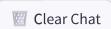
document chunk is relevant to your query
using Gemini AI

! Session Management



Recover Last

individual Message Management

Tip: Click the **₩** button next to any question to delete that specific question and its response, including any ratings you gave.

This is useful for:

- Removing test questions
- Cleaning up incorrect queries
- Managing chat history length

Current Session:

- 40 questions asked
- **4**0 responses given
- **1** 40 responses available for rating
- 80 messages
- Session: 88936850
- Analytics
 - Clear
 Analytics

Multi-RAG Chatbot with Evaluation

Compare different RAG techniques with your documents and get comprehensive analytics







You: What are the main causes of climate change as discussed in the document?

<small>21:26:45</s

Total Messa...

80

Assistant: Adaptive RAG

The main causes of climate change, as discussed in the document, are the increase in greenhouse gases (carbon dioxide, methane, and nitrous oxide) in the atmosphere due to human activities. These activities include burning fossil fuels (coal, oil, and natural gas), deforestation

Questions A...

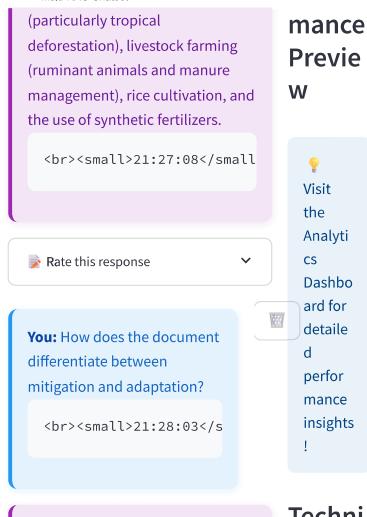
40

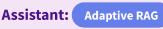
Documents ...

1



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The provided text focuses on adaptation strategies (assessing climate risks and developing strategies to mitigate them, implementing risk reduction measures) but does not explicitly define or differentiate between mitigation and adaptation.

Therefore, I don't know.

<small>21:28:19</small</pre>



Techni que Usage

- AdaptiveRAG: 10
- CRAG: 10
- DocumentAugmentation: 10
- Explainable Retrieval: 10

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> You: What are some technological innovations presented to combat climate change?

Export

<small>21:28:28</s</pre>

Downlo ad Chat History

Assistant: Adaptive RAG

Technological innovations presented to combat climate change include:

- **Renewable energy** innovations: Advancements in solar power, wind energy, and bioenergy, focusing on improved energy storage, grid integration, and smart technologies.
- **Carbon sequestration technologies:** Bioenergy with carbon capture and storage (BECCS), direct air capture, and mineral carbonation.
- Advanced materials: Highperformance insulation materials, lightweight materials, and materials for sustainable agriculture.
- **Carbon capture and storage** (CCS): Capturing CO2 emissions from industrial processes and power plants

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and storing them underground.

- Carbon utilization: Using captured CO2 to produce synthetic fuels, chemicals, and building materials.
- **Direct air capture (DAC):**Removing CO2 directly from the atmosphere.
- Sustainable agriculture:
 Practices like agroforestry,
 precision farming, and
 regenerative agriculture.
- Electric vehicles (EVs): Zero tailpipe emissions powered by renewable energy.
- Hydrogen fuel cells:
 Generating electricity by combining hydrogen and oxygen, producing only water as a byproduct.

<small>21:28:40</sm</div>



You: How is climate change impacting human health globally?



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<small>21:29:37</s</pre>

Assistant: Adaptive RAG

Based on the provided text, climate change is impacting human health globally in several ways:

- **Increased heat-related illnesses:** Rising temperatures and more frequent heatwaves increase the risk of heat exhaustion and heatstroke, particularly for vulnerable populations.
- **Increased vector-borne** diseases: Warmer temperatures and changing precipitation patterns expand the habitats of diseasecarrying insects, leading to a greater risk of outbreaks of diseases like malaria, dengue fever, and Lyme disease.
- **Worsening respiratory and** cardiovascular diseases: Air pollution, exacerbated by climate change, contributes to respiratory and cardiovascular diseases by increasing groundlevel ozone and particulate matter.
- Threats to food and water **security:** Climate change

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affects food production and water availability, impacting nutrition and health through droughts, floods, and disrupted growing seasons.

