農村住宅綠建築基地保水指標評估之研究

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摘 要 環境中高度的地表不透水率不僅會改變原有的逕流現象,更會影響局部微氣候及土壤生態。在我國的綠建築評估體系中,即以「基地保水指標」來對基地開發前後的保水量進行評估。本研究以農村住宅爲例,針對 46 個實際案例進行現況調查,並計算其地表不透水率與基地保水指標。結果發現平均的不透水面積約占 16.65%,若僅針對本研究所定義之「開發區」範圍加以評估,則其地表不透水率及保水指標爲 85.1%及 0.22,均較全區整體評估不佳,再者,「開發率」對於不透水率及保水指標的影響亦最爲顯著,也導致開發區的惡化程度幾乎與都市住宅區一致。由於綠建築的基地保水指標對於農村住宅幾乎沒有任何的管制效果,故建議在原有之指標基準之外,再以本研究所定義之開發區基地保水指標 λ dev</sub> 做參考之依據。有助於全區及開發區內保水性能之提升。

關鍵詞:農村住宅、綠建築、基地保水指標。

Evaluation of Water Retention Index in Green Building of Housings in Agricultural Villages

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ABSTRACT — A high percentage of impervious area contributes to changes of runoff, microclimate, and soil ecology. Therefore, the water retention index, which is a criterion for the green building system in Taiwan, is here applied to evaluate the performance of water retention in building sites. This research focused on 46 housings in agricultural villages with field investigation to calculate each index referring to water retention and the surface permeability. The results show that the average IMP reached 16.65%, whereas the IMP and the index were 85.1% and 0.22 when only the developed area was evaluated, thus demonstrating the deterioration of permeability in agricultural village's areas. The developed ratio was the main factor that affected the IMP and the index, causing the permeability to be even worse than in some urban areas. Due to the ineffective control of the index in agricultural village's housing developments, this study proposes an additional factor, λ dev, to evaluate the developed area so that water retention can be improved.

Key Words: housings in agricultural villages, green building, water retention index.

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