More on MOST:

Proceedings of an Expert Meeting

With a short introduction by Henk J. van Rinsum and Arie de Ruijter

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The National Unesco Commission (NUC) of the Netherlands was founded in 1946 and acts as the substantial link between Unesco and the Netherlands, by stimulating Dutch participation in Unesco programmes and promoting Unesco and its work in the Netherlands.

National Unesco Commission

Visiting address: Kortenaerkade 11, The Hague

P.O. Box 29777
2502 LT The Hague

Phone: (070) 426 02 63
Fax: (070) 426 03 59
E-mail: scunesco@nuffic.nl
Website: http://www.unesco.nl

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MOST Revisited: some reflections

Henk J. van Rinsum and Arie de Ruijter[1]

The UNESCO programme Management of Social Transformations (MOST) started formally in 1994 from the recognition that social sciences are essential in the economic, social, and cultural development of societies. MOST was established as the only inter-governmental social science programme within UNESCO. This has strengthened the role of the social sciences within UNESCO. MOST has enabled UNESCO to support the formation of a number of research networks across the world that addresses problems of multiculturalism, urban processes, and local-global linkages, as well as cross-cutting themes of migration, governance and social exclusion.
The three principal aims of MOST are:

1. Fostering the production of knowledge on social transformations.
2. Enhancing the relevance of social science research and expertise for policy-making and development.
3. Strengthening the scientific, professional and institutional capacities, particularly in developing countries.

Although MOST wants to foster knowledge production, its main emphasis is on establishing and interconnecting international policy networks and renowned researchers. The policy and social research interface comprises the major raison d'être for MOST. Such linkages should be the distinctive feature and the value-added of MOST. This linkage implies a treatment of MOST themes from an interdisciplinary and comparative perspective, using a multilevel methodology. In the context of establishing networks of researchers and policymakers the approach up until now is primarily bottom-up.
Although this bottom up approach has proved to be of value, the negative side effects have become increasingly manifest. The programme broadened without the necessary theoretical deepening. Each of the themes developed its own idiosyncratic route. Therefore, the programme risked breaking up in a configuration of loosely connected projects. This also meant that the policy relevance of the programme was fading away. Consequently, the Midterm Evaluation Report (1999) recommended three key elements for the Programme:

1. A refocusing on its core business and objectives.
2. An emphasis on MOST's central objective of contributing to a more effective use of results from social science research in policy and decision making.
3. A production of authoritative (research based) publications for a wide audience that enhances public understanding of issues within the framework of social transformations.

In view of the criticism that MOST lacks a specific profile resulting in the absence of strategic priorities thereby hampering the constitution of a clear, well defined 'niche',

efforts are made to reinforce the coherence of the programme, enabling it to operate as a well-structured framework generating scientific results and policy guidelines on social transformations.
To enhance the internal consistency of the Programme it was considered necessary to reflect on the key-concepts and themes. At present, the programme comprises a wide array of methodological approaches, conceptual frameworks and theoretical orientations. This multi-paradigmatic context, using encompassing 'sensitising concepts', proved highly productive in the initial phase of the programme, but it is, however, imperative that in a maturing phase key concepts as well as the internal structure of the different domains of themes within the management of social transformations will be clarified and put into operation.

To enable the restructuring of MOST, the Dutch National UNESCO Committee organised an expert meeting in November 2001 in The Hague (for participants see appendix). Next to the members of the International Scientific Steering Committee and the MOST office, some Dutch experts were invited to participate and to formulate suggestions for a further conceptualisation of MOST. The aim of the meeting was first and foremost to reflect on the principal themes that MOST addresses. Is the catch phrase 'Management of Social Transformation' still the most appropriate for the programme, given the lessons learnt from the first phase and in light of recent global developments and what should be its major focus?

Prelude to the expert meeting

MOST was formulated in the early 1990s when social transformation seemed an apt term to denote the prospects felt to spring from the global changes introduced by the fall of the Berlin wall. Now, almost ten years later, the question is whether the concept of social transformation is still useful as central focus of MOST. As long as people have or were organised in different forms of associations of different scales and at different levels, processes of social transformation have taken place. The concept of social transformation, however, has a descriptive but not an explanatory or even prescriptive content. During the expert meeting, it was therefore considered necessary to look at processes of social transformation from different perspectives.
An important issue raised during the meeting was that despite apparent transformations, the world remains to be characterised by unequal distribution of (and access to) resources. These resources can be defined in different ways; we speak about economic, natural, social, cultural resources. Sometimes the term capital in the broad sense of the word is used to indicate these resources.
Discussing this lack of resources takes us inevitably into the field of mechanisms of power by which appropriation and allocation of resources is regulated. Power has many disguises. We see the exercise of physical power, e.g. through the military and police apparatus. However, there is also, and perhaps even more dominantly, symbolic power by which we allocate and locate the identity of the other and thereby his or her access to resources. The intricate ensemble of resources, agents and institutions materialises in structures and processes of power relations, determining processes of social transformation. Presently, one can discern two crosscutting elements through this complex model, viz. glocalisation and multiculturalism.

Glocalisation

(1) We see a growing process of globalisation or transnationalism and an inherent process of localisation. Time and space are increasingly contracted. The world has become smaller and therefore the impact of political or economic action is felt in larger areas. These effects are interpreted and handled in a local setting and context, sometimes provoking fragmentation, disintegration and violent actions. Boundaries of nation-states more and more loose their determining position in the appropriation and allocation of recourses, including cultural resources that people have at their disposal to locate their own position. Transnational processes in the distribution and allocation of resources are more and more important.

Multicultural society

(2) A second element of the contemporary society that partly coincides with the process of globalisation, is the growth of the multicultural (or multi-ethnic) society. Social stratification and differentiation in terms of classes, gender, etc. is inherent to the formation of groups. But nowadays, this stratification finds a particular mould by which former, relatively homogeneous societies, coinciding with the modern nation-state, develop into multi-cultural or multi-ethnic societies.

The concept of the 'multicultural society' threatens to degenerate into a 'buzzword' that needs serious and substantial redefinition. At first glance, the concept 'multicultural' taken in its ideological guise, seems to suggest a society based on a presupposed, almost ideological commitment of all the members of this particular society in order to let this society continue to exist, notwithstanding (or even perhaps because of?) its differences. It looks as if this concept is more and more subject to severe pressure. E.g. in the Netherlands we can see small hairline cracks in our melting pot 'myth'. Some people talk about a multicultural drama; a meltdown of our multicultural society in stead of a melting pot of multi-cultures.

These two trends, globalisation with its inherent local translation, and societies becoming increasingly multicultural, transform the complex and dynamic processes of resource dynamics. This leads to the fundamental question on social transformations: what keeps people and groups of people together? Through this question we enter the domain of sustainability.

Focus on Sustainability

The expert meeting explored the question whether sustainable development should become the core concept of MOST. Unlike social transformation, it was argued, sustainable development has an agenda-setting quality befitting the objectives of MOST. However, as was noted, this would require a definition of sustainability as comprising both environmental and social aspects. The word sustainability has strong connotations with the Brundtland report. In this report sustainability was primarily defined in terms of sustainability of natural resources. During the expert meeting, a plea was made for a broader definition of the concept by asking: what keeps people and groups of people together in a sustainable way?

Sustainability is then connected to social cohesion. Sustainability is dependent on the relationships of man with his natural and social environment. Without viable and stable relations within and between both orders there will be no sustainability. Two conditions are important as far as the relationship between man and fellow man is concerned: viz. institutional co-ordination and trust. To be effective and efficient, institutional frameworks have to meet two conditions. Firstly, there must be mechanisms for co-ordination. After

all, it must be possible to harmonise activities with one another. Nature and degree of co-ordination are connected to the structural characteristics of the society concerned (that is, scale, complexity, openness, dynamics, stratification and suchlike) but also to the cultural characteristics (the often implicit rules, opinions, values, norms and the repertoires of action related to them). In addition to this, trust is also necessary. Trust promotes predictability, the harmonisation of behaviour and the commitment of actors. These are and have always been basic conditions for society. Trust enables the good functioning of the world economy, smoothes organisations' operations and allows for successful co-operation of actors. Trust is of course never given just like that. People know that trust, which has been given, can be violated. Trust must be built up in concrete interactions. Trust presupposes four conditions: (a) good attachment built up in early childhood; (b) stability and reliability in interactions; (c) transparency in social arrangements; as well as (d) experienced justice: power differences must fall within culturally acceptable limits. It is precisely these conditions which are under pressure in the current world because of deep, radical social transformations. However, efficient and effective relationships between social partners are not only dependent on the degree of trust and solidarity which individuals in a social situation bring with them on the basis of earlier socialisation and experiences. In a modern society with flexible connections between people and anonymous client-system relationships, the setting up of institutions should also create trust whereby (rationally acting) egoists are stimulated to co-operate in stable and calculable connections. In short, trust and efficient co-ordination are mutually constitutive.
A central concern for MOST would be to connect social transformation with sustainability. But then we need to elucidate the concept of sustainability. Sustainability is not 'absolute'. Two factors seem to be dominant in weighing or measuring sustainability:

1. The way societies at different levels are able to regulate scarcity of resources or capital and the resulting pattern of inequality with its inherent tensions.

