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The Impact of Syrian Refugees on Food Security in the Northern Badia

Jesse Schaffer
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The Impact of Syrian Refugees on Food Security in the Northern Badia

Jesse Schaffer

The George Washington University

International Affairs, Environmental Studies

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Academic Director: Al Tabini, Raed, Ph.D.

Project Advisor: Abuamoud, Ismaiel Naser, Ph.D.

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Student: Jesse Schaffer
Date: 5 May 2013

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Abstract

The crisis in Syria has caused a massive influx of refugees into Jordan to the detriment of the Jordanian host communities. This research paper seeks to examine the direct impact of the Syrian Refugees on Jordanians' food security. The researcher hypothesized that the large influx of refugees reduced the overall food security of Jordanian families in terms of food accessibility and availability. The methodology consisted of two major parts. First, field interviews were conducted with Jordanians in the Northern Badia and representatives from non-governmental organizations (NGO) in Amman. Second, forty-two families were surveyed in the Northern Badia about their food consumption, sufficiency, and personal socioeconomic information. This field research produced quantitative and qualitative data that ultimately proved the hypothesis true. The influx of Syrian refugees has directly hindered local families' food security by increasing prices and making food inaccessible and unavailable. This research is significant because it examines a different side of the pressing and contemporary topic of the Syrian crisis by focusing on the plight of average Jordanians. The Jordanian government and the international community have largely neglected these communities, and by identifying their needs this research is a call to action for sustainable development. The situation in the Mafraq Governorate continues to rapidly deteriorate with disastrous consequences. The study recommends investing in sustainable livelihoods for families and supporting conflict resolution between the Jordanian host communities and Syrian Refugees.

Introduction

Since the revolution and civil war began in Syria more than two years ago, there has been a large influx of Syrian refugees into the northern Badia region of the Hashemite Kingdom of Jordan. Currently, the United Nations High Commissioner for Refugees (UNHCR) estimates that more than 500,000 Syrians have fled to Jordan, though the actual number is likely much higher.¹ In recent months, the number of refugees has increased drastically, especially in the northern Badia region of the Mafraq Governorate, where thousands enter on a daily basis. According to the United Nations Development Program (UNDP), the Mafraq Governorate has the lowest levels of human development of all the governorates in the Kingdom.² Furthermore, it also has the highest rates of poverty, illiteracy, and food insecurity in the Kingdom. Despite the high rates of poverty, the Governorate is home to the majority of the Syrian Refugees. The impoverished Jordanian population in this struggling region is now in competition for the limited resources. The growing population has greatly increased demand, and has raised the prices of food, basic commodities, housing, and many other basic human needs.

The hypothesis of this study is that the influx of a large, new population into the Northern Badia region will reduce the overall food security of families there both in terms of food accessibility and availability. Because the resources of this area are already strained, this will likely reduce the ability of Jordanians to provide for their own families as they compete for these resources with the refugees. Assuming this relationship and outcome is proven true, it is a call to action on behalf of those who are food insecure in

¹ Bibi, A. (2013, April 22). [Personal interview by the author]

² The Hashemite Kingdom of Jordan Ministry of Planning and International Cooperation. (2011). Jordan Human Development Report 2011 (United Nations Development Programme, Author). Amman, Jordan: Rafidi Print.

the Northern Badia. In addition to the aid helping Syrian refugees, the outcome of this study will necessitate providing aid to these struggling Jordanians.

To approach this subject one must first define key concepts, contextualize the research, and build a theoretical framework for study. According to the 1996 World Food Summit, food security “exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”³ This definition demonstrates the complex interactions between geographic, socioeconomic, and biological factors, which combine to determine the state of food security.

The definition of food security can be reduced into two distinct, yet interrelated dimensions of food access and availability. First, according to the USAID, food access is “ensured when households and all individuals within them have adequate resources to obtain appropriate foods for a nutritious diet.”⁴ Access usually depends on a family’s available income, expenditure distribution, and the price of food. Second, food availability is “achieved when sufficient quantities of food are consistently available to all individuals within a country.”⁵ These quantities of food come from a variety of sources such as domestic output or other household production, commercial imports, food assistance, or others. The inability to meet these needs and access a sufficient supply of food to satisfy a healthy diet is defined as food insecurity.

³ Food and Agriculture Organization. (2008). An Introduction to the Basic Concepts of Food Security. European Commission-FAO Food Security Programme.

⁴ Riley, F., Mock, N., Cogill, B., Bailey, L., & Kenefick, E. (1999, January). Food Security Indicators and the Framework for Use in the Monitoring and Evaluation of Food Aid Programs. U.S. Agency for International Development. p. 8

⁵ Ibid.

Theoretical frameworks can help to simplify the complex subject of food security. One major framework is the Human Development Approach and Capability Approach to Food Security. This theoretical framework proposes that there are a variety of approaches towards understanding the causes and realities of food insecurity. These approaches, such as the Food availability, Income-based, Basic needs, Entitlement, or Sustainable livelihoods approaches, will provide different solutions or ways to respond to these problems. The capabilities approach to food security shifts the debate from commodity entitlement towards gaining the individual capability to be food secure. Because food security is a complex issue and manifests in different ways in different countries, it will be necessary to adapt a theoretical framework that is specifically applicable to Jordan.

Both qualitative and quantitative data will be used to prove or disprove the hypothesis. Forty-two families were surveyed in the Northern Badia region, mainly in the Mafraq Governorate. The main demographic to be surveyed will likely be poor, rural families. This demographic was intentionally chosen because it will provide the best representation of those whose food security is affected by the influx of refugees. A questionnaire drafted by the National Center for Research and Development will be utilized, as it is thorough and will provide both quantitative and qualitative information about families' food security. Experts in the field of food security in Jordan will be interviewed, including those from the UN High Commissioner on Refugees (UNHCR), the World Food Programme (WFP), and the Human Relief Fund (HRF).

Modernization without food security is not modernization at all; development is predicated on the necessity of food security. This research is essential because it studies the challenges facing average Jordanian families in the periphery of Jordan. This study

brings to light the struggle for sustainable livelihoods in an area largely neglected by the Jordanian government. This can also function as a case study for supporting host communities of refugees. In addition, the research is constructive because it identifies the needs of these host communities and discusses the resulting competition for resources. It will also touch on the possible conflict that arises from the influx of refugees into impoverished host communities. This issue is important to a variety of different groups including the Jordanian government, NGOs, international aid organizations, and food security researchers. This research will provide information on the pressing topic of Syrian refugees from a new angle, and with this data, it may help mobilize aid to these struggling communities. The intention of this research is to provide others with knowledge about the situation in the Northern Badia as a step towards solving their food insecurity.

As a farmer and student in the United States the researcher is deeply interested in the issues of food security and food sovereignty and their relationship to sustainability. Last year as part of an International Environmental Policy Course, the researcher composed a report on the Food and Agriculture Organization of the United Nation's efforts at sustainable agriculture to fight food insecurity in the Sudan. Fusing hobbies and lifestyle with academic interests was a fruitful and eye-opening experience which would be continued in Jordan. While learning about food security and sustainability in the classroom is interesting, it often neglected the real livelihoods of average people. The researcher wanted to meet with real people facing these very serious challenges. The ISP helped bridge the gap between those academic and personal interests and engage with

them in greater depth. The ISP will hopefully be used as the basis of the Senior Thesis at The George Washington University.

