Joani Lindsay, Student Participant West Noble High School Ligonier, Indiana

Agriculture Extension Programs: North Africa

Introduction

"Over one billion people live on less than one dollar a day. Chronic hunger devastates families, large communities, even entire countries, and is passed on from generation to generation," states the Freedom for Hungers campaign ("About Freedom from Hunger"). Something needs to be done about it. One of the countries that have the most people below the poverty line is North Africa. So I chose to do research regarding this. The countries included are Algeria, Canary Islands, Egypt, Libya, Morocco, Western Sahara and Tunisia. I chose this region as the focus of my research because I have studied it several times in the past and realized that these countries are just developing and they need all the help that they can get. I also have an interest about the people under the poverty line because I am a helping person and something needs to be done about it. People here in the United States have programs for all kinds of help such as getting an education and keeping a home, but in Africa they do not receive that kind of help because it is still a developing country.

I chose my factor to be the one dealing with agricultural extension programs. It involves education and advisory services to family farmers for implementing technologies and practices from research and development efforts. This is a great idea that would benefit thousands of people and I believe that this is what North Africans need. Right now in North Africa approximately twenty-five percent of the people are under the poverty line. Something needs to be done about this problem that is continually getting worse. It is getting worse because people do not know how to adapt and adjust to new developments that are approaching them. With the lowering of birth rates and the underdeveloped family wealth and posterity, people are discouraged every day. Deprived families are suffering from this because their diet and health have drastically changed due to inflation of prices. Underprivileged children in all of North Africa are working more instead of going to school in order to help provide for their families. The markets are not continuing to work as well as they used to. Although one-fourth of the population is employed in farming, that still does not account for most of the country's production. In order to change these conflicts of everyday life they need to receive help through educational programs designed for what their interests are. Although the North African people are deprived of everyday life as we know it, people are just beginning to build their country, and need some extra support because they do not have the advantages that we receive every day.

Need For Extension

Most families in Northern Africa are basically just the nuclear family living together including wife, husband and any unmarried kids, but some extend the families to even include grandparents, aunts, and uncles. The birth rate in all the countries of Northern Africa has decreased drastically in the past thirty years. For example, in Algeria during the 1970s the average number of children born per woman was eight to ten, while now it is approximately one to two children born per woman (Algeria). The women are basically confined to the household chores and taking care of the kids. The women are confined to the house regarding permission from the man of the house. Men are the only ones that are allowed to leave the house and they are responsible for making the money, and the one in charge of the family.

The diets of people in Northern Africa vary greatly in each individual country. In Algeria, the national dish is couscous, which is steamed semolina wheat served with lamb or chicken, cooked vegetables, and gravy. In Egypt, the main dish is baladi bread, which is only a few cents a loaf in American money. This is something they can actually afford. People stock up on this bread and buy as

much as they can a day. In Libya the main diet is a one-pot meal and they scarcely have meat because they cannot afford it. In Morocco a typical day's meal is bread, a stew then something a little bit bigger for supper. A basic Tunisian diet is bread, vegetables, occasional meat, fruit, and olives.

Algerian children are educated equally, while boys in Morocco are always higher educated than girls. In Morocco it is thought to be more important to educate boys because the men in the future are the ones who need to make the money for their future family to live. When these children get older, twenty-two percent of them will be farmers, but right now farm production only accounts for six percent of the country's economy (Gamal). Some of the main crops that are grown are wheat, olives, cotton, sugarcane, maize, citrus, and vegetables. In Egyptian agriculture, the tasks that can be done by a tractor, for example plowing and hauling, or water pumps are mechanized. Other tasks, for example planting, weeding, and harvesting, are still done by hand. Since most farmers cannot afford to own machinery, they rent it as they need it. On the whole, tractors and pumps are owned by the richer farmers who rent out their excess capacity.

The center of commercial life in Algeria is the souk, large open-air markets where farmers and craftspeople sell their products. Street markets with local foods and handicrafts, including carpets, traditional dress, pottery, jewelry, and carved wood, can be found in every major city in Morocco. In Egypt elaborate market networks composed of small-scale traders purchase food crops and trade them into urban areas, or sometimes between rural areas. On the whole, the marketing sector is characterized by a plethora of small units, although a few large-scale trading companies operate. Being too small to bargain on price, farmers have to accept the trader's offer. Some major barriers to improving farm agricultural productivity and income is that the agricultural industry is often plagued by droughts, encroaching desert, poor irrigation, and lack of machinery as well as by government policies that favor industry over farming. Some other barriers include using the wrong methods of farming and this extension program could change that.