2. The extent to which a society is able to define at different levels a common denominator of some sort of common identity. Paradoxically, such an identity can be found in accepting and articulating differences within its society.

While the need may be obvious for such a comprehensive agenda for sustainability, it is also dishearteningly clear that despite decades of sustainable development policies the world seems to have moved further away from its realisation. One could argue that in present times a global process of a deepening divide in terms of the distribution of resources, accompanied by a deeply felt absence of a common identity, can be discerned. Processes of social transformation resulting from this divide show an increasingly violent pattern. States of emergency and disasters are the order of the day. A deeply felt insecurity seems to have become a central feature of our times. In this respect '9/11' did not change the world, it opened our eyes to this world of difference and inequality.
The objectives of MOST to generate knowledge, make it accessible to different stakeholders of processes of social transformations and bridge the worlds of social science and policy thus continue to be more relevant than ever. However, these observations also invite MOST to reconsider its policy relevance. Besides providing a bridge between the worlds of science and policy, an additional significance of MOST may be to foster research and discussion of the question of what constitutes policy relevance while complex social transformation shows changing perspectives, changing actors and changing theatres? This means that MOST would encourage questioning the relationship between knowledge and

policy, and provide windows for studying policy processes in a globalised, multicultural world. Whose policy are we talking about? What is the relation between policy formulation and implementation? How do power processes interfere in translating knowledge into sustainable action? To what extent and how can sustainable transformations be governed?

Contributions to the MOST-expert meeting

In the expert meeting of November 2001 of UNESCO-MOST various elements of the processes of social transformation were discussed in the contributions.

Ali Kazancigil pictures the broad policy lines along which the MOST-programme developed until now. He ends with some recommendations for the future of the programme.

In his contribution, *Yoginder K. Alagh* concentrates on the issue of water. Water is certainly going to be one of the most important, but at the same time one of the most disputed, topics in the near future. Water will be a dominant, if not the most dominant, issue on the global agenda of inequality in the coming decennia. 'Water' is the focal issue of scarcity and power.

Nikolai Genov outlines various elements of the process of social transformation in a part of the world, Eastern Europe that is rapidly integrating into the Western world-system. This process of integration, with its accompanying features of disintegration, gives Genov clues to further conceptualisation of social transformation.

Hans Siebers elaborates on the possibilities by which acceptance and co-ordination of cultural difference, in stead of looking for integration, can regulate in a meaningful manner the pressures in a multicultural society. The discussion following the presentation of his paper focused on the question: to what extent can any society endure a certain level of inequality? This is a paramount research question, suitable for comparative research in different parts of the world.

Juliette Koning gives an interesting kick-off for an actual operationalisation of the concept of social sustainability in the so-called TELOS-project. Her paper raises the relevant question whether social sustainability can be measured and reduced to figures.

More on MO(ving for)S(ustainable)T(ransformation)

The expert meeting concluded that a broader definition of social sustainability could act as an encompassing theme to interpret processes of social transformation, coloured by the effects of globalisation and multiculturalisation. At the same time, one must realise that the concept of social sustainability can be interpreted in terms of 'lost opportunities'. Conceptualising is one thing, implementing another. This brings us back to the global theatre of power. An analysis of changing configurations of power relations will give us a better view on the potentials of the concept of social sustainability.

In the coming years, a **MO**(ving for) **S**(ustainable) **T**(ransformation)-programme could focus on this theme. **MOST (URGENT ACTION) IS NEEDED.**

Note

[1] We thank Thea Hilhorst for her stimulating comments.

Management of social transformations (MOST) programme: problems and prospects

By Ali Kazancigil (Executive Secretary, MOST)

The Final External Evaluation of MOST, covering the 1994-2001 period started in January 2002, with an initial meeting between the team of evaluators and the MOST Secretariat in Paris. The exercise will be completed in July 2002. A mid-term evaluation has been conducted at the end of 1998, covering the first four years of MOST.

The phase II of MOST is to cover another 8 years, from 2002 to 2009. The shape MOST is to take will be decided, on the basis of the evaluation, by the Steering Bodies of MOST and the Governing Bodies of UNESCO, in 2002-03. Because we have to adjust to the institutional schedule of UNESCO, the first two years (2002-03) of MOST-II work will be continued in the same areas as MOST-I. However, with the guidance of the Scientific Steering Committee, we may change some of our operational strategies.

Important as it is, the thematic question is not the whole story. The conceptual and theoretical framework in which the programme can be developed coherently and effectively and the operational strategies are also crucial.

Below, after giving the historical background, I shall describe the development of MOST, its strong points and shortcomings, to terminate with prospects for phase II, having at this stage more problems and questions to raise than solutions and answers to offer.

The Institutional Background

At UNESCO, international, intergovernmental natural sciences programmes, in ecology (MAB), hydrology (IHP), geology (IGCP) and oceanography (IOC), have been successfully developed since the 1960s. As regards UNESCO's social science programmes, after an initial dynamic quarter of a century, from 1946 to early 1970s, a period of decline set in from 1975 onwards, which lasted, with ups and downs, until 1990, with a loss of professional identity and programmatic focus. While the activities relating to the institutional development of the social sciences, particularly in developing countries, kept a certain coherence, thematic programmes were less and less defined, and their objects constructed from perspectives other than social science approaches. Drastic budget cuts in 1984-85 (over 30%) as a result of the USA and UK withdrawals made things even more difficult.

By 1986, the Executive Board of UNESCO, alarmed by the decay of the Social and Human Sciences programmes, adopted several decisions calling for their strengthening.

One outcome of such concerns was to be the so-called In-depth Study of the Executive Board on "The role of the social and human sciences in UNESCO" (131 EX/SP/RAP. 1, 11 April 1989), of which I happened to be the co-ordinator and, ultimately, the author, with inputs from the late Prof. Veronica Stolte-Heiskanen. Amongst its many proposals for

a renewal and re-dynamization of the Social and Human Sciences (SHS) in UNESCO, one that was highlighted concerned the establishment of an Intergovernmental Social Science Programme. This idea was inspired by the experience of the above-quoted environmental programmes and also a precedent: at the 1978 General Conference, the Canadian Delegation proposed such programmes, in the Human Rights and the International Development of the Social Sciences. In the context of the cold war, the initiative was rejected.

The European Social Science Conference, organized in June 1991, in Santander (Spain) by the UNESCO National Commissions of Western and Eastern Europe, provided the occasion to publicly launch the proposal and get support. Subsequently, Switzerland introduced a Resolution at the 1991 General Conference, asking for a Feasibility Study towards an International Social Science Programme. This study was conducted in 1992, approved by the Executive Board in its Spring 1993 session, and the statutes of the Programme adopted by the General Conference in November 1993. MOST formally started in March 1994, with its first Intergovernmental Council, followed by the first session of the Scientific Steering Committee, in December 1994.

The institutional structure of MOST comprises the Intergovernmental Council (IGC), made up of 35 Member States elected by the General Conference; the Scientific Steering Committee (SSC), consisting of 9 scholars (the President of the IGC being the 10th, ex-officio, member); MOST National Liaison Committees (approximately 60); and the Secretariat at UNESCO.

Development of MOST-I (1994-2001)

MOST was introduced as an innovation and a learning process. Its programmes, strategies, *modus operandi*, had to be designed, implemented and tested through a trial and error process.

Its institutional objectives have been designed taking into account the context (a UN Specialized Agency with a mandate in the social sciences), certain needs and shortcomings of the social sciences and the necessity to find a "niche", a value-added, by positioning MOST in complementarity with what is being done elsewhere, especially in the Academy. Thus, its goals are:

1. Fostering international, interdisciplinary, comparative research, to generate new knowledge, that is also policy relevant;
2. Promoting a better use of the social sciences by decision-makers and enhancing research-policy linkages;
3. Capacity-building in the areas of the programme, especially in developing regions.

The rationale for Objective 1 is that social sciences are still too much nationally oriented; for Objective 2, that beyond short-term expertise, social scientists are seldom interested and/or successful in transfering knowledge to users; for Objective 3, that until the gap between the North and the South, as well as West and East, is narrowed and the scientific production of the latter is also diffused properly, the social sciences cannot claim to be relevant and universal.

The view of the MOST community was, and still is, that beyond the thematic focus, these three institutional goals constitute the real value-added of MOST.

The generic theme of Social Transformations was selected at the feasibility stage in 1992/93, as it corresponds to the considerable changes which are observed since the end of "the short 20th century" around 1989-1991, i.e. the fall of the Iron Curtain and the end of the USSR. It also makes an easy to remember acronym. The sub-themes of multicultural societies, urban development and local-global linkages do not seem, in retrospect, irrelevant.

The *modus operandi* for the initial phase of MOST can be characterized as follows: a bottom-up strategy, consisting in world-wide diffusion of information to sollicit project proposals, from multinational research networks, designed to be internationally oriented, multidisciplinary, comparative and policy-relevant, to be evaluated and accepted/rejected by the Scientific Steering Committee. Some 18 such large network projects (some 15% of all received) have been included in MOST between 1994 and 1998.

