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## **National Responses to Food Insecurity – Afghanistan**

I am Abuzar Royesh, an exchange student from Afghanistan, a country at the middle east of Asia. It is a country introduced by its wars and difficulties. A country unfortunately known as the land of terrorism and standing against humanity. But this year I am trying to show the other side of my country. I want to show what is not shown by the media. The western media mostly focuses on war or insecurity. But I want to show that there are people in Afghanistan who think about their community and people. They want to find a way to get out of this situation. People in my country have an interest in gaining knowledge. They want to develop. Afghanistan is not only Taliban with their severe methods; it is also a land of people with hearts who don't want fights, Taliban or ruins.

Afghanistan has a dark history. Its history is full of civil wars, dictators and ruins. These forced most of the people to leave their jobs and works. During the Taliban regime, the majority of the people immigrated to other countries. They had to save their lives. They left their farms, fields and properties. Even now in the southern parts of Afghanistan, Taliban are not letting the people live a safe life. They force them to not study, but instead to grow poppy and tobacco, and produce opium.

I know that now food insecurity is a big problem that threatens the entire world. The natural sources for food are being spoiled, in some areas slowly and in some areas through devastation that happens quickly. In many parts of the world, people are dying from starvation. They can not find enough food for themselves or they cannot afford to purchase what is there. They are struggling to find only one loaf of bread, but sometimes even that becomes a big problem. Especially in my country, Afghanistan, food insecurity is a big problem. Most of the people can not find something to eat. Afghanistan is an agricultural country. Only 12% of the country is arable. And from this only 40% of agricultural land is irrigated. But about 80% of the residents of Afghanistan are farmers. It means that agriculture is the biggest source of revenue for Afghanistan. Afghanistan cultivates wheat, corn, dried fruit and many other crops. We have big fields all over Afghanistan. The biggest area of agricultural cultivation is the southern part. In the southern parts of Afghanistan, most people generate income with farming and planting. They cultivate many different crops and are the biggest producers in Afghanistan. They even grow narcotic drugs such as hashish.

Afghanistan is the world's biggest producer of narcotic drugs. Afghanistan produces about 90% of the world's poppies. Most of the people are growing tobacco and poppy. People grow heroin and poppy because they don't have an alternate for it. Now there is no one to find a market for wheat and other crops to foreign countries or to other people, so there is no market for wheat. But there are demands for tobacco and heroin. Naturally people are interested to grow poppy and get money with it. If we could find a market for wheat, then the people were not compelled to grow poppy. It is the only way for them to answer their needs.

### *The situation of Agriculture in Afghanistan*

To understand the specifics of agriculture in Afghanistan and the difficulties it faces, I want to give an example of a typical Afghan family. We assume a family with 10 people sharing a house. This family is comprised of father, mother, 3 sons, 3 daughters, grand father and grand mother. All the members of the family are illiterate except 3 sons. These sons go to a masque and study religious subjects. They hardly can read and write. A clergy helps them read and write. They don't go to school and they don't study other subjects. They don't know about what is going on in the larger world around them. They only

study some books which are assigned by. Even at the end, when they finish these lessons, they can hardly read and write. They don't know about this fast changing world; they don't know that nowadays world has machines and instruments that can function as human. They even don't learn about how they can improve agriculture in their area, or how to take a good harvest of their lands.

They have a small piece of land as their field. Its area will be around 3 hectares. Their ancestors had a very big land but by the passing of the time it was divided between the sons as legacy. So now this family owns only a small piece of land, not enough to support a family.

The most popular crop is wheat, and most people mainly cultivate this crop. They also grow barley, rice, corn and occasionally some other crops. This particular family that I am talking about will grow wheat, corn and a little barley and potatoes. They grow the barley for their goats, cows, and sheep. Every year they buy wheat, corn, barley and potatoes seeds from markets and then cultivate them. At the beginning of the year they plow the land and then drop the seeds there. Most of the time, they cannot utilize the seeds in a good manner. The seeds are not protected and birds and other rodents eat them. Sometimes the seeds are spoiled because they are not planted in proper way in a good place.

The farmers have small hand-made lakes that catch water coming from the mountains and springheads. Every village has only one or two of these; so all the residents of the village must share this water. A person's turn comes approximately every 20 days or once a month. Then with that amount of water they must irrigate all their lands. It is clear that this is not enough water, and the harvest of the land will be reduced. But they should deal with it, because there is no other way. Sometimes they are faced with drought. And because of this one year or maybe more than that, they do not produce a harvest at all. The average rainfall in Afghanistan is about 30 to 40cm in a year. This also can not help them irrigate their fields.

