



Climate Change Impact Hotspots in GBM delta of Bangladesh

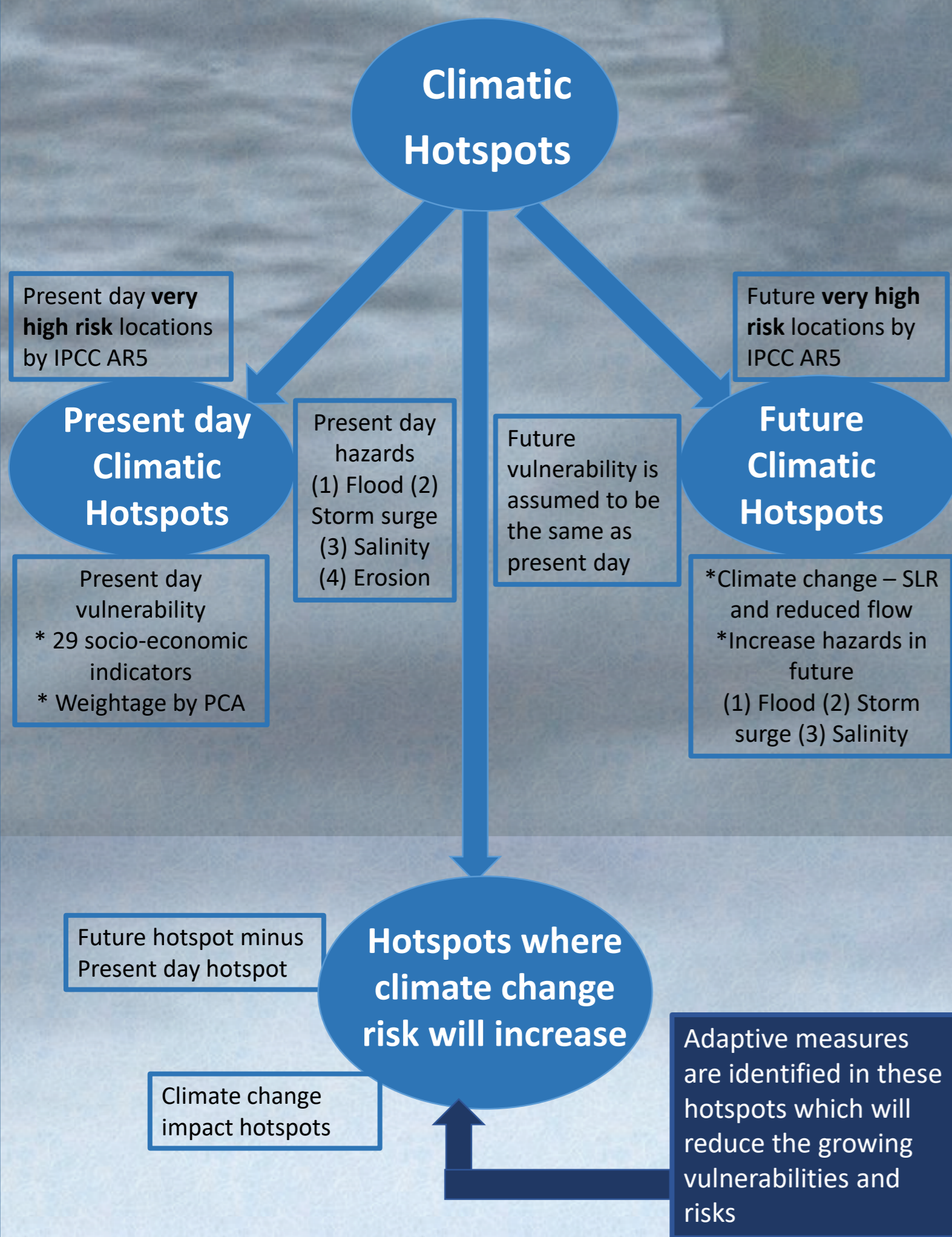
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Introduction

