**Table S1:** Mean difference in rainfall between major and minor seasons in three separate decades namely, 1985-1994, 1995-2004 and 2005-2014 within the Fanteakwa District of Ghana

|  |
| --- |
| **Seasons Mean SD CV PCI (%)**  (Major/Minor) |
| X1  160.73 - - -  X2 138.76 - - -  X3  122.78 175.5 -5.7% 33%  X4   150.33 - - -  X5 108.48 - - -  X6 127.19 206.06 -7.6% 33% |

X1, X2, X3 are 1985-1994, 1995-2004, and 2005-2014 for major seasons respectively

X4, X5, X6 are 1985-1994, 1995-2004, and 2005-2014 for minor seasons respectively

**Table 2:** Correlation analysis of climatic variability and crop yields between 2003-2014 within the Fanteakwa District in Ghana

|  |  |  |
| --- | --- | --- |
|  | **Seasonal Variation** |  |
| **Crops Rainfall (mm) Major (mm) Minor (mm) Tmax (oC)Tmin (oC)** | | |
| Cassava -0.466 -0.283 -0.41 -0.696 -0.406  Cocoyam -0.431 -0.261 -0.36 -0.775 -0.333  Plantain -0.274 -0.196 -0.232 -0.858 -0.462  Tomatoes 0.417 0.5 0.280 0.116 -0.453 | | |
| Significant level: 0.01 | | |