Literature Review

As a complex subject, food security can be understood through a number of different approaches, perspectives, and theoretical frameworks. In a working paper published by the UNDP entitled *A Human Development and Capability Approach to Food Security: Conceptual Framework and Informational Basis* there are five different approaches to understanding the concept of food insecurity.⁶ The first is the food availability approach, which maintains that the growth rate of food availability in a country must be higher than the growth rate of the population in order to reach food security equilibrium. The income-based approach focuses on the macroeconomic means of a state or family to improve their availability of food. This approach would focus more on the relationship between the income distribution of a household and the family's overall access to food.

The basic needs approach, as it sounds, is focused on satisfying the basic needs of people as priority. In this report, families were surveyed about the frequency and quantity of meals and types of food in their diet. This "food-first" approach focuses on the short-term food security of a family and their ability to provide the necessary nutrition per meal. Contrastingly, the entitlements approach focuses on the resources or endowments of a household and the endowments of their local community. While there may be enough food in a given area, this approach focuses on the individual or family's ability to access that food based on their own status and long-term situation. The fifth and final approach is that of sustainable livelihoods which looks at overall development and

⁶ Burchi, F., & De Muro, P. (2012, February). *A Human Development and Capability Approach to Food Security: Conceptual Framework and Informational Basis*. United Nations Development Program.

poverty alleviation. It aims to secure a living for a household while giving them the ability to provide for themselves in the long-term. Of all the approaches, this seemed most agreeable to the researcher because it focused on empowering people to build food security for themselves sustainably.

Another framework for food security comes from the International Food Policy Research Institute that focuses on the specific outcomes of the consumption and production of food. The main focus is a comparison between the intake of calories, proteins, and fats versus the production of those nutritional needs. This framework focuses mainly on the relationship between production and consumption of calories that reduce malnourishment. According to this framework, agriculture is seen as an effective tool towards poverty reduction and food security. Linking availability to food security means emphasizing the production and supply side of the food system.

These general frameworks for food security are helpful in understanding Jordan's particular situation, but theoretical models must be paired with the situation in the field to be effective and applicable. In 2008, the WFP and the Jordanian Alliance Against Hunger (JAAH) published a report entitled *Jordan Food Security Survey in the Poverty Pockets*. The main focus of this research survey was to understand the impact of rising food prices on food security, specifically in the poverty pockets of Jordan. The timing of the survey coincided with the 2008 financial crisis which resulted in rising food prices across the globe. By quantifying food security in poor areas, their research survey provided a framework and model for this report.

More than a third of all the poverty pockets in Jordan were located in the Northern Badia. Thus the WFP's data on the food security and economic situation in the

area can be used as a comparison for the surveys in the researcher's report. For example, both the researchers from the WFP and the field researcher of this report conducted surveys in the villages of Ghour and Housha. The findings of the survey concluded that increases in food prices and energy expenditures were especially prevalent in the North and Northwest Badia region.⁷ These increases correlated to a disruption in food consumption patterns. In addition, researchers found a direct relationship between the level of education, family size, and food security. Lower levels of education and larger families were linked with food insecurity. These relationships and correlations served as comparisons for this research report.

In addition, the research paper provided background data on the region's demographics. Almost 70% of food insecurity occurs in the rural areas of Jordan. In addition, the rates of food insecurity in the rural areas of Jordan are more than double that of the urban areas, the former at around 11.3% and the latter at 4.5%.⁸ These statistics provided a frame of reference for building a hypothesis and expectations for field research in the Badia. Their research on the poverty pockets included averages of different income and expenditure distributions such as housing, transportation, and food. For example, on average, 37% of Jordanian families' expenditures were spent on food, a much higher proportion than those in urban areas.⁹ Thus, the impact of rising food prices is felt most by the poor, as food, on average, was the major constituent of their consumption profiles. By comparing the results of both surveys, it helped to put this research in context by using another researcher's scale of food security and poverty.

⁷ Awni Taimeh. (2009). Jordan Food Security in the Poverty Pockets. World Food Programme and Jordan Alliance Against Hunger. p. 18

⁸ Ibid. p. 28

⁹ Ibid. p. 16

In November 2009, the World Bank published the *Hashemite Kingdom of Jordan Poverty Update*, a thorough report on the state of poverty across Jordan. The report mainly reaffirmed the findings in *Jordan Food Security in the Poverty Pockets*, but went into greater depth about the Governorate of Mafraq. As of 2006, the incidence of poverty in the Mafraq governorate was 23%, which was the highest of all the governorates in Jordan.¹⁰ The poverty update also listed specific poverty lines for the different governorates and defined a family above the poverty line in Jordan as a household that “can afford to consume sufficient calories (and non-food items) to maintain a healthy body.”¹¹ There is clearly a large emphasis on food consumption in understanding poverty, which demonstrates the close relationship between poverty and food security.

The research paper entitled *Prevalence of Food Insecurity among Women in Northern Jordan* is another constructive example of surveys and research on food security. The report found that of the 500 women surveyed, 47% came from families with monthly incomes below the poverty line, while 32.4% came from food insecure households.¹² In addition, 33% of women could not afford to eat balanced meals and 26% ate less than what they felt was enough food because they lacked the money.¹³ These numbers were strikingly high and served as a benchmark of comparison for the results of the researcher’s survey. The report on women’s food security was especially important because the researcher’s field survey sample mainly consisted of men. Often times the survey respondent was the male of a household, underrepresenting women who are key in

¹⁰ Hashemite Kingdom of Jordan Department of Statistics. (2009, November). Hashemite Kingdom of Jordan Poverty Update (Report No. 47951) (World Bank, Author). World Bank. p. 3

¹¹ Ibid. p. 3

¹² Bawadi, H. A., Tayem, R. F., Dwairy, A. N., & Al-Akour, N. (2012). Prevalence of Food Insecurity among Women in Northern Jordan. *J Health Popular Nutrition*, 30, 49-55. p. 52

¹³ Ibid.

household food security. It also served as a comparison and contextualized the results. Comparing the researcher's data (mainly representing males), to the women's food security report, resulted in a more holistic understanding of the state of overall food security in the Northern Badia.

The *Jordan Human Development Report of 2011* is an important resource for current information of the state of modernization and development in Jordan, especially on the micro scale. The Human Development Report is significant because it provides a different perspective from traditional economic notions of development. Instead of focusing on Gross Domestic Product (GDP) or overall output of a country, human development focuses on improving the quality of life and livelihoods of average individual and families. Human development works to invest in human capital and small-scale sustainability as opposed to national production. The focus on the micro scale of food security in individual communities is directly tied to the larger study of modernization and development. The report listed food security as one of the most severe challenges facing Jordan's human development.

The 2009 *World Food Programme Regional Market Survey for the Middle East* is a helpful resource to understand regional price changes on commodities and the specific state of food security in Jordan. The major issues listed are the ratio of refugees to Jordan's actual population and Jordan's small agricultural sector.¹⁴ The resulting food trade deficit for Jordan is a serious issue, which is largely not being handled. The report lists similar concerns for Jordan's future food insecurity, noting Jordan's vulnerability to global price and systemic shocks.

In addition to what can be found in current literature on this topic, what is left out

¹⁴ Marktanner, M. (2009, October). World Food Programme Regional Market Survey For the Middle East.

of the existing literature is equally significant. While there is a variety of literature on the state of Syrian Refugees and their food insecurity, there is little about the impact of these refugees on the local Jordanian communities and their food insecurity. For example, in a 70-page report published by the WFP on the state of food security in the region, only a single paragraph is dedicated to the local Jordanian communities hosting refugees.¹⁵ Even in this paragraph the focus is on the struggles Syrians face in adapting to these local communities. There is no information on the challenges faced by Jordanians.