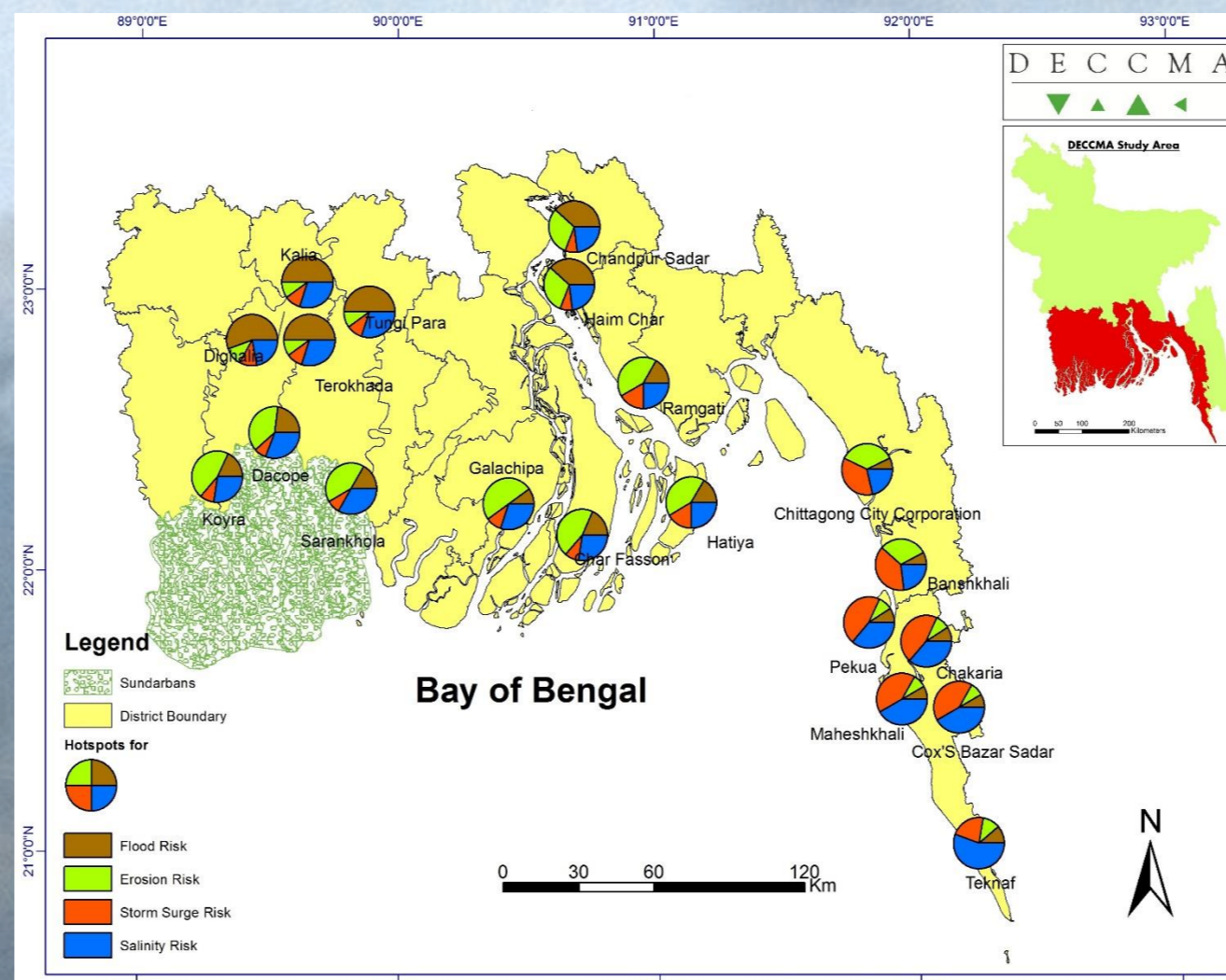
- Climatic hotspots are defined as locations where climatic risks are very high.
- On the other hand, Climate Change Impact hotspots are defined as locations where climatic risks will increase due to climate changes.
- To identify Climate Change Impact hotspots in GBM delta of Bangladesh, hazard specific risk maps are developed both for present day condition and future condition due to climate change. Locations where risks increase due to climate change are identified as Climate Change Impact hotspots.
- From present day socio-economic vulnerability assessment, current status of vulnerability in these hotspots is identified.
- Specific adaptive measures that will reduce vulnerability and risk in Climate Change Impact hotspots are recommended.

