



# Deltas, vulnerability and Climate Change; Mitigation and Adaptation (DECCMA)

## Biophysical and Socioeconomic State of the Volta Delta Region of Ghana from the Perspectives of Gender and Spatial Relations

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DECCMA



### 1.0 Introduction

- The Volta delta region constituting the DECCMA study area covers a total area of about 3,301km<sup>2</sup> with an estimated total population of 863,810.
- The study aims at establishing the state of the Volta delta based on socioeconomic and biophysical context.
- Socioeconomic and biophysical context were linked to the final demand of goods and services in the delta, in the country and in the Rest of the World (RoW).

### 2.0 Methods



Figure 1: Map showing the study area (Volta Delta)

- Environmentally extended input-output (IO) model was applied.
- The regionalization method, Simple Location Method (SLQ) method was used in constructing the input-output table.
- The main information for the regionalization was the District Analytical Reports

### 3.0 Findings

Table 1. Summary of import, export and footprints

	Direct in production	Embodied exports	Embodied imports	Net trade (E-M)	Footprint
Delta. Employment (1000 people)	355	113	318	-205	560
Delta. Land (1000 hectares)	670	222	612	-390	281
Delta. Energy (Mtoe)	0.1	0.0	0.1	-0.1	0.0
Delta. CO2 (Mt CO2)	0.1	0.0	0.1	-0.1	0.0
Non-Delta. Employment (1000 people)	9,576	2,706	2,624	83	9,586
Non-Delta. Land (1000 hectares)	17,990	4,618	4,434	184	19,530
Non-Delta. Energy (Mtoe)	2	1	1	0	2
Non-Delta. CO2 (Mt CO2)	2	1	1	0	2

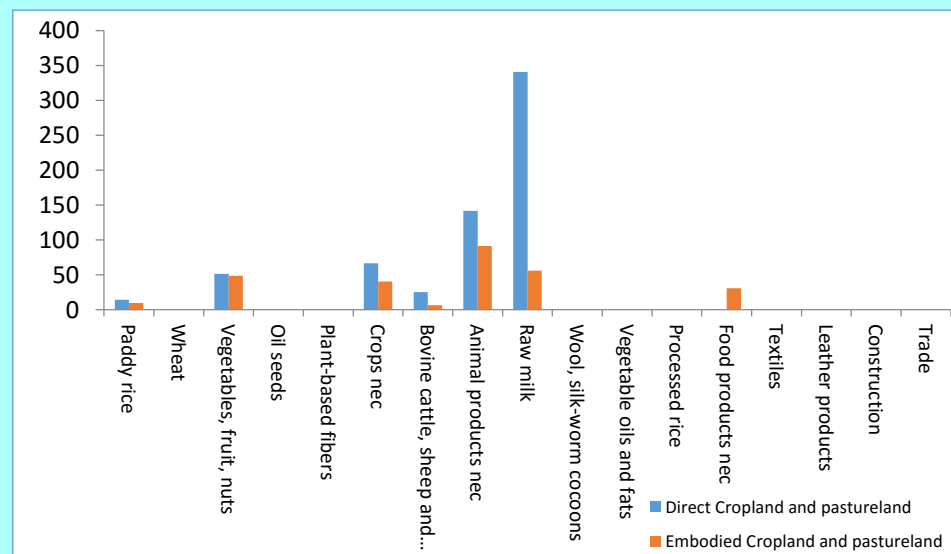


Figure 2: Direct and embodied Cropland and pasture land (1000 hectares) of the delta

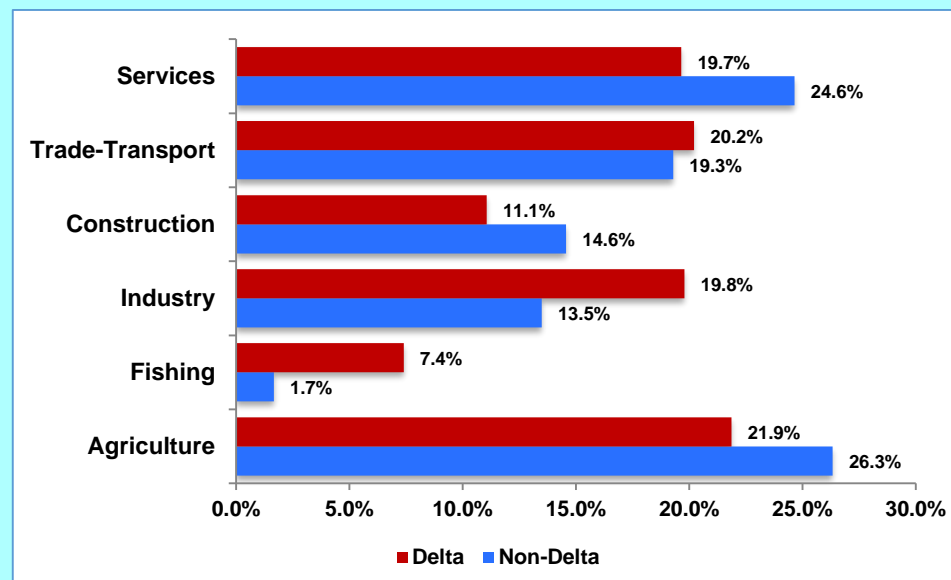


Figure 5: Distribution of Value Added by main 6 categories for the deltas.

Table 2. Summary of import, export and footprints

	Direct in production	Embodied exports	Embodied imports	Net trade (E-M)
Delta. Employment (1000 people)	355	60	187	-127
Delta. Land (1000 hectares)	670	175	361	-186
Delta. Energy (Mtoe)	0	0.0	0.0	0.0
Delta. CO2 (Mt CO2)	0	0.0	0.0	0.0
Non-Delta. Employment (1000 people)	9,576	187	60	127
Non-Delta. Land (1000 hectares)	17,990	361	175	186
Non-Delta. Energy (Mtoe)	2	0.0	0.0	0.0
Non-Delta. CO2 (Mt CO2)	2	0.0	0.0	0.0

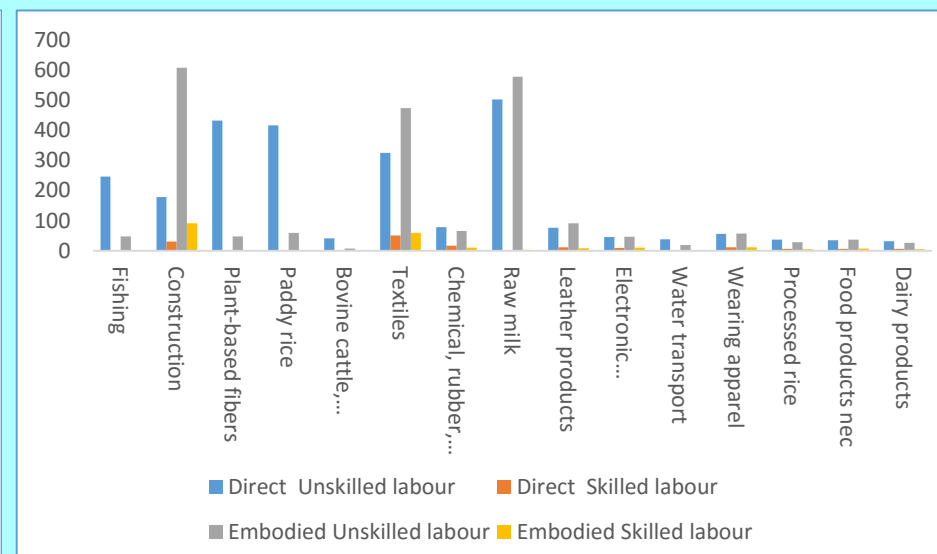


Figure 3: Direct and embodied labour of the delta by sector

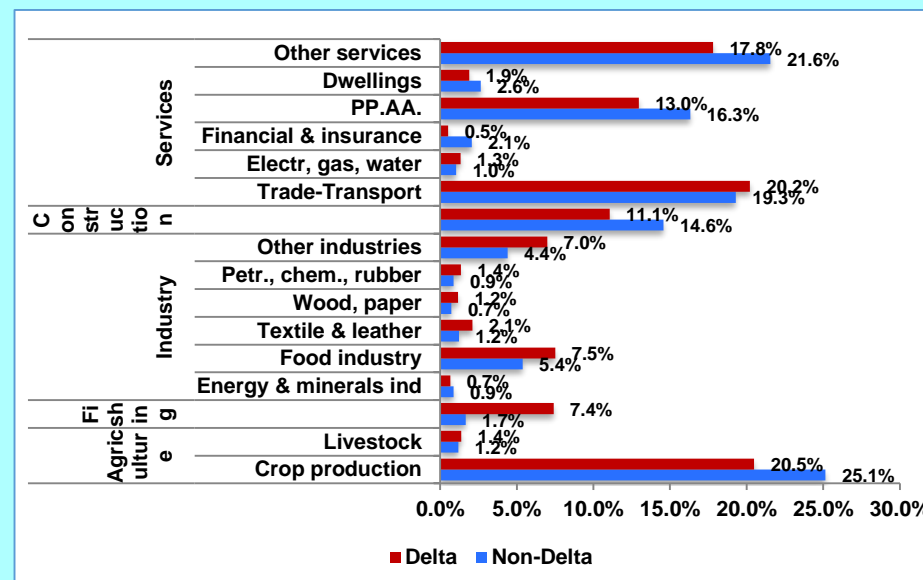


Figure 6: Distribution of Value Added by main 16 categories for the deltas.

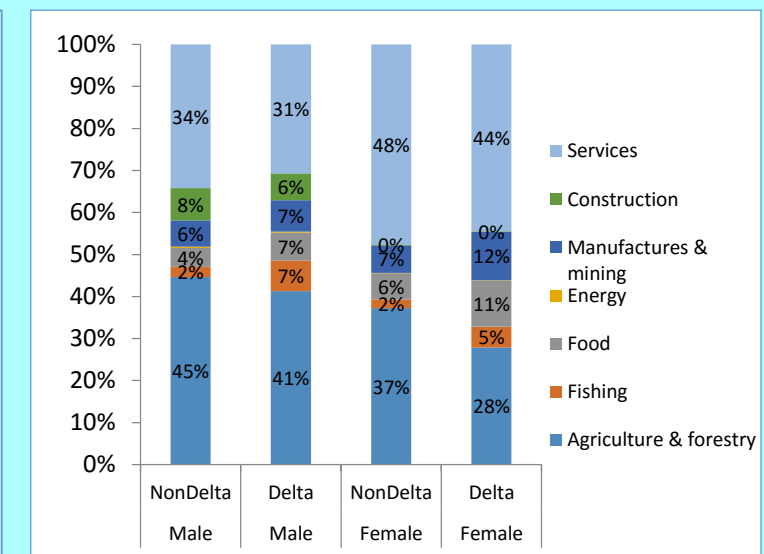


Figure 4: Direct and embodied labour by sector and gender in the Non-Delta and Delta

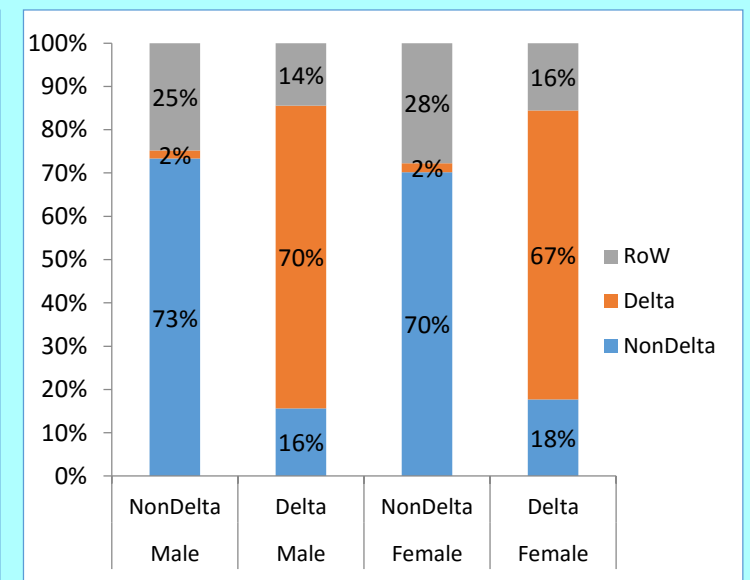


Figure 7: Employment by gender & sector of the Non-Delta and Delta by demanding region

### 4.0 Summary of findings

- Agriculture is a key sector in the Delta, dominating pastureland activities.
- The fishing sector is relatively much bigger in the Delta than in the rest of the country.
- The embodied work of women in the Delta is predominant in services and manufactures.
- The embodied work of men in the Delta is more pronounced in agriculture, energy, fishing and construction sectors.
- To date, CO2 emission in the Volta Delta is minimal

### 5.0 Conclusion

- According to these preliminary results, the Volta Delta is net importer of all the metrics (Tables 1&2).

### 6.0 Acknowledgments

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### References

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