A Changing Development between Traditional and Emery Ecological Footprint - at the Area of Taipei Metropolitan

Abstract

As Taipei Metropolitan which including Taipei city and Taipei county Keelung city was a range for studying, Using Ecological Footprint had been popular validity on sustainability assessment been the mine theory and empirical implement for studying. Then add a extensive model of EF_E modify up traditional EF_T was based on energy analysis, According to the empirical proceeding managed with tow application tools between EF_E and EF_T, Realizing the real eco-status from the available result was showed on different constructs. First conduct was to draw up the empirical proceeding completely according to two models, that had obtained the foundational eco-condition included EF calculated by consumer datum and EC assessed by natural resources. So it would had gain the integrative development construct through degree and mass over all researching areas, then to add a district eco-security index to assess every district on eco-condition descend from integrative construct with detail, It could found character of these two models was conducted in a comprehensive analysis following the affections within whole eco-condition and particular eco-condition. After the comprehensive analysis to summarize the issuable conclusions and practical advises with both sides, individually provided the key point about eco-sustainability at the studying areas also purchase some crucial methods about model modifying and topical subjects for subsequent researches.

- 1. Both of EF_T and EF_E approve the result Taipei Metropolis had been standing a severer debt from, It was emphasized that energy consuming was main EF impaction which make eco-deficit growing was a tendency have been seen clearly.
- 2. EF_T was a suitable role used to hold a stage to reflect an impaction opposed to ecology against particular object from relatively comparing, contrary EF_E was fit to consider the whole affection opposed to ecology from any object flows, was based on a real gauge deployed absolute comparing.
- 3. There still were so much space improving on logical assessment also analytic function and applicable coefficient, should been offered to regulate also modify either EF_T or EF_E . The early part have been responded with some advises, must still have been laying on successive researches to achieve for the later part.

Keywords: Ecological Footprint; Energy analysis; Thermodynamics (first and second principle); Geographic Information System