

## List of Figures

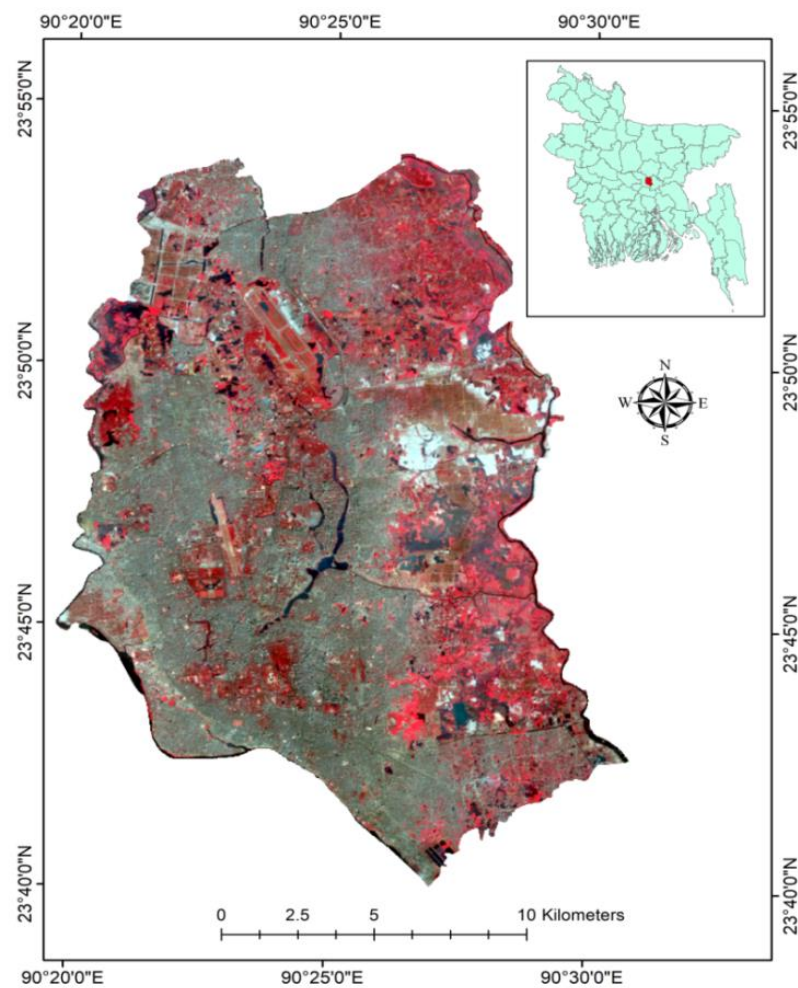


Fig. 1. Study Area map showing the location of Dhaka city in a false-color composite of Landsat imagery.

