EVOLUTION OF THE 'ANALYSIS OF INPUT/OUTPUT IN PHYSICAL UNITS.

Topic: Physical and hybrid input-output tables 2 Author: Pasqua L'Abbate

The lifestyle of the industrialized modern civilization, every day requires the transformation of a huge amount of material. Natural resources are transformed in industrial goods and services, but at the end of the cycle returns to the environment after use in an altered form, as waste and emissions. The society degradation and the physical resource scarcity, have made the society aware of the complexity of natural resources and of social systems, and the circular interdependencies that exist between the systems. The economic system seen as a subset of the environmental system, is studied by applying the balance of matter, by calculating the physical flows of matter and energy. For the calculation of these flows were born a number of tools. This study considered the innovative instrument : the Physical Input - Output Tables (PIOTs). The following work will expose the concepts PIOTs basis of, their history, the differences between MIOTs (monetary Input - Output table) and PIOTs, and make examples of application. Finally we report the strengths and limitations, and perspectives needed to make the PIOT interesting and convenient tool for evaluating environmental and economic policies.