In an assessment report entitled *Syrian Refugees living in the Community in Jordan*, there is once again only a single paragraph dedicated to the Jordanian host communities. The paragraph notes the severe situation for those host communities and the problems they face including “pre-existing poverty and high unemployment, rising cost of living, rising rents, especially in the North and Amman, caused by the refugee influx, potential for food price inflation in the North, also caused by the refugee influx.”¹⁶ In addition, it is noted that increased support for the refugees could increase resentment and tensions amongst Jordanians towards the Syrians. There is no plan to change the situation or improve the livelihoods of struggling Jordanians. “The perception amongst more vulnerable members of the local Jordanian community will be that Syrian refugees are being supported to an unfair degree, whilst their needs are overlooked.”¹⁷ The report only mentions considering options to deal with the problem but does not seem invested in improving the livelihoods of Jordanians as well. One solution is adding Jordanians to the cash programs that are open to Syrians, though the report only mentions exploring this

¹⁵ World Food Programme. (2013). *Syrian Refugees and Food Insecurity in Iraq, Jordan, and Turkey: Syria*.

¹⁶ International Federation of Red Cross and Red Crescent Societies. (2012, September). *Syrian Refugees Living in the Community in Jordan*. Amman, Jordan. p. 43

¹⁷ Ibid.

option as it did not have the capacity for expanding the program at the time. For this organization and most others, the Jordanian communities are neglected and suffer the brunt of unequal aid. In understanding the state of food security in these Jordanian communities, the unequal distribution of aid is an important aspect.

Another important source of information is current news sources and reports discussing the issues on the ground. There is little documentation on the crisis occurring on the Jordanian side of the Syrian Border. According to an article entitled *Jordanians Driven Further into Poverty* published by IRIN, a UN news publication, the situation in these small communities is dire. The article discusses how rising fuel and food prices has negatively impacted struggling Jordanians. One woman they spoke to in late February of this year could no longer afford to heat her home.

Because of excess demand from the influx of Syrian refugees, the food distributions she used to receive have reduced greatly: “There is no bread, no flour, no sugar in the house anymore.”¹⁸ Food prices continue to rise from both an increase in demand and the disruption of local supply and export chains from the crisis in Syria. For example, the prices of important staple foods like chicken and eggs have risen by 25% since November. The situation has directly reduced peoples’ food security: “people just eat less and less... but given their poor diet [to begin with], it means people are eating chicken or meat once every two months instead of once every month.”¹⁹ The influx of refugees has also put a large strain on host families, and on most public services including education, health care, and water. In addition to increased food insecurity, there

¹⁸ Integrated Regional Information Networks. (2013, February 22). *Jordanians Driven Further Into Poverty*. Retrieved May 3, 2013, from IRIN Humanitarian News and Analysis website: <http://www.irinnews.org/Report/97528/Jordanians-driven-further-into-poverty>

¹⁹ Ibid.

is also a substantial increase in competition for jobs: “We are struggling to find work in farms nowadays... so many people fled here. It is easier for an employer to hire an entire [Syrian] family because it costs them less money.”²⁰ Overall, the refugees are straining the resources of the local communities and are pushing their Jordanian hosts further into deeper poverty.

Similar themes are highlighted in the article, *Will Syria's Refugee Crisis Drain Jordan of its water?* The local Zaatari Refugee Camp and the widespread influx of refugees across the Governorate have strained water resources to a disastrous level. Some parts of Mafraq for example were without water for two weeks in February.²¹ The competition is not just limited to water resources. The same problems are true for electricity, schooling, housing, health care, and especially food. Mafraq's population has more than doubled causing utilities, rent, and food prices to increase exponentially. The competition and demand for resources is drastically increasing tensions and the situation has only worsened over the past month. These tensions are incredibly serious and have already resulted in protests. According to an article from the Jordan Times on April 20th, Jordanian residents of Mafraq held a rally outside of Zaatari, protesting the increasingly large number of Syrian refugees entering Jordan. The residents chanted, “Go back to Syria” in frustration about the ongoing social and economic problems caused by the massive influx of refugees.²²

Overall, there is some research being conducted on food security in Jordan. In addition, there is a substantial amount of literature, research, and resources designated to

²⁰ Integrated Regional Information Networks. (2013, February 22). Jordanians Driven Further Into Poverty. Retrieved May 3, 2013, from IRIN Humanitarian News and Analysis website: <http://www.irinnews.org/Report/97528/Jordanians-driven-further-into-poverty>

²¹ Baker, A. (2013, April 6). Will Syria's Refugee Crisis Drain Jordan of Its Water. Time Magazine.

²² Luck, T. (2013, April 20). Security Personnel, Refugees Injured in Zaatari Protest. The Jordan Times.

the Syrian refugees. Nonetheless, there is little to no research which specifically discusses the impact of Syrian refugees on Jordanians. This literature review provides background and a basis upon which to build this research which will further establish the challenges facing local Jordanian host communities.

Methodology

The methodology of this research included both qualitative and quantitative research, mainly in the form of fieldwork in the Northern Badia and interviews with professionals in urban centers such as Amman and Mafraq. The combination of perspectives, of urban and rural, professionals and working class people, border region and Amman, was meant to provide a more holistic approach to research. With these issues in mind, forty-two heads of households were surveyed across the Northern Badia region in the small towns and villages around Mafraq. All towns were within twenty miles of the Syrian border and were thus inundated with Syrian refugees. These communities are located in the periphery of Jordan, neglected and far from Amman. In the article *Food Security in Jordan in the Poverty Pockets of Jordan*, nearly half of all poverty pockets were located in this region. These communities are made up of working class individuals and families, without the disposable incomes of those in Amman for example.

To directly investigate the impact of the influx of Syrian refugees on these already struggling communities, families were surveyed in a number of different towns and villages. These included Mansoorah, Ghour, Housha, Sweilmah, Um Elmasrb, Mghayr Asirhaan, and ElZubidia. The goal was to sample a variety of different villages to get a better understanding of the whole area and to see whether the impact of Syrian refugees was universal throughout the region. Because the researcher was not familiar with the

area, Jihad AlTabini acted as a guide, directing the researcher to a variety of different villages and homes to interact directly with the local community. As a native of Mansoorah, who had lived his entire life in and around the Governorate of Mafraq, he had connections to individuals in all the different villages, local government administration, and NGOs. In many ways, he chose the sample of participants by choosing which locations to visit.

A key part of this research project was the food security survey, drafted by researchers from the National Center for Research and Development. The survey was a basis upon which to do more extensive field research. With some edits by the researcher, the heads of households in this region were surveyed using these questions. Topics included monthly income distribution, rates of consumption of certain staple foods, perception of the Syrian impact on their own consumption, and more (see Appendix). In total the survey consisted of 24 questions with four sections: types of food eaten, sources of food, food sufficiency, and household details.

The survey asked respondents to explain their average weekly food consumption habits, for example, “in a 7-day week, how many days do you eat chicken or bread?” Questions covered the different aspects of food security, from the diet itself to accessibility and availability. The respondents were asked about their resources, ability to access food, and whether their income allows them to purchase the necessary food items for a healthy diet. Availability in this context meant asking whether there was, at all times, sufficient amounts of food from a range of sources, such as local farms or grocery stores. Dietary nutrition and consumption, food accessibility, and food availability were

major the focuses of this survey and gave a more holistic approach to understanding the respondents' food security or insecurity.

The actual process of surveying individuals was an eccentric experience. After arriving in Mafraq, the researcher met with his guide, Jihad AlTabini, who showed him around Mafraq and the surrounding area, introducing the researcher to his family and community members, while discussing the state of Syrian Refugees in the area. The survey was discussed and the concept of the research project was explained. The next day was spent going door-to-door interviewing and surveying families.

