CAPACITY AFRICA INSTITUTE

COURSE ASSIGNMENT ON

DIPLOMA IN FOOD SECURITY AND CLIMATE CHANGE

BY

JERUSHA WAMBUI MACHARIA

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DECLARATION

*In presenting this assignment for assessment, I declare that it is a final copy including any last revisions. I also declare that it is entirely the result of my own work other than where sources are explicitly acknowledged and referenced within the body of the text. This assignment has not been previously submitted for any diploma at this or any other institution.*

*NAME: JERUSHA WAMBUI MACHARIA – JWM…..*

ABSTRACT

We will be looking at limitations of food aid, how and why genetically modified foods have become a controversial issue and its role on food and nutrition security, coping strategies when there is crop failure and finally, technological trends leading to an individual’s vulnerability to food security. This will also be summarized and mentioned in the conclusion. This research will mainly be sourced from google scholar and articles.

Define 1

1. Policy refers to strategies that are mainly proposed by an individual or an organization in order to meet its objective or achieve its goal.
2. Food balance sheet refers to compilation of statistics on a country ‘s means of food supply whether imported or locally produced, its utilization, its benefits on its society on certain or specific period of time.

2, discuss four limitations of food aid

1. INCREASE DEPENDENCY -for many years affected countries have been getting help from donor countries or from other regions. This has been the case due to calamities, diseases, poverty among other causes. Donor countries may set a long-term strategy to aid these affected countries and these affected countries ted to depend on them.
2. CORRUPTION - donor countries may set up programs on how to aid the countries suffering from drought and famine, this is mainly in terms of funding them to help them improve their economic growth. The funding later lands into greedy government who loot and deprive the poor its benefits of intervention. This has a negative impact on the people who depended on it. This sort of grafting undermines the confidence of the funding countries.
3. CHANGE IN COMSUPTION PATTERN -food aid may at times distort consumption patterns such that it may be supplied, purchased or delivered mostly when the local users least expect. In most cases there would be food in local markets, and these may result into overfeeding. Another case is when food supplied to the affected areas is not enough and this may lead to most families skipping meals or not having enough, resulting to eating incompetence and lacking some of the dietary nutrients.
4. PRICE EFFECTS -After food is purchased and distributed in the affect areas, these is usually a blow on local markets since the food prices almost invariably fall, this is because many people may have enough in their households and to maintain buying and selling, and mostly to prevent the food in the market from going bad, sellers are forced to cut off the price. This affects the running of the local market.

3, use of genetically modified foods (GMOs) has been a controversial issue. Discuss the role of GMOs on food and nutrition security.

For the last many years, genetically modified foods have proved to be controversial issue, this is because of the pros and cons that comes with it. According to Genetically modified foods: safety, risks and public concerns by (Anilakumar), genetic modification is defined as special set of gene technology that alters the genetic machinery of living organisms such as animals, plants or microorganisms. This may pose as both positive and negative to humans. Some of the positive effects of GMOs are as,

A: according to the definition of genetic modification we saw that these genes alter with genetic machinery of living organisms of plants and this makes plants more tolerant on weather and climatically changes e.g. heat, drought, cold etc.

b: plants become more resistance to insects and pests. Some plants such as cotton and maize have been genetically modified so as to become toxic to some of the insects. In the past years, genes from Bacillus thuringiensis have made a significant beneficial impact on global agriculture.

c: increase in crop yields

d: increase their shelf life

e: increase higher levels of nutrients e.g. calcium and proteins

f: give fruits stronger and attractive colors e.g. oranges

g: eliminate seeds in fruits e.g. grapes and watermelon.

h: plants and animals under genetically modification becomes virus resistant.

