

TOPIC B: ANIMAL AGRICULTURE, ENERGY AND CLIMATE CHANGE***prepared by Ghalia Khalil***

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INTRODUCTION

It is extremely hard and challenging to accept that one's very own lifestyle, comfort zone and routine could be contributing and worsening the most serious environmental problems humanity must face. We have been disconnected from our nature, been educated but not enough to question what we have been taught, distracted from the true essence of life and peace with perfectly placed blinders. Globalisation has left many people behind, with over 900 million human beings left hungry worldwide. It is only an illusionary freedom we are holding onto, for we are undoubtedly prisoners. We have been deceived enough to accept faking our own freedom.

But we need not despair. To move forward and contribute to promoting compassion, peace and sustainable living, we must understand the root causes of the problem. We must carry out extensive research and be willing to change our thinking and approach to the formulation of policies that can effect change.

Consequently, it is highly important to mention and emphasise in this committee particularly, the very root cause of the most serious environmental problem for mankind. Unfortunately, it is no surprise that this problem at hand has been given very little attention on the international stage by world leaders. It is not until recently that Climate Change has been talked about so often by global actors, who now realise the importance of protecting the environment. However, what is important is, not all world leaders agree that climate change is real. The shocking position of the United States of America, on the Paris Climate agreement is testament to this.

DEFINING ANIMAL AGRICULTURE

Animal agriculture is defined as “the practice of breeding animals to produce animal products and [...] other purposes.” This includes evident products such as beef, poultry, and fish, extending to other animal by-products such as dairy, eggs, honey and leather. over 50 billion land animals are slaughtered every year for food, making the practices of raising and slaughtering extremely unethical, unsustainable, unsanitary and inhumane.

THE AGGREGATE PICTURE

Animal agriculture is the most destructive and most devastating industry facing the planet today. It is the leading cause of climate change, world hunger, water pollution and shortage, deforestation, species extinction, ocean dead zones and land exploitation. Its impacts are heavily distinct, yet extensive, and as such should be examined individually. Both the United Nations Environment Program (through the UNEP Global Environmental Alert Service) and the FAO (in an article published by the department) have warned that “Cattle produces more greenhouse gases than driving cars”; much more -as measured in CO₂ equivalent- than all transportation combined. To be more specific, raising animals for food is responsible for 51% of all worldwide GHG emission, while all transportation combined account for only 13% of the global emissions. Livestock is also responsible for 65% of Nitrous Oxide emissions, which is 296 time more destructive than CO₂ and stays in the atmosphere for 150 years. This is particularly alarming, seeing that the emissions

from animal agriculture are expected to increase eighty percent by 2050, compared to the thirty percent increase expected within the energy sector. According to Doctor Richard Oppenlander, without using any gas, oil or fuel from this day forward, we would still exceed our 565 gigatonnes CO₂e limit by 2030, without the electricity/energy sectors even factoring in the equation- all by simply raising and eating livestock. Energy related emissions are expected to increase by 20% by 2040 due to livestock production. To formulate solutions, the ways and origins of these greenhouse gases must be known and understood. These gases are produced by the meat and dairy industries in three primary ways: through the management of agricultural soils which emits nitrous oxide, the natural digestion process of cattle and livestock that emits humungous amounts of methane gas, and the storage practices of animal manure which emits both nitrous oxide and methane. The previous paragraph examined the greenhouse gas emissions and energy consumption associated with animal agriculture. We have yet to uncover the massive ecological footprint of animal products ranging from their water footprint to their land footprint.

KEY ACTORS IN CLIMATE CHANGE: COWS, PIGS AND CHICKEN?

In a world centred around water scarcity with an increasingly skyrocketing demand starting to determine much of global politics in the twenty-first century, the preservation and safe usage of water in a sustainable manner is crucial. According to Water Footprint Network, 2,500 gallons of water are needed to produce only 1 pound of beef, while 1,000 gallons are required to produce 1 gallon of milk. In addition, livestock covers 45% of the Earth's total land. We are witnessing today the largest event of mass extinction of species in 65 million years, as we are losing important animal, marine and plant species at a rapidly and alarmingly accelerating rate.

