West Africa can be divided into three agro-ecological zones or three different trade basins (West Basin, Central Basin and East Basin). Both important for understanding market behavior and dynamics.

The three major agro-ecological zones are the Sahelian, the Sudanese and the Coastal zones where production and consumption can be easily classified. (1) In the Sahelian zone, millet is the principal cereal cultivated and consumed particularly in rural areas and increasingly, when accessible, in urban areas. Exceptions include Cape Verde where maize and rice are most important, Mauritania where sorghum and maize are staples, and Senegal with rice. The principal substitutes in the Sahel are sorghum, rice, and cassava flour (Gari), the latter two in times of shortage. (2) In the Sudanese zone (southern Chad, central Nigeria, Benin, Ghana, Togo, Côte d'Ivoire, southern Burkina Faso, Mali, Senegal, Guinea Bissau, Serra Leone, Liberia) maize and sorghum constitute the principal cereals consumed by the majority of the population. They are followed by rice and tubers, particularly cassava and yam. (3) In the Coastal zone, with two rainy seasons, yam and maize constitute the most important food products. They are supplemented by cowpea, which is a significant source of protein.

The three trade basins are known as the West, Central, and East basins. In addition to the north to south movement of particular commodities, certain cereals flow horizontally. (1) The West basin refers to Mauritania, Senegal, western Mali, Sierra Leone, Guinea, Liberia, and The Gambia where rice is most heavily traded. (2) The Central basin consists of Côte d'Ivoire, central and eastern Mali, Burkina Faso, Ghana, and Togo where maize is commonly traded. (3) The East basin refers to Niger, Nigeria, Chad, and Benin where millet is traded most frequently. These three trade basins are shown on the map above.
MAIZE: Maize is the main food staple for the majority of the Guinean and West African coastal counties, and particularly food insecure and rural populations, and acts as a substitute for millet and sorghum in the Sahel during times of shortfalls. It is also used by industry and for animal feed.
COWPEA: Cowpea is a basic food for the coastal countries and also acts as a source of protein and meat substitute for poor households in the Sahel.

RICE: Rice is an important commodity for the urban Sahel and West African region. Monitoring market trends for rice is necessary because unfavorable conditions can lead to social instability. All of the markets shown here represent those that import international products for dissemination to other markets.
SORGHUM: Sorghum is generally the first substitute for millet and is more important in the Sahel for consumption, industry, and animal feed. There is currently significant competition between human food consumption in Sahelian zones and breweries that demand sorghum for beer production.

YAMS: Yams are important for food security in the coastal countries and the southern part of Nigeria. Through commercial flows, surplus yam from the coastal countries moves to the urban areas of the Sahel and several rural areas to reinforce the food availability during the lean season and times of shortfalls. It is also a first substitute when cereal prices start to rise.
MILLET: Millet is the main food staple for a majority of the Sahelian food insecure populations, particularly for the rural and urban poor. These are the main market centers for the Sahelian countries, where a majority of the population relies on it.