MOST was able to provide seed money, and the rest of the funding had to be raised from other sources (the regular budget of MOST for 2002-03 is about US$ 2.300.000). The advantage of this bottom-up approach was to allow research priorities and the more dynamic research networks to manifest themselves. It also helped MOST to broaden its scope and reputation. The reverse side is the fact that this approach weakens the thematic coherence of the Programme.

Also, due to the availability of stronger institutions, infrastructures and resources, more networks from the North are part of MOST, whereas one of our goals was to strengthen the capacities of the developing countries.

Another factor loosening the focus of MOST is the UN context and the pressure to take on board new themes, such as poverty, governance and sustainability, on top of the three initial ones.

A further pressure is to be "concrete", i.e. develop development oriented operational projects, using the expertise gained by the Programme.

All these additional requirements are no doubt legitimate. But they risk increasing the burden of the Programme beyond what is manageable, spreading thinly its limited human and budgetary resources.

The goals other than research, i.e. fostering research-policy linkages and capacity building, also suffered from these strains.

As regards the research-policy linkages, two approaches are implemented: one is to document the existing practices, through the "Knowledge Use" project, consisting of comparative case studies in some 40 countries. The other is to relate the results of the research networks to policy-makers. The networks have been encouraged to include "users" such as decision-makers or NGOs. In the last year of each project the focus is placed on this issue. In certain cases, the outcome was institutional arrangements. For example, in the project on Drugs Trafficking as globalized processes, UNESCO Chairs are being created in Mexico, China and India to do extension work. In Australia, the APMRN Project led to the establishment of CAPSTRANS – Centre for the Asia-Pacific on the Study of Social Transformations. In the "Risks of Social Transformations in Central Europe" project, the

Government of Bulgaria and at least one municipality used the results of the project. One of the favourable developments has been the interdisciplinary work between MOST and the 4 environmental science programmes of UNESCO, around issues relating to sustainable development.

In capacity building, the MOST Phd Award was created, and a MOST/ISSC summer school was established.

But on both accounts we should be able to do more and better.

Prospects for MOST-II

The questions below take as an assumption that the three institutional goals – international interdisciplinary research; research policy linkages; and capacity-building – will be kept.

They mainly concern the substantive, theoretical and operational issues.

1. On the substantive and theoretical side:

   - How can we identify and conceptualize the phenomena, which constitute the core of social transformations? Is this a matter of producing lists of problem areas for research, or a matter situated in the up-stream of specific research areas? If so, it would concern certain paradigms, and conceptual frameworks such as sustainability and sustainable development, social cohesion or democratic regulation, through which MOST is to approach social transformations and define specific issues for its activities.
     This has been a continuous concern and subject of debates in MOST, which were not conclusive so far. In the MOST IGC, the 35 Member States have divergent ideas concerning the areas in which MOST is to work. Hence, long lists of themes are produced and fragmentation, lack of focus, set in. Is it reasonable to think in terms of one such broad, unifying conceptual frameworks for MOST?
   - Should the themes be approached through the conceptual framework adopted, so that they are defined in a way to establish synergies and cross-fertilization between them and to work towards joint outcomes? Can we even contemplate abandoning the system of having three broad standing themes, in addition to the generic one (social transformations)? The alternative could be a series of research issues relating to social transformations, the coherence being provided by the conceptual framework chosen (as well as, of course, the over-arching institutional goals of policy-relevance and of linking research to policy-making).

2. On institutional/operational issues:

   - A major UNESCO mission is to connect reflection and action, research and policy-making. Thus, the question of how to operationalize the conceptual options is of central importance.

The sequence in designing a MOST project would be as follows:

1. Given the institutional goals of international research, linking research to policy, and capacity building;
2. establish the conceptual framework;
3. establish the operational framework, translate (2) into activities with appropriate methodologies, *modus operandi*, time-frames, partners, and expected results/impact, in terms of the three institutional goals.

To implement research projects, MOST has opted for large multinational networks, through a bottom-up process. Subjects (2) and (3) where defined by the networks themselves; only subject (1) was defined by MOST.

Should we continue this? Or should MOST be more directive and top down? Indeed, if the broad conceptual framework, and research issues, as well as the expected results, are defined centrally, then the research team has less autonomy. On the one hand, given the institutional context of UNESCO, there is a necessity to deliver knowledge-based and significant synthetic material, on broad issues, making sense to "user" groups, which are our constituencies, rather than analytical research results, on more narrowly defined subjects, addressed to peer groups.

Given these requirements, what should be our operational frameworks in the next phase of MOST?

2. How to make progress on research-policy linkages?

   The obstacles are well known and documented in a considerable literature. Solutions proposed are also well-known: they are limited and mostly ineffective. Shall MOST look into certain issues, which are related to the professional culture and inner organization of the social sciences, that determine some of the obstacles to smoother relations between the two cultures?

3. Capacity building:

   The North-South and West-East imbalances in terms of infrastructures and resources, and the linguistic problem (i.e. the poor diffusion of social science production in languages other than English and a limited number of other European languages), are fundamental problems for the SHS. Since the latter are at once contextual and universal, these problems are simply crippling for them everywhere, including in the economically and scientifically more developed countries. How can MOST be more effective in this respect?

Water security: an interdisciplinary research and policy agenda

By Yoginder K. Alagh

Introduction

This paper begins with definitional categories. Water availability and demand categories are fairly straightforward and are in fact becoming widespread after the global water agenda setting meetings like the UN Millennium Summit where the UN Secretary General raised water as a major global concern, the recurring water stress occasions and the requirements of international negotiations on environmental issues. The definitions of water availability with other resource categories like land, climate and soil, is less clear, although some pointers are there in UNESCO/FAO's agro-economic zoning work. Similarly, definitions of hunger and poverty are clear, although their relation with behaviour patterns and demand is not and without this, analysis of water and food requirements, again leading to implied water demands, becomes difficult. The definitional problems arising when water is addressed as a "basic need" is also important. This paper addresses these concerns, reviewing existing studies and identifying knowledge gaps to be filled for improved understanding and policy formulation. Its main argument is that the social aspects of water problems are not an add-on to the techno-economic analysis of water projects and programmes, but are central to an understanding of the design of solutions. The paper shows through analytical categories that design of solutions is not possible without constructing the framework in social and techno-economic categories.

Definitional categories are the "primitives" required for systemic understanding. Holistic studies on water are few in relation to requirements. On the supply side water can be examined in an agro-economic context. Soil, climate and water are literally "physically" enmeshed. The hill slope, the river valley, the arid and semi-arid regions and the coastal areas are the categories to examine here. The UNESCO/FAO Agro-Economic Zoning atlas is a global attempt in this context. Geographic information systems are a great help and yet there are no unique ways of portraying interpenetrating categories of information. At a physical level the problem is that of portraying water as a part of the region. But on a deeper plane, the conceptual aspects of defining distance and aggregation for portraying water as a stock and a flow, are profoundly related both with the understanding of systems and of the need of man made institutions, which may not easily relate to a physical phenomenon. This leads to interesting research agendas, for improved sustainable hydrological models in the future. Water studies also have some special features like the sharp distinction between stocks and flow and the multi-layered model for surface-ground study.

The question of the demand for water seen as a system is equally interesting. The normative approach to measuring water requirements is still popular, for example the WHO norms of water need as x lpd. Liberalisation and more important the diversity of institutional responses to meeting water demands is leading to more complex data and analytical requirements. Market data for water is not very plentiful, particularly for developing countries where the policy reform aspects are urgent. Given the nature of complex solu-

tions being discussed like various combinations of public-private organizations, price responses separately by region and income and social class will be required. These may need estimates of complete demand systems that economists work with. Policy modelling of commodities which require both market and non-market interventions is again an obvious area of work in this field. The existing studies reviewed for this paper show that systems models give counterintuitive results on worked out impacts of government interventions in dual price models. An interesting aspect of recent studies is the sensitivity of economy level agricultural water demands to diversification of food baskets and agricultural trade impacts. The existing studies give pointers, which need much further exploration.

The studies we review are often of a macro nature, but may also concern sub-regional or micro experience cases. The latter are now presenting tantalizing possibilities of institutions which work and equally important, those that do not work. Apart from organizational characteristics, there are questions of deriving rules on developing incentive systems to encourage faster replicability and equally important disincentive systems for punishing perverse behaviour. The existing knowledge base only permits preliminary formulations, which in turn can be used to set a research agenda. These are the issues requiring high priority, both at the national and global levels.

The concerns of this paper are on research relating to outcomes. Water demands of agriculture constitute a major issue. The impact of demand diversification and trade on water demand will work through the input requirements of the preferred output sets. Scarcity of water and land are inexorably linked together. The necessary tool boxes and early warning signals are a matter of research. So are technologies of soil and water management and water conveyance. A more recent phenomenon is the possibilities of water saving crops and conveyance technologies. The overarching issues are designs of organisations with combinations of the power of decentralised markets, meshed with community initiatives. The role of pricing systems and financing models of a sustainable kind are yet to be operationalised. It is easier to buy a tax free bond of a large municipality, rather than a water supply agency in rural areas. The whole literature on farmers and community organisations is strong on prescription, but weak on analytical models and operational detail.

