Sekolah Alam Al-Firdaus. The focus on the natural environment pays off from one node to another, starting with the construction of the lower section of the river arm. A barrage at the lower section of the river arm and drainage purposes but not for public activities. The idea of providing a public facility is convincing, feasible and easily achieved.

Not applicable

Comment of the Holcim Awards jury Asia Pacific

The jury commended this project because of its visionary rethinking of merging density with simplicity. This balancing act is not only well-resolved on a structural level but also on a contextual level. Urbanity, meaning its positive intellectual attributes, is transferred to the countryside and merged with the rural ‘genius loci’ (inherent spirit of place). Well-composed spacing underlines this idea. The selection of materials including concrete, bamboo and reclaimed wood, and well-elaborated design of the buildings go hand in hand with the school’s pedagogical framework. The essences of its integral elements make this project exemplary.

Project description by author

The project is inspired by combining the functions of an education facility, agricultural area, and local farm. This combination creates a unique and children-friendly education system for Sukoharjo-Surakarta. The socially-integrated project connects religious spirit and the local social culture to enable new networking between farming, education, social institutions, and economic development for better living standards in Budi Sukoharjo, Surakarta by empowering local people.

The concept also embeds the ambition to transfer knowledge from one node to another, starting with the construction of buildings and extending to the holistic education system of Sekolah Alam Al-Firdaus. The focus on the natural environment and its incorporation into the teaching program of the school provides multifarious opportunities for learning and awareness-building for sustainable communities.

Relevance to target issues by author

Innovation and transferability – Progress

Sekolah Alam Al-Firdaus acts as a catalyst for creating better lives in the local community, and by extension contributes on the larger scale. The children and broader community are taught sustainable and healthy farming practices, and the importance of the natural environment. The school will teach and adherence to sharia economics and getong nyong which are the values of the local people. In terms of architectural progress, the level of technology reflects locally-available materials and skills. Bricks are constructed on-site to save logistics costs. Furthermore, each design detail considers ease of care, low maintenance, and low energy. The building footprint is less than 5% of the site area, and water use is minimized to allow up to 85% of available water to be allocated to agricultural use.

Ethical standards and social equity – People

The school is built on land allocated for education and adjacent to a secondary school. By minimizing the building’s footprint, a greater proportion of land is available for rice farming, enabling local farmers to continue working. The school houses a temporary market which aims to stimulate the economy of the region by selling local produce and teaching agricultural management so that local farm production can be sustained. Sekolah Alam Al-Firdaus provides an education where the fulfillment of the rights of children is central, and therefore contributes to building greater community engagement on social equity and creates socially-aware leaders of tomorrow.

Environmental quality and resource efficiency – Planet

The approach maintains the agricultural function of the site and provides children with an opportunity to learn from crop growing, and the supply of food. Crop production through intensive technology such as hydroponics and organic farming increases the sustainability of the approach. The use of local materials made by local people reduces the environmental impact of the building materials.

Economic performance and compatibility – Prosperity

Sharia economics operate on the basis of the principle of mutual benefit and the balanced use of resources. The education programs build a level of community engagement that builds a region that is ready to face the future. The project shall be built in phases from the capital provided the foundation of Al-Firdaus and developed independently by local principals.

Contextual and aesthetic impact – Proficiency

In the agricultural context, the design concepts also lead to sustainable farming. The project suggests through its structure, a system of life that envisages a synergy between man, nature and God. The structure incorporates facilities to accommodate users and the broader community. The façade and skin respond to the environment and create a fun atmosphere for learning.