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**A look at insects as a solution to world hunger and food security**

**Premise**

- Pressure on food systems (agriculture and meat production) due to growing world population

- Other constraints on food systems: climate change, land degradation, loss of biodiversity

**Scope of the project**

1. Food production as it is isn't sustainable. Can an insect-based diet help?

2. Environmental impact of an insect-based diet — looking into data to quantify this. In touch with a scientist who might be able to help

3. Indigenous insect diets — Will create a database of insects traditionally eaten across the world. Source: Plenty of scholarly articles available

4. Companies selling inset food products — Not yet researched

5. Insect recipes — As a fun side note

6. Interactive — swapping x% meat with insect will help the environment y% — If I’m able to quantify the ecological impact of insect farming, comparing that to emissions from the meat production industry.

**Excerpts from Edible Insects in Sustainable Food Systems**

- While a global concern about the sustainable utilization of resources was born at the Rio Earth

Summit over 25 years ago, there have been few major renewals in food systems that

could bring hope for more sustainable food production up until now. The FAO publication ignited this hope by pointing out the overlooked potentials of insects.

- What is a sustainable food system? A food system is considered sustainable when it delivers food security and nutrition for all in a way that economic, social and environmental sustainability is not compromised for future generations.

- Food system sustainability can be interpreted differently depending on cultural, economic and geographical context.

**Data/reports available**

1. [Emissions](<https://www.fao.org/faostat/en/#data/GT>)

2. [Agri emissions](<https://www.wri.org/insights/everything-you-need-know-about-agricultural-emissions>)

3. [Global greenhouse gas emissions](<https://ourworldindata.org/emissions-by-sector>)

4. [The State of Food Security and Nutrition in the World] (<https://www.fao.org/publications/sofi/2021/en/>)

**Data to look for**

1. Number of edible insect species, where they're found and their environmental impact

2. Agricultural emissions projections

3. World hunger index projections

4. Rate of increase in meat consumption

5. Effect of meat production

**Extra things to look into**

[The 2030 Agenda for Sustainable Development] (<https://sdgs.un.org/2030agenda>)

**Risk analysis**

**Data collection**: Barring data on quantifying insect-farming’s impact, I have seen the rest available in scholarly articles. Doable.

**Analysis**: Running numbers and pivoting them against what scientific papers are saying — doable

**Visualization:** I think the project has great scope for fun and creative visuals. Haven’t planned them out yet, but not worried either

**Challenge:** The information exists, it’s just very scattered. Bringing it all together in a narrative that flows smoothly and still looks like a data project will be my biggest challenge.