The paper assessed vulnerability of forests under different governance regime (government, community and free area) to deforestation. Based on the Land Use Act of 1979, governance of Nigeria’s forest is vested mainly in the State governments with policy responsibility of protecting forest against any form of encroachment, damage or destruction and to regenerate forests at a rate that is higher than that of exploitation. This policy notwithstanding, forests in Ogun State, Nigeria have been witnessing continuous encroachment, exploitation and degradation over many years but there has been no study on this trend. Data were collected on governance regimes and drivers of deforestation through census survey of 52 forest officials in the State Forestry Ministry, random survey of 12 forestry and environmental scientists and purposive interview of 10 community level key informants. Available secondary data on sizes of designated forest reserves/protected areas were collected but no official data on current extent and status of the reserves is available. Forest status and vulnerability to deforestation/degradation from 1976 to 2006 was generated by integrating existing data from base maps and imageries from Landsat Thematic Mapper. Results indicate that policies and regulations on exploitation protection, regeneration and biodiversity preservation are ineffective ($z = 0.6$). The main drivers of forest vulnerability to deforestation are the underlying factors of culture and socio-political (88%); policy and institutional (71%); Technological (66%) and economic (56%) factors. Of the proximate factors, forest extraction (61%) and agricultural expansion (54%) are major drivers. Bivariate correlation shows a negative but weak association between policy effectiveness and the driving factors (proximate versus exploitation = -0.45, regeneration = -0.087, biodiversity = -0.035; underlying versus exploitation = -0.65, regeneration = -0.37, biodiversity = -0.35). Results of binary logistic regression shows that forest extraction (proximate) factors ($\beta = -1.095$), economic (underlying) factors ($\beta = -1.130$) and socio-political (underlying) factors ($\beta = 1.169$) have significant implications for sustainable forest management (Omnibus tests of model coefficient = 64.2, $P<0.01 = 0.00$). A descriptive cross-tabulation showing cause connection of proximate and underlying causes shows that culture/sociopolitical-forest extraction tandem ranked highest (49.5%); policy and institutional-forest extraction (46.7%); policy and institutional-agricultural expansion (46.7%); economic-agricultural expansion (40%), and economic-forest extraction (40%). Preliminary remote sensing and GIS analysis suggest about 15% loss of forest cover in the last 30 years. However, more changes (15-18%) occur in the government reserves and free areas (10-15%) than the community managed forest (5-8%). Encroachments into government-designated reserves are evident. Further analysis is on to determine how the drivers actually interact across space and project forest vulnerability and extent and trajectory of future forest degradation based on this interaction. Without a reversal of this trend of deforestation, forests in the state will become more vulnerable to exploitation as demand for wood products increases. There is the need to build a sustainable institutional approach to forest management and curtail deforestation through enforcement of rules, re-orientation of culture and local people, demarcation of agriculture and forest areas, reconversion of exploited land to forest and appropriate use of socio-political capital.