

CLIMATE CHANGE IMPACTS ON HUMAN HEALTH IN ZAMBIA

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AT THE:

**COP/MOP –BALI : SIDE EVENT
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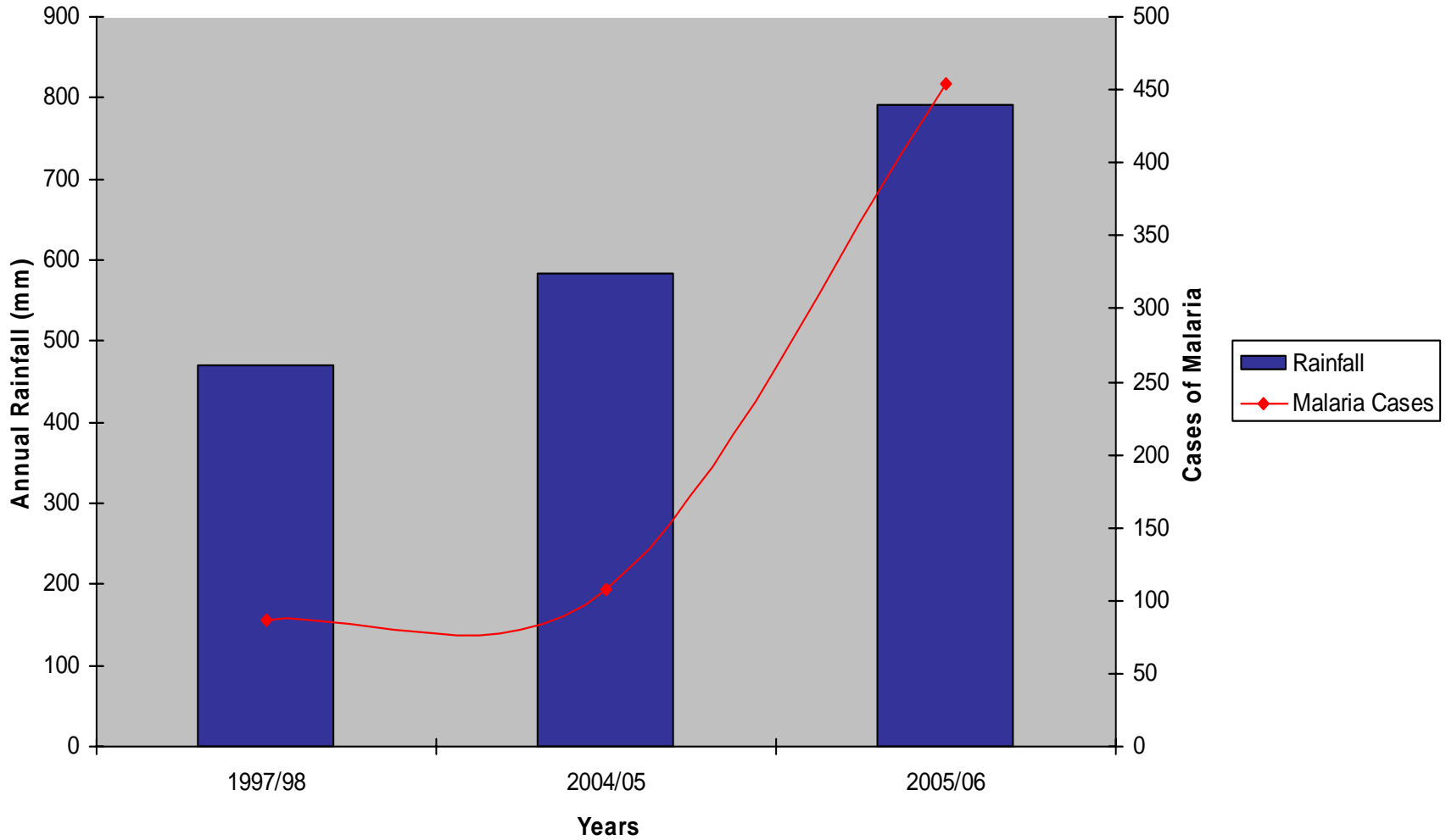
Climate Hazards in Zambia

