Slide 1-4: Abstract & Introduction *(Airies)*

"Good day everyone. Today, our group will present our research on the effects of genetically modified organisms (GMOs) on the economy, environment, and society. Let's begin with the abstract."

Abstract:
*"*This research highlights how GMOs contribute to economic growth, such as increased agricultural productivity and reduced production costs. We also explore their environmental benefits, including reduced pesticide use and enhanced crop resilience, and contrast these with risks to biodiversity and ecosystems. Societal implications, such as ethical concerns about food security and health, are discussed alongside the roles of government and private agencies in regulating GMOs. The conclusion emphasizes responsible governance and ethical practices to maximize GMO benefits while mitigating risks."

Introduction:
"In recent years, biotechnology has revolutionized agriculture through GMOs, which are organisms with altered DNA to improve traits like resistance to diseases or productivity. For example, the introduction of Bt cotton in India boosted yields and incomes but also sparked debates over its long-term impacts. This presentation will delve into the historical evolution, advantages and disadvantages, and ethical considerations surrounding GMOs, providing a comprehensive understanding of their multifaceted impact."

Slide 5-6: Historical Evolution of GMOs & Agencies Involved *(Romeo)*
"Thank you, Airies. Let's explore the historical evolution of GMOs and the key agencies involved in their regulation."

HistoricalEvolution:
"The journey of genetic modification began centuries ago with traditional breeding techniques. A breakthrough came in the 19th century with Gregor Mendel's genetic discoveries, followed by the identification of DNA structure in 1953 by Watson and Crick. In 1973, Herbert Boyer and Stanley Cohen created the first genetically engineered organism, marking the birth of modern GMOs. These milestones have since expanded GM applications in agriculture, medicine, and environmental management."

Agencies Involved:

"Globally, agencies like the FDA, USDA, and EPA in the U.S., the EFSA in Europe, and the CFIA in Canada play pivotal roles in GMO regulation. Their frameworks ensure that GMOs meet safety standards while balancing innovation with public health concerns. However, approaches vary worldwide, with countries like Brazil embracing GMOs and others like Zambia remaining cautious. This regulatory diversity underscores the complexity of managing GMO technology globally."

Slide 7-8: Advantages & Disadvantages of GMOs *(Clarizza)*
"Now, let's discuss the advantages and disadvantages of GMOs."

Advantages:
"Economically, GMOs boost agricultural productivity and profitability by reducing crop losses and improving yields. For example, Bt cotton in India led to a 21% increase in yields, enhancing farmer incomes. Environmentally, GMOs reduce pesticide usage and promote practices like no-till farming, which conserves soil and reduces erosion. Societally, GMOs address food security and malnutrition, with innovations like Golden Rice combating Vitamin A deficiency in developing nations."

Disadvantages:
"However, GMOs pose risks, such as the spread of modified genes to wild plants, which could disrupt ecosystems. Overuse of herbicide-tolerant crops has led to 'super-weeds,' requiring stronger chemicals that harm biodiversity. Economically, GMO seed patents often disadvantage small-scale farmers, increasing costs and limiting access. Additionally, societal opposition to GMOs stems from health concerns, environmental risks, and ethical debates about altering nature."

Slide 9-10: Ethical Considerations & Conclusion *(Jorell)*
"Finally, I'll address the ethical considerations and conclude our presentation."

Ethical Considerations:
"The ethical concerns around GMOs include health safety, environmental impact, and social equity. Critics worry about unintended effects, like new allergens or the potential creation of invasive species through gene flow. Additionally, corporate control over patented GMO seeds raises questions about food sovereignty and equity. To address these issues, transparent regulation, public education, and equitable access to GMO benefits are critical."

Conclusion:
"In conclusion, GMOs offer significant benefits in agriculture, medicine, and environmental management, but their adoption must be guided by responsible governance. Policies should focus on minimizing risks, promoting equitable access, and preserving ecological balance. By doing so, we can harness GMOs' potential to address global challenges like food security and sustainability while upholding ethical principles."