Issues of the kind detailed in the last paragraph also have counterparts in rural drinking water schemes. These issues are also related with rural health, employment and gender equity concerns. The meta relationship of such issues with sustainability concerns is known. Specifics are few. As a research approach, the technology, the operation and working of best practices has to be deconstructed, to develop operational models, with sustainability built in, rather than added as an afterthought.

There has during the last decade been great concern on the efficient working of water institutions and reform processes related with these concerns. More recently the issue of development is also being raised. Given water scarcities, conflicts on scarce resources and rising demands, development issues relating to water use including inter basin transfers are gaining attention. The question of optimal policies towards water projects is coming to the fore again. The Mekong, the California Water Development Master Plans and water sharing in the Iberian peninsula are examples. Given the primacy of water rights, storage designs are now smaller while concern for riparian rights is much higher. There is also much greater recognition of the rights of project affected persons and rehabilitation. Sensitivity to cultural roots is also emerging although the literature is still of an economistic

variety. The economic issues that arise with interbasin transfer of water projects are just emerging, as also techno-economic models which integrate modern water conveyance technologies with agriculture and rural conditions in densely populated countries. The Mekong Agreement was also another approach to conflict resolution with a three tier structure built in for problem solution. At the highest level a political machinery, at the second level a bureaucratic structure and at the third level an expert system, provided new approaches, as compared to earlier more partial systems. There is need for work on such developments and their implications for project design and impacts on energy and food requirements of poor populations.

Technology of water assessment, water storage, conveyance, recycling and water use is going through major development. Institutions which integrate these developments with ongoing practice are a concern. Assessments of water as a resource tend to be sketchy and controversial. There has been development of scientific criteria to narrow differences, but these are not widely used. In most problem solving situations, technologies as a range of possibilities are there. Institutions to use them are not. Biotechnology, the new materials, computer aided system design, have all been discussed and policies need a focus in terms of research designs.

Finally we also discuss questions of designs of research systems which address the identified questions and are flexible and responsive to need. We also address the question of priorities and effectiveness. Transparency, openness and sensitivity to "best practice" have been suggested as criteria, but research excellence is an elitist business and universities and centers of research excellence are generally conservative bodies. MOST finds these difficult issues to resolve.

Definitions and Methodology

Water Scarcity has received considerable policy attention in recent years. The standard definition has been in terms of annual per capita availability of fresh water. The global average per capita availability of fresh water is currently placed at 7000 cubic meters per person (cumet/percaput) and is estimated to decline to 5100 cumet/percaput by 2025. This number is estimated with the prerevised UN population projections and has to be revised upwards with the revised population projections which are lower (UNU, 2000). There is some evidence from micro studies to suggest that recharge figures for groundwater may have to be revised upwards, if basin level planning is done and if interbasin transfer of water is planned. For example for India, a recent detailed official study by a Blue Ribbon Commission originally set up by the present author as Planning Minister has suggested that recharge figures could be higher by around 8%, as compared to earlier national estimates, which have been used in the global projections (See Government of India, 1999 and S.R. Hashim, 1999: we will return to this result with the results of recent multi aquifier models which give different estimates of recharge, as compared to conventional figures.)

In 1994, the annual per capita fresh water resource was 6918 cumet/percaput for the World, but it was only 3680 cumet/percaput in Asia, 5133 cumet/percaput in Africa, 28702 cumet/percaput in South America and 17458 cumet/percaput in North America. Within region, within country variation was also large (WRI, 1998).

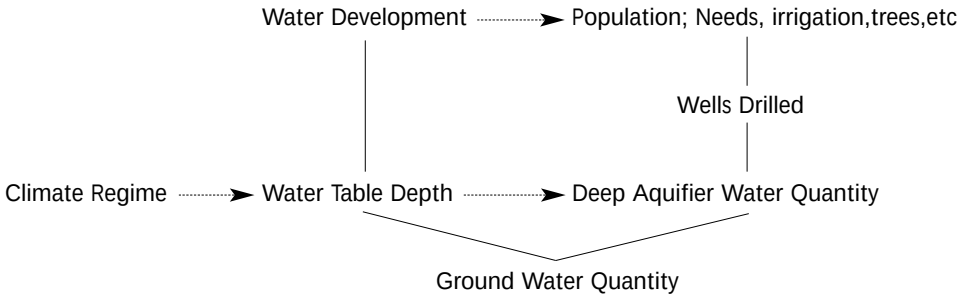
Concepts of water stress and water scarcity have been developed based on an index of per

capita fresh water needs (Malin Falkenmark, 1991). They are of an average ready reckoner kind, with the considerable advantage of near global applicability. While not strictly so, water can be treated as a renewable resource. Fresh water supply can be determined in an agro-climatic regime in a defined time period. For a political entity like a country or smaller administrative boundaries, a rough water availability indicator can be estimated by dividing the renewable water supply in a time period by the population of the country or region, in the same time period. The available renewable water supply includes (a) internally produced surface water, (b) internally produced ground water and (c) river flows from the adjoining countries of the region. The Falkenmark Index is based on a yearly time period and consists of 1000 persons per 1 million cumet or one flow unit. 1000 cumet/percaput annual therefore becomes the dividing line for **water scarcity** (Falkenmark, et.al., 1989). This norm has been used in the global discussion. Countries in the range 1000-1700 cumet/per caput annual, are classified in a **water stress** category. Below 1000 cumet/per caput annual, the water stress index is that of **extreme scarcity**.

These indicators are admittedly of a rough kind. Water flows do not follow administrative or political boundaries. Aquifiers are confined by geo-physical and not political and administrative features. Climate also determines the demand for water, including evaporative demand. Seasonal rainfall cycles can be very different across countries. For structural understanding and policy analysis, general indices have to be used with care.

Water availability, in fact is now also estimated as a part of structural analysis and advanced project level design for both aquifier management and drainage and conjunctive use projects, with a reasonable degree of accuracy. For example, the Mike She Model of the Australian Murray Darling Basin Plan models is used by the New South Wales Department of Land and Water Conservation. While it is used for integrated catchment modelling, for the basin, its main features "are that it can represent all major flow features in an area and is well suited to describe the dynamic interaction between the surface and subsurface water systems." (Peter Millington, 1996). The flow chart of a simple multi level model can be as follows:

Figure 1.



Source: Nicholas Sonntag (1996)

A more detailed version available, which gives detailed additional resources of water made available by a more precise basin level assessment has been reported in a set of stud-

ies compiled by William Fisher (1995). The Mahi Narmada Doab, a model developed by Alagh and Buch, gives initial heads in 1980, calibrated heads for 1990 and forecasts for 2000 under alternative use assumptions. The model shows sensitivity of outcomes to trees planted, surface irrigation and pumps drilled (Fisher, Columbia Seminar Series, 1995, pp. 291-318).

Recent interesting work includes sensitivity of estimated resource flows of water available with integration of surface flows with local small storage projects. Alagh (2000, World Water Council Plenary Speech) has reported an augmentation to the extent of 14 % of estimated water availability as follows:

Tank Storage in Shedhi System

Year	No. of Tanks Deepened (progressive)	New Capacity Creation MCM	Range of Deepening (m)
Season 1993/94	150	3.5 (6.0 to 9.9)	1 to 6
By June 1994	254	6.0 (7.9 to 13.9)	0.25 to 9.3

14 % additional water cannot be considered trivial in a water short context. It is interesting that the Shedhi Branch of the Mahi system was planned on the basis that there are no tanks in the system.

The point of these micro studies and approaches to assessment of available water resources is to emphasize that the quantities themselves are sensitive to detailed resource inventorying as compared to initial assessments based on empirical formulas, projections of a preliminary kind and in some cases 'guesswork'. This kind of limitation is being addressed, for example by international programmes, etc. But there is a more basic problem. There is a synergy in water as a resource emerging from complimentary and sustainable use with more holistic approaches and this can only be captured with more integrated methods of measurement. An example is the simultaneous use of tanks and surface conveyance strategies. More precise assessments can in many cases make the difference between scarcity and conflict, on the one hand, and possibilities of a judicious management strategy on the other.

The FAO, for example, moved over from irrigation as an input in the agricultural sector to a perception of the synergistic role of water in the process of agricultural growth as early as the late Seventies of the last century. Thus the following statement illustrates: "The pervasiveness of such influences is suggested by a comparison of targets for 1975 proposed in the 1969 FAO Indicative World Plan for Agricultural Development (IWP) with actual experience up to 1976. While actual production growth in most developing regions was below proposed growth rates, most identified inputs […] actually exceeded growth rates proposed for them." (FAO, AT 2000). For example in the period mentioned above, the targeted growth rate for agriculture in the Asia and Far East Region was 3.7% per annum, but the achieved rate was 2.6%. However, arable land grew at 0.6% annual, twice the target rate and irrigated land at 2.2% while the target was 1.8%. Since then the policy and

planning exercises have been in terms of more holistic approaches of simultaneous development of land and water. Thus the planning methodologies of AT 2000 considered the development sequence of moving land from a soil and water regime to an alternate one. There were in the numerical models five land and water classes. Moving from bad soils with low and variable water availability to good irrigated lands. This was a more synergistic view (developed from FAO's vast field experiences) of water development preparing agro climatic regimes to adopt specific (appropriate?) cropping and farming systems. AT 2010 carried this process to a logical conclusion of sustainable development of land and water resources providing the basis of farming systems (See Alexandratos, 1995).

