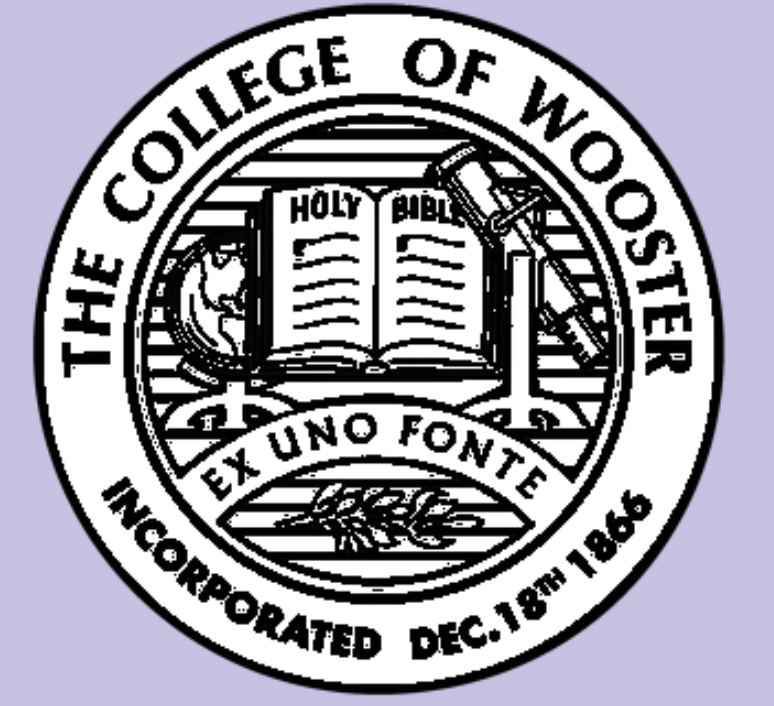


# A FARMER WORKS SO THE WORLD CAN EAT: AN ANALYSIS OF THE IMPACT OF UNITED NATIONS FOOD (IN)SECURITY AND CLIMATE CHANGE COLLABORATION ON LINKAGES IN UNITED NATIONS OUTCOMES



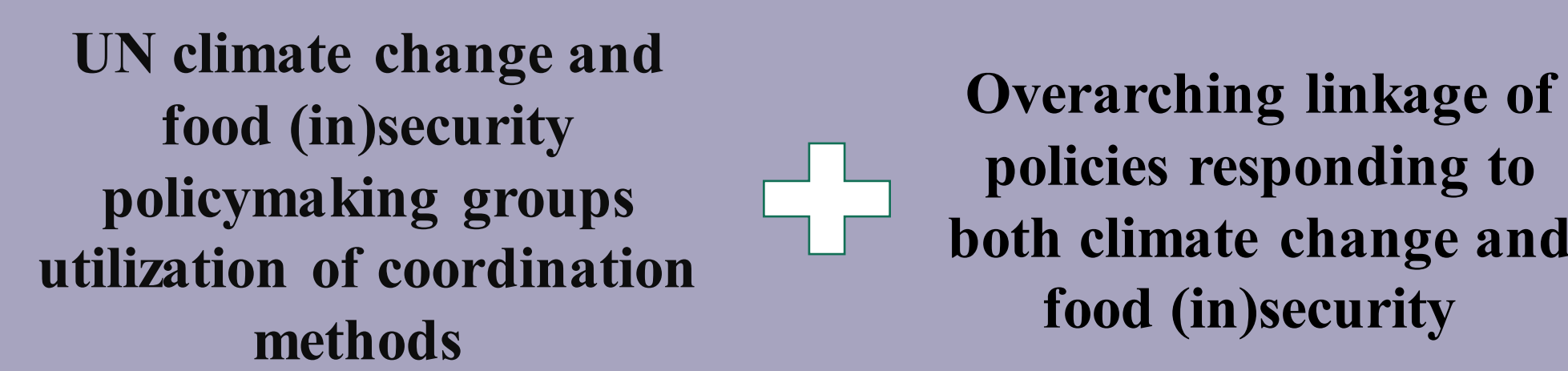
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## Abstract