Methodology

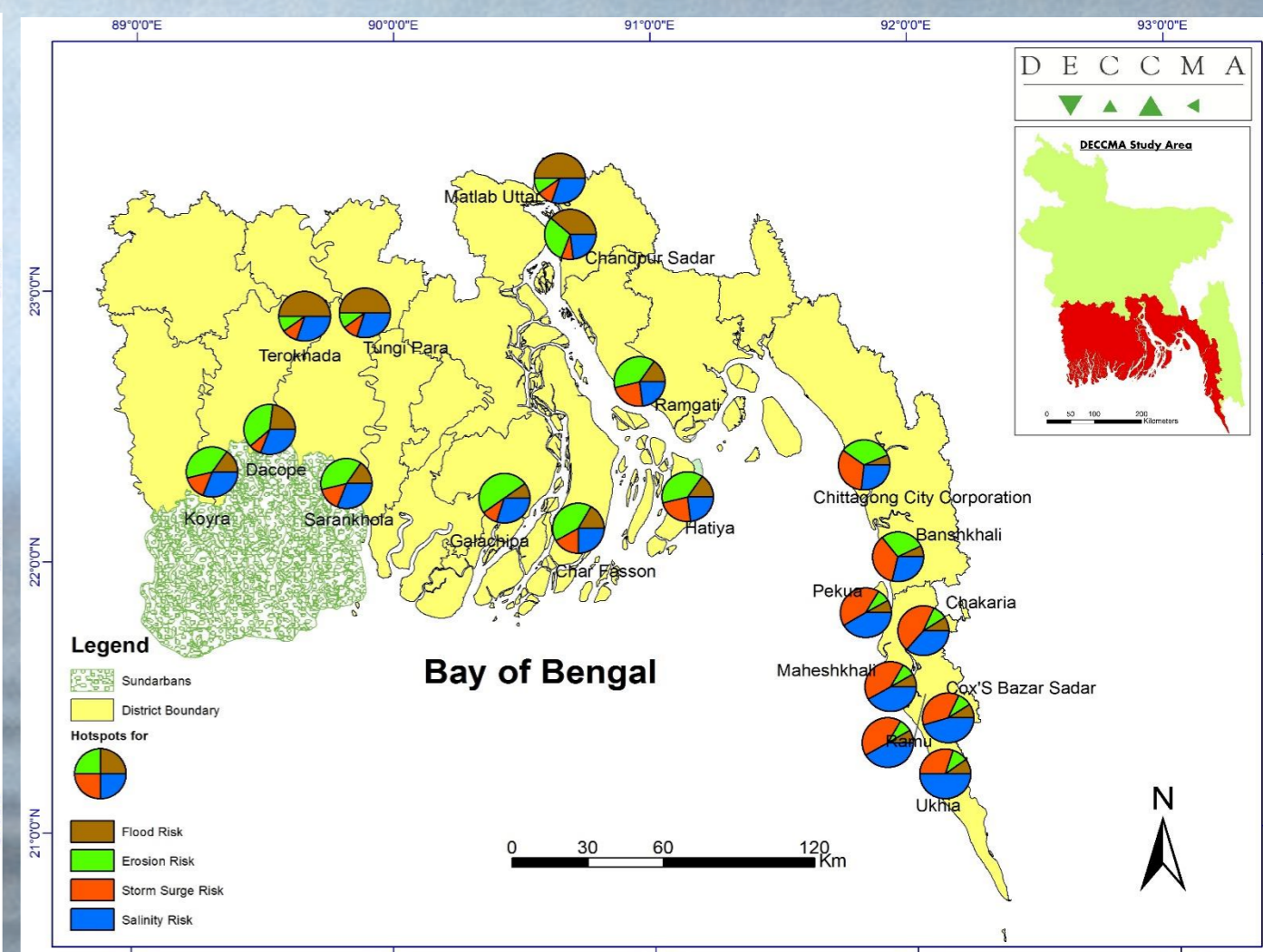


Results

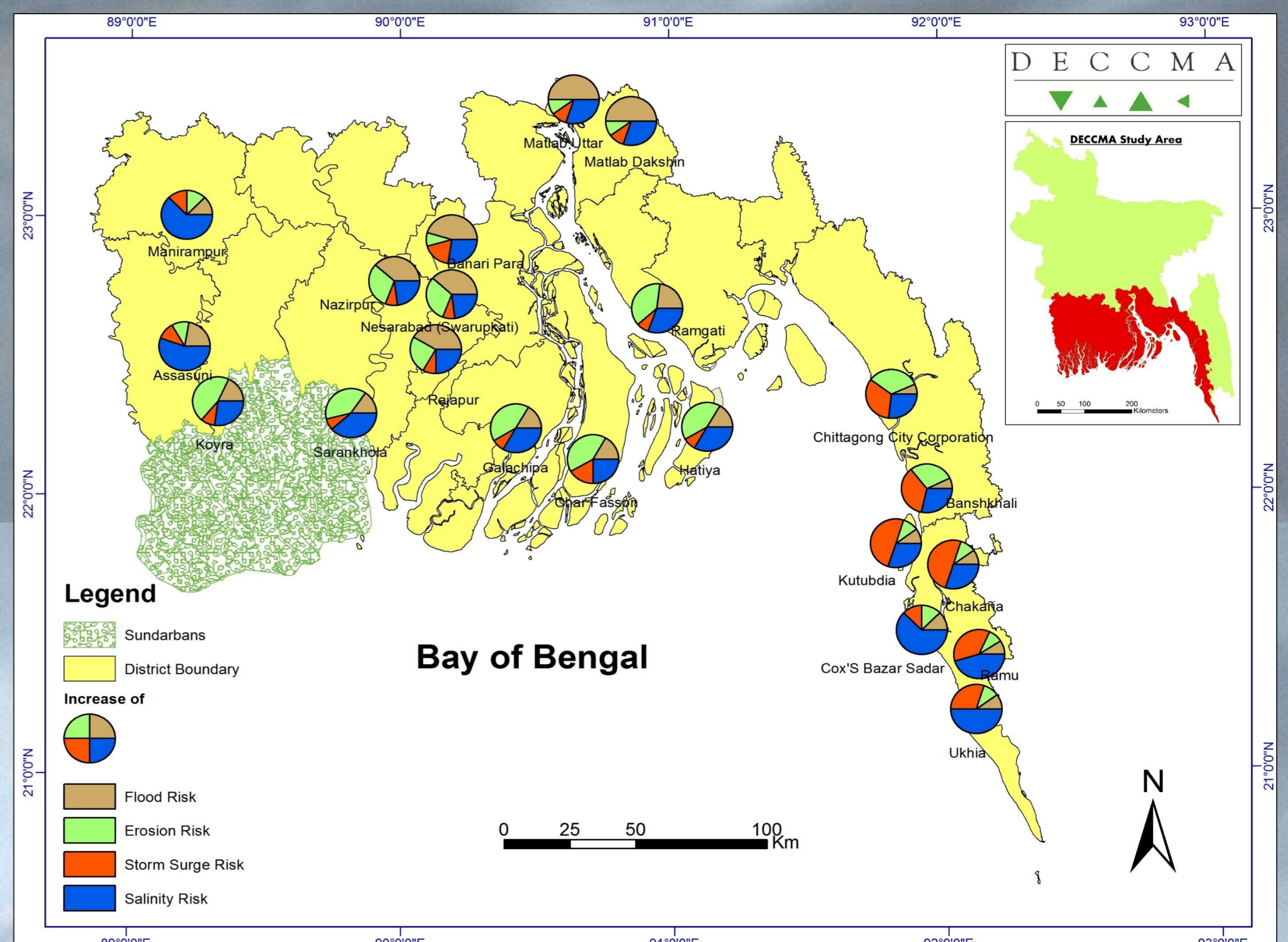
Present day Climatic Hotspots



Future Climatic Hotspot due to Climate Change



Hotspots where Risks due to Climate Change will Increase



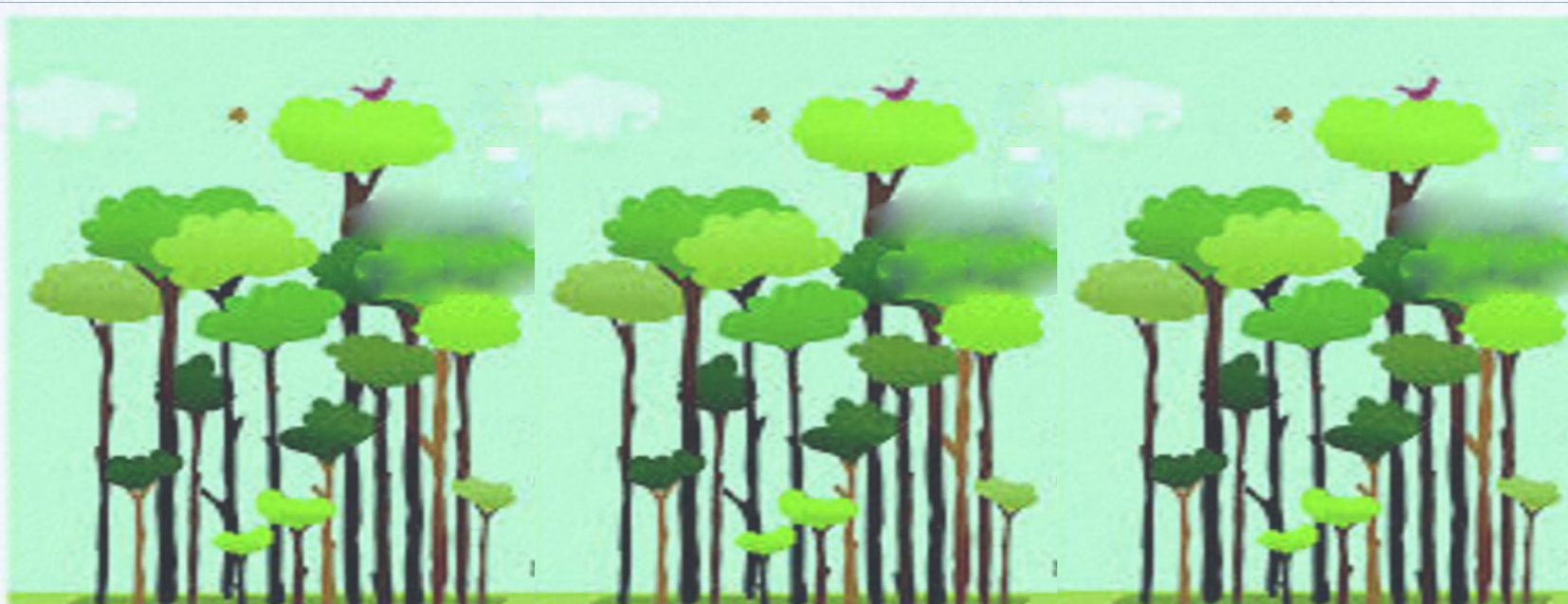
Implication for Policy Makers

To prioritize investment to reduce vulnerability due to climate change, policy makers can use the adaptive measures identified in different hotspots in GBM delta of Bangladesh.

Conclusion

Top 3 adaptive measures in identified climatic hotspots which will reduce growing vulnerabilities and risks are : (1) Loan (2) Training (3) Climate tolerant crop

The choice we make today will determine how high sea level rises in future, how fast it occurs and how much time we have to protect our communities



