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Looking Ahead: Sustainable Paths Toward Food And Nutrition Security

Introduction

War torn Lebanon faces many challenges toward achieving a sustainable path towards food and nutrition security. Obstacles that hinder their ability to provide an abundant, economical, safe, and nutritious food supply include the lack of productive agricultural land, infrastructure to distribute raw and processed foods, and an economy that allows all to be able to afford the food they need for themselves and their family. The main force behind this scenario is related to the Lebanon's long war history.

Civil War and Current Crisis

From 1975 until the early 1990's Lebanon suffered a bloody civil war in which regional powers, particularly Israel, Syria, and the Palestine Liberation Organization, used the country as a battle field for their own conflicts (BBC News, 2006). The Lebanese Civil War began on April 13, 1975 when gunmen attacked Christian Phalangists at a church, killing several and injuring many. As fighting moved to a cease-fire in November of 1976, the Palestine Liberation Organization continued attacks on Israel, bringing Israelis back to Lebanon. Later the Israelis left only to return. In June of 1982, they launched "Operation Peace for Galilee." This invasion eventually made the Palestine Liberation Organization retreat from the country and left the land in the hands of the U.S., French, British, and Italian troops. There mission was to stabilize the country. In the end, nearly 18,000 Lebanese were killed plus many Palestinians and Syrians.

Two days after president-elect Bashir Gemayel was assassinated, the Kataib forces killed more than 800 civilians at a Sabra-Shatila Palestinian refugee camp in Beirut. As fighting continued, in October of 1983, more than 300 U.S. and French troops were killed by a truck bomb in Beirut. When war finally started to calm down in 1989, the country came to an agreement and elected Rene Moawad, who was killed 17 days later and was replaced by Elias Hrawi. Over the decade and a half of war, between 130,000 and 150,000 were killed and an estimated of \$25 billion to \$30 billion was lost to their economy.

On July 12, 2006, two Israeli soldiers were captured by Shiite Hezbollah militia fighters from southern Lebanon. As a result, Israeli forces launched a land-sea-air offensive targeted in Lebanon. Israelis bombed the headquarters of the Hezbollah and attacked Beirut's airports and blocked ships from entering or leaving the country. Beirut suffered a loss of city buildings and ways of communication. As this crisis developed, thousands of foreigners were evacuated from the war zone. Soon other countries were being attacked such as Tripoli, Baalbek, Tyre, and Sidon. On August 14, 2006, a cease-fire came into place.

Just in two weeks, 400 Lebanese and about 40 Israelis were dead with thousands injured and an estimated half a million Lebanese were displaced. 900 factories, markets, farms, and other commercial buildings were destroyed. Along with 32 airports, ports, water and sewage treatment plants, dams and electrical plants were destroyed. 25 fuel stations, 78 bridges and 600 kilometers of roads were also destroyed. And, the initial costs of clean-up of a huge oil spill caused by the Israeli bombing of a power plant will be \$64 million dollars. Repairs to buildings and infrastructure and rebuilding are expected to reach \$4 billion dollars (BBC News, 2006).

Jan Egeland, UN's emergency relief co-coordinator, called what had been done a violation of humanitarian law. Others call what happened a disproportionate use of force employed by the Israeli military since the attacks killed many civilians. Lebanon now faces the challenge of rebuilding and ensuring a cease-fire will hold allowing them to address other important issues such as food production, infrastructure rebuilding, environmental concerns, and economic stability.

Country Profile

Lebanon is considered a Middle East country bordering the Mediterranean Sea and is placed in between Israel and Syria. Lebanon's area is 10,400 square kilometers and is about three-fourths the size of Connecticut. The capital of Lebanon is Beirut and it happens to be the largest city in the country. As of July, 2006, Lebanon has an approximate population of 3,874,050 people. The people of the country are called Lebanese. The average life expectancy of its citizens is about 73 years old. Luckily, this country only suffers with one-tenth percent of its population having to deal with HIV/AIDS. 95 percent of this country is considered Arab, only 4 percent of the population is American. The major religions of this country are Muslim and Christian, by more than 95 percent. The government is republic and gained its independence on November 22, 1943 from France. France had been awarded Lebanon from League of Nations. France combined the Christians from the mountains and the Muslims from the coastal plain to form the Greater Lebanon.

Family and Culture

Lebanese families usually consist of two parents and several children ranging from two to six on average. Most families have home cooked meals and having everyone there to dine builds for family time. Common dishes usually include kebbe and tabbouleh. Most families have a balanced diet and an average income of \$3,800. Several years back about one third of the country was considered poor.

Because of the size of Lebanon it is hard to own land to farm with. The average small farm has about 180 acres. Because of how the land was formed, Lebanon has the privilege to grow European and tropical crops.