Ocean dead zones are areas devoid of any life with 3/4 of the world's fisheries either exploited or depleted due to unsustainable over-fishing and animal manure: animals produce 3.475 trillion pounds of manure every year. Bycatch and discard from fishing threatens all marine animals and mammals including but not limited to whales, sharks and dolphins and other endangered species. As many as 2.7 trillion animals are pulled from the ocean each year, with 50 million sharks killed needlessly by fishing lines alone.

On the other side of the spectrum sits the Amazon rainforest, being the hidden treasure of what is remained of the Earth's hidden insect, plant and animal species. It is severely threatened by animal agriculture as well, with the latter being responsible for 91% of its destruction -137 plant, animal and insect species lost with it.

Throughout the world, humans drink 5.2 billion gallons of water and eat 21 billion pounds of food each day. However, cows drink 45 billion gallons of water and eat 135 billion pounds of food each day. This means that we are currently growing enough food to be able to feed 10 billion human beings, consequently ending world hunger and famines.

With 82% of starving children living in countries where food is fed to animals that will later be eaten by western countries, it is only reasonable to re-evaluate priorities in accordance with the progression of our world.

Relying simply and only on shifting from traditional energy sources to sustainable green energy sources is ultimately not enough to stop and reverse the effects of climate change. More importantly, completely converting to wind and solar power will take more than 20 years and will cost roughly 43 trillion dollars. However, climate change cannot wait, our lives and the environment cannot be compromised. Immediate and urgent action must be taken.

EXISTING CHALLENGES

Unlike other existent major humanitarian, social or political problems, animal agriculture has yet to be properly addressed by governments, world leaders and the United Nations. International indifference and efforts to dissimulate the problem may be because the animal agriculture lobbyists consist of a billion-dollar industry (meat and dairy industries), thus characterised by and profiting from huge political and corporate power, majorly influencing political processes of decision-making.

Other challenges include the cultural aspects of trying to inflict behavioural changes in people. Traditions and religious beliefs affect lifestyle and diet most of the time, the latter being extremely sensitive and thus very challenging to address.

The animal agriculture industry will not cease to continue to grow exponentially, very soon. On the contrary, the continuous rapid growth of the human population, the urbanisation in developing countries and the effects of globalisation will all lead to an even higher demand for animal products.

MAJOR PARTIES INVOLVED AND THEIR VIEWS

The Food and Agriculture Organization of the United Nations

The FAO of the UN is the chief body concerned with achieving food security and setting this goal as a priority. With regards to sustainable animal agriculture practices, the strategic objectives of the FAO as stated on its website are to “manage ecological risks, increase resource use efficiency and improve ecosystem services”. The activities that it has undertaken are further addressed in the “Evaluation of Previous Attempts to Resolve the Issue” section of this report. It constitutes the main channel through which the international community has acted to address the issue on a global level.

Major Corporations in the Animal Agriculture Industry

Major corporations, who today produce and control up to 90% of the supply of meat and dairy products in North America, Australia, Brazil and other importing countries, are limited to 5 corporations: Cargill, Tyson Foods, BRF and Alltech. This leaves us with huge lobbying power, little to no competition and extreme mass production of animal products.



