Georgia Saddoris

George Washington High School

Cedar Rapids, IA

Cambodia, Animal Agriculture

Animal Agriculture Problems in Cambodia

Have you ever been to Cambodia? Located in South-East Asia, with a population of 16.49 million people. The prime minister of Cambodia is currently Hun Sen. Hun Sen is the longest-serving prime minister of Cambodia and has been in office since 1985. He is also one of the world's longest-serving leaders. Along with Hun Sen, the head of government, Cambodia also has a constitutional monarchy, with King Norodom Sihamoni as the current head of state. (thoughtco.com) Cambodia's religion is Buddhism and its official language is Khmer. Their capital is Phnom Penh.

With plains and the great river trade, a largely rural country lies amid important overland and river trade routes, linking China to India and Southeast Asia. Cambodia is one-third the size of France and somewhat larger than the U.S. State of Missouri. Cambodia is bordered by Vietnam to the east, Laos in the northeast, Thailand in the west and northwest, and has a coastline at the Gulf of Thailand in the southwest. According to hotels.com, Cambodia is also the home to the oldest Indianized state in Southeast Asia. The Indianized state comes from its roots in the 1st to 6th centuries in a state referred to as Funan known as the oldest Indianized state.

I will be talking about what animal agriculture is and how it is affecting Cambodia. I will also discuss what Cambodia is doing to combat this problem and my solutions. Animal agriculture is the breeding of livestock for the production of vaccinia for recreational use. Raising agriculture takes a massive amount of land, food, and water. Cambodia has a major clean water problem and because of this maintaining proper agriculture is an ongoing issue. The amount of water Cambodia receives annually ranges from 1400mm- 4000mm. They would need more water, proper irrigation, and better filtration systems to combat this problem.

In Cambodia, there are five million people that lack access to clean water. Most of the people that lack access live in rural areas where the livelihood of this population is dependent on agriculture. One-fifth of Cambodians are food-deprived which means they do not have enough food to support their population. The Cambodian government has put together a program called Feed the Future to help increase agricultural productivity.

There has been a lot of success with the program. According to usaid.gov agriculture and food security, Cambodia has had a lot of success with the feed the future program. The program has reduced nearly 30% of underweight children within the past 5 years. 41,000 children under five were to receive the nutrition program. The feed the future program addresses a big portion of Cambodia's agriculture problems,

according to usaid.gov, the program trained nearly 340,000 people or 124,000 households in agriculture and food security. 25% of them were poor. The program also helped over 193,000 farmers or 78,000 households to apply new technology on 87,600 hectares of land. They also trained over 230,000 people in improving nutrition practices. With the help of the feed the future program. (usaid.gov/Cambodia/agriculture-and-food-security)

Agriculture is very dependent on rainfall because Cambodia has a very poor irrigation technology infrastructure. (International Fund for Agricultural Development, [IFAD] 2013a) Cambodia's annual rainfall is 1400mm, with some regions reaching 4000mm. In Cambodia, 97% of all arable land, farmable land, is presumed to be rain-fed. (Devendra, 2012) The wet season is very important to farmers in Cambodia. Cambodia's wet season is characterized by heavy rainfall during the planting season. The planting season ranges from June to November, the harvest season ranges from November to January, and the dry season ranges from December to April. Farmers seem to have improved productivity during the dry season. 1.85% annual growth compared to 1.62% in the wet season. (Sophia, 2012). During the wet season, their main export is rice.

Livestock in Cambodia is used for many different things. Livestock is a source of food for many Cambodians and supports other people all over the world. Cambodia also uses cattle and other strong livestock for draft power. Draft power is when you use animals instead of machines to farm the land. Cambodian citizens also use their livestock for manure. There are many beneficial things you can do with manure. Such as recycling it and putting it down in your garden to help your plants thrive and grow strong and healthy. Inadequate veterinary services, insufficient feed supply, and widespread disease is also a big problem facing Cambodia's agriculture. Due to Cambodia's low-income economy, livestock contributes 16% of overall value and makes up 4.3% of their Gross Domestic Product. According to the 2013 census for Cambodia, they reported around 1.6 million households in Cambodia raising livestock.