The argument here is that conceptually, the measurement of water availability has to be in the context of a physical system and therefore is in the ecological domain. This would be a strong argument for integrating such work with the long tradition of FAO's cooperative work with UNESCO on agro-economic zoning. For example, the soil and land categories worked with here are the following :

1. Dry Semi Arid
2. Moist Semi Arid
3. Sub-Humid
4. Humid
5. Marginal in 2,3,4.
6. Fluvisols/Gleysols
7. Marginal Fluvisols/Gleysols
8. Irrigated Desert

(FAO, 1978/81, 1982, and more recently: FAO, 1993, Ch. 2, 4, Table A5.)

FAO's global work of this kind is interesting and given modern imagery, even useful for preliminary classificatory kind of exercises. Yet, it is much too "global" for direct or even conceptual use.

The categories behind agro-economic zoning, of soil or land type, water and climate are very important. Climate here refers to weather i.e. temperature and rainfall (both levels and variation). Water is both surface and ground. These concepts have been described well by geographers and a classic description is by the Russian academician Dr. Galina Sadasyuk (See Alagh, 1991 for a detailed discussion). G. Sadasyuk and P. Sengupta, (1968) for example, divided India into 18 agro-climatic zones and 44 sub-regions (See Alagh, 1988 and Planning Commission, 1989). Similar exercizes have been developed in other large countries, for example, Brazil, Indonesia and even France (See Ignacy Sachs, 1991; Lutfi Nasution, 1993).

It is at the agro-climatic subzonal level that resource availability of water can be given teeth to. This is not to say that the existing estimates of a more global kind are of no use. In many cases they are all we have, but the quest for improvement is not only that of conceptual and numerical precision, but that of an improved understanding of the processes through which renewable supplies of water are generated and without that, numbers of x cumet/percaput will remain not only an abstraction, but also subject to a degree of avoidable variability. A parallel in Economics was that the measurement work of Wassily Leontief and Richard Stone was closely intertwined with the conceptual development of modern macroeconomics.

There is an element of circularity in the reasoning of using water to define agro-climate and agro-climate to measure water. It is unavoidable in a simultaneously functioning system. In a circular chain of causation it does not matter where you begin. But there is a more difficult problem, which is that given physical facts, there are probably no unique ways of determining physical systems for estimating water flows per unit time. This will involve some conceptual work on how close is "close" in agro climatic space. What is the degree of aridity or lushness which distinguishes one space from another. Statistically satisfying procedures do not give spatially coherent categories and this is an area for more work. (See W. Isaard, 1956, Ch.8 and W. Fisher, 1969.)

The argument is therefore that of a new research effort at integrating water resource assessment work with agro-climatic regional categories and that of improving the precision of the estimates and setting the base for more work on the features which augment the availability of fresh water in a renewable manner. The plea here is for a fairly large research effort, which corresponding to agro-climatic concepts defined in a regional context, simultaneously models water availability. Surface-groundwater interaction models are by now common. It is being suggested that such modelling should be attempted more systematically, not in response to project formulation work, but with instruments of a water conserving or water augmentation nature built in. In a three to five year framework, it should be possible to generate knowledge, from which generalisation could begin. It is extremely likely that assessments of water as a resource will gain another dimension.

On the demand side, techniques of estimating water demand for industry and agriculture are well known and are integrated with market and supply data. There is much less clarity on water requirements for personal consumption. Domestic use of fresh water is relatively small and yet critical from welfare angles and is often counted as a basic need. According to WRI, agriculture accounts for 69% of fresh water withdrawals on a global plane, industry 23% and domestic use 8% (WRI,1998). There are regional variations with industry the largest user in developed countries. In 1995 according to Shiklomanov domestic use accounted for 350 cubic kilometres of fresh water (Shiklomanov, 2000). In Africa, per capita withdrawals for personal use were only 47 litres per day. This figure was 85 for Asia, 334 for U.K., and 578 for U.S. Peter Gleick has placed a range of 20 to 40 litres per day as a minimum need for drinking and sanitation. Including bathing and cooking, this figure varies from 27 to 200. Gleick proposes an international standard of "an overall basic requirement of 50 litres per person per day" as a basic need for drinking, bathing, sanitation and cooking. According to him, in 1990, 1 billion people in 55 countries did not meet this standard. Malin Falkenmark suggests a standard of 100 litres per day for personal use in developing countries. However, there is little unanimity in these estimates. It has been shown that the minimum water requirement for basic needs ranges from 400 to 2000 cumet/percaput annual according to different experts (Rosegrant and Ringler, 1998). This is obviously an area for further work.

In recent policy discussions, a demand driven approach for water planning and policies has been suggested. The point has been well made that in service provision, centralised and bureaucratic methods and procedures fail. At the same time the basic need approach has great votaries for drinking water as seen above. Most sensible policy studies see the need for a "dual" approach. Drinking water for poor populations is seen as a minimum need, within the framework of market driven systems. Votaries of market driven systems also see the need for "transitional strategies" (See for example, World Bank, Allied, 1999,

p. 45). But more astute observers have been seeing the practical difficulties of transitional strategies. World Bank Consultant, R.R. Iyer. A former Water Resources Secretary, saw water literally leaking in a transitional strategy (Water Roundtable, World Bank, May 2000, Delhi).

A way out may be a strategy which models a simultaneously functioning market for water and a rationing system. The real issue would be the design of an operator – a contractor working under public supervision or a community body working in a transparent system – for such a system and this needs careful thinking out and would vary around local conditions. A parallel to this would be a dual demand system, which has both prices and quantitative allocations built in and can also work with income distribution categories. Such systems have been built earlier, in transitional strategies for public distribution systems and can be adapted to water markets. For example, Alagh and Khattab designed such a system for food security system reform in Egypt as a FAO-UNDP project (Alagh and Khattab, 1994). The details of an earlier model developed for India consisted of a Linear Expenditure System for 13 groups of commodities. LES was specified as a complete demand system for the 13 commodities and was given by:

1. yi = piqi = aipi + bi (y – aipi)
2. where yi = per capita consumption of commodity I; y = per capita private consumption; pi = price of commodity I
3. y^ = [< piQi
4. [< bi = 1

The parameters ai and bi were estimated separately for urban and rural areas from time series of cross section data, separately for rural and urban areas. More important they were estimated for the rich and the poor separately (Alagh, 1979). Price elasticities can be estimated separately for each income class for each commodity. It has been shown in a model of this kind that with a part ration and rest open market economy, a supply price the economy can afford can be worked out, which if it does not clear the market, would require the open market quantity share to increase or a subsidy to the supplier to cover the long range marginal cost of supply (See Alagh, 1991). These kind of models have been used extensively in dual market pricing in food security systems and can be adapted for water markets.

The kind of price elasticities which are estimated with these class of models is as follows:

Price Elasticities for Selected Items

	Rural		Urban	
	Poor	Non Poor	Poor	Non Poor
Cereals	_0.73	_0.30	_0.66	_0.04
Pulses (Lentils)	_0.83	_0.44	_0.87	_0.19
Edible Oil	_0.63	_0.63	_0.91	_0.31

Source: Alagh et.al., 1979 and 1984 in E. Thorbecke, ed. Modelling of Socio Economic Processes

It has been shown that with demand depending on income and prices and a long range marginal cost supply curve, if the demand for poor persons is to be met from quantitative allocation policies, in a general equilibrium model, with elasticities of the kind given above specified, quantities demanded by the non-poor can be worked out. A demand supply equilibrium relation can then work out the supply price which can be met with or without a subsidy. If the subsidy is limited on account of fiscal conditions, the quantity of water for the poor will have to be set below the normative level (See Alagh and Khattab, 1994, for the working of such models in non water "essential consumption" commodities). It is obvious that these kinds of models for the water sector can play an important support role for any transitional strategy moving away from allocation to market dominated principles.

Water demand is sensitive to income growth. Household demand is probably inelastic to price changes, but would depend on variables like income and urbanisation. Derived demand from the agricultural and industrial sectors will be determined both by growth of the economy and relative prices. Agricultural demand both increases in quantum as growth increases and the structure diversifies. With a growth rate of around 4% in per-capita terms it has been shown in India, for example, that domestic agricultural demand accelerates and diversifies, with grains growing at around 3.5%, non-grains like edible oil, sugar and cotton growing at around 5% and noncrop agriculture like milk, eggs and forestry products at &% plus, annual (Alagh, 1990). Similar results are obtained from FAO's commodity demand projections (see for example, A.T. 2010 in Alexandratos, 1995). The relationship of these kind of demand changes with water demand are only now beginning to be modelled. In large developing countries they lead to quantum breaks in past trends. It has been estimated that the increases in cropping intensity in India in the next decade and a half will exceed that in the last three decades, if demands have to be met (Alagh, 2000). This would depend essentially on larger and improved water supply systems. Alternately technology of water conveyance and crop water requirements will have to improve in a dramatic manner (National Commission for Integrated Water Resources Development, 2000, Table 10.1). These kind of perspective exercises have also been done in the Global Water Partnership exercises, but are of a preliminary nature (See William J. Cosgrove and Frank R. Rijsberman, 2000) and need considerable detailing.

