

TERRA2000

The TERRA project is concerned with the creation of scenarios and models of present and future developments in order to support policy debate and decision aimed ultimately at optimising the contribution of Information Society Technologies to Sustainable Development. Such a wide and complex subject area merits rigorous and systematic development. For the purposes of TERRA it is taken as read that attaining Sustainable Development (as defined by e.g. the Brundtland Commission) is both desirable and something to which the Information Society and its associated technologies can contribute. The IS is inevitable, and attaining sustainability necessitates an understanding of the implications of the IS and the tools and tendencies it contains.

The starting point for the whole TERRA topic is thus the 'IST proposition:'

The new technologies of the Information Society (ISTs) seem likely to offer scope to enable economic growth, and to allow a more equitable distribution of wealth, without necessarily increasing consumption, pollution and energy use.

This is a proposition in need of both proof – in that many would deny it – and implementation – in that sustainable development within the inevitable IS requires active and adaptive employment of ISTs. To meet these requirements, TERRA decomposes the IST proposition itself into sub-propositions relating to specific domains – these form the first section of the Story of TERRA. Implementation of these propositions is a task for public policy as well as private action; the second section of the 'Story' therefore develops the progression from historic data (affording hindsight) through models and scenarios (whose main purpose is shedding light on the inner workings of the IS-SD interface, i.e. providing insight) to their contribution to the necessary background for the creation of public policy (which necessitates some complementary foresight). ISTs are not, historically, the first technological leap¹ to produce sudden and marked impacts on society – considerable pre-existing knowledge is available to guide us in conceptualising and articulating the manner in which technologies influence society: the third section of the Story of TERRA surveys the resulting conceptual framework, divided into chronologically and effectively distinct phases with typical accompanying 'rebound' effects. At this stage the potential for individual action² through lifestyle change is introduced into the argument.

¹ The IS also involves indirect effects associated with technologies from the proximate (networking) to the systemic (globalisation). The globalisation of the 1870's-1910's, driven by general -purpose transport and communication technologies - and thus by wider distribution of human brain power - did not produce the same effects (esp. 'hollowing out' of the middle of the income distribution). History teaches us some things but its deepest lesson is that it does not teach us everything.

² Individual action complements policy and business as a sphere of action and as a way of linking sustainability and IS evolution. No domain is sovereign; each must look to the others with hindsight, insight and foresight, and each must take some pro-active responsibility for addressing sustainability. Ultimately, we want policy makers, business leaders and people (as individuals as well as parts of 'civil society') to reflect on this analysis and employ these tools.

Such conceptual frameworks help interpretation of specific data; but these data must exist, be gathered and collated, and ultimately be handled by suitable analysis tools. The fourth section describes these 'windows on the world:' data sources (UN; OECD; World Values Survey etc), the particular TERRA analytical tools (ASA, IFS) and the scenario framework.

The next two sections utilise the principles and data sources defined in previous sections to illustrate the work of the project in developing, respectively, specific policy perspectives relating to human and social development (Section 5) and to environmental and ecological considerations (Section 6), showing the use of scenarios and models to illuminate particular problems. The seventh and final section considers a number of topics highlighted by TERRA relating to an even more uncertain future in which change is discontinuous or radical, or where more work is needed – for instance where data or indicators are missing; where theory is inadequately developed; and/or where policy issues have received insufficient attention.

Appendices discuss key concepts (Concept Sheets) and particular mechanisms (Insight Primers) and map the very large quantity of papers and reports produced in the TERRA project against the brief summary provided in this Story of TERRA. The accompanying CDs contain the whole TERRA resource of data and discussion, as well as the tools required to utilise both empirical data and theoretical knowledge in pursuit of further understanding of the issues surrounding the contribution of ISTs to sustainable development.

The Story of TERRA thus goes well beyond a simple and finite explanation of a limited number of specific problems. Rather, it is a work space containing: a set of tools with an instruction manual; a vast mass of historical data with an interface and tools for exploring past and future; and a sufficient examination of underlying theories to facilitate their use in addressing the real problems facing the world. The examples offered are just that – examples or instantiations of the tools and techniques. The real Story of TERRA is created by you, the user responding to specific issues in the real world. Although intimately concerned with the future, it is not a crystal ball: it should illuminate a likely range of futures but not a single choice: for this reason its final outcomes are described as 'policy briefings'. Uncertainty will always remain in the making of policy, but TERRA's tools should enable at least a realistic assessment of the extent of that uncertainty.

Its editors, who have added introductory, explanatory and linking text, have distilled this document from the very large quantity of work in TERRA to what is essentially a guided tour of the work. Those who find items of specific interest are then directed to the footnotes, reference and catalogue Raisonnée for more detailed discussion.

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