

Design Principles of Arboretum in Babakan Siliwangi

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ABSTRACT

Physical development and degradation of environmental quality becomes a frequent dilemma faced by a city. The development is not infrequently done by immolate the environment, so the quality of the environment is becoming increasingly decline. The ideal proportion of public green open space in city is 20% of the area of the city based on the provisions stipulated in the Act No. 26 of 2007 about Spatial Planning. Data of Gardening and Funeral Service in 2009 stated that the proportion of green open space at Bandung is only 8.87% out of the total area of the city. That means the proportion of green open space in Bandung is still under the requirements of the provisions. Based on its main function, green open spaces can be grouped into urban agriculture, city parks, and urban forest. Region of Babakan Siliwangi at Coblong District is one of the few green open spaces left in Bandung. Its location that near around universities and colleges, enable Babakan Siliwangi to used as an urban forest for research and education, or commonly known as arboretum. In addition to research and education functions, arboretum is also useful to absorb the negative results of city activities and create micro climate for surrounding region. Ecological design is defined by Sim Van der Ryn and Stuart Cowan as all forms of design that minimizes the effects of environmental damage by integrating the design to the processes of life. By placing ecology as foreground in design, it can minimize the energy and material use, reduce pollution, conserve habitats, and develop the community, health, and beauty. The output of this research is design principles of arboretum in Babakan Siliwangi. These design principles can be generated through creative collaboration of universities and colleges with the government and the residents of Bandung in general.

Keywords: *design principles, arboretum, ecological design, Babakan Siliwangi*