The losses of fresh food at the commercialization and distribution phase have frequently been discussed in Brazil. Waste information comes from specialists but there are divergences in the data collection procedures. Thus, the ways to assess and quantify these food losses are still unclear. This study aimed to develop a methodology for waste analysis at the commercialization stage (wholesale) in warehouses. The main wholesalers were interviewed in two major units: The ETSP – CEAGESP and CEASA Campinas. The following products were pre-selected and evaluated: potato, tomato, orange, papaya and lettuce, which together represented in 2010 33.6% of the sold volume in tons at ETSP and 26.4% of the financial volume. These same products represented 33.9% of the volume in tons at CEASA Campinas. The survey consisted of 39 questions that were considered in order of importance according to each transaction contribution in the wholesale commercialization actions. The results indicated that the relative level of loss has an inverse relation with the commercialized volume. Also, it was observed that the best practices were developed by the tomato sellers. We concluded that it is feasible to assess all losses (commercial and material) based on questionnaires taking as benchmark those best practices presented.