About twenty-two percent of North Africans are employed in agriculture but it is beginning to decrease greatly because of the decline in income. About twenty percent are unemployed. The most common off-farm sources of income are government work such as teachers, clerks, or guards (Gamal). Some also work in private businesses such as trucking agricultural goods or trading, and factory work. One major barrier to improving income for access to nutritious food is education, to help with learning how to do it on their own. People need to be more educated on how to manage themselves better and how to make things last in a time of need. In Northern Africa approximately twenty-five percent of people are under the poverty line (About Freedom From Hunger). The quality of life is not that great for many people, but for some who have jobs and live off of what they make as in income, are doing well on their own. The quality of life for poverty stricken Africans are underdeveloped, yet they try to make it better although there are insufficient opportunities available for them.

The agricultural extension program that I wish to initialize would educate North African families and advise family farmers about services for implementing technologies and practices from research and development efforts. It would be a program that in order to have a farm, or grow crops, North African farmers would have to take classes or go to the program office. Also, Africans could visit a website and watch specific educational movies on how to do things the best possible way in order to maximize the productivity and income the produce brings. It should be a requirement, because some farmers would think that they are doing fine on their own but really they are not doing so well. This would increase the country's production rates and the ability to provide more for their own country.

The objectives of this agricultural extension program would be to reduce poverty and improve conditions of life in rural areas, improve agricultural productivity, optimize the use of available resources, and to protect the environment by generalizing the delivery of professional agricultural services to all levels of the farming community. It would reduce poverty by helping more people start farms and also

because if the production yield rises then the price of foods would decline due to a decreasing amount of scarcity for that good. That would then improve conditions of life in rural areas. It would improve agricultural productivity because farmers would learn how to take care of their crops properly, such as crop rotation, proper irrigation, fertilizing the soil, and other various things. It would teach the farmers how to use the right available resources and how to utilize them correctly. It would protect the environment by generalizing the delivery of professional agricultural services to all levels of the farming community. As a requirement it would therefore cause all the people to be on the same level. This would be a great advantage because then some farmers would not have as many opportunities as other farmers.

The main project components include strengthening the delivery of the agricultural extension services and providing support for farmers' organizations through the provision of transport, equipment, rehabilitation of facilities and incremental operating costs. Other key components of this program is improving the technical and management capacity of agricultural staff through training by the provision of equipment, supplies, facilities and transport for regular in-service training of extension staff. These components are the basic things that this program will cover.

The important factor that I chose to be the focus of my research is building agricultural extension programs offering education and advisory services to family farmers for implementing technologies and practices from research and the development efforts. This basically includes making a type of food reserve program and educational program. These would educate people how to manage everything in a time of need and a way to make food and supplies last. It should teach people how to develop their own backup system so if disaster occurs, individuals would be prepared and families preserved. It would also teach them how to develop and maintain their farmland productively.

The factor I chose dealing with agricultural extension programs is not implemented yet in North African countries. It is nonexistent at this time. If it could be implemented then it would change life drastically in North Africa. It would increase agricultural productivity and farmers incomes. It would educate farm families on how to take care of their production and it would teach them the concepts of doing it right. It would teach them how to make their crops result in a greater yield, how to rotate crops properly and how to maximize production properly. If a farmer does not have any agricultural productivity then they do not get an income and they lose money. Their income is based on the produce they market and sell. Some produce can survive through drastic measures but some does not do as well. If we start these extension programs it would help farmers to always have an income.

An urban family would benefit from an agricultural extension program also. Without farmers producing much yield, the price of food becomes drastically high because the food is so scarce. But with a program like this North Africans would have enough farm produce and it would become less scarce. Then with more produce the outrageous prices would not be as high, because food availability would be at greater amounts. This factor would help families to produce enough goods and earn sufficient income to purchase food.

This situation is very severe, because nothing is being done right now to educate the people about a program like this. They are not receiving the education that this program could give them. The environment is hardly being degraded but this program would help people learn how to not let that happen. The main people that are disadvantaged are the urban poor, because they cannot afford to help out. Due to religion, women are basically not allowed to do anything without the permission of the husband. They are sheltered. Developing countries are disadvantaged because they do not trust many other countries yet. It would be an advantage if the U.S. would help them because then they would receive what they needed all along.