The researcher and guide drove from town to town, visiting homes. Before discussing the survey or the research at all, as part of the Bedouin culture, families would offer tea, coffee, and cigarettes. This was followed by small talk and conversation about local events, which usually included the Syrian conflict. After some time of drinking, smoking, and discussion, the conversation would turn to the survey and the research would be explained. Some visits would include an interview in addition to the survey, but each visit took at least thirty to forty minutes. After the survey and/ or interview, another home in an adjacent village would be visited. This process of tea, coffee, cigarettes, conversation, survey, and interview was repeated from 10am – 6pm.

Towards the end of the day, a Jordanian family was visited that was renting out the first floor of their home to a Syrian refugee family. After the normal Bedouin hospitality of tea, coffee, and cigarettes the survey was conducted and then something remarkable occurred. The family brought out a massive platter of food including hummus and fresh vegetables, roasted potatoes, *zait wa zataar* (oil and thyme), and two large plates of *Magluba* with chicken, rice, and a large pile of bread. This family that had just

answered a survey about their food insecurity, and was already hosting an additional impoverished Syrian family, brought out a massive platter of their finest food, simply because that is the culture. The importance of hospitality came above their personal hardship. This was an awe-inspiring experience and one that came to represent this time in the Badia. Aside from the research and data that was gained from this project, even more was learned about the culture and the people who were visited. The vibrant and hospitable Bedouin culture is something that will never be forgotten from the research process.

In addition to the door-to-door visits, surveys were dropped off in Elhamra (an adjacent village) and at the local government administrator's office for them to distribute to the local community, to be retrieved the next day. At the end of the time in the Badia, a total of 42 surveys were compiled. In addition to the surveys, a number of interviews were conducted with local community members including a farmer, three local heads of households, the local administrator for agriculture, and employees at a charity organization that registers refugees in the city of Mafraq.

Because the information in the surveys was sensitive, it was imperative to protect the identity and integrity of the participants. Surveys were conducted with this concern in mind. At all times the researcher was joined by Jihad, a local community member, who made it clear to respondents that their names and identities would be kept anonymous. In addition, because he knew or was acquainted with most of the respondents, the survey originated from a place of community support rather than outsider objectification of the local community. It was made clear from the beginning that the goal of the research was to help the local community, not to exploit the information.

After returning from the Badia, the surveys were compiled and their data was entered into an excel spreadsheet. All answers were converted to numbers so that all the data could be quantified, and thus compared and analyzed by the data analysis program, SPSS. The program mainly provided means and averages of data, such as the average number of times per week a family consumed chicken or meat, or the distribution of differing levels of education. These averages and sums provided an overall understanding of the data to see possible correlations or causation. This was one of the most important steps in the process as it took the variety of survey results and turned it into trends to help prove or disprove the hypothesis.

In addition to the surveys in the field, interviews were conducted with representatives from the UNHCR, World Food Program, and Human Relief Fund. The goal of these interviews was to gain a more holistic understanding of the issue by interviewing those who were not affected by the Syrian crisis directly. Unlike those in Mafraq, these representatives were not suffering from the crisis themselves. Instead, they were mainly in management positions trying to solve the problems on the ground. In many ways, these sources were more academic and demonstrated a different perspective from those in the field. The researcher compared and contrasted these resources with the perspectives of those living in the Jordanian host communities.

Despite the holistic approach to the methodology, there were a number of different discrepancies in the research that were out of the researcher's control. First, Jehad largely determined the locations which were visited. Because the researcher was not familiar with the area, Jehad chose the locations visited and which families were surveyed and interviewed. While the families came from a variety of backgrounds, they

were not randomly selected like an average sample. Instead, a fourth of the sample was selected by Jihad, while a friend of Jihad's and the local administrator randomly distributed the rest. The majority was distributed randomly, though some of the sample was a chosen group. In addition, the sample came from a variety of towns, with only a few surveys in each. Because the surveys were so few from each community, little can be interpreted about each community's data. In some of these communities, the respondents neglected to note their village, making it impossible to know the location of their residence. As mentioned earlier, the researcher was not present for some of the surveys. There is no way to know if two family members from the same family may have responded to two separate surveys. It is also possible that someone visiting the area, originally from Amman, could have answered the survey, possibly skewing the data.

Lastly, the respondents frequently asked about the reason for the research and where it would lead. Before explaining that names would be kept private and anonymous, some felt scared to answer honestly, for fear that it might insult those in the government or the King himself. After explaining that the information would always be kept anonymous, it calmed their spirits and they filled out the survey. For those respondents that were not spoken to directly, however, there is no way of knowing whether they responded falsely out of fear or respect for the government or King. This may have skewed the data as well.

Findings and Results

Throughout the course of the field research and review of literature, the influx of Syrian Refugees left a noticeable trend on the Jordanian host communities in the Northern Badia. Across all interviews, articles, surveys, and official reports, the influx of Syrian Refugees was negatively impacting the livelihoods of average Jordanians in the

north. In interviews with Jordanians in the villages of Mansoorah, Housha, Zubidia, and ElHamra, to name a few, respondents consistently complained of the challenges they have faced on a day-to-day basis as a result of the Syrians. Similarly, in interviews with academics and professionals in Amman, it was clear that the situation was rapidly disintegrating into an unsustainable situation to the detriment of the Jordanians. The surveys showed similar patterns specifically in regards to reduced food security, availability, and accessibility. The variety of news sources provided corroborating evidence that consistently demonstrated the negative impact on Jordanian host communities. While the situation in the Mafraq Governorate is rapidly deteriorating overall, these findings will reveal the specific impact of the influx of refugees on the diminishing status of food security.

During the field research phase of the project, a number of formal and informal interviews were conducted with local heads of households sampling their opinions about the influx of Syrian refugees into their communities. The first formal interview was held with three men in their mid-twenties and early thirties from the village of Housha, one of the poorer villages in the Kingdom. The three men had a variety of grievances about the influx of refugees. The challenges they and their families faced as a direct (or perceived) result of the Syrian Refugees included scarce water resources, rising prices on food and basic commodities, increasing rental and housing prices, and increased unemployment/more competitive job market.²³ They said that because Jordan is already a water-poor country and water resources are scarce in the Mafraq region, the increase in water consumption by refugees around the Mafraq governorate and in Zaatari Camp

²³ Interviewee 1, Interviewee 2, & Interviewee 3. (2013, April 14). [Personal interview by the author].

would only exacerbate the problem. Priority on water consumption is being given to the refugees within and outside of the camp and it is hurting Jordanians.²⁴

The men explained that because of the massive increase in population, there has also been an increase in demand for goods, causing prices for most foods and goods to increase greatly. They described most of these trends using anecdotal evidence. For example, when describing the increasingly competitive job market and rising unemployment they shared the following example: “A Jordanian does a job for 30JD whereas a Syrian who has all other expenses covered by international NGOs, like the UNHCR, will do the same job for 10JD. The employer would prefer to pay the Syrian 10 rather than paying the Jordanian 30. Thus, the Jordanian loses the job to the Syrian or has to accept lower wages.”²⁵ They also mentioned that while many Jordanians were renting out rooms in their homes to Syrians, or even leaving their homes entirely to host refugees, rental and housing prices were skyrocketing.

Overall, the feeling was that their government and the international community were abandoning these Jordanians. In addition, they felt frustrated that all the aid was going to Syrians while Jordanians were struggling severely as well. Jordanians were opening their homes and communities to Syrians and were getting no support. Nonetheless, when asked about whether the Jordanian government should close the border, they were unanimously against the idea, referring to them as their “Syrian Brothers”.²⁶ They will not turn their back on the refugees; they just want support for their own communities. In their opinion, the government needs to take a stand and deal with the problems, because it will only get worse as time goes on.