Buffalo and cattle are almost exclusively produced on smaller single-family farms in Cambodia. Cattle and buffalo are primarily raised in traditional mixed crop-livestock systems by smallholder farms. smallholder farms typically raise between two to ten heads. Buffalo and cattle are an investment. Buffalo and cattle can act as last resort if the family ever ran into hardship in rural areas of Cambodia. If the family is ever in a pinch and needs money they can sell off some of their livestock. They are viewed as supplementary products to provide additional support and stability to a family.

Land area in Cambodia is a big problem. Most of the land is dominated by rice fields, so in the wet season, livestock spend most of the time tied to the house. After harvest season happens the cattle get moved down to the lowland and graze on the rice stumbles. Upland areas only consist of 10% cattle. The government has conceded mostly all the land and sold it to private companies. The government and wildlife crimes are the main problem of Cambodia's animal agriculture problems.

Recently, the government of Cambodia has been selling wildlife sanctuaries that are supposed to be protected, to private industrial firms. According to DW.com Cambodia's wildlife endangered by land concessions, Cambodia's government granted more than 200 firm land concessions. Land concession is a contract between the government and another landowner that gives specific rights to control an area of land for a fixed period of time, Covering about 22% of the country's surface. Affecting thousands of families. Cambodia wildlife has become endangered because of these land concessions. Mark Wright of the world wildlife fund stated "the concession is made only to land with barren trees, not to the jungle"

By doing this it is only a matter of time when you run out of time and the farmers don't have anything left. (dw.com/en/cambodian-wildlife-endangered-by-land-concessions/a-16184278)

Cambodia has a big history of infectious diseases problems. These problems include supermarket outbreaks to animal outbreaks. Infectious disease is a bigger mystery than you think. Most people say they know about diseases but there is a lot more to it. Infectious diseases have been circling Cambodia for over a decade. According to the Asia beef network, Cambodia's livestock is raised in traditional mixed crop-livestock living, increasing the risk of diseases and how long it takes for it to spread. According to fao.org, some causes of infectious diseases to spread are farmers using widespread use of open-range livestock production. (http://www.fao.org/home/en/)

Other ways that diseases can spread are a lack of border control. Their border control does not check or intercept infected livestock. Going through border control in Cambodia is a lot easier than in the USA, Cambodia also has very few rules about what you bring into this country. Animals must be accompanied by veterinarian good health and rabies inoculation certificate issued at the port of origin, Cambodia's only other rules are that you are allowed only 400 cigarettes, or 100 cigars or 400 grams of tobacco, also 2 liters of wine, stated iatatravelcentre.com. Compared to the USA and the country's long list of rules to enter the USA, there is little to nothing protection for agriculture.

The lack of border control allows diseases to enter the country and spread rapidly to the livestock already in Cambodia. Livestock is sourced through Thailand, paying Thai villagers to walk cattle over the border. The cattle are checked by vets briefly but diseases could go missing. With trades being unofficial it is hard to track animals through the border. The news does not do a great job of reporting about the outbreaks, which means that people may not be aware that this is even a problem. According to usaid.gov, the feed the future program has helped 73 students to pursue associate, bachelor, MSc, and Ph.D. degrees in agriculture, food security, or environmental-related sectors. Feed the future has also helped with disease spread, by helping over 193,000 farmers or 78,000 households to apply new technologies. (https://www.usaid.gov)

My solution is to create an educational program. I can inform people about this topic through a website and spread awareness, but the main thing I could do is help the locals with information on how to prevent the animals and livestock from getting the diseases. There will also be information about how to prevent the spread of the disease if an animal does contract any disease. I will include all the resources to contact local authorities and local media to help out other farmers from getting the disease and it leads to a bigger outbreak and maybe even destroying the ecosystem.