As regards demand for water the focus has to change from an exclusive emphasis on normative studies to a much greater focus on study of behavioural parameters and the expected changes in demand arising as market phenomenon get greater attention. However policy will also be concerned with both the basic needs of water of poor people and the need of informed directions of water systems as markets play a larger role. The role of hybrid systems which can illuminate transitional paths will be particularly rewarding. There is a tradition of such work in policy reform strategies of food security systems, particularly, those that phase out non-merit subsidies and these should be integrated with work on the water sector. As noted earlier there is little unanimity in normative standards on water demand and this needs reconciliation.

Institutions: Structure and Incentives

There is at present a near consensus on the nature of institutions that work in the water sector which revolves around three rules. These are privatisation, decentralisation and the role of the market. An example of this kind of a policy package is the very detailed work done by the World Bank on water referred to earlier, as also for example a recent large

study on Asian agriculture by the ADB (See, Asian Development Bank, 2000). There is much to be said for these approaches. Agriculture is an atomistic sector, the farmer responds to economic incentives and direct intervention by large government agencies in the agricultural sector on the input or output side is in many cases counterproductive. In Asia the powerful work of Hayaami for example has shown the vitality of peasant markets (See for example, Y. Hayaami, 1981). Continuous processes of agricultural growth reduce unemployment and poverty. In good soil and water conditions as defined in the agro climatic work referred to earlier, if market infrastructure is available, the competitive model works. The State can play a role in technology generation and infrastructure creation and in the initial phases of the introduction of new technologies, state intervention in price markets, helped in reducing the risks of farming, but basically the success of the green revolution can be attributed to the Asiatic peasant mode of organization. It is now recognized that hunger, deprivation and unemployment were minimized in areas where widespread agricultural growth took place, generally supported by market incentives.

The present author was involved in design of policy support of the kind described in the lastparagraph (see Alagh, ESCAP, for a description). In the eighties the model was criticized as being 'linear' and leading to a 'favoured region: favoured crop' outcome. Ironically the regionally unequal consequences of the strategy were brought out in a widely used study done by the author (Bhalla and Alagh, 1979). Growth was fast in areas with good soils and assured rainfall or irrigation, but the arid regions, the hill slope, the difficult aquifiers – hard rock or coastal areas prone to salinity ingress – were bypassed. The interesting feature of large countries such as India, Brazil and Indonesia is that they possess all the agro climatic regimes of the World and have been described as a 'World within the World' (Alagh, 1994). These were the **problem areas**. Peasants are rational and markets work here also, but reality is more complex. The performance of areas with low and/or uncertain rainfall regimes was poor and uneven. "Marketization", "commercialization" and sometimes "globalization" led to serious problems, with socio-economic deprivation, destabilisation, and environmental disaster, as two sides of the same coin. The work of Gerry Helleiner, later Chairman of the International Food Policy Institute (IFPRI), showed that associated with the disasters in Saharan and Sub-Saharan Africa, was the systematic decline of peasant and community organizations in rural areas (Helleiner, 1986).

In "difficult" areas, the process of historical evolution had lead to a certain balance between social activity and resource endowments in different agro-climatic regimes. This was the phenomenon of traditional economic and cultural styles related to soils, climate and resource endowments. These are again being incorporated in watershed and other water and soil development projects. This traditional equilibrium was in many cases cruel, for specific groups such as women, for example. However, society had in a certain sense coped with the crisis of resource endowments. This fragile equilibrium was being disturbed, before the current emphasis on globalisation. Diminishing mortality and subsequent population pressure and more generally, commercialisation and marketization were leading to breakdown of traditional community arrangements. Increasing desertification, soil erosion, flood proneness, forest clearing could be traced back to water harvesting or drainage breakdown and the impact of commercialisation, including on decline in labour contributions in kind.

These vicious circles coexist with many positive experiences. There are examples of

households and communities which have coped with the similar fragile land and water endowments and have met energy, food and at the basic level employment and income deficits in a sustainable manner. While in the early nineties these were being thought of as "experimental" in nature, by now they are of a magnitude where they can be called as "alternative" organizational methods, rather than demonstration projects. In the late eighties under the author's supervision, eight case studies were performed by independent research institutions in India, in which through community efforts combined with private ownership of land, food and energy gaps were met in a sustainable manner. These studies described the land and water development project implemented in a defined homogenous micro geographical area like a hill slope, a micro watershed, a tributory branch, an aquifier, or an irrigation distributory (Alagh,1991). They estimated the land and water development costs. The labour component, 'outside finance', the output in terms of food requirements met, energy requirements met and fodder supplies. There were estimates of 'economic rates of return on the investment', i.e. at accounting border prices, with a shadow wage rate 25% higher than the market rate. Financial rates of return at market prices were also estimated. These studies showed high economic rates of return (18% plus), making them very productive investments.

These initial studies were flatteringly reproduced and replicated with many other examples (compare Alagh,1991 with K. Chopra and G. Kadekodi, 1993). A recent study has been initiated by the United Nations University and a ADB review of Asian agricultural experience has some insights (See ADB, 2000). There is still no theory of such development, but there are preliminary pointers which we try to review. The projects examined have varied considerably. Watershed development, for settled agriculture alternately tree crops, reclamation of saline lands, farmers run lower level irrigation systems, aquifier management in difficult situations, like coastal aquifiers, tribal lift irrigation cooperatives, tank irrigation have all been reported and studied.

The success stories are community and leadership based, with leadership coming from diverse sources – an NGO, a local army retired person, a 'concerned' civil servant, a scientist working in the field. The leaders either had a science background or knew enough to adapt from a nearby science institution. The organisation structure was neither purely private ownership, nor fully community or social control. The leadership invariably argued for aggressively functioning markets, private land ownership and agricultural operations at the household level. However there was for land or water management, limited and well defined cooperation. This could be drainage, soil shaping, contour management, improvement and management of lower level canals, controlled grazing and so on. They estimated the land and water development costs. The labour component, 'outside finance', the output in terms of food requirements met, energy requirements met and fodder supplies. There were estimates of 'economic rates of return on the investment', i.e. at accounting border prices, with a shadow wage rate 25% higher than the market rate. Financial rates of return at market prices were also estimated. These studies showed high economic rates of return, 18% plus, making them very productive investments.

Work is required on the regularities, if any and systemic features of such organizations. Established systems understand well defined and linear models of organization. Their hierarchies and structures are understood. It is hybrid systems which are difficult to replicate. Rules of replication of systems which combine limited forms of cooperation with private and market dominated systems are difficult to configure. A recent example of

designing legislation for cooperatives to incorporate as public limited companies illustrates the difficulties (Alagh, 2000).

An interesting feature of these success stories has been that even though the economic rates of return were high, they incurred financial losses. These have at least been estimated in the initial stages of operation. The reasons for this are not fully understood. Some pointers are to the effect that invariably output prices are lower than border prices and input prices are higher. Markets are poorly developed in fragile regions and soil; amendments, pumpsets, seed prices and interest rates will be higher than in developed regions. Another reason could be that input rates may in poor soils be high initially and may go down as the organic composition of the soil improves. In saline lands for example, initial irrigation requirements for leeching may be high, seed rates and soil amendments may cost substantially and low value crops may need to be grown in rotation to improve the organic composition of the soil. Financial support to such efforts also needs effort at institutional reform. Collateral becomes difficult to organize in partial cooperative forms of organizations and bankers generally find community collateral unacceptable. Many of these projects require lending through a weather cycle, for example a watershed development cycle. The fact that some of the resource requirements of such projects emerge from labour contributions of the community makes it difficult to work out margin requirements. There is an interesting discussion of reform issues from a bankers perspective to refinance the loan component of such projects in an annual report of a national bank for agricultural and rural development (NABARD, 1991). From the available studies some of the systemic conclusions which follow in terms of rules for organisational and incentive/disincentive system reform need to be culled out in terms of systematic research. We attempt a first beginning below.