<small>21:29:47</sm
</div>



You: What roles do international agreements play in climate action?

<small>21:30:10</s</pre>

Assistant: Adaptive RAG

International agreements, such as the UNFCCC, Kyoto Protocol, and Paris Agreement, provide frameworks for negotiating and implementing coordinated climate action. They set targets (like the Paris Agreement's goal to limit warming), establish mechanisms for incentivizing emission reductions (like carbon pricing), and promote technology transfer and capacity building to support developing countries. The Montreal Protocol, while initially focused on ozone depletion,

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demonstrates how such agreements can evolve to address climate-related issues. These agreements also facilitate international collaboration and negotiations (like COP meetings) to review progress and secure climate finance commitments.

<small>21:30:15</small</pre>



You: How are youth and indigenous communities contributing to climate action?

<small>21:30:28</s</pre>

Assistant: Adaptive RAG

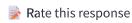
Youth are contributing to climate action by bringing energy, creativity, and urgency to movements; leading initiatives; participating in decision-making; and acting as powerful advocates through education, activism, and leadership opportunities. Indigenous communities are contributing by advocating for land protection and rights, leading global climate movements, and

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highlighting the impacts of climate change on their communities while promoting holistic solutions.

<small>21:30:37</small</pre>



You: In what ways can individuals and communities act against climate change?

<small>21:31:37</s</pre>

Assistant: Adaptive RAG

Individuals can reduce energy consumption, minimize waste, support renewable energy, and advocate for climate action.

Communities can create green spaces, promote sustainable transportation, support local food systems, and enhance resilience through local projects and initiatives.

<small>21:31:47</small</pre>



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You: What are the social justice issues linked to climate change?

<small>21:32:23</s

Assistant: Adaptive RAG

Based on the provided text, the social justice issues linked to climate change include:

- Disproportionate impacts on vulnerable populations: Lowincome communities, indigenous peoples, and marginalized groups face the greatest risks from climate change while contributing the least to greenhouse gas emissions.
- Communities of color are disproportionately exposed to environmental hazards exacerbated by climate

change.

Environmental racism:

Gender inequality: Climate change affects men and women differently, often exacerbating existing gender inequalities, particularly impacting women in developing countries. This includes their roles in

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agriculture, water collection, and caregiving.

• Land rights: Securing land rights for indigenous and local communities is crucial for climate justice, ensuring sustainable land management and resistance to exploitation.

<small>21:32:32</sm</div>



You: How does climate change affect biodiversity and ecosystems?

<small>21:32:48</s</pre>

Assistant: Adaptive RAG

Climate change affects biodiversity and ecosystems in multiple ways.

Terrestrial ecosystems experience shifts in species distributions and composition, leading to biodiversity loss and disrupted ecological balance. Marine ecosystems are impacted by rising sea temperatures, ocean acidification, and changing currents, affecting biodiversity from coral reefs to deep-sea

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habitats and disrupting food webs and fisheries. Freshwater ecosystems face altered water quality, habitat loss, and reduced biodiversity due to changes in precipitation, temperature, and water flow. Coral reefs are particularly vulnerable to warming waters and acidification, resulting in bleaching and mortality. Increased frequency and severity of extreme weather events further damage ecosystems and reduce biodiversity.

<small>21:32:54</small</pre>



You: What is the economic rationale for investing in climate change mitigation?

<small>21:33:03</s

Assistant: Adaptive RAG

Investing in climate action now can prevent much higher economic costs in the future. The economic costs of climate change include damage to infrastructure, reduced agricultural productivity, health care costs, and lost labor

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productivity. Extreme weather events cause significant economic disruption.

<small>21:33:09</small</pre>



You: What are the main causes of climate change as discussed in the document?

<small>21:33:35</s</pre>

Assistant: CRAG

The primary cause of recent climate change is the increase in greenhouse gases, primarily due to human activities ("Retrieved document," Chapter 2: Causes of Climate Change). While the document mentions that small variations in Earth's orbit have caused climate changes in the past, it emphasizes that modern observations show a rapid increase in global temperatures, sea levels, and extreme weather events overwhelmingly driven by humancaused greenhouse gas emissions ("Retrieved document," Modern Observations).

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