This study was stimulated by the rapid rise in the number of vernacular FM radios in Kenya. It expounds the relationship between vernacular radio and peace building. How best vernacular radio can help the audience live in harmony and have peaceful coexistence even between various ethnic groups. This was done through a case study of radio Mayienga, a government owned vernacular radio that broadcasts in Dholuo language and reaches the counties of Kisumu, Siaya, Homabay and Migori. The study sought to inquire if radio Mayienga has had any significant role in influencing attitudes and perceptions of its listeners in Kondele Kisumu through its daily programming. The study was guided by the conviction that vernacular radio has the potential of promoting peaceful coexistence and that audience participation is a key to this. The overarching research question was: In what ways is radio Mayienga contributing in the peaceful coexistence of its audience? Specific questions were tailored to find out about programming, perceptions and attitudes on the parts of both the listeners and the programme makers. The findings of this study reveal that through the programming of radio Mayienga, communities were able to actively participate in deliberation of issues and find solutions to divergent standings thereby resulting in peacefully co-exist. The findings also reveal that Radio Mayienga influenced peaceful co-existence among its listeners through its programmes, a big percentage of the respondents were found to have a strong feeling that through its programmes, radio Mayienga helped them change their attitudes and behavior especially in conflict ridden areas. The study adopted a descriptive research design targeting listeners of radio Mayienga whereby respondents were chosen using random sampling techniques. Empirical data was collected through questionnaires, personal interviews with the station staff and a focus group discussion. The field interviews were conducted in Kondele Kisumu County between August 1st to August 30th 2013. Data was analyzed with descriptive statistics using frequencies, percentages and means. It is then presented through figures, tables, charts and in prose. The study concludes that while vernacular radio stations world over are the ideal platforms on which the marginalized, rural and peri-urban populations can access information that in turn shape the peace agenda, there is need for further studies to be conducted on the subject with the view of promoting the effectiveness of vernacular radios in Kenya and in particular radio Mayienga being the government tool in addressing the collective needs of peace building. The study ends with some recommendations on how best the various stakeholders in vernacular radio industry can and should use this important tool to promote peace.