Local and Global Rules

The problem of imposing a hard budget constraint at the local level and helping those who help themselves, is a difficult one to address. Another way of setting the problem is to harness the great vitality of decentralised markets in replicating widespread rural growth, with in the core areas of local and global concern. Some of the lessons which follow are as follows:

1. Financial institutions have to design structures such that community collateral is possible for viable projects. Self help financing groups are only one such group. Land and water development groups, local infrastructure projects, in road or communication sectors, (Alagh, 2000), productionising products developed in R&D institutions, training for production with improved techniques, market development schemes developed by local and community groups would be other examples (ADB, 2000);
2. Lending through a weather or project cycle would be necessary. The Indian National Agricultural Bank started a scheme of this kind in 1991 as a part of an agro-economic regionalisation strategy started by the author, gave it up in 1993 and is again starting it now (See Reserve Bank of India, 2000 for details);
3. Developing policy “champions” for sorting out administrative, financial and procedural issues at local, regional and national levels, when problems arise with these kind of development strategies. It is reasonably certain that problems are going to arise in development experiments which are off the beaten track. The question then is, is there somebody in the policy decision making structure who will sort out the problem. ADB reports in a detailed study of farmer managed irrigation systems, that the failure cases

were those where such support did not exist. Failure here is defined as performance levels in water delivery lower than by government agencies (ADB, 2000);

4. The kind of problems discussed in the last paragraph, partly arise because the existing legal and administrative systems and financial rules are structured for formal organisations in the public or private corporate sector. So are global financial institutions. These newer kinds of institutions with strategic mixtures of organisational styles, coops and corporates, NGO's and government, NGO's and coops do not have a level playing field for them. For example a loss making subsidised electricity system can underprice a renewables group and drive it out of the market. The long term problem is reform in the sense that subsidies and protection given to established groups have to be withdrawn. In the short run the protection given to each group must be the same;
5. The structure or incentive and disincentive systems for this kind of growth should begin with a taxonomy of complimentarities of policy rules at different levels of policy making like no level can spend more resources than they have access to. But resources, which are short or binding constraints at national or global levels, are elastic at local levels. However their mobilisation requires policy changes at higher levels. For example, it is easy to buy a tax free bond of the New York civic bodies, but very little attention has been paid to markets for local bodies bond paper in developing countries and the fiscal reform that has to precede them (See Vaidya, 1998, for a description of an exceptional effort in Ahmedabad and the difficulties faced);
6. The last three problems essentially work out that the reform process has to be fairly deeply rooted for widespread land and water based poverty reducing growth processes to take place.

The kind of growth discussed meshes well with higher output, income, employment and trade levels. Improved management of water leads to crop diversification. The typical sequence is a poor yielding mono inferior cereal economy, succeeded by a high yield cereal and a commercial crop, or tree crops. In the Indian case, exchange rate reform led to higher growth of agricultural exports, before the East Asian crisis cut down demand in the fastest expanding markets (See Alagh, in UN, ESCAP, 1995, pp. 225-36), and recent evidence is that the districts sourcing non-traditional exports have gone through a phase of land and water development sequences (Alagh, 1999).

Technology and Community in Water Based Development

There is by now a vast literature on irrigation performance and management systems. A number of case studies are available, including those initiated by the International Institute of Irrigation Management (See IRRMI,1991, for a summary). More recently attempts have been made to generalise from them. The need to integrate technological with community and socio-economic institutions has been made clear (See Small and Carruthers,1991; Ostrom,1993, 94, 96, also the earlier studies by IIMI see summary in Shaul Manor and J. Chambouleyron, 1991). The relative inefficiency of State run systems has been known, as also when such systems impinge on historically evolved communal systems (Wade, 1982 and Chambers, 1988; also Siy, 1987 de los Reyes and Jopillo, 1987). The more interesting studies now being conducted are generalising more. They are getting into the very fragile nature of rules with which traditional irrigation systems worked, their vulnerability to outside interference and 'commercialisation' particularly in terms of labour contributions and maintenance rules. The struggle for defining rules which permit local initiative without open ended subsidies is being recognized. More important there is now an awareness that there will also have to be evolved a set of disincentives, in other

words rules which discourage perverse behaviour. Attempts have now to be made to develop paradigms for policies for land and water development in different agro-climatic regimes, reviewing the available literature, but establishing organizational and financial rules for working systems.

There is an interesting literature which is now emerging which empirically questions the proposition that decentralisation and self management automatically increase performance levels. There can be a decline in government expenditures on the water sector. More important there can be the lack of a policy focus which monitors performance and makes an effort to anticipate and develop systemic solutions to emerging problems. Empirical studies therefore show mixed results from some decentralised participative experiments (Vermillon, 1997, ADB, 2000). ADB quotes a study by Rice (1997) "that poor operation and management have a negligible impact on the irrigated crop" (ADB, 2000, associated volume p. 53). This is an area of very high importance and the available results are of an extremely tentative nature needing systematic empirical study. The problem may in fact lie with system design rather than the working of a particular institution, as argued in the last paragraph. This is again an issue we will come to in the discussion on drinking water and sanitation.

Literature on capacities and designs leads to interesting questions. On the one hand it is argued that there has been an excessive emphasis on building physical capacities and management and institutional issues have been ignored in irrigation systems. Traditional management systems in particular it is argued are being swamped. On the other hand it is argued that physical capacities have fallen short (IMMI, 1987, 1991). Ambler's plea that "The link between techno-managerial arrangements and local performance goals must be understood before measuring performance or proposing interventions probably contains an important clue (Ambler, 1991, p.11). Alagh and Buch have shown that in planning distribution systems in developing countries using hydraulic techniques developed elsewhere, for example full supply hydraulic distribution systems operating in the developed world needs a lot of innovative systems work. In the California Aquaduct or the Canal de Provence, there were very few farmers as compared to the examples they studied. The behaviour of large farming populations then has to be studied and built into capacity and design parameters. Alagh and Buch (1995) show the use of acreage response studies and water allocation and distribution systems working on conjunctive use principles with the operation authority monitoring and if necessary intervening. The Mekong Basin Indicative Plan asks for such work to be intensified. They refer to the Alagh- Buch model as "an excellent example of how agricultural econometric models are used in water resource planning to help design and manage large irrigation systems." (Mekong River Commission, 1996). This is an area of high priority work for project design and policies.

While generally a recognition of water rights will lead to smaller dams, the need for basin and interbasin transfer of water will remain. For example the stipulation in the Mekong agreement to cooperate on the maintenance of flows "To enable the acceptable natural reverse flow of the Tonle Sap to take place during the wet season" (Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, Art. 6), shows a sensitivity to water rights not seen earlier. These sensitivities will have important design and structural implications and work of an interdisciplinary nature not seen earlier, when the economist, the social anthropologist and the social worker were seen as add-ons after project design rather than a part of the engineering design team. Replication of these examples will need systematic work, training and manuals.

On a more general plane, there are recent examples of difficult cultural issues being grossly mishandled by those who would know better. Chris Degan in a 21 page exquisitely sensitive sketch of Myth and History in the Narmada River reviews cultural and historical perspectives over 2500 years and of the space and environment of the River (C. Degan, 1995). He brings out the fact that the entire river is sacred – its perambulation a unique cultural event and how "development" agents and "Sustainable growth" agents, remain out of tune with its distinct culture and people. He accepts that "The Narmada Valley's future lies as much in technology, economics and social reforms, as it does in the cultural definitions of character, duty and law". Yet, he argues that "to understand and absorb the ethos that constitutes the Narmada as a cultural zone is merely the first step in accepting its coherent and interdependent, human and cultural ecology". But this kind of approach is not at all common. For example, the Independent Review under Bradford Morse of the SSP stylizes the "Tribal People" in a manner that is highly invasive – say as compared to Degan's sensitive portrayal. The analysis of 'Tribals' and 'Hindus' in the Independent Review is based on poor evidence, deliberate misrepresentation of the major streams of social anthropological study done within India and outside and most unfortunate comments on India's freedom movement and its traditions. Consider the following statement: "Dr Padel told us that since the 1940, there has been a tendency in some sections of Hindu society to claim that tribal peoples are just a poorly integrated part of the mainstream culture of India" (p.67). The IR reveales the Indian social anthropologist G S Ghurye: "His arguments have their place in India's nationalist movement. Ghurye sought to avoid an emphasis on tribal indigenous status that could appear politically divisive" (Independent Review, 1987, p.67).

The patronising biases of the IR are very clear. While modern social anthropologists are given passing references or criticized, not very well known scholars or Censuses conducted during the colonial period are referred to extensively. The colonial Government finally decided on a policy of segregating the tribes into special areas where their lives and interests could be 'protected'. On the other hand a great scholar like Verrier Elwin, who spent a lifetime in the area advocated an integrated policy for the tribals and that they must be educated and given legal and constitutional rights within the framework of what would now be called a 'positive affirmation' policy.

Jawaharlal Nehru, who was the butt of tasteless sarcasm in the first sentence of the Morse Independent Review in his foreword to the second edition of "A Philosophy for NEFA" by Verrier Elwin, wrote on 09th October, 1958: "We cannot allow matters to drift in tribal areas or just not take interest in them. In the world of today that is not possible or desirable. At the same time we should avoid over administering these areas and in particular, sending too many outsiders into tribal territory. It is between these two extreme positions that we have to function. Development has to be ensured in various area, such as communications, medical facilities, education and better agriculture."

In this region, the tribals and non-tribals had historical links. Since the twelfth and thirteen century in Central India, the Bhils who are now agriculturists, absorbed a great deal, both physically and culturally from the many waves of invaders who entered from the North-West.

