights malnutrition", 2013)

Malnutrition affects food insecurity because people have a lack of important nutrients. (Cleaver, Okidegbe, & De Nys, 2006) According to gainhealth.org, two billion people in the world suffer from various forms of malnutrition. Malnutrition can occur with food insecurity it can be caused by eating too little or eating a unbalanced nutrient deficient diet. ("Fast Facts About Malnutrition - Global Alliance for Improved Nutrition", n.d.)

Most families don't have enough money to buy nutritious foods because agriculture and home businesses aren't super profitable. Though Bolivia is steadily growing, it's still a developing country. The simple solution is to give farmers to increase agricultural productivity. They don't have funding to buy new equipment and most new methods might not help because of how much traditional farming methods have destroyed the environment.

The trend is steadily worsening for Bolivia. Over 75 percent of households lack basic food items in Bolivia. Lack of income in Bolivia is the main cause for food insecurity. A great part of the generally provincial and indigenous populace depends vigorously on subsistence agribusiness. Amid the incline seasons, individuals endure nourishment deficiencies while dry seasons or surges make farming a questionable wellspring of wage. Currently, 16 percent of the Bolivian population is undernourished. ("Bolivia | World Food Programme", n.d.)

Tragically, the rate of ailing health for kids in the poorest families is a stunning 40 percent. Moreover, "among Bolivian ladies of kid bearing age, around 12 percent are so short that they are at danger of having an underweight infant; and 27 percent of ladies of childbearing age are anemic to the point that they will most likely pass inadequacy to the unborn kid... absence of sanitation and improper bolstering of youngsters under two are the main sources of lack of healthy sustenance in Bolivia" (World Bank,

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2002). To a great extent because of lack of healthy sustenance, baby, kid, and maternal death rates in Bolivia are the second most astounding in the half of the globe. ("Health Issues in Bolivia", 2002)

There has been a link between malnutrition and uneducated women. Low-birth weight infants and stunted children may be at greater risk of chronic diseases such as diabetes and heart disease than children who start out well-nourished. Between 1994 and 1998 the number of overweight women increased by nine percent, with the greatest increases seen among women with less education. This "double burden" is the result of various factors. Progress improving infrastructure and development of safe public health systems has been slow, impatient efforts to reduce undernutrition; while rapid urbanization and the adoption of Western diets high in refined fats, sugars and carbs combined with a sedentary lifestyle are cited as the major contributors to the increase in obesity and chronic diseases. (*Nutrition At A Glance-Bolivia*, n.d.) Improving this factor would increase the income available to a average farm family in Bolivia, by being able to purchase nutritious foods and farming equipment. Poor families will be able to be more health conscious. Mothers need to be educated on feeding through counseling service based on monitoring growth of their children. Giving extra supplemental income to farmers can allow them to stop overexploiting the environment with slash and burn and computerize and modernize their agricultural practices.

With farmers being able to have better equipment, they will be able to produce higher yields of food at cheaper prices. Therefore, this will bring farm families out of poverty and allow more people to have access to nutrients they need. Women will be able to get proper nutrients during maternity to prevent stunted growth of children. This will provide rural families and indigenous population to climb out of poverty.

Problems that affect malnutrition is food insecurity, poverty, poor healthcare and agricultural practices. Food insecurity affect the wellbeing of the average farm family by not giving them access to adequate nutrients. Poverty will keep people from eating healthy. Having poor medical care will prevent people from being aware of diseases they might have or might be in risk of. (Foundation, n.d.)

Other environmental concerns, confronting Bolivia include deforestation, loss of biodiversity, and modern contamination of water supplies used for drinking and water system. Abuse of government funding to meet now monetary needs alongside populace weights has left the nation exhausted of assets that customarily bolstered most by far of its residents. Lamentably, extensive scale, best down undertakings subsidized by vast advancement offices commonly fall flat at tending to these issues and focusing on the zones most in need. ("Environmental Sustainability Issues in Bolivia", n.d.)

With the Food and Agriculture Organization of the UN estimating we will need to grow over 70% more food by 2050. To make the demand in developing countries, countries like Bolivia have resorted to deforestation. Which has wrecked the environment tremendously. We need to find a more efficient approach-like GMOs. Meat consumption is driving global food demand. To fulfill the future statistics of agriculture, we have to close the yield gap between rich and poor countries. To fill the gap we should use GMOS in developing countries like Bolivia. (Naam, 2014)

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Although, GMOS seem like a easy solution to the problem,others disagree.In Bolivia,specifically farmers strongly disagree with genetically engineering and modifying foods.The vice president of Bolivia,Alvaro Garcia Linera has suggested that biotechnology could be the answers to chronic malnutrition.The debate about biotechnology has been going on for awhile.

The leader of the Farmers movement Rodolfo Manchaca thinks that Bolivian citizens need to have say in this debate.He said”We do not refuse the topic of GMOs. According to the WHO and the UN, they are negative and dangerous for health, and Bolivians should think about it twice or thrice before deciding to use them. This is why we are suggesting a referendum on the topic,” he explained.("Bolivia Fails To Reach An Agreement Over GMO Use")

At this time,the Alvaro Garcia is requesting a increase in food production.He wants the country to modernize its agricultural practices and be consistent while doing so.("Bolivia Fails To Reach An Agreement Over GMO Use")

Bolivia finding support in SDGs in areas like education,clean water form ing strong institutions will help solve malnutrition in Bolivia before 2030.The government of Bolivia will have to come with a plan to educate the citizens on modern agriculture.Children should be taught about how biotechnology can change the grim reality they face.

Organizations like the Inter American have started programs to educate the public.Health agent s have been sent to homes to show families how to better feel children and what nutritional supplement can help prevent the trend of stunted growth.Things like cooking classes and community meetings have been brought to cities in Bolivia like Camocha to provide information on public health.("IDB - Bolivia fights malnutrition", 2013)

Evaluations of programs like these have shown success in poor communities,There has been a definite change in pregnant women,Though,perceptions have changed in certain groups,it has failed with over 1,000 under age 2 vowed to begin taking nutritional supplements,they never took the correct doses or often forgot about them,Therefore,programs like these haven’t seen supplemental evidence that they will change the problem.("IDB - Bolivia fights malnutrition", 2013)

With improvement programs developing,but nothing ever changing how will Bolivia solve the issue of malnutrition?The simple answers is technology and money but without nether...How?

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