²⁴ Interviewee 1, Interviewee 2, & Interviewee 3. (2013, April 14). [Personal interview by the author].

²⁵ Ibid.

²⁶ Ibid.

In an interview with a local Jordanian farmer located only a few kilometers from the Syrian Border, he reaffirmed the previous sentiments and provided similar anecdotal evidence. His major crops are cucumbers, peppers, tomatoes, and some fruit trees. As a farmer, he has seen the direct impact of rising food prices and increased demand. The increased demand had actually been beneficial for him as he made more profit on the same levels of production. He understood, however, how hard it was for people in his community who are struggling with these unbearable prices. He mentioned that many people simply can no longer afford to purchase his vegetables. He said “for example, a Kg of tomatoes used to cost around 10 piasters and today costs 1JD. Before the influx of refugees, the price of tomatoes was 10% of what it costs today.”²⁷ This substantial increase is a practical example of rising food prices on a micro scale.

Not only is accessibility becoming an issue, but also according to the farmer, there are not enough people in the area devoted to agriculture. There are simply not enough farmers to produce for the increased demand, especially when he sees roughly 2,000 to 3,000 people cross the border each night near his home.²⁸ This is an example of food availability issues with regards to food security because there is not enough production on the supply side of consumption.

Because of rising prices, the farmer noticed that many families can no longer purchase his produce and are unable to access the necessary foods because of their limited incomes. According to the interviewee, “there is currently no solution to the problem, I see no help from the government, and soon the situation will be a large

²⁷ Farmer. (2013, April 14). [Personal interview by the author].

²⁸ Ibid.

disaster.”²⁹ Other issues that worried him were the rising housing prices (a home that was 100JD now cost 700JD) and the scarce water resources for those in agriculture without private wells.

Following interviews with community members, an interview was conducted with the agricultural administrator for the region of Mansoorah. He shared similar anecdotal evidence related to food availability and accessibility and problems in the job market. He said for example, “in the past, before the Syrian Refugees, I would wait 3 minutes at a bakery for bread. These days I wait around 30 minutes... Because the Syrians undercut Jordanians on wages, where a Jordanian previously would have received 300JD a month, now they might receive 50JD.”³⁰ The anecdotes and the trends throughout the formal and informal interviews were incredibly consistent. Every person knew someone who was renting out a home or room to Syrians, had waited in long lines for food, was spending more each month for the same commodities, or being paid less for the same job. This new challenging situation was visible in each conversation and everyone was affected. Jihad, the guide, described it best: “the city of Mafraq had roughly 60,000 people. Today there are more than 80,000 Syrian refugees living here. You can’t help notice them here when they double your population, when they increase the traffic, when they change the local culture.”³¹ The impacts were clearly visible in the lives of most Jordanians in the local community.

In interviews conducted with members of the NGO community in Amman, the same anecdotes and stories were repeated. They understood the plight of the Jordanians but had no solutions. They spoke about the situation for Syrian refugees but neglected to

²⁹ Farmer. (2013, April 14). [Personal interview by the author].

³⁰ Administrator of Agriculture of Mansoorah. (2013, April 14). [Personal interview by the author].

³¹ Jihad AlTabani. (2013, April 14). [Personal interview by the author].

mention the Jordanian communities until specifically asked about them. The first interview was held with Ali Bibi, a representative from the UNHCR. He spoke extensively about the UNHCR's work registering refugees and providing for their basic needs both within and outside of the Zaatari Camp. After discussing the state of Syrian Refugees, he also spoke to the situation of the Jordanian communities. In his words, the Syrians are a large "burden" on already struggling communities.³² For example, roughly 40,000 Syrian students are in Jordan but outside of the Syrian Refugee camps. These students have become an immense burden on the local education system where there is simply not enough space for the students, in already over capacity classrooms without enough teachers.³³ The influx has left these Jordanian communities over-capacity for electricity and energy consumption and is consuming water at a rate that is completely unsustainable. In terms of the health care system, there is currently a 98% occupancy rate in all hospitals in the north, with 78% of those occupants being Syrian.³⁴ There is a shortage on medicine, hospital beds, and a decrease in the quality of care for patients. While the Jordanians pay taxes for these government services, the Syrians pay nothing but still receive the benefits. Roughly \$400,000,000 has been spent in government subsidies for Syrians while Jordanians continue to suffer as hosts.

Bibi also mentioned many of the previous grievances of Jordanians including rising food prices and commodities, water scarcity, and unemployment. According to Bibi's resources at the UNHCR, the unemployment rate in the Mafraq governorate jumped from roughly 14% to 37% since the arrival of the Syrian Refugees, because the Syrians continue to undercut the job market. For example, he said: "A Syrian might be

³² Bibi, A. (2013, April 22). [Personal interview by the author]

³³ Ibid.

³⁴ Ibid.

paid half the wage of a Jordanian but because they pay no taxes, can be paid by day illegally, and get international support for their basic needs.”³⁵ In the end, the Jordanian hosts receive no support and tensions increase. At this point, Bibi said that no one is solving the problem for Jordanians and there is no solution in sight. Bibi’s testimony only reconfirmed the hypothesis about the impact of the influx of Syrian Refugees.

The only representative or organization to offer a solution or even focus on the Jordanian side of the crisis was the partnership between the Human Relief Fund (HRF) and the World Food Program (WFP). A number of individuals at their Amman office were interviewed including the International Programs Coordinator and the Regional Director of the World Food Program.

The International Programs Coordinator is currently working on building the capacity of local NGOs towards effective conflict resolution. The goal is to train Jordanians in local NGOs with the skills to help facilitate conflict resolution between Jordanian host communities and Syrian Refugees.³⁶ Many Jordanian communities are frustrated by the widespread support for Syrian refugees and the complete lack of aid to Jordanians. The goal of the conflict resolution is to reduce tensions, integrate the two communities, and understand each others’ mutual challenges. Most NGOs are simply focused on getting as much aid and support to the Syrian Refugees as possible without considering the implications for the underprivileged Jordanian host communities. HRF and WFP hope to add conflict resolution to the priorities of NGOs to reduce conflict and bring to light the challenges of impoverished Jordanians.

³⁵ Bibi, A. (2013, April 22). [Personal interview by the author]

³⁶ International Programs Coordinator. (2013, April 27). [Personal interview by the author].

While the interviews provide qualitative findings and results, the surveys are a more concrete and quantitative resource towards proving or disproving the hypothesis. The results of the survey can be divided into a number of different categories. First, respondents listed the number of times per week they consumed a certain food item. For example, out of 7 days, how many times did a given family consume meat? The distribution and rate of consumption provides information on the diet of families, such as what food groups were lacking or which were sufficient (See Figure A in Appendix).

As expected, staples of the average Jordanian diet, bread, oil, and zatar were the most commonly consumed food items. In addition, dairy products and vegetables were also incredibly common and represented an important aspect of weekly food consumption. The least consumed food groups were fruits and the animal product category of meat, chicken, and fish. On average, meat was consumed less than once a week, and of all surveyed households, 57% consumed chicken only twice or less per week. In addition, 71% of families consumed fruit twice or less per week. When asked what food items respondents would like included in their diet that is not included currently, respondents consistently wrote in “Meat and Fruit.” The main idea to be extrapolated from this data is that while most aspects of the average Jordanian diet are stable in this sample, the minimal frequency of animal products and fruit demonstrates that certain aspects of nutrition and consumption are limited, inaccessible, or unavailable. The limited consumption of fruit and meat in this case is not as much a choice, as a limiting factor.