Since this program is not in North Africa yet, the way it would be measured is by the willingness to accept help. The situation is not changing yet. It just seems to be getting worse. The situation of farm

families are getting worse because they do not have the knowledge to grow their own food and it is making other people suffer too. If we created these agricultural extension programs it would increase the amount of food and income to farmers and their country because it will teach them how to get the most out of their product. It would benefit women by empowering them and allowing them to support their children better. It would help them to make more with what they have and increase the yield and maybe be able to expand their farm. Urban dwellers would benefit because the supply would continually decrease. Developing countries would benefit because it opens up new ideas.

Increased productivity and yields by small-scale subsistence family farmers affect this factor because as farming increases, the program is needed even more. The status is not present but these small subsistence family farms are one of the main reasons we need this program. Trends are seen all over Northern Africa where small farms are basically doing everything unmechanized, but bigger farms are not. Small farms could be helped in order to produce more and get more money out of it in order to buy their own farming equipment. It would improve the livelihoods of both a subsistence farm and urban family. It would help subsistence farm families by increasing their production rate and their income because this program will help them get more out of their land and money. The more money they have, and the better they can provide for their families, the happier they will be. It would improve urban families because less people would be under the poverty line. This would decrease prices of physical needs and it would cause people be able to afford it better.

My recommendations to increase productivity by small-scale subsistence family farmers would be implemented by teaching them how to grow their crops properly in order to produce a greater yield and therefore make an increase of income. With that increase of income then they could increase the amount of land to develop farm produce. It would improve food security because the family farm would then supply sufficient amounts of food needed to provide their family with. I suggest that the World Bank, the USDA international division, and the individual country governments should take into consideration my suggested recommendations. They should be able to provide an agricultural extension program like this for the people of North Africa.

Conclusion

In all, I believe that North African countries should implement an agricultural extension program in order to produce a more sustainable farm and a greater income, in order to improve the development of the country. This underdevelopment should be put to an end before it exceeds the limits. So even if it is just helping one family at a time, it makes a big difference to them and then they are willing to help others. We must always remember that approximately twenty-five percent of North Africans are under the poverty line; this means that a majority of them are malnourished or underprivileged. As Freedom from Hunger states, "Over one-billion people have to live on less than one dollar a day." (Freedom From Hunger) There is an insufficient amount of food that you can get with a dollar a day. A fast-unfolding food affordability crisis is occurring simultaneously in many countries around the world, the first time that this has happened since the early 1970s. The new prices have sent a wave of hunger and poverty rippling through all of the world's poorest nations. Because of this, shock street riots and threatening of destabilizing governments have occurred. Many analysts predict that the world is entering a crisis that prices may still be 45% higher than in the years 2006-07 and something needs to change so that doesn't happen. Addressing these issues requires sustainable growth and food production (The cost of Food: Facts and Figures).

This agricultural extension program would open up more possibilities to provide North African people with their own nation and give them opportunities to better their nation's people's lives. Although one-fourth of the population is employed in farming, that still does not account for most of the country's production. In order to change these conflicts of everyday life they need to receive help through educational and agricultural programs.

Bibliography

"About Freedom from Hunger." <u>Freedom From Hunger</u>. 2008. http://www.freedomfromhunger.org/about/>.

"Algeria." Info Please. 2008. < http://www.infoplease.com/country/profiles/algeria.html>.

- BBC news Q&A rining World Food prices. 11 April 2008. http://news.bbc.co.uk/2/hi/business/7340214.stm>.
- El-Fiqi, Mona. <u>Not Even Minimum Wage.</u> 29 7 2008 http://weekly.ahram.org.eg/print/2008/907/ec1.htm.

Gamal, Wael. "The Joblessness Crisis." Ahram. < http://weekly.ahram.org.eg/2003/626/ec1.htm>.

- <u>Northern Africa and land resources.</u> 13 April 2007. http://www.eoearth.org/article/Northern_Africa_and_land_resources>.
- Reutters. <u>Algerian farmers Struggle to Exploit Price Boom.</u> 07 06 2008. 09 07 2008 http://archive.gulfnews.com/articles/08/06/07/10219055.html.
- saleh, Heba. <u>Egyptians Hit by Rising Food Prices.</u> 22 7 2008 http://newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk

The Cost of Food: Facts and Figures. 29 May 2008. < http://news.bbc.co.uk/2/hi/in_depth/7284196.stm>.