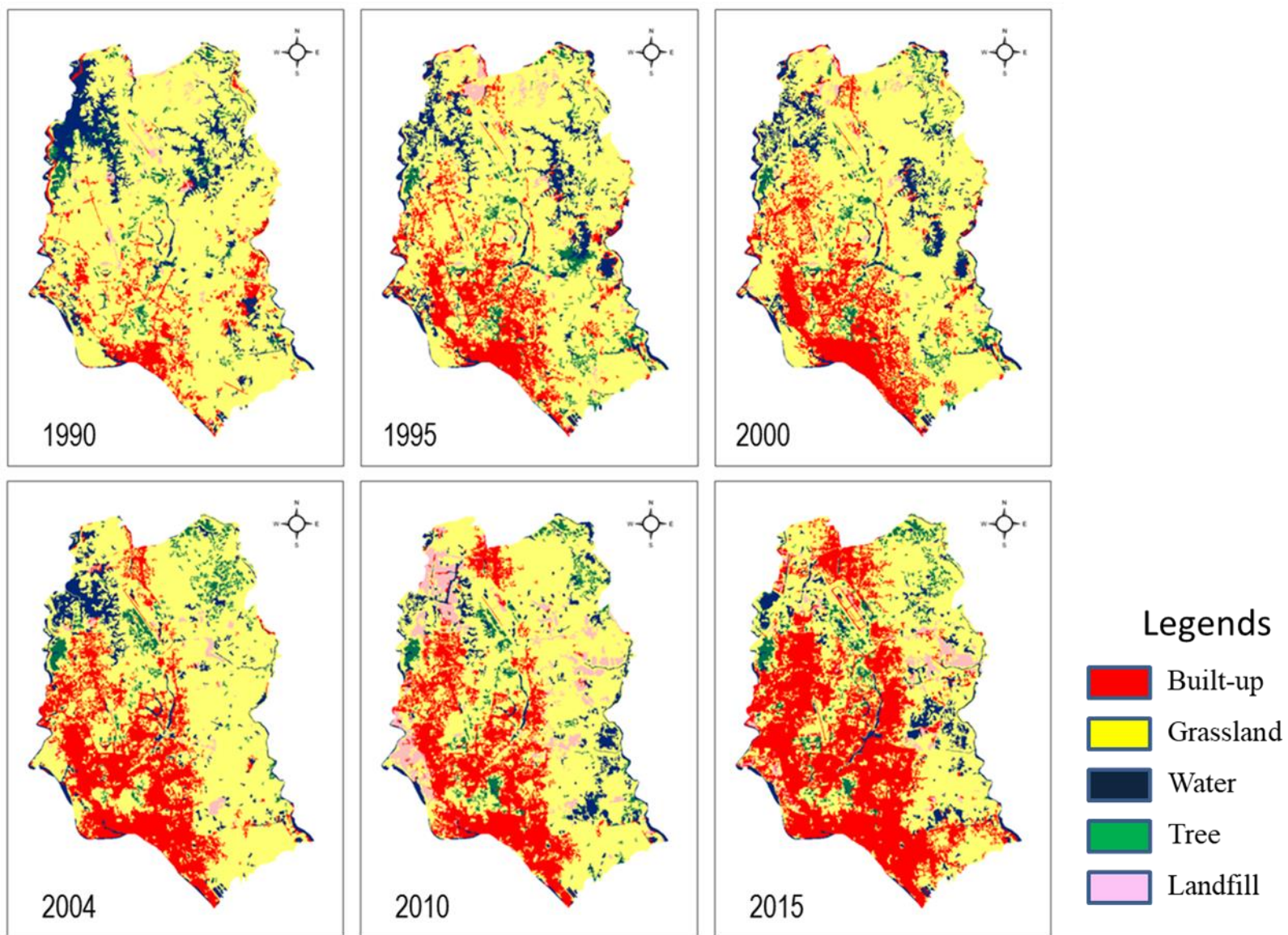


Fig. 2. The spatial and temporal pattern of land-use and land cover change in Dhaka (1990–2015)

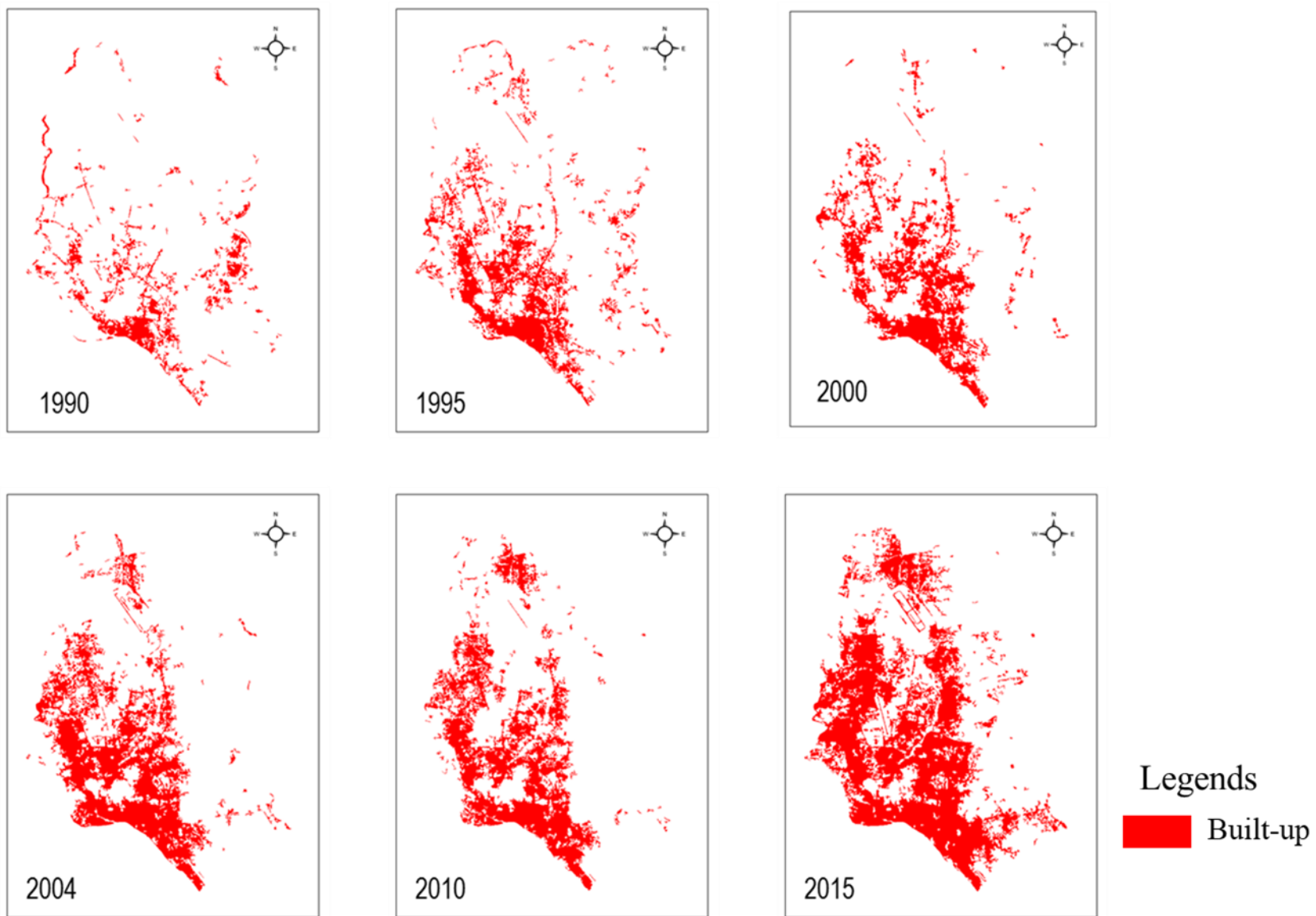


Fig. 3. The spatial and temporal pattern of the built-up area in Dhaka city.