Drought	Floods	Extreme Heat	Shorter Rainy Season
<ul style="list-style-type: none"> • Crop damage/loss, leading to food scarcity and hunger • Water shortages • Reduced fish stocks • Income loss • Reduced charcoal business • Increase in diseases (affecting humans and animals) • Decreased water quality • Increased soil erosion • Decreased soil fertility • Increased honey production (if drought is not too severe) 	<ul style="list-style-type: none"> • Crop damage/loss, leading to food scarcity and hunger • Loss of crop land and grazing ground • Decline in fish catches • Increase in diseases (malaria, dysentery, cholera, etc.) • Destruction of infrastructures (houses, roads) • Life loss (humans and livestock) 	<ul style="list-style-type: none"> • Increase in diseases affecting animals, crops and humans (especially malaria) • Decreased human capacity to do work • Loss of life (animals and humans) • Crop damage/loss • Reduced fish stocks • Decreased livestock feed • Reduced water quality 	<ul style="list-style-type: none"> • Decreased crop yields • Crop damage/loss • Decreased income from crop selling • Crop seeds do not reach maturity (which negatively affects the next crop generation) • Reduced charcoal production and business

Rainfall-Disease Correlation Matrix

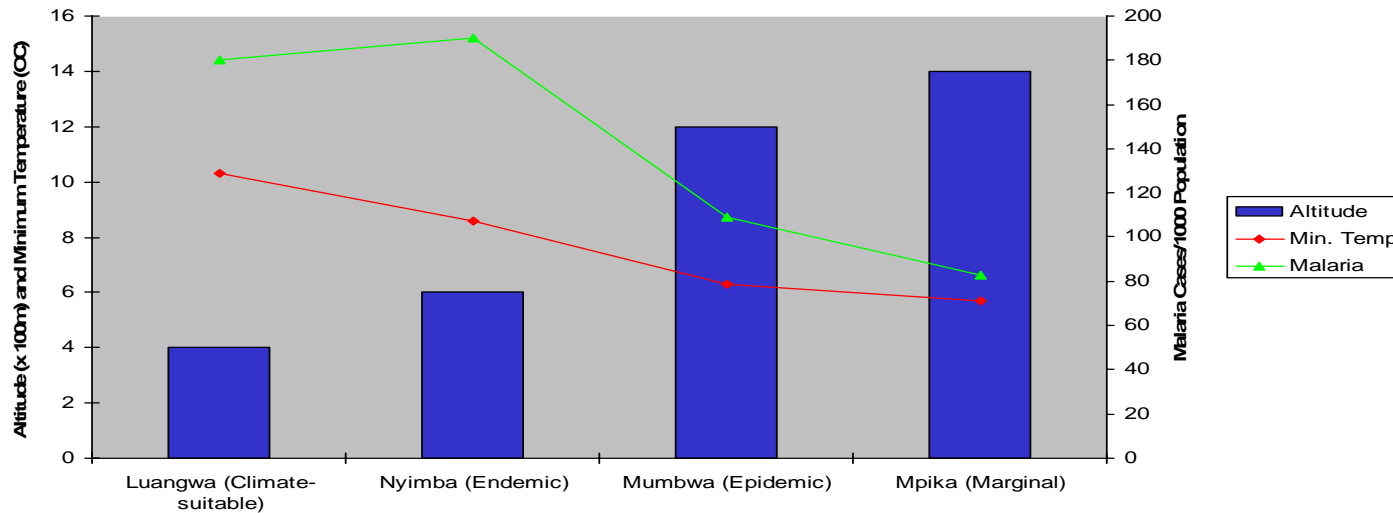
Disease	Correlation Coefficient
Malaria	0.56
Diarrhoea	-0.47
Respiratory infection: Pneumonia	0.70
Dysentery	-0.09

Fig. 4: Rainfall effects on malaria at Itebe clinic



TEMPERATURE AND ALTITUDE EFFECTS ON MALARIA

Fig. 7: Temperature and altitude effects on malaria distribution in Zambia



DEVELOPMENTAL VALUE OF STUDIES

1. Included into National Adaptation Programme of Action (**NAPA**)
2. Set basis for further studies

WAY FORWARD

1. Use robust methodology to quantify link between climate and diseases
2. Determine economic implications of climate impacts on health in Zambia.