This study explores the interactions between United Nations (UN) food (in)security and climate change bodies, UN food (in)security and climate change outcomes, UN collaboration techniques, and linkages between climate change and food (in)security. Specifically, this study is examining the impacts of collaboration across UN bodies on the linkages present in UN outcomes, establishing whether a change in collaboration is correlated with a change in linkages. In studying this, UN food (in)security and climate change bodies are used as an area of research for collaboration, and UN food (in)security and climate change outcomes are utilized to identify linkages. This study hypothesizes that if UN collaboration methods across food (in)security and climate change bodies increase over time, then the linkages between food (in)security and climate change in UN outcomes will also increase; if there is an increase in coordination, then there is an increase in linkages of UN outcomes. This study takes a three-step analysis approach, using the methods of content analysis, process tracing, and comparative analysis. The content analysis method examines the number of linkages present in eight UN outcomes, ranging from 1996 to 2022. Process tracing is used to research collaboration that occurred before and during the creation of these outcomes. Comparative analysis is used to identify the correlation between the data from the content analysis and process tracing. This study concludes that collaboration and linkages do correlate, but do not increase over time. The data shows there was a steady increase in UN collaboration and linkages from 1996 to 2014, with a decrease from 2014 to 2022, refuting the hypothesis.

If collaboration methods are utilized across UN climate change and food (in)security policymaking groups, then there will be noticeable overarching linkages between climate change and food security policies



## Methodology

*Step 1: Identify the current coordination methods used across six UN bodies, using information from their respective websites.*  
 - The UN bodies used were the United Nations Environment Program (UNEP), International Panel on Climate Change (IPCC), World Meteorological Association (WMO), Food and Agricultural Administration (FAO), World Food Programme (WFP), and the International Fund for Agricultural Development (IFAD)

*Step 2: Use content analysis to identify linkages of food (in)security in climate change outcomes, and climate change in food (in)security outcomes.*  
 - The UN responses that will be evaluated are the World Food Summit (1996), Kyoto Protocol (1997), Millennium Development Goals (MDGs) (2000), CFS Global Strategic Framework for Food Security and Nutrition (2014), 2030 Agenda on Sustainable Development (SDGs) (2015), Paris Agreement (2016), UNEP Adaptation Gap (2022), the Global Report on Food Crises (2022).  
 - Identified the number of mentions of 'food' and 'food (in)security' in the UNEP Adaptation Gap, the Kyoto Protocol, and the Paris Agreement, 'climate,' and 'climate change' in the World Food Summit, the CFS Global Strategic Framework for Food Security and Nutrition, and the Global Report on Food Crises, as well as 'food,' 'food (in)security,' 'climate,' and 'climate change,' in the SDGs and MDGs.

*Step 3: Use process-tracing to identify the events and preparations that led to the creation of the selected UN outcomes.*  
 - In this process, looking for cross-coordination of UN food (in)security and climate change bodies; If cross-coordination has occurred, there is a noticeable shift in the UN policies, reflecting the evolution across time. Ultimately, there is a shift in policies when there is a shift in coordination. If there is no coordination, then this proves that the UN bodies are isolated and do not coordinate. The more UN bodies can coordinate across governing bodies, the more linkages and overarching goals will be present.

*Step 4: Comparatively analyze how the collaboration methods found across the UN food (in)security and climate change bodies correlate to the linkages between climate change and food (in)security.*  
 - If there are more collaborative techniques are used in the preparation of these UN outcomes, then there will be more links to climate change in the food (in)security research and more food (in)security mentions in the climate change documents.

## Results

Step 1: It was found that the most common partnership techniques across the UN bodies' websites were partnerships, financing, the creation of working groups or task forces, and commitment to the 2030 Agenda on Sustainable Development.

Step 2: The research identified that the UN outcomes showed linkages between food and climate increased from 1996 to 2014. In 2014, the linkages trend back downwards, with a small spike happening in 2022. It was also found that the food responses studied (WFS, CFSGFS, and the GRFC) had more linkages overall to climate change than the climate change responses (KP, PA, UNEPAG) had to food (in)security. Results are shown in Table 1.

Step 3: The data shows that the preparation for the eight UN outcomes increased from 1996 to 2014. In 2014, the linkages trend back downwards, with a small spike happening in 2022, shadowing the results from the content analysis. It was also found that the preparations of the food outcomes utilized conversations with climate bodies than climate outcomes did with food.

