

NEW SUSTAINABLE DEVELOPMENT INSTRUMENTS AND METHODOLOGIES

UNIVERSITA' DEGLI STUDI DI MILANO – BICOCCA

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Dottorato di Ricerca in Scienze Ambientali - XX ciclo

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Academic year 2006 – 2007

Sustainable Development is a concept that has been formally defined in 1987 by the United Nation as “a development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. A development in order to be sustainable needs to be based on the interaction of economical, social and environmental elements.

Doctoral studies have been focused on the indicators that can measure, with a unique number, the three sustainable development elements.

Particularly, the PhD project presented with this thesis can basically be divided in two parts:

- the comprehension as well as the application of the most well-established sustainable development indicators (Ecological Footprint, Genuine Progress Indicator and Human Development Index);
- the development of a new sustainable development indicator named Social Well-Being Indicator.

The layout of the thesis is as follows.

Chapter 1 is a brief introduction to Sustainable Development and to its indicators.

Chapter 2 is dedicated to the Ecological Footprint and is divided in two parts. The first one explains the Ecological Footprint concept and related measurement method, the second one analyzes how a sustainable development Ecological Footprint assessment can be carried out. One of the possible sub-national Ecological Footprint method has been applied to the Italian town of Cirimido.

The first part of Chapter 3 explains how the Social Well-Being Indicator is assessed, while the second part is dedicated to the application of the Social Well-Being Indicator to the geographic area of the United States for the years 1970, 1980, 1990 and 2000.

Chapter 4 presents comparisons that have been made between sustainable development indicator values and methods. The values comparison has been made among Ecological Footprint, Genuine Progress Indicator, Human Development Index and Social Well-Being Indicator, while the method comparison has been accomplished between Genuine Progress Indicator and Social Well-Being accounting method.