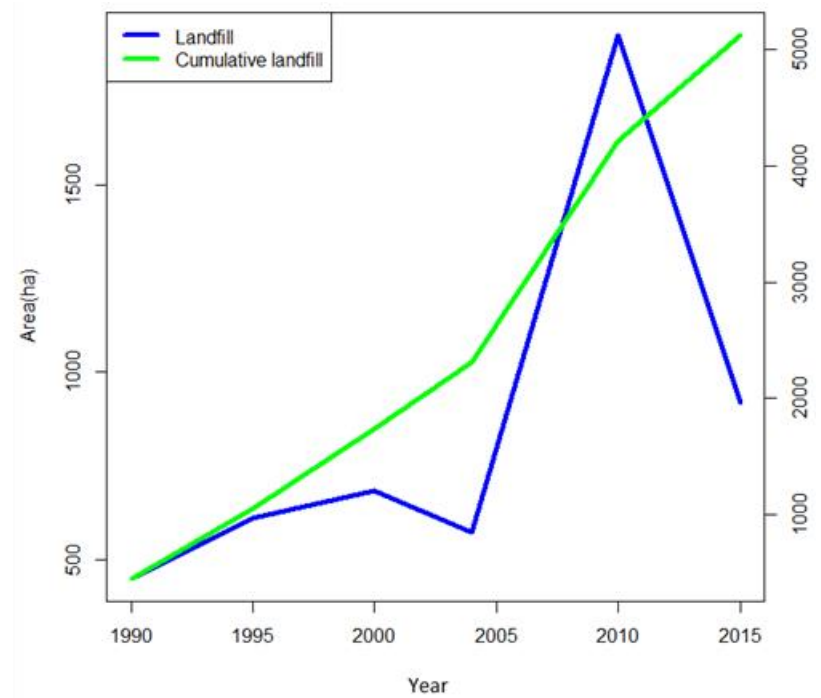
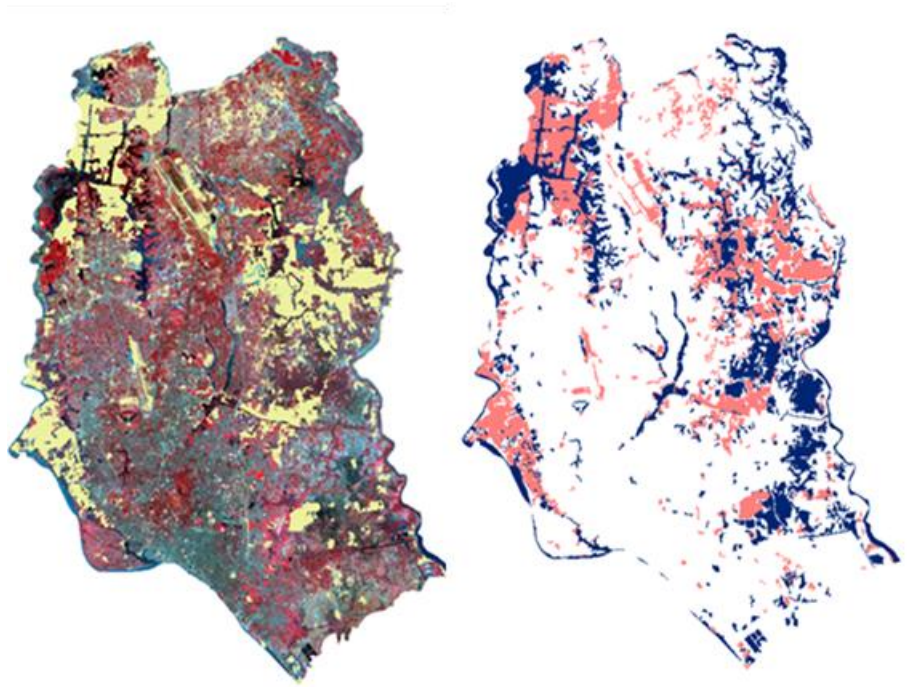


Fig. 4. Cumulative landfill area from 1990-2015 showing the extent of wetland loss (left and center) and comparison of cumulative landfill and time series of landfill area showing the degree/intensity and extent of wetland loss (right) in Dhaka city