Finally, if they could cope with all these problems, their crop from that piece of land will be about 1500 to 2000 pounds of wheat they reap this crop with their hands and then they thresh the pure wheat by animal force. One part of this harvest will be spoiled or lost during these actions. The rest will be their hard work's result after one year.

After taking the crop, they still must transform the crop into money or other goods. Most of the farmers are exchanging their crops for the necessary items through barter. For example, they exchange three pounds of wheat for a pair of shoes. They provide everything they need in this way. Sometimes most of the people don't need wheat or other crops, so the farmers must go and sell wheat in the far markets. The transportation and selling of the wheat itself costs a lot. We don't have modern equipments for transportation. They have to use their donkeys or horses. It is very slow and also has lots of dangers. Because there will be many things in the way, such as thieves, and animals that can warn their life and cargo. The ways are also not in good circumstance. Passages are full of stones and rocks. Most of the paths are going through mountains, hills, and valleys that they have their own dangers. They should tolerate all these problems to afford their necessities. Every farmer for exchanging his crop to money needs to do marketing. So they sell their harvest for less than the true market values, which cannot provide them everything they need, much less raise their standard of living.

The biggest barriers that cause difficulties for the farmers are: drought (lack of irrigation), bad weather, and exchanging the crop with needs I would add lack of credit, lack of markets, poor transportation system, lack of proper education in agricultural techniques (proper seed handling, storage and planting). If one year drought comes, they can not plant anything, so they should live with their storages from previous years. If the weather is bad also it will destroy the harvests.

*Trying to find a solution for these problems*

To solve these problems or improve this situation, organizations such as FFA and the World Food Prize can provide enormous aid by sponsoring efforts to apply scientific research into crop biology for improving yields, lessening the diseases and finding a way to stand against drought and other problems.

Now, our typical Afghan family doesn't have much information about agriculture. They only know the things which are collected by their experience. And as their society is disrupted by emigration from Taliban pressure and movement to the urban areas, even that knowledge is being lost. They can grow something, but they don't know about the technology that exists to improve the strength of their crops' resistance to drought and disease. They don't know when to plant something and how to do it. They don't have many choices to choose between them and find the best choice for planting things. For example they have a small piece of land, so they should cultivate everything they need in that small piece of land. They can not choose that they will cultivate rice at the proper place, because they don't own that land. They cannot save the plant against the dangers that may occur. They only have the knowledge that their forefathers have conveyed to them and the experiences that they have earned. Bringing new scientific information on crop storage, hybrid vigor, disease resistance as well as ideas about combination crop farming to the typical Afghan farmers and applying it in practical way to their situations would dramatically and quickly improve their lifestyle. This information exists now; it just has not been given to these people who need it so much.

The corn kernels and wheat seeds are not checked in Afghanistan; and most of them are not fertile or maybe some of them have some diseases that will affect all the crops. It will shatter the economy of the farmer family, because they can not have a good produce at the end of year. An entire year wasted means economic and personal ruin for a family.

From this side Afghanistan has a better condition than previous years, because sometimes the government distributes checked seeds of wheat or other crops among the people. But it is only a small proportion of the seeds that are sold. But still the seeds that are sold in the bazaars are not scientifically checked. The farmers also don't know how can they best plant the seeds and how can they irrigate it to tap it in a good way. Teaching basic planting techniques to minimize soil moisture loss and disease conditions, as well as providing assistance for irrigation programs would be other avenues to immediately and dramatically effect the typical Afghan farmer's situation.

Even then, the farming life cannot support the typical Afghan family. It supply adequately for their necessities. Mostly they can only afford 50% of all their necessities with farming. So they send their children to other places to work and send them money. Now Afghanistan has many refugees in other countries. The majority of these people are going illegally. The primary cause of this is that inside the country the families cannot earn enough money with farming. Now, if we go to most of the villages in most of the provinces, you will find only a few people living there. The rest of the people have gone to the cities or other countries to earn money. Formerly about 70% of Afghans were farmers. But now most of them have left this work. They have come and still are coming to cities to maybe find something to eat.

Now the majority of the children cannot go to school, because their parents need their income so that the family can eat! Once everyone is fed, then they can think about sending their kids to school. Most of these kids, when they become an adult, or even before that, are sent to foreign countries to work. They should work for their entire life to find a loaf of bread for their families. The same case is with the women. When they are children, they cannot go to school to learn something and when they get adult, they have to marry a person and work with him. Most of the women in the villages are working from dawn to dark: They bring water; collect wood for the woodbin, milk the cows and do other household chores. This cycle will continue for the next generations too.