From all the above pros on genetic modified foods, it is possible to find sustainable ways to feed people in such that, with these friendly pros, some crops can grow in environments with harsh conditions and with the longer shelf life of some of the Gm foods it is possible to ship foods to affected people. But despite of all the benefits, genetically modified foods still pose as a risk to human safety. This comes with its cons which includes,

a: allergies. According to the Centers for Disease Control and Prevention (CDC), allergies in children below 18 years of age have increased, it is believed that this spike is linked to GM foods. In the 1990s, according to the researchers report in (Nordlee, 1996) *New England Journal of Medicine, the GM soybeans triggered allergic reactions within people with Brazil nut allergy*. Those soybeans were never sold due to this.

b: Antibiotic resistance. Antibiotic-resistant bacteria can resist antibiotics making them hard to kill hence infecting people and according to the CDC, these infections kill at least 23000 people a year. It is highly questioned if GM foods are connected to rising rates of antibiotic resistant bacteria.

c: Cancer. Most people globally talk of GM foods causing cancer but there is no sufficient evidence to conclude genetically modified foods affect cancer risk.

4, Discuss the common coping strategies adopted by household in your community when is crop failure.

(Wambui, 2019), Crop failure refers to where crops on the farm are lost due to pest invasion, climatic changes among other reasons. In most communities crop farming is the main activity that is carried out by most household and in case there is crop failure, this affects them severely for instance farmers income is lost, decreases the amount of food available for consumption and this later leads to households affected through starvation, changing their feeding patterns among others. For these blows, households in the community has come up with coping strategies in case of crop failure which are:

A, casual labor-- In order to meet their basic needs and in order for life to keep going, household members are forced to engage in variety of services which are based on a few hours. This is accompanied by low payments which in most times is not enough for food. This later affects the nutritional status of the household members as they opt for more cheaper foods which has low or no dietary values in the bodies or at times the food is not enough and the family suffers from malnutritional diseases.

B, wild food- Crop failure has forced household members to go wild. To avoid starvation, members start eating edible herbs and wild meat.

C, farm irrigation - in cases where the crop failure might have been caused by poor or no rainfalls, households introduce irrigation methods on their farms as a coping strategy. Those near rivers pump water to their farms while others collect in tanks and carry out drip irrigation which mostly do not require a lot of water.

D, barter trade - households has adopted barter trade where they exchange goods or services for other goods or services. For instance, those who experienced crop failure may exchange some of their assets or services for food.

E, charcoal and firewood selling - crop failure has forced household to indulge in selling of forest resources. This is done by mainly cutting down of trees and selling them as firewood or others they burn charcoal and sell.

F, skipping meals. - Household affected by crop failure mainly find themselves not having enough food and for them to cope with the situation, and for the food to last a bit longer, they are forced to skip meals.

5, Explore the technological trends that can increase individual’s vulnerability to food insecurity.

Food security is referred to as availability, affordability and accessibility of nutritious food by an individual at all times. When all that is not met, then it is referred to as food insecurity. This can affect an individual psychologically and socially. In the current world, technology has proven to be a crucial determinant on food insecurity in such that, for example, technology has brought about use of computer networking, use of artificial intelligence, block chain technology, computer vision among others. This has proved to increase individual’s vulnerability in such a way that everything can be done through technology hence putting an individual at risk of un employment and underemployments. This is a huge blow on an individual because no income means he/she is exposed to poverty where getting nutritious and enough meals is a problem.

CONCLUSION

The objective of this assignment was to look at limitations of food aid and one of the huge con of food aid is corruption, genetically modified foods controversial issue, role on food and nutrition security and to discuss strategies when there is failure of crop, we have as well explored some of the vulnerabilities of food insecurities brought by introduction of technology to an individual.

Having mentioned the above statements, the assignment objectives have been met and the resources used are from articles and google as cited in the body of this assignment.

RECOMMENDATION

As stated in the conclusion above, to curb corruption we recommend the funding countries to consider realignment of program structure to match the mission and goals of the funding, mandate and its budget.

Broader and more research is required on Genetically modified foods since it is not clear on the cons that comes with GM foods.

References

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* <https://www.google.com/search?q=CDC+allergies+in+children&oq=CDC+allergies+in+children&aqs=chrome..69i57j0l5.22095j0j7&sourceid=chrome&ie=UTF-8>

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