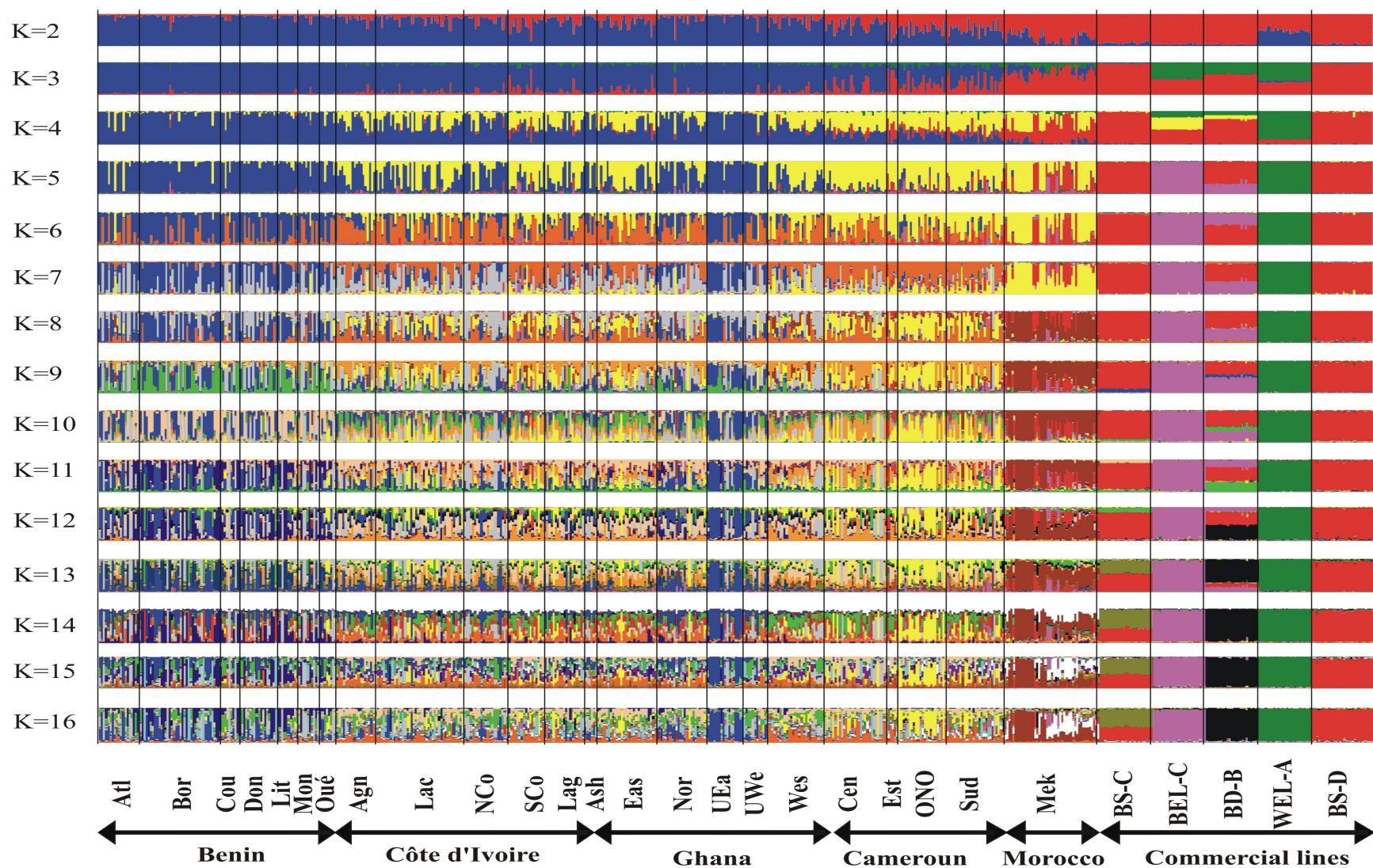




Additional file 4 – STRUCTURE analysis involving all 28 populations (23 African local chicken populations and 5 commercial lines), for K=2-16, using Q-matrix averaged overall 100 runs.