My website would also include recommendations on how to avoid the contraction and spread of disease by preventing it at the source. First, you can regularly clean your livestock pens. If you have the resources, vaccinate your animals. You always want to know symptoms your animals will have if they ever end up getting the diseases. This will help you diagnose it faster and present spread. Report any diseases that your livestock contract, you have to report it to the authorities because then they can report that information to the media to prevent further spread. My website would also include a map of where outbreaks were reported so you could see if there was an outbreak in your area that you would need to be aware of. Informing other farmers so they can quarantine their animals is an important part of stopping further spread of the disease. They can not quarantine their livestock if they are not aware that their animals have been in contact with the infected. If you're unsure about what is happening to your livestock you should first quarantine them to be on the safe side so it won't spread and then you can phone the authorities. You should also watch your health and the health of those around you so that you can make sure that the disease does not spread from the animals to other people and cause a larger outbreak.

Some recommendations I have to not get in this situation are that the government needs to put together a better media response so then other farmers would be informed if they are at suspected risk. Cambodia also needs to have better border control. If they would just check bags then they could at least slow down a few diseases coming into the country. They should be checking for fruit or even foreign livestock on foot. Cambodia could even stop the disease from spreading to other countries and affecting their livestock.

Cambodia seems like a very likable country with a lot of potential. Some work needs to be done within their agriculture sector before they could start attracting tourists wanting to come to visit the country. Knowing about the background and risk of contracting the disease, tourists would most likely choose somewhere else to visit. I believe that if the government imposes more regulations on borders that would significantly reduce the diseases coming from outside the country. They also need to promote more awareness and support programs that inform their people so they can make more educated decisions. Doing this would not only help their own people protect their livestock but would increase the likelihood of tourists wanting to come and visit the country, which would also boost the economy.

Bibliography:

• "Fast Facts about Animal Agriculture to Help You Get Informed." *1 Million Women*, 15 Dec. 2015,

www.1millionwomen.com.au/blog/fast-facts-about-animal-agriculture-help-you-get-informed/#:~ :text=Animal%20agriculture%20is%20the%20practice,that%20meat%20has%20environmental% 20impact.

"Fast Facts about Animal Agriculture to Help You Get Informed." *1 Million Women*, 15 Dec. 2015,

www.1millionwomen.com.au/blog/fast-facts-about-animal-agriculture-help-you-get-informed/#:~ :text=Animal%20agriculture%20is%20the%20practice,that%20meat%20has%20environmental% 20impact.

 Welle, Deutsche. "Cambodian Wildlife Endangered by Land Concessions: DW: 22.08.2012." DW.COM,

www.dw.com/en/cambodian-wildlife-endangered-by-land-concessions/a-16184278#:~:text=In%2 0Cambodia%2C%20land%20concessions%20and,the%20world%20are%20rapidly%20decreasin

g.

• "Cambodia's Water Crisis - Cambodia's Water Problems 2020." *Water.org*, water.org/our-impact/where-we-work/cambodia/.

- "Agriculture and Food Security: Cambodia." U.S. Agency for International Development, 29 Nov. 2017,
- www.usaid.gov/cambodia/agriculture-and-food-security#:~:text=Nearly%2080%20percent%20of %20Cambodians,minimum%20daily%20requirement%20of%20calories.
- Cambodia beef cattle industry. *Cambodia Beef Cattle Industry*. www.asiabeefnetwork.com/wp-content/uploads/2016/12/151101-Cambodia-profile.pdf.
- "Cambodia." *Cambodia : FAO in Emergencies*, www.fao.org/emergencies/countries/detail/en/c/161521.
- Cambodia- a brief history- go guide, Cambodia information go guide,
- www.hotels.com/go/cambodia/cambodia-brief-history
- What you should know about Cambodia- thoughtcowww.thoughtco.com/cambodia-facts-and-history-195183
- Cambodia customs, currency and airport tax regulations details- IATAwww.iatatravelcentre.com/KH-Cambodia-customs-currency-airport-tax-regulations-details.htm