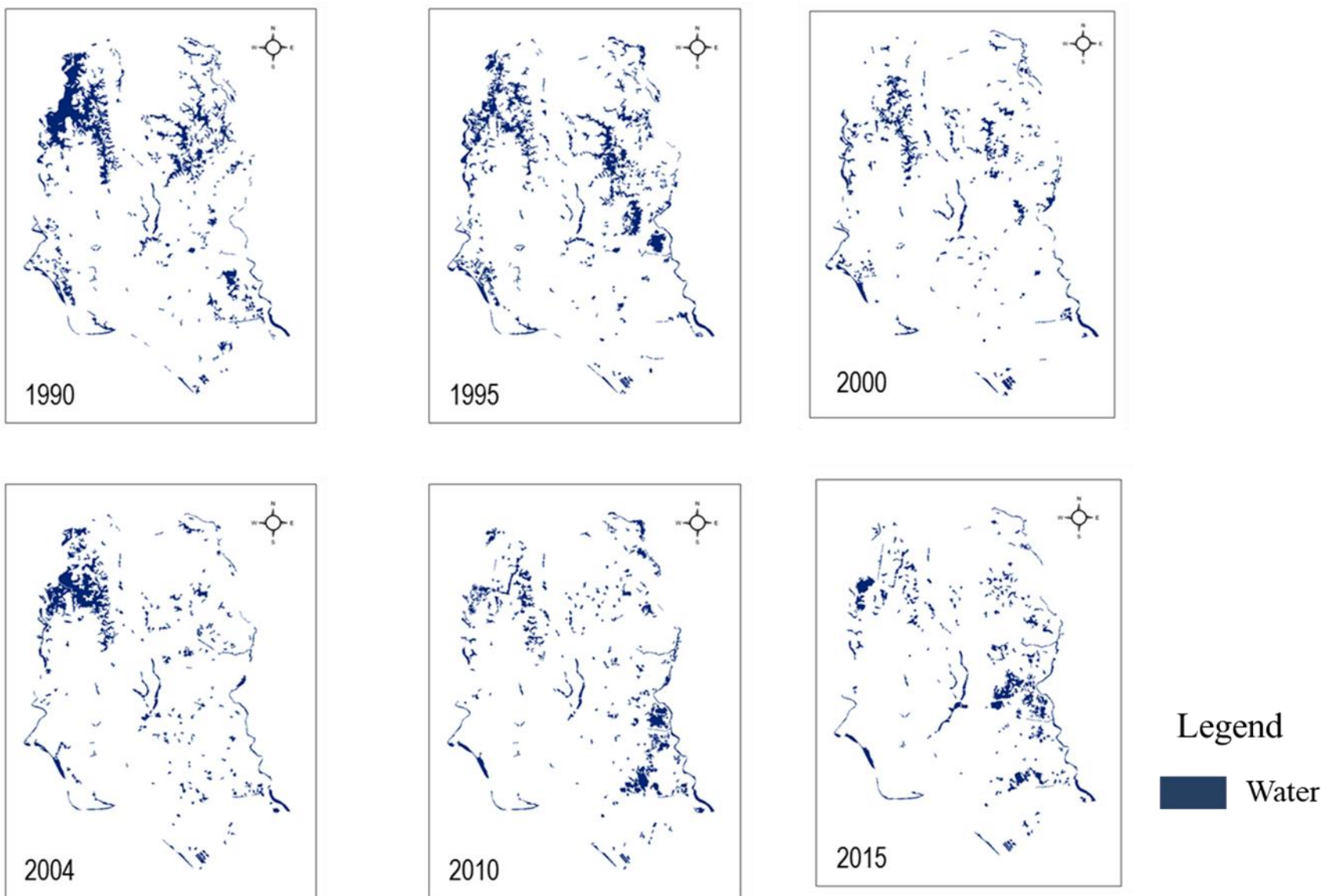
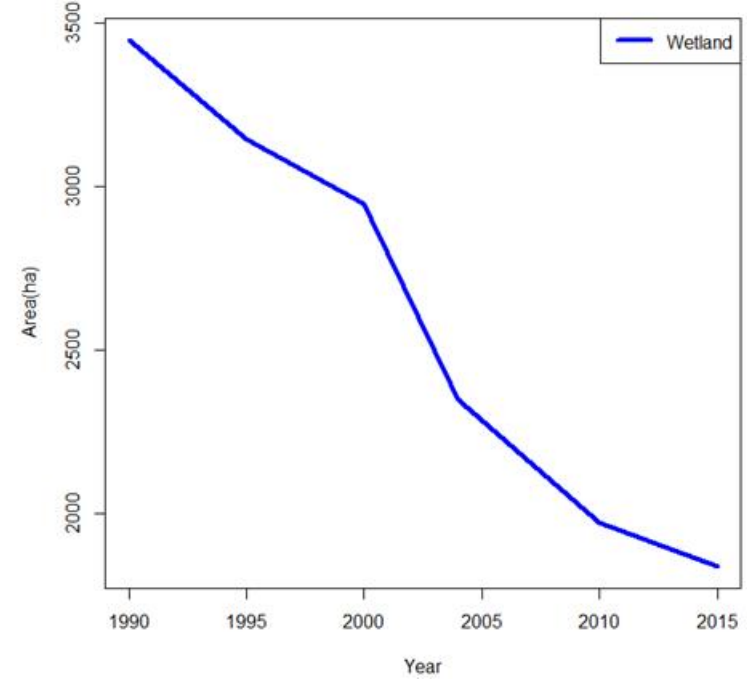
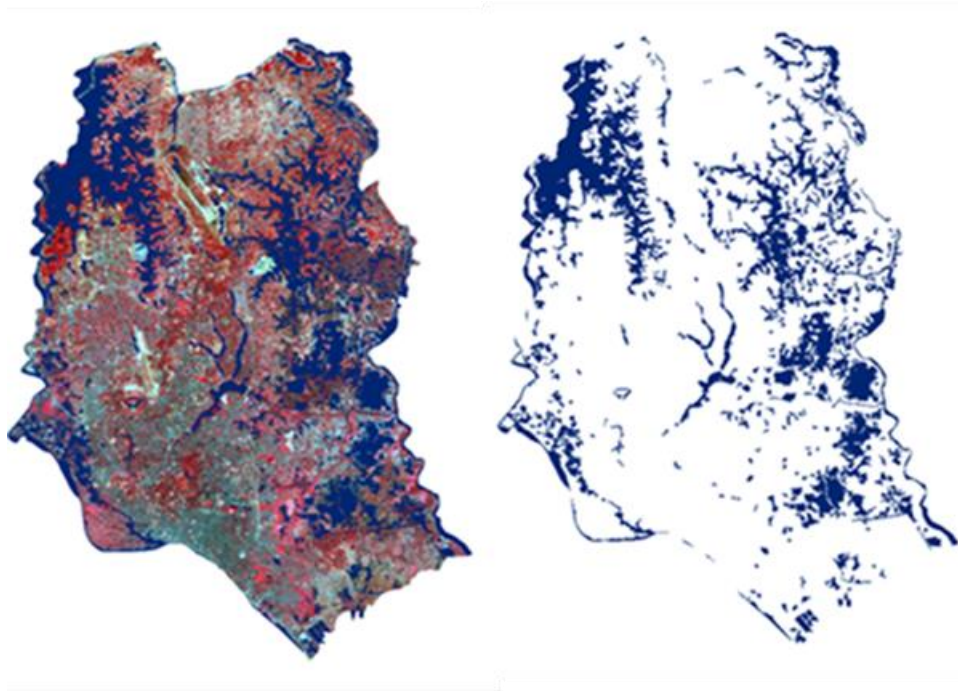


