# THE ECOLOGICAL FOOTPRINT OF SELECTED SEGMENTS OF UTM'S COMMUNITY

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# ABSTRACT

Renewable resources are very limited and consumption of people from these resources has an ever increasing demand. In order to save the World natural resources for next generations we need to develop programs to protect these resources and provide sustainable development so that the rate of our consumption from these resources could be equal to rate of their natural recovering. One of the most recent and very powerful tools that could calculate our consumption and regarding land use through our lifestyle is the Ecological Footprint. The Ecological Footprint could be used in different levels such as calculation of footprint in the national level, city or district, enterprise and organisation and even individual Ecological Footprint. The results of such analysis could be possibly helps directors, decision makers and governmental department to understand current rate of consumption and consequent land use and provide them accurate information to get proper decision in order to change the current rate into optimum consumption. In this research the Ecological Footprint calculated for selected segments of the Universiti Teknologi Malaysia community based on component approach and by choosing Matrix method developed by Wackernagel et al (1996). To carrying out this study, eight people selected based on their different social, educational and income level and interview with them based on their consumption, lifestyle and awareness of environmental issues in order to calculate the Ecological Footprint and analysis the results based on their lifestyle and environmental awareness both. Collected data put into Matrix method as an input and the Ecological Footprint calculated for each interviewee and by means of statistical measures proportion of their consumption and land use obtained. In the end these results compared and some early steps to optimize Ecological Footprint and sustainability proposed.

# ABSTRAK

sumber boleh diperbaharui yang sangat terhad dan pengambilan masyarakat dari sumber-sumber mempunyai permintaan yang terus meningkat. Untuk menjimatkan sumber Dunia alam untuk generasi seterusnya yang perlu kita mengembangkan program untuk melindungi sumber-sumber dan memberikan pembangunan berterusan sehingga tahap pengambilan kita dari sumber-sumber ini boleh sama dengan nilai alami mereka pulih. Salah satu alat yang paling terbaru dan sangat kuat yang boleh mengukur pengambilan kita dan mengenai penggunaan tanah melalui gaya hidup kita adalah Jejak Ekologis. The Footprint Ekologis boleh digunakan dalam tahap yang berbeza seperti pengiraan jejak di bandar, peringkat kebangsaan atau daerah, syarikat dan organisasi bahkan peribadi Ekologi Footprint. Keputusan analisis tersebut dapat mungkin membantu pengarah, para pembuat keputusan dan jabatan kerajaan untuk memahami tahap masa penggunaan lahan pengambilan dan konsekuen dan memberikan maklumat yang tepat untuk mendapatkan keputusan yang tepat dalam rangka untuk mengubah tahap saat ini menjadi konsumsi optimum. Pada penelitian ini Jejak Ekologis dikira untuk segmen yang dipilih masyarakat Universiti Teknologi Malaysia berdasarkan pendekatan komponen dan dengan kaedah Matriks memilih dibangunkan oleh Wackernagel et al (1996). Untuk melaksanakan kajian ini, lapan orang dipilih berdasarkan tahap sosial yang berbeza, pendidikan dan pendapatan dan wawancara dengan mereka berdasarkan, gaya hidup pengambilan dan kesedaran akan masalah persekitaran dalam rangka untuk mengira Jejak Ekologis dan analisis keputusan berdasarkan gaya hidup mereka dankesedaran alam sekitar keduanya. Mengumpulkan data dimasukkan ke dalam kaedah Matrix sebagai masukkan dan Jejak Ekologi diwawancara dikira untuk masing-masing dan dengan cara perkadaran saiz statistik pengambilan dan penggunaan lahan yang diperolehi. Pada akhirnya keputusan ini berbanding dan beberapa langkah awal untuk mengoptimumkan Jejak Ekologi dan keberlanjutan yang dicadangkan.