Recommended adaptive measures in identified climatic hotspots which will reduce growing vulnerabilities and risks

Validation

Adaptive Measures Needed	% Hotspot	Sending area survey result %
Loan	100	71
Training	38	16
Climate tolerant crop	29	21
Education	24	--
Road	24	--
Polder	19	27
Cyclone shelter	19	27

Districts	Upazilla	Adaptive measures
Barisal	Banari Para	(1) Training (2) Loan
Bhola	Char Fasson	(1) Loan (2) Education
Jhalokati	Rajapur	(1) Loan (2) Training
Patuakhali	Galachipa	(1) Loan (2) Education
Pirojpur	Nazirpur	(1) Loan (2) Training
Pirojpur	Nesarabad	(1) Loan (2) Climate tolerant crop
Chandpur	Matlab Dakshin	(1) Loan (2) Training
Chandpur	Matlab Uttar	(1) Loan (2) Climate tolerant crop (3) Training
Chittagong	Banshkhal	(1) Training (2) Loan (3) Cyclone shelter (4) Road network
Cox's Bazar	Chakaria	(1) Training (2) Road network (3) Loan (4) Cyclone shelter
Cox's Bazar	Cox's Bazar Sadar	(1) Climate tolerant crop (2) Loan
Cox's Bazar	Kutubdia	(1) Loan (2) Education
Cox's Bazar	Ramu	(1) Climate tolerant crop (2) Loan (3) Polder
Cox's Bazar	Ukhia	(1) Climate tolerant crop (2) Polder (3) Loan
Lakshmipur	Ramgati	(1) Loan (2) Road network
Noakhali	Hatiya	(1) Loan (2) Road network
Bagerhat	Sarankhola	(1) Loan (2) Polder (3) Education
Jessore	Manirampur	(1) Loan (2) Polder (3) Education
Khulna	Koyra	(1) Loan (2) Cyclone shelter (3) Road network
Satkhira	Assasuni	(1) Climate tolerant crop (2) Loan
Chittagong	Chittagong city	(1) Loan (2) Training (3) Cyclone shelter