This situation has stayed the same for several years. In these past years, it has become even worse. The farmers can not exploit the land to get a good harvest. We can easily see the pattern by looking at the population of the villagers. Before this, (what year are you talking about) every village had about 200 families. But now, you can hardly find 20 families in a big village. But on the other hand, the populations of cities are getting terribly large. For instance, now Kabul, the capital of country, has a population over 5 million people. Kabul is not a big province but contains a huge population.

The family that we are talking about still lives in their village. They are still farming and growing plants. But they can not provide everything they need. Most of the people are leasing their farms to the others. They lease their farms to others even without any cost. They are just walking away from their houses and farms to add to the urban load. But unfortunately there is no work in cities either. But this family can not even take advantage of the other lands, because they can not seed them or find water to irrigate them.

Again, the solution that I suggest is to bring technology and scientific research into Afghanistan. If we bring modern technology to the country, then the works can be done easier. They can plant everything easier. They don't have to struggle from dawn to dark to do their chores. They can do the things that now are done in weeks, in few hours... Also this way will be more confident than doing it manually. The result will be much better. Now, they are working weeks to prepare the land and then plant the seeds, but if we have modern technology such as tractors, and other things, it will be done in one day or less than that. Nowadays we have instruments that can lead a farm without any need to a human to do them. Now, technology can irrigate the lands only by pressing a button, or writing a command. But still we have another side of the world that should deal with cows and donkey. They should use animals in order to do their works.

Now the women and kids go and collect stuffs for burning, like woods, small branches and leaves of trees. But with an electronic saw it will be easier.

Another important thing that is needed in Afghanistan now is a more scientific and uniform approach to agriculture. Now we have lots of seeds for growing crop, but most of them are not fertile. The seed varieties are not productive. But if instead of ten of these seeds if we had 1 scientifically checked and fertile it is better. If a means of reliably supplying these seeds to the markets was available then the farmers can get them easily. And this would encourage the farmers to grow plants other than opium poppies. They know that this will have a reliable profit for them. This would help halt the exodus from the agricultural areas to the urban areas. Providing simple improvements to water storage and irrigation systems is another relatively easy and low-investment opportunity to stabilize Afghan agricultural production, reassuring farmers that even in a drought year they have the opportunity to harvest a crop that will support their family. They will find money to send their children to school and have a better future.

If we do these things for small scale subsistence family farmers, then they can improve their business. They can sell their products to others. Then with that money they can expand their business. They can rent the unused lands. They can employ the other people. Then every one will find a way to provide livelihood for his family. This improves the life of the farmers and the whole country economy both. Government institutions must investigate the options to open up markets and improve access to credit. These things go beyond the scope of agricultural improvements even though they bear very heavily upon the farmers. But at least with scientific research and techniques and investments to even out the quality and quantity of the harvests, we will see Afghan farmers willing to work with the government and community in further efforts to make changes.

If we improve the life of each farmer, then the entire situation will be improved. Every community is comprised of members, we can not do anything directly with a whole community, but if we improve

the life of each member of a community then the whole community will improve. We can not implement improvement as a general concept unless we find the detailed factors for it. Here is the same case. If we improve the life of each farmer, then the whole country can produce more harvest.

Now Afghanistan imports most of the crops from foreign countries. What is the reason for this? It is because we can not use our possessions and properties. A very good example for this is the exports and imports with Pakistan. Every year, the Afghan farmers are selling their products to Pakistan for a very less value. But Pakistan sells that back to Afghanistan with the mark of Pakistan for a very high price. It means that we are buying our own products for a high price. We don't have a cold storage in Afghanistan to keep these crops and do marketing for them and then sell them. We have every basic thing that is needed for planting and producing food. But we don't have the equipments to use them. Buying all these crops from foreign countries is a big burden on our country's shoulder. If we produce all the basic needs, then we don't have to spend a big amount of money for buying these things. If we only supply the whole need of our country or most of it, it is also a big step toward improving and standing against food insecurity.

Now every other time Afghanistan receives a huge amount of money from United Nations and International banks. A big part of this money is spent in useless ways. Based on the fact that Afghanistan is an agricultural country, we should invest more money on our agriculture. If we only use 40% or even less of this money on our agriculture we can do a lot. We can enrich our seeds, we can buy some assets that can help agriculture, we can make some dams to provide us water, and we can build storage and irrigation system for the water and many other things. The only thing that we need now is a powerful government that can ensure that this money to be spent in best way.

The government should be responsible for these helps that are done by other countries. They should feel that this is not a gift from god that they can spend it in every way and still receive more. The government should know that the other countries are not foolish to spend their moneys for no result. One day they will ask us for the result. The government should be aware of this and should do its best to use this money for developing our country. This huge amount of money that still comes can be used for everything. If they properly apply this money, our country can improve from every side.