Food sufficiency was the second major category of the survey. For this section, individuals were asked whether they identified with certain statements relating to

household food security. In these questions, respondents were asked whether they ever had to sacrifice their own consumption habits or dietary needs because there was not enough food. Examples of these sacrifices or changes in consumption included not eating for a whole day, going to bed hungry, skipping meals, or cutting the size of their meal. The possible responses included “*Yes, Almost every month*”; “*Yes, in some months but not every month*”; “*Yes, in only one or two months*”; “*Never*”; “*Don’t know/ Refused to answer*” (see Appendix). These responses helped to quantify their food insecurity as opposed to understanding the composition of their diet. In the past 12 months, 39% of respondents said they did not eat for a whole day or went to bed hungry in at least one month or more because there was not enough food. The results of the food sufficiency questions can be seen in greater detail in Figure B of the appendix.

The results of this section were staggering. In each of the questions, more than 50% of respondents answered yes. Thus, more than 50% of the sample had cut the size of their meals. Roughly 70% had experienced not having enough food for their families or the money to buy more. Two out of every three respondents were concerned at some point about running out of food for the following month. These problematically high figures show strong characteristics of food insecurity. Over the past 12 months, many respondents were forced to change their food consumption habits or directly experienced the vulnerability of limited financial resources. Many of these averages were substantially higher than those in the papers *Prevalence of Food Insecurity of Women in the Northern Badia* and *Jordan Food Security in the Poverty Pockets*. In addition, the rates seemed to be consistent making them statistically significant.

Further questions in this section ask about both the quantity and quality aspects of the family's food consumption such as having enough food or nutritional value. Overall, these results demonstrated a substantial percentage of food insecure homes. The results of this section were incredibly striking. On average for most questions, roughly half of all respondents had to curb or cut their consumption on at least a number of occasions because they did not have enough money. This rate was substantially higher than in the survey conducted with women in the paper *Prevalence of Food Insecurity of Women in the Northern Badia*. An incredibly large proportion of families had direct experience with food insecurity on more than one occasion, forcing heads of households to change their own consumption patterns (see Figure B for more details).

The communities surveyed in the Northern Badia were already struggling before the arrival of the Syrian Refugees. Many of the villages and towns in the area were already seen as poverty pockets of the Kingdom, with substantial portions of the population living beneath the poverty line, significant rates of unemployment, and pockets of food insecurity. Thus, some of the data received from surveys reflects the status quo of life and livelihoods in this region of Jordan. Based on the personal accounts in interviews with Jordanians in the Northern Badia host communities, however, the overwhelmingly consistent data of the surveys, the testimonies of experts and academics from NGOs in Amman, the academic and policy reports of international third parties, and current news articles, the influx of Syrian refugees has exacerbated the situation for the Jordanian communities, increasing their food insecurity by reducing both the accessibility and availability of food.

In every formal and an informal interview, Jordanians complained of rising food prices and its growing inaccessibility. The average of food products such as tomatoes have increased tenfold. A farmer near the Syrian border, representative of the production side of the food system, even noticed the growing desperation of Jordanians, noting that many former consumers simply cannot buy his produce anymore. In the survey, many respondents stated that while they wish fruits and meat products could be more integrated into their diet, they simply could not afford it. In small communities which already struggled with poverty and food security issues, the massive influx of refugees has rapidly increased demand for everything from daily commodities, to food, to housing and rentals.

Overall, food security has been diminished because both food availability and accessibility has decreased and households' vulnerability has increased. First, while the population in the Northern Badia region around Mafraq has rapidly and exponentially expanded since the beginning of the crisis, agricultural production in the area has remained largely unchanged. As the farmer stated earlier, his production has been mostly stagnant, though prices have risen. He also mentioned that the area is in need of more farmers, as the current levels of production are not reaching demand.

Jordanians face similar problems with regards to accessibility, as the rising prices are not affordable for these impoverished citizens. According to the Department of Statistics, Jordan has seen a 26% average increase in agricultural producers prices for February 2013, compared to February 2012.³⁷ This number is merely an average for the Kingdom, with the situation being more severe in the North. The sudden increase in

³⁷ Hashemite Kingdom of Jordan Department of Statistics. (2013, April). 26% the Average Increase in Agricultural Producers' Prices for February 2013 compared with February 2012.

prices and the resulting inaccessibility demonstrates the vulnerability of these populations. The refugee influx is a systemic shock that has left many people food insecure by hindering the accessibility and availability of food. It demonstrates the vulnerability of the Jordanian host communities and how the situation is now extremely unsustainable for average Jordanians.

Conclusion

The research hypothesis was that the large influx of Syrian Refugees into the Northern Badia was negatively impacting the food security of households in the Jordanian host communities. The research findings ultimately proved the hypothesis to be accurate. First, the Mafraq Governorate has both the highest rate of poverty of all the governorates and lowest level of human development in the Kingdom. The local population was in fact already vulnerable to food insecurity before the arrival of the refugees. The influx of this large, impoverished population to the same area directly increased demand on most commodities including housing and rentals, basic needs, food, and employment. The limited production or availability of these resources combined with the exponential population increase has raised prices in the area significantly. At the same time, unemployment has increased in the area and incomes have not been able to keep up with rising food prices.

Food insecurity means not having sufficient amounts of the necessary foods for a healthy diet at all times and being vulnerable to systemic shocks on the food system. Two key characteristics are the inaccessibility of foods because of limited financial resources, and unavailability because of limited production with high demand. All of these characteristics are present in the Jordanian host communities, especially since the arrival of the refugees. Across all interviews, both in the Badia and in Amman, interviewees

noted the rising food prices at rates that are not sustainable. In these poor communities, the increased prices are making staples and commodities inaccessible, causing families to skip meals, cut the sizes of their meals, or worry that they would run out of food before the end of the month.

In an interview conducted with a local farmer, he described how his livelihood has greatly improved with the massive increase in food prices. He noted however, that he is the exception, because the increase in his income means higher prices for the consumers of his goods. In addition, he mentioned that there are simply not enough farmers in the area to handle the level of demand. He described the situation as being on the brink of disaster with regards to the limited availability of staple foods, especially vegetables. The farmer was located just a few kilometers from the Syrian border, where he heard bombs and witnessed thousands fleeing Syria each night. In his experience as a farmer, he inadvertently described the characteristics of food insecurity in the region including the inaccessibility of average individuals, the limited supply, and the vulnerability to disaster and systemic shocks.

In addition to the interviews, the data from the surveys demonstrates the dire nature of the situation. Based on responses to the survey, more than 50% of respondents experienced times of food insecurity in the past 12 months. Each day thousands more Syrian refugees enter Jordan and the situation only worsens. There is no end in sight to the conflict, and the scarce resources are dwindling. Worse yet, there is no support from the government or the international community. The competition for resources, housing, and employment between the two communities increases tensions but aid continues to be

limited to the refugees. The struggling Jordanian communities need aid just as much as the refugees but they are left largely ignored by NGOs.

In addition to satisfying their basic socioeconomic needs, conflict resolution and community integration will be necessary towards a long-term sustainable solution. Few NGOs focus on this incredibly important subject and instead focus all their resources on the Syrian Refugees. These NGOs rush to aid without consideration for the wider context and long-term needs of the local communities. The few organizations focusing on conflict resolution are Mercy Corps, the Human Relief Fund, and the World Food Program. They are working to build the capacity of local NGOs to create dialogue between the two communities and work together, instead of competing, to build a shared coexistent future. Their work towards conflict resolution is incredibly important towards reducing tensions however, priority must be placed on economic support to the struggling Jordanian host communities. Without aid and investment in local sustainable livelihoods, the situation for average Jordanians in the Mafraq Governorate is unsustainable and will ultimately end in disaster.