Fig. 5. Time series of wetland area in Dhaka city from 1990-2015, showing the gradual loss of wetland.



24

25 Fig. 6. The base wetland area superimposed on 2015 imagery to show the original extent of wetlands in Dhaka city during 1990 and  
 26 the trend of wetland area declined in Dhaka city from 1990-2015. The trend of wetland area change showed a decreasing pattern over  
 27 the study period.

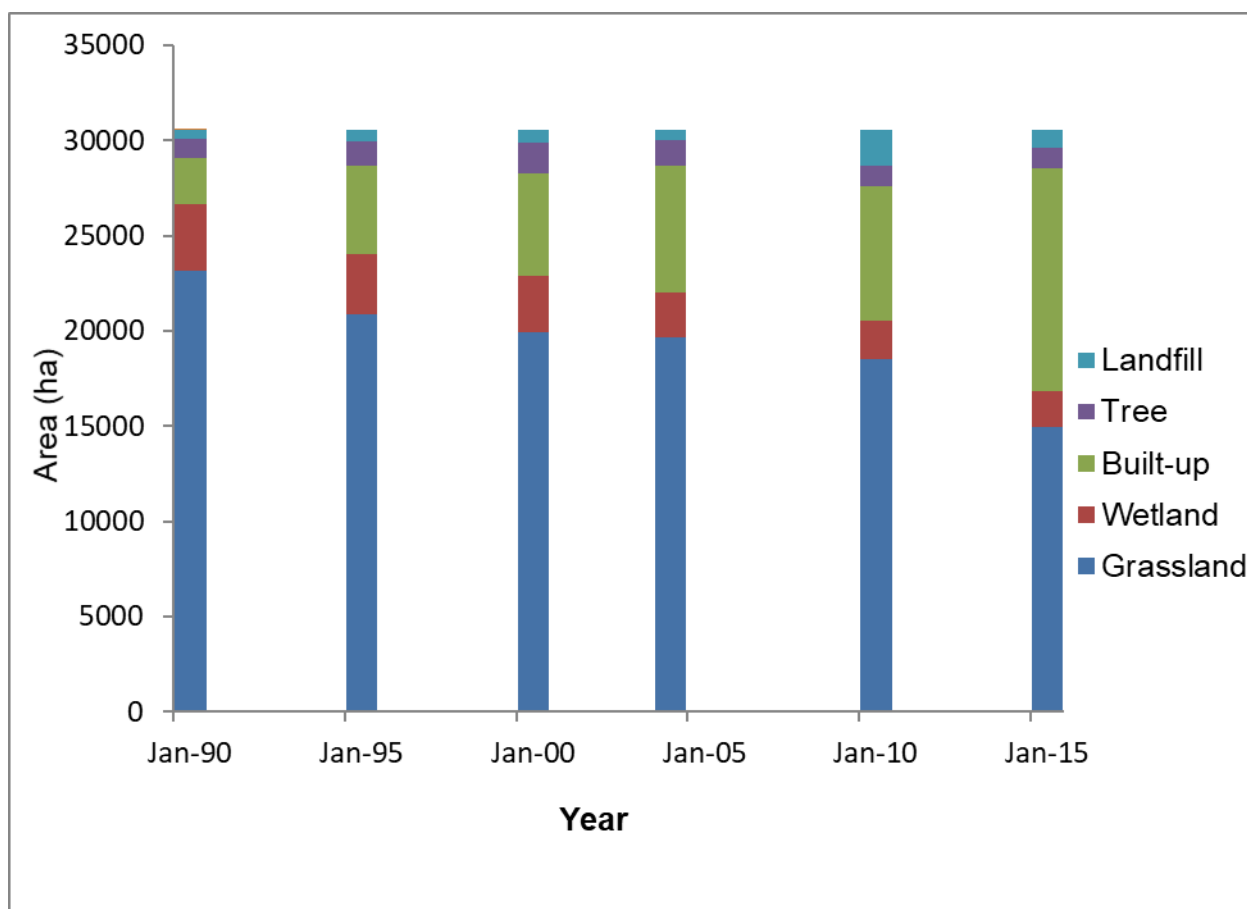


Fig. 7. Distribution of Different LULC Classes from 1990 to 2015, showing the contribution of LULC in Dhaka city