Step 4: The comparative analysis shows that the hypothesis of this study was disproved. The study was unable to prove that coordination across UN food and climate grounds has increased over time, both increases and decreases in coordination over time. Results are shown in table 2.

Table 1

Outcomes	# of Mentions	Ranking
WFS 1996	CC: 12	3
KP 1887	FS: 0	1
MDGs 2000	CC: 4. FS: 1	2
CFSGFS 2014	CC: 42	4
SDGs 2015	CC: 27. FS: 15	4
PA 2016	FS: 2	2
UNEPAG 2022	FS: 2	2
GRFC 2022	CC: 14	3

Table 2

	WFS	KP	MDGs	CFSGS	SDGs	PA	UNEPAG	GRFC
IV: Body Total	2	1	3	4	3	2	2	2
DV: Outcome total	3	1	2	4	4	1	2	3

## Sources

Boliko, Mbuli Charles. 2019. "FAO and the Situation of Food Security and Nutrition in the World." *Journal of Nutritional Science Vitaminol* 65: S4-S8

## Conclusion

This study concludes that, while UN collaboration and linkages in outcomes correlate, they do not completely increase over time, which refutes the hypothesis. More specifically, the findings of the content analysis of the UN outcomes showed that linkages between food and climate increased from 1996 to 2014. In 2014, the linkages trend back downwards, with a small spike happening in 2022. In researching the six UN bodies' websites as the second data analysis method, the two coordination methods found most prominently in the food bodies were partnerships and funding. In climate bodies, the most prominent methods were partnerships once again, and the use of working groups or task forces. Found in all six websites, though, was a connection to the SDGs, which emphasized that there is collaboration at an overall level. The results from this section helped guide the process tracing of the third data analysis, as partnerships and working groups were seen in the processes of creating the UN outcomes. Mentions of COPs, as discussed in Chapter II, were also very prominent in the process tracing results. With this, the process tracing results found closely mirror the results of the content analysis, showing that from the 1996 World Food Summit to the 2014 CFS Global Report on Food Security and Nutrition, there was an increase in collaboration. From 2014 to 2022, however, the collaboration between bodies decreased. With this, even though collaboration and linkages increase, the results are unable to confirm that collaboration and linkages in outcomes have increased over time. What the results showed was that both variables are distributed in a bell-shaped curve, rather than having an overall positive correlation. Knowing this, the hypothesis for this study was ultimately disproved. One other surprising result found from the data was that UN food (in)security tended to link climate change much more than UN climate change outcomes did to food (in)security. While this was identified mainly in the content analysis, it could also be seen in researching the websites of the UN bodies; the food bodies have more information regarding collaboration with climate change bodies than the climate change bodies have with the food bodies. This finding could highlight why collaboration and linkages do not positively correlate over time, as the distribution would reflect the order of the outcomes studied and both the climate and food outcomes ranged from 1996-2022.

## Introduction

One of climate change's most significant and surging impacts is food (in)security, as the international community's malnutrition rates skyrocket above 820 million people globally (Boliko 2019, 4). UN food and climate bodies need collaboration to create more accurate and effective outcomes. However, many UN agencies solely work within their respective sectors and treat climate and food as separate entities, hindering UN outcomes' applicability on these issues. More specifically, coordination problems exist across UN groups working in response to climate change and food (in)security, leading to negative impacts on the linkages of UN climate and food outcomes. Hence, this study examines the impact of UN collaboration across food (in)security and climate change bodies on the linkages in the outcomes produced by these agencies; whether a change in collaboration methods impacts the outcomes produced. This leads the research question of: **How do the coordination methods between United Nations climate change and food (in)security governing bodies impact the linkages of United Nations outcomes on these issues over time?** This question is essential to this research for multiple reasons, including the study of coordination needed between UN bodies to address problems and govern the international community accurately and efficiently. With this, the UN, food (in)security, climate change, and collaboration are important framing concepts in this study. In analyzing these concepts, examining UN food (in)security and climate change bodies, UN climate change and food (in)security outcomes, and collaboration must occur. Ensuring that this study gathers an accurate amount of data, the outcomes studied range from being produced in 1996 to 2022.

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