Study Limitations

As a first time field researcher there were flaws in the methodology and process of the research. One major discrepancy was the vast underrepresentation of women in the survey process. During all the days of field research, only one woman responded to the survey, and even in that instant, she did so with her husband. For example, when one house was approached, only a woman was present. When told the reason for the visit, she explained that she was willing to take the survey. The guides, however, did not allow it and said they would wait until her husband returned. In this case and others, the results may have been changed because of the methodology of the local guides.

As mentioned in the review of literature, the perspectives of women in food security is incredibly relevant and important. To not have women represented in the discussion of food security greatly undermines the results. In the average Jordanian family women often play an incredibly important role in the food consumption of the family and may often have a better understanding of the food security situation of the household than the husband. Nonetheless, only 10% of respondents overall were women which undermines the credibility of the data.

At times multiple people were interviewed at once. While the initial plan for research was to interview individuals only, it became apparent that most times interviews would occur in groups rather than one on one. As a result, group interviews seemed somewhat skewed as respondents tended to limit their responses or agree with others around them so as to create a unified narrative. It was unclear whether the groups of people felt similarly and had corroborating stories, or whether they all had different opinions but neglected to share them. For example, when asked in person about how the Syrians are impacting their lives, respondents would always feel strongly that the Syrians were making life substantially harder. On the survey, however, the majority of people did not share the same opinion. It is important to note the difference between interview responses and those on the survey.

Another substantial problem with the research conducted was the short-term nature of the research period. To note a change in food security, one would need to compare statistics from the past to the new statistics. In comparing previous data on households to new data, one could then make assumptions or a hypothesis about how food security levels have changed. Because little research was done earlier or before the

Syrian crisis, it is hard to definitively tell if there has been a substantial change in food security since the influx of Syrian refugees. The thoughts and feelings of the local population on the impact of Syrian refugees are relevant, but they do not give the researcher quantifiable data. Thus, the data would have been more effective if it could have been directly compared to earlier data points. In addition, the limited sample size of only forty-two families somewhat undermines the quality of the data.

Recommendations for Further Study

While this research intended to be a holistic approach to food security of Jordanians in the Northern Badia, it still provides opportunities for follow up and a more in-depth look at crosscutting issues. The major focus of this research was on the demand or consumption-side of the food system. To fully understand the problems facing the community, it would be constructive to look at the supply-side of their food insecurity. This would entail researching agricultural production, export-import economics, and the overall food distribution system. Studying the environmental impact of the influx of refugees would provide a more complete understanding of the situation on the ground. In addition, food security without sustainability is not security at all. Thus, future research should focus on long-term sustainable food security by investing in micro-scale sustainable livelihood projects. Researching solutions through sustainable development and community building in tandem with conflict resolution could be a constructive next step in the research process.

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Appendix

Figure A: Weekly Consumption Profile of Families in the Northern Badia

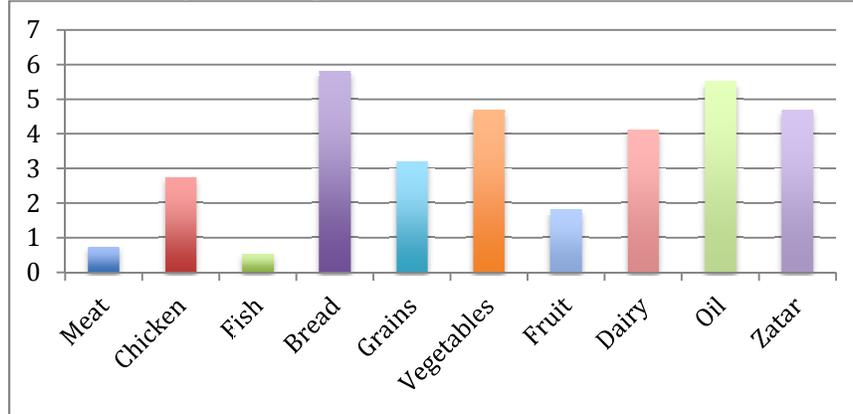
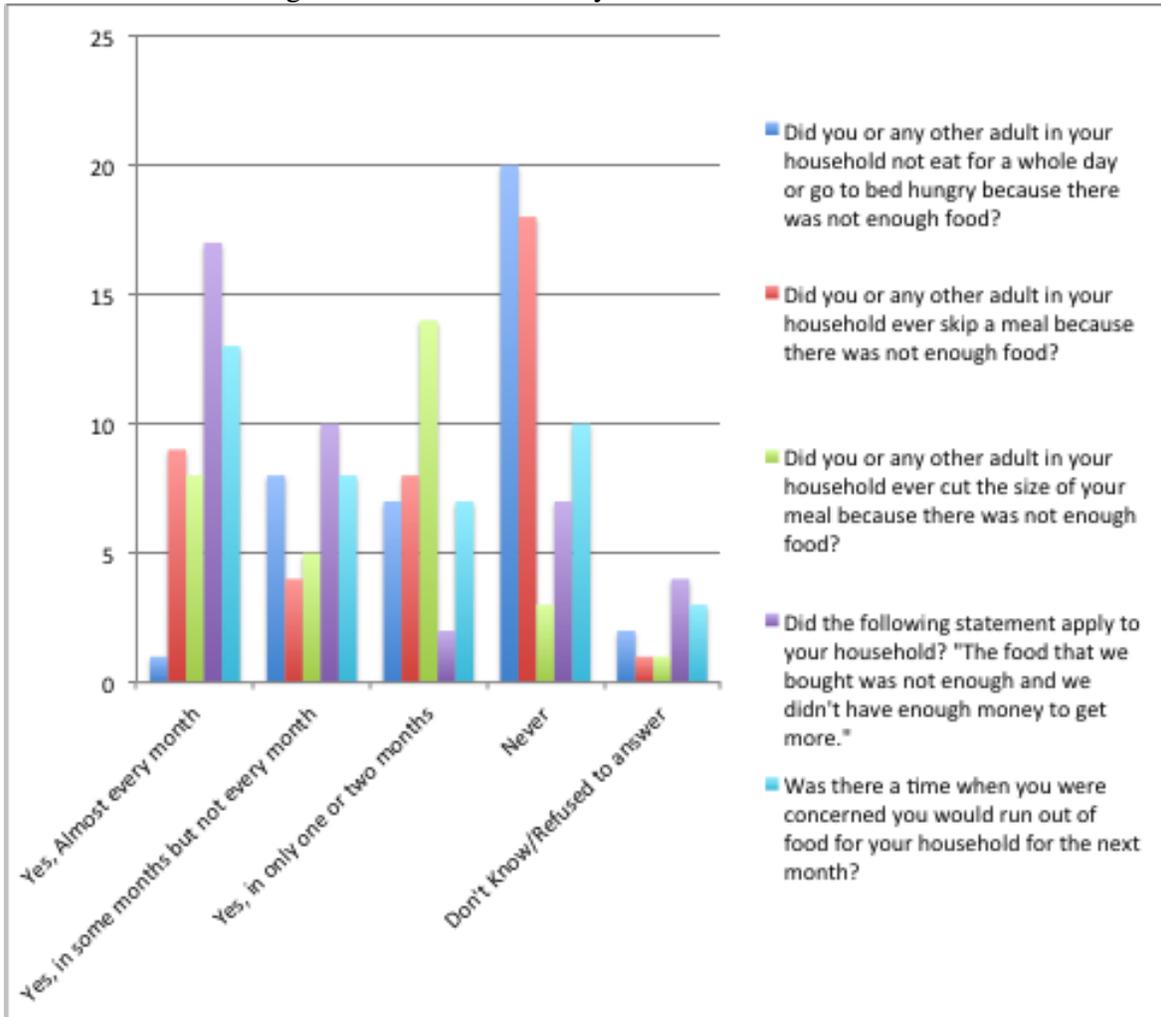


Figure B: Food Sufficiency in the Northern Badia



Food Security Survey:

Type of Food eaten

1. How many days during the week (seven days total) do you have the following food items (regardless of meal, i.e., breakfast, lunch, or dinner)?