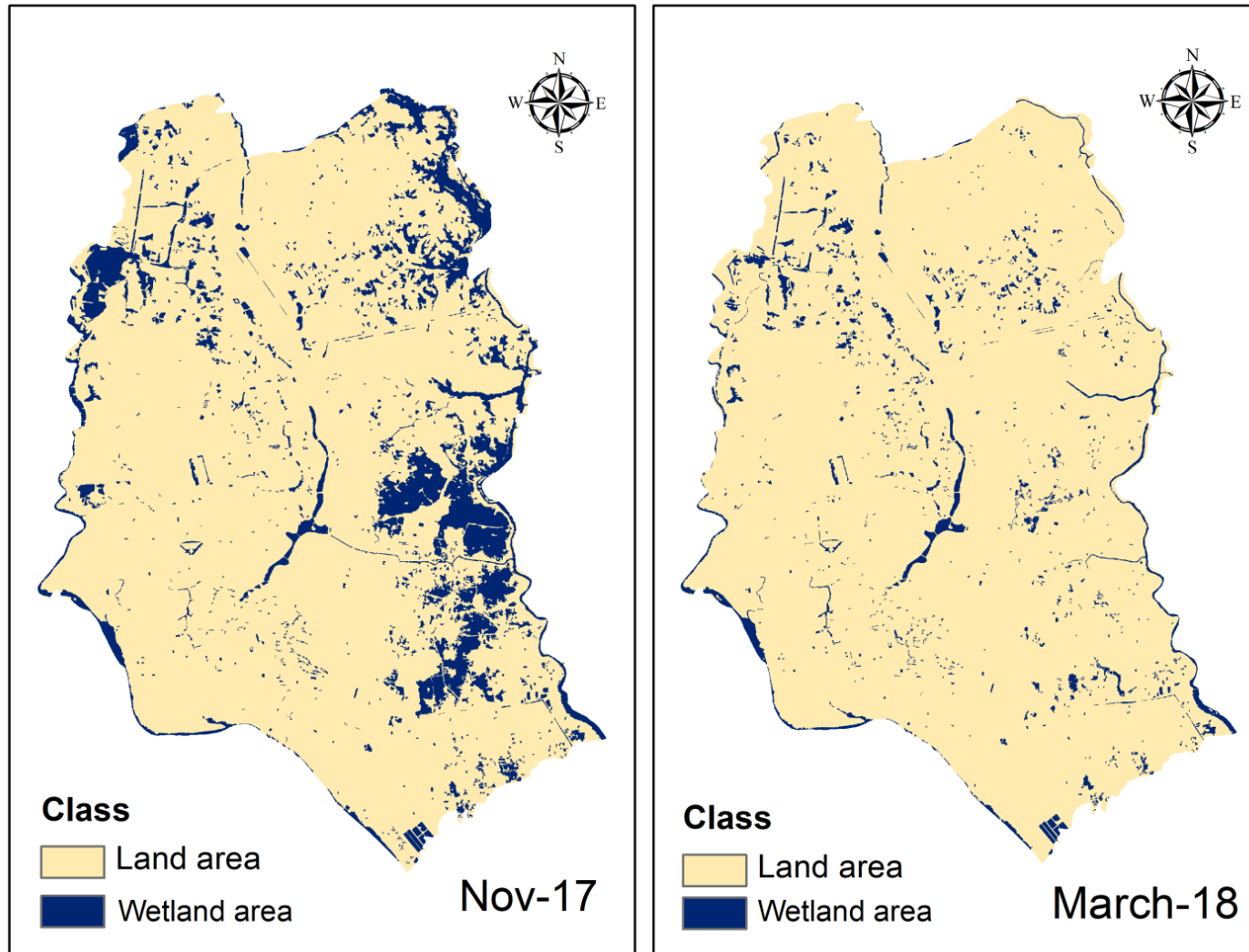


Fig. 8.Changes in wetland between Nov17 and March 18 showing the maximum and minimum areas of wetland exhibiting the seasonal dimension of wetland in Dhaka city.