TIMELINE OF RELEVANT RESOLUTIONS, TREATIES AND EVENTS

<u>Date</u>	<u>Description of event</u>
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7000 BC	Cattle and chicken domesticated
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Roma Declaration on World Food Security and World Food Summit

Plan of Action

1996	One of the first international documents affirming the goal of achieving sustainable food security is passed
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The FAO debuts the Global Agenda for Sustainable Livestock

June 2010	Considering the need for sustainable livestock farming practices, the FAO begins to hold annual dialogue between stakeholders in this global partnership.
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The Panama Declaration issued

June 23, 2016	The Panama Declaration of the Global Agenda for Sustainable Livestock, which affirms and pledges support for the Sustainable Development Goals (SDGs) as it relates to the animal agriculture industry and livestock farming, is passed.
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The global Agenda for Sustainable Livestock, which is a global FAO-led dialogue and exchange between the FAO, UN Member States and industry corporations, has undoubtedly been an important stepping stone for the international community for future more effective improvements. Mostly and up to this day, most of this dialogue's efforts have been focused on ways to improve resource efficiency when dealing with livestock production, while still disregarding that this is not enough to prevent or alleviate the consequences of such practices on the environment and the planet. There are still setbacks and obstacles that arise when dealing with this industry, preventing fruitful resolutions and consensus.

The FAO, however, is still the ONLY channel through which the United Nations have addressed and acted on this pressing issue. The solutions that have been reached and implemented so far have only provided access to more efficiency within the industry, helping these corporations in finding better practices for raising animals and feeding them, but nothing more. The FAO has only been a collaborator, and never a policy entrepreneur or an agent of change that would help shift the entire mindset of the UN when it comes to tackling and ending climate change. At the end of the end of the day, raising and eating 56 billion land animals per year cannot be done in a sustainable manner.

AREAS OF IMPROVEMENT AND POSSIBLE SOLUTIONS

In the future, existing policy instruments and frameworks for promoting environmental sustainability should be ameliorated. The animal agriculture industry has proven to be the most unsustainable industry in the world, the most polluting and the most cruel and inhumane. Until governments decide to implement bans, increase taxes and educate consumers on the ecological footprint of what they are consuming, the animal agriculture

corporations must work on reducing their environmental footprint in a variety of ways. For example, a policy recommendation by many experts has been to research ways to recycle manure and waste, possibly through biogas initiatives. Another proposed solution has been the 'flatulence tax' proposed in New Zealand to combat methane emissions by cows. Australia has started to set up an animal waste management since late 2005, creating a Methane-to-Markets partnership agriculture Taskforce. However, it has been facing many challenges in implementing this system that requires advanced technology and research, leaving doubt as to whether such systems can be applied on larger scales and by different nation-states with different financial capabilities and human resources.

These steps will help reduce the impact of methane emissions on climate change through a relatively simpler policy instrument. In addition, a suggested policy solution has been to improve methods to conserve soil and keep livestock away from environmentally sensitive areas where their presence could pose a danger to the ecosystem. These policies will, however, require huge cooperation of member states and major corporations, with the absence of lobbying power. With an industry that has, for decades, tried to dissimulate and hide the environmental devastations it has caused, fast and objective action must be taken.

QUESTIONS A RESOLUTION SHOULD ANSWER

- What is the relationship between the UNEP, the FAO, UN Member States and the animal agriculture corporations, specifically when it comes to sustainability and climate change mitigation efforts?
- What is the role of the UNEP in encouraging change (policy and behavioural), in preventing corruption and in being a policy entrepreneur in the fight against climate change?
- How can the UNEP hold sustainable dialogues with the animal agriculture industry while still fighting against and pointing out its unsustainable practices?
- Should there be limits and criteria over UNEP -and UN in general- intervention when it comes to pressuring governments and corporations in adopting certain policies and regulations?
- Why have the UNEP and the UN been silent and failed to raise awareness and bring about change on a global scale to solve the issue, seeing the massive amount of greenhouse gas emissions from cattle?
- What can the UNEP do better to protect the environment and prevent future environmental crises?

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"Our Future Our Food. Making a Difference With Every Bite: The Power of the Fork!". Earth Save International

Land required to feed 1 person for 1 year:

Vegan: 1/6th acre

Vegetarian: 3x as much as a vegan

Meat Eater: 18x as much as a vegan [xvii]

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