The culture of Lebanon has been shaped with many influences that all hold a strong and rich respect for family. Many occasions are celebrated with drums and singing. Common gatherings involve a lot of dancing including a dance called debkeh, which has since influenced dancing the Middle East region and many other parts of the world.

Religion

Government is greatly affected by religion, which is why Lebanon is considered a confessionalism governmental policy. Many conflicts in Lebanon exist because of a disagreement about religion. Years ago, Lebanon was mostly Christian. However, Muslims have been immigrating into this great country. Since they have a higher birth rate, Muslim is now the main religion of Lebanon. About 70 percent of Lebanese people practice Muslin teachings. Religion is such an important part that on governmental-issued identification cards, one is required to indicate their religion of choice. As of now, Lebanon's government holds 17 distinct religious sects: 11 Christian (4 Orthodox, 6 Catholic, and 1 Prostant), and 5 Muslim (Shia, Sunni, Druze, Ismailite, and Alawite).

Schooling

Out of all the Middle East, Lebanon is one of the most educated and technically prepared populations. In Lebanon, 88 percent of the people ages 15 and older are literate. Primary schooling is

free in Lebanon. Lebanon also hosts six proclaimed colleges including: the Jesuit-sponsored Saint Joseph University, the well-known American University of Beirut, the government-supported Lebanese University, the Lebanese American University, the Egyptian-sponsored Beirut Arab University, and the Armenian Hagazian College. Lebanon also consists of more than 100 vocational and technical specialized schools.

Agriculture and Natural Resources

Although Lebanon's major resources are limestone, iron ore, and salt, Lebanon is also able to have a viable agriculture industry. They are able to grow tobacco, figs, citrus fruits, bananas, olives, and an assortment of vegetables. 13.75 percent of Lebanon's land is dedicated to permanent crops. For the most part, they have great land for production purposes but, because of the war, it is hard for them to grow things efficiently and consistently. One of the biggest barriers of crop production goes back to the country's war history and current crisis. It is also affected by the government's relationship with other countries.

Lebanon has several natural resources including cedar trees, abundant water, productive soils, and terra rossa (red earth). Lebanon's forest are mainly made up of cedar trees and the trees mean so much to the country that they put it in the center of their country's flag. Cedars have been so important that they have been mentioned in the Bible and many other religious readings. The fertile soils are found in the coastal plains and in the higher elevations, you will find the terra rossa. About 36.6 percent of Lebanon is agricultural land and 13.3 percent is dedicated to forest. About 37.6 percent of forested land is in a reserve to protect the cedar trees.

Lebanon has begun to address the following environmental issues: deforestation, soil erosion, desertification, air pollution in Beirut from vehicular traffic and the burning of industrial wastes, pollution of coastal waters from raw sewage and oil spills. They have also been party to environmental – international agreements such as: Biodiversity, Climate Change, Desertification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Ship Pollution, and Wetlands. They have signed, but not ratified Environmental Modification and Marine Life Conservation Agreements.

Water and Sewage Treatment

After the Civil War, the country started to discharge untreated sewage and industrial waste into waterways or they pumped it into deep holes. By the 21st century, Lebanon increased its effort in changing the waste-disposal methods, clean-up procedures, initiated environmental conservations practices in order to help the environment. Lack of operational sewage treatment plants has negatively affected drinking water supplies. Much of the drinking water supply has been contaminated with fuels, and chemicals. Underground pipes and other water supply infrastructure have been seriously damaged or destroyed causing a severe shortage of safe drinking water. To temporarily relieve the drinking water shortage, water is being trucked in from other parts of the world in rubber bladders. The demand currently exceeds the available supply.

Lebanon has the luxury of having a surplus water supply in a water-deficit region. The current situation paints a different picture. Water and sanitation systems were badly damaged in Israel air strikes across southern Lebanon during the recent conflict between Israel and Lebanese Hezbollah militants. "The water system has been totally destroyed," Abu Hamid said. "Even now that the war is over, here in Aitaroun we are still facing a shortage of water." With relief efforts underway in southern Lebanon, the UN's Children's Fund (Unicef) said in a statement on Tuesday that the destruction of water infrastructure was a major obstacle to helping people return home (IRINnews.org, 2006). The problem of safe water is

only one of many obstacles that stand in the way of providing a sustainable path toward food and nutrition security. 1,040 square kilometers are irrigated each year.

