## 5<sup>th</sup> International Conference on **GIS and Remote Sensing**

September 16-17, 2019 | Rome, Italy

## Geospatial assessment of Raphia palm wine production and consumption points in Owerri Senatorial district, Imo State, Nigeria

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Raphia palm wine occupies a very important position in the traditional activities of Owerri senatorial district and the Igbo ethnic group in Nigeria generally. A lot of benefits have been derived from Raphia palm, which can be grouped under cultural, health, religious, culinary and economic benefits. The specific objectives of this study are (1) to examine the existing distribution of Raphia palm wine production and consumption points (2) to determine the best route; (3) to determine the closest production point to consumption points and (4) to map their hot spot and cold spot zones. The location coordinates of the existing Production and Consumption points were collected using a GPS. Using ARCGIS software, nearest neighbour analysis was used to analyse pattern of distribution, the route analyst tool was used to analyse the best route and lastly, Getis-Ord G\* a spatial statistics tool was used to determine the hotspot and cold spot zones. Findings showed that Raphia palm wine production points are randomly distributed across the study area, while the consumption points where clustered particularly around Owerri North, Owerri West, and Mbaitoli Local Government Area, which is witnessing rapid urbanization. The result of production hotspots and cold spot analysis revealed that the production hotspots were found at the North-east part of the study area, while a cold spot was found few kilometres away from the city capital. One of the recommendations was the enactment of state laws to reduce the felling of Raphia palm trees in the face of rapid urbanization.