Indonesia is a country with potential natural resources so as to have an important role for the development of tourism, especially natural tourism. A lot of natural potential is lost and damaged because of the lack of specific management, one of which is the dwindling mangrove forests since the last 10 years. Mangrove forest conservation can be done for developing of eco-tourism that has strong potential in the interest of society. Some areas in Indonesia had planned ecotourism project mangrove forest, one of which is in Surabaya have made a planning for mangrove ecotourism with adding five support tourism places. The plan will develop to be three planning alternatives, for seeing the efectivity of mangrove ecotourism planning with finance analysis.

The method is used in this study is a model calculation of the incremental cost of investment in the existing development plan and investment model selection analysis performed to select the best investment alternative of three alternative plans that have been determined. The selection of investment alternatives that are based on the risk of losses, most small to see the value of NPV (Net Present Value), IRR, and Payback Period of each alternative. And the selection of alternative uses BCR increment calculation. Also used sensitivity analysis to measure the sensitivity of the selected alternative variables that affect construction costs, revenues, and operating costs.

Of calculations have been performed on three alternative tourism development plan of Surabaya mangroves, it was found that the best alternative to be developed as an eco-tourism project with a NPV of Rp mangrove, 72,588,911,523, 11.99 IRR, payback period of the investments for 18 years and 10 months and BCR of 1.083. The factors that most affect the NPV and IRR after analysis sensitivity is a factor of the number of visitor arrivals and rising construction prices.

Keywords : Alternative investment, ecotourism, sensitivity