Economy

With its high literacy rate and traditional mercantile culture, Lebanon has traditionally been an important commercial hub for the Middle East (BBC News, 2006). Lebanon's main exports are food and food products, paper products, chemicals, textiles, jewelry and metal products to countries such as Saudi Arabia, the United Arab Emirates, Switzerland, the United States and France. The major imports are from Italy, France, Germany, the United States and Switzerland and consist of automobiles, trucks, heavy equipment, communications equipment, electronic goods, appliances, machinery, and petroleum and petroleum products.

The current crisis has caused a major blow to the economy of Lebanon. Along with the over 900 factories, markets, farms, and other commercial buildings that have been destroyed, the tourist industry has been decimated. Tourism is estimated to have earned Lebanon \$2.5 million (BBC News, 2006). Rebuilding this economy will be a long-term challenge which will take many years to accomplish. The state of Lebanon's economy is one factor that will determine whether Lebanon will have a secure and sustainable food supply in the future.

Key Issues

I believe the main issue to address involves international policy initiatives. It may not be that the government needs to solve a poverty problem at this point; rather, they need to fix the conflicts between their citizens and surrounding countries. If these disputes were settled with a stronger army, I believe Lebanon could better provide for itself. I think that Lebanon right now has two problems: the government and the people are going to have to come to the table and discuss their differences and come to a consensus if they are to move ahead toward other important issues. Policies and actions that foster vision, problem-solving, rebuilding efforts, and a cooperative spirit is needed if they are going to address the issues of food production, distribution difficulties, export potential, import requirements, and economic

A major problem within the government lies in its instability. This instability has caused the government and its people to rely on other countries. If a government cannot stand on its own then it cannot protect its beautiful country and the people who live in it. Religion bias plays a large role in Lebanon's government. At times, the two major religious groups may have differing ideas and beliefs. In order for peace to reign in this country, the government must find a way to respect each and all viewpoints. Yet, if they stay the course with their operational procedures, ideas, beliefs, lack of cooperation, and policies, things may not improve, rather things may get worse and worse to where they cannot control the people. Lebanon may slip into becoming a third world country.

The people of Lebanon also play a large role in creating a resolution to this problem. While it is important to stay faithful to their religion, they too must also learn to live in peace. Within the religious documents of each religion, one can find evidence calling for peace. For example, the Bible states in Exodus 20:12, "Thou shalt not murder," while the Qur-an states, "And thou wouldst surely find them of all men the most covetous of life, even more covetous than those who associate others with God. Every one of them may wish to live a thousand years," (Holy Qur-and 2:96) The Qur-an also says, "You shall not kill any person, for God has made life sacred, except in the course of justice. If one is killed unjustly, then we give his heir authority to enforce justice. Thus, he shall not exceed the limits in avenging the murder, he will be helped," (Holy Qur-an 17:33). Both the Bible and the Qur-an clearly state that it is

against the faith and religion to kill anyone for no reason. Neither faith believes in unjustly deaths. This leaves the question of why they both find it necessary to torture one another. The Lebanese people must work together to help make this great nation one of peace and on a road toward a sustainable food system. When the people forget their differences and combine their own efforts in creating a stable government, then Lebanon will be on a sustainable path toward food and nutrition security.

Conclusion

In conclusion, Lebanon is a beautiful country full of color and culture but, the past history of war and the crisis that has occurred over the last several months has demolished many things that had been fixed after the civil war. Now this country needs help from within and from other nations in getting back to a sustainable future which includes the economy, people, and environment. The people of Lebanon must work together to bring peace back to their nation, while the government must make peace with neighboring countries. While religion is an important aspect of this land, the people and government must learn to put aside their differences and join forces for the common good. The international community must assist the country in getting the people their basic needs, such as food, a safe water supply, clothing, and shelter. When the country and its people recover from the recent bombings, they will need to begin to rebuild their government. Rebuilding their government will allow this country to build their economy. Re-establishing jobs and their economy will stabilize all aspects life, family and community. These efforts will be the first of many steps but, it should lead to the long-range goal of establishing sustainable paths toward food and nutrition security.

Bibliography

- 1. BBC News. October 1, 2006. http://news.bbc.co.uk/go/pr/fr/-/hi/world/middle_east/5257128
- 2. IRIN News. October 1, 2006. www.irinnews.org
- 3. Al Bawaba. October 1, 2006. www.albawaba.com/en./countries/Lebanon/204164
- 4. CIA Fact Page. October 1, 2006. https://www.cia.gov/cia/publications/factbook/geos/le.html
- 5. World Bank. September 29, 2006. www.worldbank.org
- 6. WASAMED. September 29, 2006. http://wasamed.iamb.it/programmi/doc/4
- 7. Country Studies. September 29, 2006. http://countrystudies.us/lebanon/71.htm
- 8. Encyclopedia Encarta September 30, 2006. http://encarta.msn.com/text_7615649630/Lebanon_(country).html