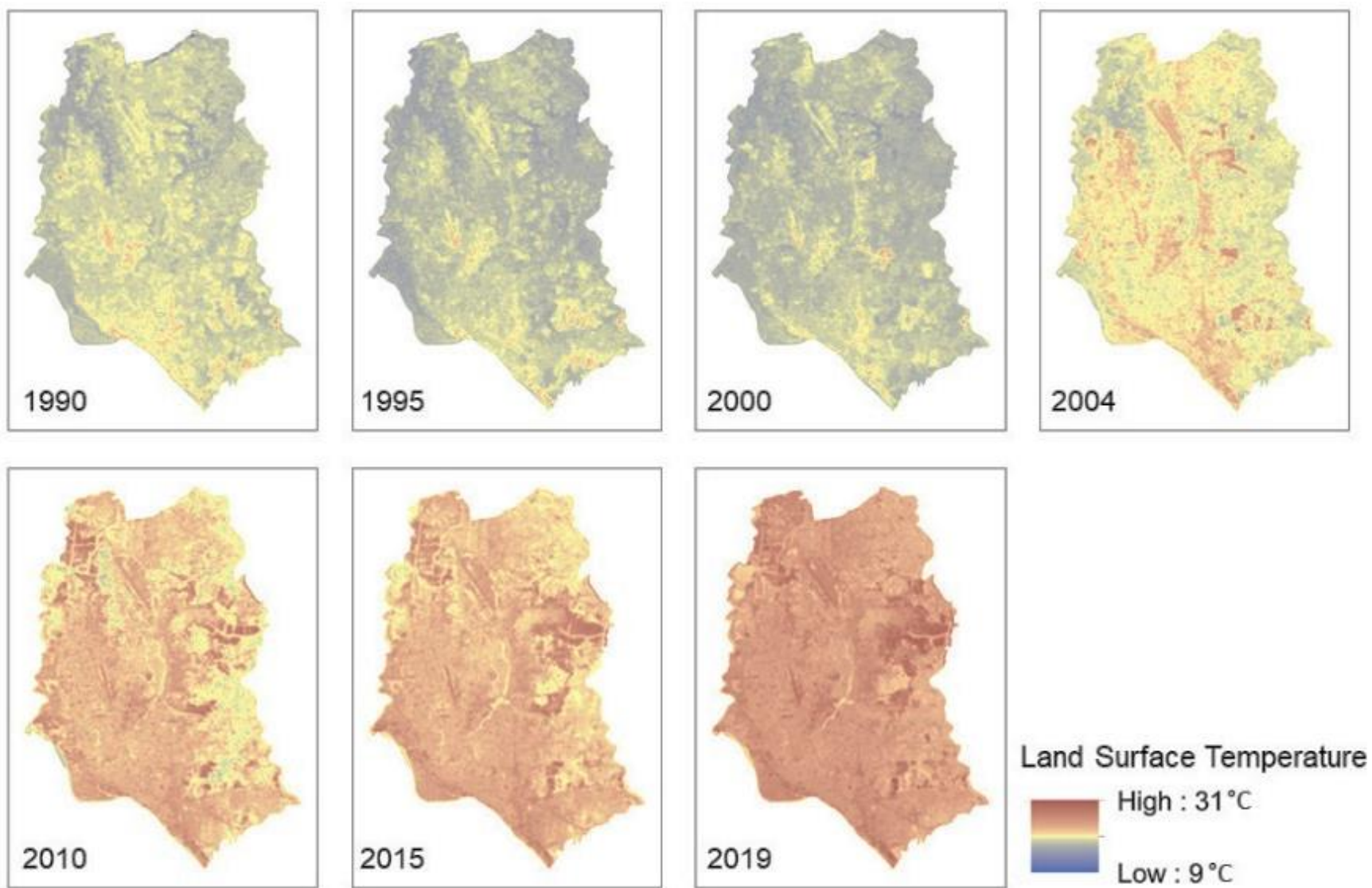
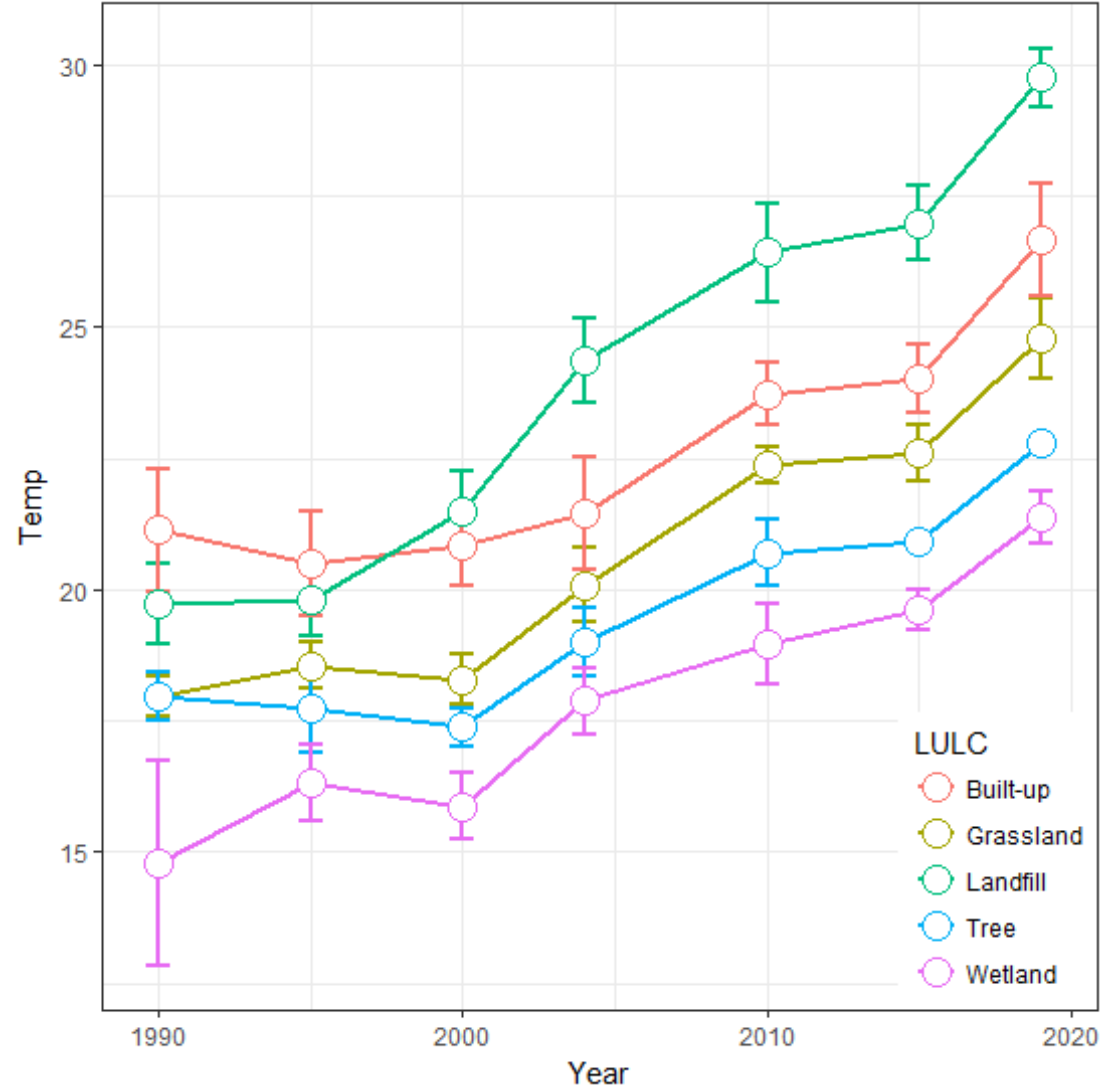
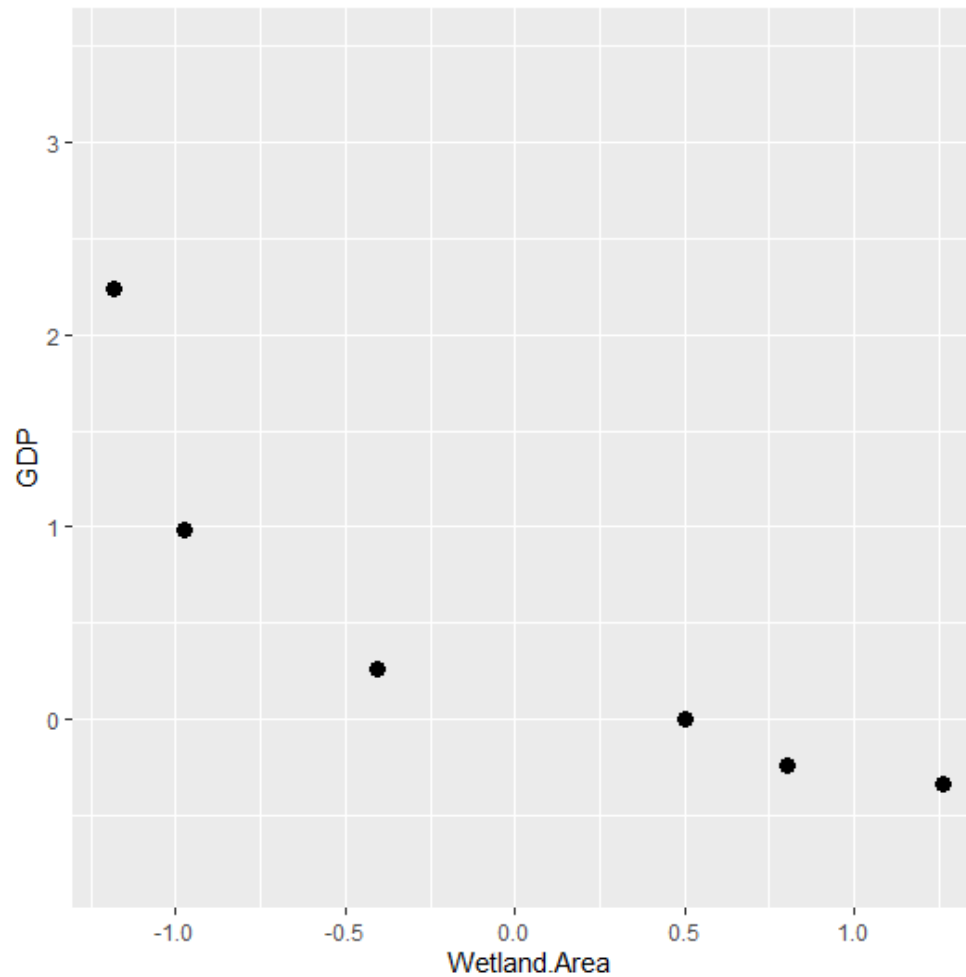


Fig. 9. The land surface temperature of Dhaka city over the years (1990-2019) and displaying a gradual increase in LST especially in the landfill area where sand is the medium of landfill.



36

37 Fig.10. The trend of the temperature of different land use and land cover in Dhaka city, showing the increasing land surface  
 38 temperature over the period.



39

40 Fig. 11. Relative wetland area versus GDP, where wetland area z scores are interpreted as GDP increase (similar to an Environmental  
41 Kuznets curve). The strong association indicates that deteriorating wetland area loss has been strongly coupled to economic growth,  
42 but no investment is visible to restore the depleted wetland.