The impacts of drought on Amazon is permeated by uncertainties (e.g. its carbon sink ability) and underexplored questions such as the role of functional diversity and its different components – richness, divergence and evennes - in the carbon sink, as well as the impacts on functional diversity itself. In that sense, here we introduce a new vegetation model, the so called CAETÊ. In order to explore these issues we employed two versions of the model in a scenario of 50% reduction on precipitation for the Amazon basin forest. One using a plant functional type approach (PFTA; fixed values for functional traits in 3 tropical PFTs) and another one using a trait-based approach (TBA; random combiantion of functional trait values creating 3000 plant life estrategies). Six functional were used: carbon allocation and carbon residence time on leaves, aboveground woody tissues (ABGW) and fine roots. The drought caused a widespread loss on total carbon storage in a similar magnitude for both approaches. However, the TBA showed an increase in fine roots investment in spite of other tissues, mainly ABGW, that can interpreted as an strategy for plants to deal with drought. This is a result of a functional reorganization on the community for the six traits: a decrease in functional dominance, that allowed previously rare trait values to increase its density and a consequent change on functional composition and on the functional diversity components (increase in richness and evenness and reduction on divergence). Although these changes were also seen in the PFTA, they were in a much smaller magnitude. Beyond that, PFTA showed a decrease in evenness and an increase in divergence. It shows that the ability of a community to functionally reorganize and deal with the new conditions is highly dependent on its traits diversity. Our study show that trait-based model opens the oppoortunity to explore questions that goes beyond a biogeochemical perspective such as how functional diversity is connected to ecosystem processes as well as communities respond to climate change in terms of its functional structure, composition and diversity.