___ / ___ 7 Beef or lamb

___ / ___ 7 Chicken

___ / ___ 7 Seafood (fresh or processed)

___ / ___ 7 Bread / Pasta / Rice

___ / ___ 7 Grains / lentils

___ / ___ 7 Vegetables (fresh or processed, e.g., canned or dried)

___ / ___ 7 Fruit (fresh or processed, e.g., canned or dried)

___ / ___ 7 Dairy product (milk, cheese, yogurt, etc.)

___ / ___ 7 Oils / fat (olive oil, butter, margarine)

___ / ___ 7 Thyme & sesame

2. What food items would you like to include in your daily diet (typical weekday meal) that you don't include now?

Sources of Food

3. Where do you shop for food (enter percent)?

___ % Grocery store (food / other household items sold in same store)

___ % Food store (food store that specializes in one type of food, e.g., bakery)

___ % Temporary food vendor (truck on side of road)

___ % Other (not identified above)

100 %

4. Do you use any of the following sources to supplement your food needs (check all that apply)?

Garden / small farm Home food storage

Outside assistance (government / NGO food assistance program)

Outside assistance (family member other non-government, non-NGO)

Store credit Other (not identified above)

Food Sufficiency

5. In the past 12 months, did you or any other adult in your household not eat for a whole day or go to bed hungry because there was not enough food?

Yes, Almost every month Yes, in some months but not every month

Yes, in only one or two months Never Don't know/Refused to answer

6. In the past 12 months, did you or any other adult in your household ever skip a meal because there was not enough food?

Yes, Almost every month Yes, in some months but not every month

Yes, in only one or two months Never Don't know/ Refused to answer

7. In the past 12 months, did you or any other adult in your household ever cut the size of your meal because there was not enough food?

- Yes, Almost every month Yes, in some months but not every month
 Yes, in only one or two months Never Don't know/ Refused to answer
8. Did the following statement apply to your household in the last 12 months? "The food that we bought was not enough and we didn't have money to get more."
 Yes, Almost every month Yes, in some months but not every month
 Yes, in only one or two months Never Don't know/ Refused to answer
9. In the last 12 months, was there a time when you were concerned that you would run out of food for your household for the next month?
 Yes, Almost every month Yes, in some months but not every month
 Yes, in only one or two months Never Don't know/ Refused to answer
10. Are there any foods you feel your family does not eat enough of?
 Yes No Don't know/Refused to answer
11. Which of these sentences applies the most to the food eaten by your household during the past 12 months?
 We had enough to eat of the kinds of food we wanted (quantity and quality)
 We had enough to eat but not always the kinds of food we wanted (only quantity)
 Sometimes we did not have enough to eat Often we did not have enough to eat
 DK/Refused to answer

About You and Your Household

12. How old are you?
 ___ Years
13. Where are you employed?
 Private business Someone else's farm or agricultural enterprise
 Personal / family farm or agricultural enterprise Public sector / government
 Retired Other, please specify _____
14. Which of the following best describes your marital position?
 single (includes widowed, divorced, separated, married but spouse absent)
 married without children (only husband and wife present in household)
 married with children / and or other family members

If answer to previous question included children or other family members then ask:

15. How many children under the age of 21 are currently living with you?
 _____ Children
16. How many other individuals (not children) are living with you? Include relationship
 ___ Individuals - Relationship: _____
17. Are you financially responsible for other individuals not living with you, i.e., do you provide food, fuel, or other assistance to these individuals?
 Yes No Refuse to answer / Don't know

If previous answer is yes ask:

18. How much per month do you contribute to these individuals (not living with you)?
 _____ JD / Month
19. What is the highest level of school you have completed?
 No formal schooling / education Primary school Secondary school College
 Post Bachelor College

20. Where are you from?

Jordan Outside of Jordan

21. What is your monthly salary? _____ JD

22. How much do you spend in a typical month on the following budget items?

_____ JD Housing (rent / mortgage)

_____ JD Utilities (cell phone, internet, electricity, water)

_____ JD Transportation (fuel, car payment, cab fare, etc.)

_____ JD Food (from all sources, e.g., grocery store, local vendor, etc.)

_____ JD Basic living needs (e.g., toothpaste, bath tissue, etc.)

_____ JD Cigarettes or other smoking

_____ JD Family obligations (money spent on family members not living with you)

_____ JD Charitable contributions (money spent on non-family members)

_____ JD Savings

_____ JD Other (please specify: _____)

_____ JD Total

23. Has it been hard to provide food for your family since the influx of Syrian Refugees

Yes, very much Yes, Somewhat No

24. Are you hosting Syrian Refugees?

Yes No

Interviewer Answered Questions

1. Date interview was conducted? _____

2. Where was interview held? _____

3. Interview was completed by:

Husband (Male)

Wife (Female)

Both Husband & Wife (Male & Female)

4. What town/village does the family live in? _____

5. Interviewer: _____

Interview Questions:

- **Badia:**

- How has the influx of Syrian Refugees affected you?
- In terms of food prices, housing, rentals, employment, water, energy, etc.?
- Is your life harder since their arrival? In what ways?
- What is being done about the situation? Do you receive any aid?
- What should be done about the situation?

- **Amman:**

- How is your organization dealing with the crisis in the North?
- What are the major challenges faced by the Jordanian host communities in the Northern Badia?
- What is being done to assist these communities?
- What can be done to help these struggling communities?
- Is the long-term situation in the North sustainable? What are the next steps? How can we solve the problem?

Informed Consent Form
The Impact of Syrian Refugees on Food Security in the Northern Badia
Jesse Schaffer, The George Washington University
School for International Training—Jordan: Modernization and Social Change

Instructions:

Please read the following statements carefully and mark your preferences where indicated. Signing below indicates your agreement with all statements and your voluntary participation in the study. Signing below while failing to mark a preference where indicated will be interpreted as an affirmative preference. Please ask the researcher if you have any questions regarding this consent form.

I am aware that this interview is conducted by an independent undergraduate researcher with the goal of producing a descriptive case study on food security in the Northern Badia of Jordan.

I am aware that the information I provide is for research purposes only. I understand that my responses will be confidential and that my name will not be associated with any results of this study.

I am aware that I have the right to full anonymity upon request, and that upon request the researcher will omit all identifying information from both notes and drafts.

I am aware that I have the right to refuse to answer any question and to terminate my participation at any time, and that the researcher will answer any questions I have about the study.

I am aware of and take full responsibility for any risk, physical, psychological, legal, or social, associated with participation in this study.

I am aware that I will not receive monetary compensation for participation in this study, but a copy of the final study will be made available to me upon request.

I [do / do not] give the researcher permission to use my name and position in the final study.

I [do / do not] give the researcher permission to use my organizational affiliation in the final study.

I [do / do not] give the researcher permission to use data collected in this interview in a later study.

Date:

Participant's Signature:

Participant's Printed Name:

Researcher's Signature:
