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Effect of deworming on hemoglobin concentration in children from 2 to 15 years from the Bengo Province, Angola.

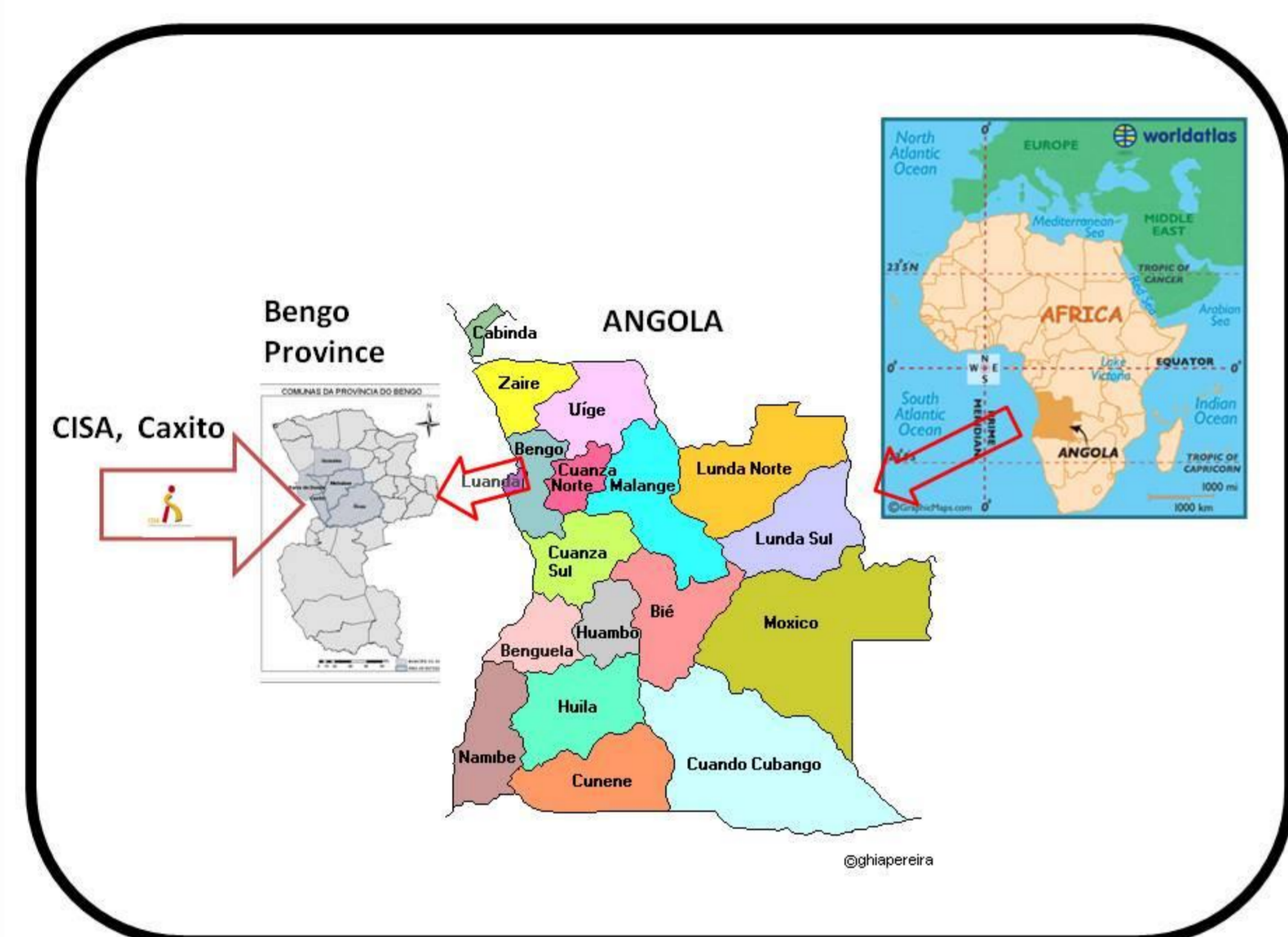


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Introduction

The most common causes of anemia are micronutrient deficiencies, but other factors may influence namely inflammation, parasitic infections and inherited disorders. One strategy to combat micronutrient deficiencies is supplementation, yet, in zones with high prevalence of Schistosomiasis or Soil Transmitted Helminthes (STH), supplementation could be not sufficient. The aim of this study was to evaluate the effects of deworming, on hemoglobin concentration, in children from 2 to 15 years, from Bengo.



Methodology

A total of 429 children between 2 to 15 years were involved. Nutritional status and anemia were evaluated. Urine and feces samples were collected for diagnosis of *Schistosoma haematobium* and STH. Praziquantel (40mg/Kg) and Albendazol (400mg) were administrated. All parameters were determined at baseline and after 6 months.

This study is being conducted in the Project CISA, located 60 km from Luanda, in the town of Caxito, an urban centre in Dande Municipality, in Bengo Province, and home to an estimated population of 250,000. Dande Municipality, a rural area defined as the Project's priority intervention area, has an estimated average population of 68,000 inhabitants.

Results

	Baseline	6 months after treatment
Anemia	Prevalence	Prevalence
mild	71.2%	49.5%
moderate	11.7 %	17.1 %
severe	57.1 %	32.2%
Hemoglobin	2.3 %	0.2 %
	106.8 g/L	114.7 g/L
Urinary Shistosomiasis		
<i>Schistosoma haematobium</i>	67.9 %	44.5 %
Soil Transmitted Helminths		
<i>Trichuris trichiuria</i>	15.3 %	10.9 %
<i>Ascaris lumbricoides</i>	11.8 %	5.0 %
<i>Hymemolepsis nana</i>	7.8 %	6.7%
Hookworm	3.8 %	0.8 %



Conclusions

These results confirm the benefit of deworming on hemoglobin concentration, even with a single intervention. However it should be clear that integrated intervention aiming nutritional education water treatment, hygiene and sanitation are needed to reduce micronutrient deficiency.

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Patrons and funding entities