First of all, I want to thank United Nations and other countries that have helped us to step in this hard way. As yet they have done many things for our country. They helped us with money, assets, and many other ways. Without their help we couldn't come this far. They performed their responsibility to humanity. They helped our community to during a period of ignorance and war. It means that they rescued the life of humanity. We will try to compensate their efforts for our country. Now we have many projects which are working on Agriculture in our country such as PRT, USAID, National unity and others. We have projects for helping farmer families in Afghanistan, projects for making dams, providing seeds for farmers and other stuff. We also have another very good project which is called Borlaug Program. They are providing some short courses in order to teach people about agriculture. We really are grateful from the founders of these programs. We hope them to maintain their helps for Afghanistan and other low-income countries. They help us find walk through the path of development faster. These have really helped us to maintain this condition.

Then, I ask United Nations and the other countries to help our government to stand on its feet. I ask them for their support. They can support us however they can. They can support us economically, culturally, socially or any other ways. It is their right to ask us for a response when they helped us. They can ask that how did we spend the money. If we didn't use their assistances in right way, they can and should ban it. They should try to make our government responsible. Then our government will work more to improve our country. If there isn't any eye to be watching then some of things will be ignored, but

when there is somebody to observe us, we will do our best. They can observe our efforts and can comment on them. If we can not spend money in its rightful place they can show us the way.

In our country we have many civic organizations in every sphere. Most of the people are members of these organizations and parties. I ask them all to work hard for our country. We only can not wait and have an eye for others to work and build our country. It is our land. We, ourselves should stand up and work for our country. I want them to help the whole country improve. They can take the money from government and try their best to use it in a good way. They can construct streets, historical places, and buildings. They can provide seeds for our crops. Neither only the government can force the people to work, nor work in every sphere very focused and concentrated. These organizations can be the right hand man for government. Government can do the distribution and then this is their duty to work hard.

The companies can also help them. The companies can trade our products to other countries. They can help people work harder by giving them motivations. For instance they can sell the products to other countries or other people. Then it will be a motivation for people to work hard. They know that the things that they are cultivating will not remain at the storage with out any use. They will know that if they get some more products, then they will have bigger profits.

Another thing to address is agricultural knowledge. Our people don't have a clear idea of agriculture and farming. They only plant something to eat it or exchange it for items that they need. But agriculture is one of the bases of a country. Agriculture can make a country independent. So it is a serious issue that should be thought about. We can take some programs such as courses to teach people who to use their lands and equipments in a good minor. Now people don't know how to plant something or where is the best place for a specific plant scientifically. But we can have some courses to teach the people about these things. They can teach people how to use their land, water and seeds. They can teach people how to fight the diseases and drought. These details can help a lot to show the people the way. Then we will not spoil this much human force, energy, money, and assets. We can do something which can be useful.

It is the government's responsibility to make the people aware of these things. Government should help people. The government can start some courses in different parts of Afghanistan. This will also be a big step toward facing with food insecurity and famine. Then we will have a stable and good agriculture.

Finally, I want to repeat that doing scientific researches into plant biology and finding the diseases, the way to fight against them, and finding a way to stand against drought and other problems is the best solution. We can follow these tips with using the assistance of other countries and start courses to teach people about agriculture and its importance. We can have other programs for betterment of agriculture too. But first we should try to use the things that we have now.

## Works Cited

The World Bank site. Agriculture in Afghanistan:

[web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/EXTSAREGTOPAGRI/0,,contentMDK:20273762~menuPK:548212~pagePK:34004173~piPK:34003707~theSitePK:452766,00.html](http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/EXTSAREGTOPAGRI/0,,contentMDK:20273762~menuPK:548212~pagePK:34004173~piPK:34003707~theSitePK:452766,00.html)

Letter of a PRT worker in Afghanistan to his family and friends:

[www.ok.nrcs.usda.gov/news/OKSucesses/Stories/JGreen.html](http://www.ok.nrcs.usda.gov/news/OKSucesses/Stories/JGreen.html)

The national site of Afghanistan: [www.afghanistans.com/information/Economy](http://www.afghanistans.com/information/Economy)

Nation Encyclopedia, Agriculture in Afghanistan: [www.nationsencyclopedia.com/economies](http://www.nationsencyclopedia.com/economies)

The governmental site for agriculture in Afghanistan: [www.mail.gov.af](http://www.mail.gov.af)

The USAID site for Afghanistan: [afghanistan.usaid.gov](http://afghanistan.usaid.gov)