Mahatma Gandhi and Thakker Bapa also tried to raise the conscience of India to the wrong inflicted upon tribals during the pre-Independence period. Gandhi set up the Bhil

Seva Mandal which was a predecessor to many voluntary organization working in this area. In 1927, an Enquiry Committee was constituted by voluntary workers for looking into the problems of tribals. This Committee under the Chairmanship of Thakkar Bapa included prominent social workers like Jugatram Dave, Narhari Parikh, Kishorilal Mashruwala, Kalyanji Mehta and Chhagan Joshi (all Gandhian workers). The real impact of the earlier works of the Gandhian workers among the tribals is that a large number of voluntary organization grew in every tribal region and all these organizations drew inspiration as well as guidance to organize their voluntary efforts for tribal development.

The entire scholarly tradition relating to the subaltern religions of India showing how Hinduism and other Indian religions adapt themselves to the requirement of popular culture at the level of its artisans and rural workers (mainly scheduled castes and scheduled tribes), like Sufism in Islam in India, the Bhakti Movement, Mazhabi Sikhs and others has been ignored by the Independent Review. Recent work shows the relevance of such a subaltern tradition to the Narmada Valley (Chris Degan has documented the religious tradition of tribals, 1992): John Stratton Hawley describes the Bhakti Movement that had gathered force as a millennium by the fourteenth century by showing that its members, though part of no overaching formal organization, were united in their commitment to the value of personal experience in religions. “Therefore they questioned the ex opere operata ritualism characteristic of the sort of Hindu worship superintended by Brahmins, and they often criticized the caste conceits that went with it. Another consequence of their belief in the value of personal experience was their use of vernacular religion language as appropriate action of faith.” (Hawley, 1988 p.6) Hawley shows how this religion of saints who were Sikhs, low caste Hindus and Muslims is a major dominating force in India today. As Degan says, “Under the heavy pressure of modernization in the global context, it is often difficult to maintain a balanced view of such large culturally unexplored places”. This balance is however important.

The important issue is that while socio-economic rehabilitation policies have been given priority, the underlying premises of the debates on sustainable development and rehabilitation, have a strong developed country focus and very little effort is made to adjust institutions and the terms of debate to the structures of poor countries where the developments take place. This is a part of the larger failure to place reform debates in specific socio-cultural settings and therefore the lack of enduring change in institutions, including those in the water sector (Alagh, 1999).

Water, Sanitation and QOL

Ambiguity in definitions of adequate supply of water for personal consumption, drinking and sanitation have been noted earlier. The relationship between safe drinking water availability and morbidity in rural areas in developing countries is well known. Open defecation leads as population pressure increases to the contamination of water sources by pathogens. Rains and floods lead to more contamination. Apart from intestinal and other diseases, there is the economic cost of health care expenditures, foregone economic activity, infant mortality and through ingestion of parasites, a general reduction of immune status and ability to absorb nutrients from food intake. Consequences on women are more, with eye and lung problems as water is boiled with poor energy sources in bad ventilation. The fact that even in the nineties many countries have less than 50% of the population having access to safe drinking water and sanitation, is not that well known and also that in Asia alone, a billion people do not have access to water. Water is considered safe in rural

areas, typically if sourced from an underground borewell or made safe when abstracted from a surface source like a pond or a well. There is a problem here for in an open access water regime, the definition of inadequate supply is tenuous. The problem is accentuated, since economic growth, urbanisation and population pressure leads to reduction of open access water regimes. Water becomes a marketable product. For example while in rural areas more than ninety percent of water for personal consumption is sourced from community and public sources, in many urban areas, even with municipal water supply, around two fifths of the population in poor countries can depend on private water supply sources for consumption (C. Vaidya, USAID, FIRE Project, 1999). The dynamics of lack of access needs quantification after precise study.

Another aspect of the relationship of water institutions is through the energy field. Biomass and forest sources are a substantial part of rural energy supplies. Recent work tends to support the hypothesis of an energy ladder in rural areas with traditional fuel being a larger part of the total in poorer households and poorer areas (Lele, et.al., World Bank, 2000, Hosier and Dowd, 1987, Reddy, 1994) and there is interesting speculation on an energy-demography trap (ADB, 2000). Infant mortality rates go up in large non-commercial energy use households. Higher fertility rates and negative gender outcomes are seen. The relationship with low income and thin employment completes the cycle. It needs to be emphasised that the role of water here is through agricultural intensification. In the studies reported earlier, energy abundance was an outcome of favourable land water experiments. On a macro plane ADB finds a relationship between agricultural growth and reduction of traditional fuel use. Uma Lele, N. Kumar, Y.K. Alagh. N.C. Saxena and K. Mitra (World Bank, 2000) report that in India, forest cover did not go down in the period for which reliable satellite based data is available (1980 onwards) because of intensification of agricultural land with rapid increase in irrigation. These kinds of relationships between water, land scarcity, bio-diversity and agricultural demands need further validation.

Institutions which succeed in providing drinking water have obviously to be enmeshed in a larger institutional setting. There are no simple rules. Decentralisation, participative institutions working in tandem with a policy regime which is supportive are suggested. Institutions are at the cutting edge of implementation, but without a policy framework, desirable outcomes are difficult. A number of factors make this interpenetration important, apart from those we have noted earlier. Monitoring and anticipation of problems is important in the kind of decentralised participative approach suggested. Fortunately modern information systems make this possible, in fact facilitate the process. The issue of interlinkages of outcomes with related policies has been noted already. Third questions of technology support and fiscal reform are critical and generally involve both reform at the local level and supportive changes at higher levels in the era of global linkages of financial policies. For example, the implementation of water supply infrastructure involves deployment of large resources in third world countries, which would require borrowing. This can only be possible if local institutions are financially viable in current operations. USAID, which has designed a number of schemes in India where municipal authorities have floated bond schemes without sovereign guaranties have illustrated these intricacies (See Alagh, ESCAP, 2000, for details). Replicability would also need reform at the treasury level to facilitate trade in municipal paper. The design of such systems in terms of principles, manuals and training needs attention. More generally the key is support of institutions which help themselves. It is quite clear that at national and global levels, there

are not available at the present time workable models to make appreciable advance towards resolving key problems like drinking water in rural areas.

Another issue is the question of linking reform processes with traditional systems. This is important in developing countries which have long traditions of water related institutions. The issue has been discussed earlier for rural institutions. Recently urban examples have come to the fore. DFID sponsored action research in the Aranya project in Indore (B.V. Doshi, Aranya, 1994), shows how modern technology dominated infrastructure projects can be integrated with the "walled city" if the traditional strengths of urban communities are taken advantage of and this involves new concepts of physical planning in terms of upgrading of the urban infrastructure using inherited skills and latent resources, but also requires significant changes in urban laws inherited from a western tradition. For example a street in a walled city can be a place of work, leisure and an extension of the 'home'. Doshi shows that modern technology can accommodate the decentralisation needs of these approaches. The MOST programme of UNESCO gives similar examples from the Maghreb, with a series of walled city studies on the Mediterranean in North Africa. Water is literally a part of culture and purely economistic studies do not go very far.

Emerging Scarcities

There are a number of studies in large developing economies like China, Brazil, India and Indonesia, which show that in terms of the current and anticipated growth trends, apart from shortages of water for direct use, the requirements of water for intensification of land use for agriculture and forest cover, sanitation in urban areas, and energy requirements in a sustainable manner will require sharp breaks with the past and business as usual will not work. An illustration from India mentioned earlier shows that cropping intensities will have to rise in a dramatic manner, non coal based energy expand very rapidly, BOD disposal strategies will be critical, as the following numbers show:

Projections for the Year 2020

POPULATION	1330 million
URBAN POPULATION	Low: 465 million; High: 590 million
SLUM POPULATION	Low: 85 million; High: 130 million
SOLID WASTE DISPOSAL	100 to 110 million tonnes
DEMAND FOR COAL FOR POWER GENERATION	Low: 817 million tonnes; High: 2016 million tonnes
CROPPING INTENSITY	More than 1.5
NET AREA SOWN	Constant at 141 million hectares since the nineties
IRRIGATION INTENSITY	Around 1.75
WATER SHORTAGE	Around 10% to 25% between the years 2020/50
NOISE LEVELS	Twice the norms in trend forecast
AIR POLLUTION	Two to two and a half times the norms in trend forecast

(Source: Alagh, UNU, 2000)

Similar results are available from China and Indonesia (See I. Aziz for Indonesia, Z. Kunmin and He Xueyang: also R. Wang for China in UNU-IAS, 2000). While at present the studies suggest technology and 'appropriate' institutions as a panacea, with an underlying

sense of urgency, the work is of a preliminary nature and needs considerable focus. Most models bring out the cost of delay in starting on the preferred policy paths.

Studies bring out the conflict in the sharing of water between agricultural and non-agricultural needs and rural and urban requirements. Such conflicts show up in 'land scarcity' or sustainability crises, for example deforestation. Improved water use is invariably an important part of the mediating strategy in terms of allowing intensive agriculture and releasing land for sustainable use. For India, A.K. Singh (1994) suggests that non-agricultural use of land is now gaining importance at between 6 to 10% in decadal periods. With arable area not growing, Singh asks for a land use policy. Alagh (UNU, 2000 and Foreword to Singh, 1994) asks for a change in emphasis from urban land ceilings and control of each plot to a land use and transportation policy. Alagh also shows that the pattern of urbanisation can determine the quantum of BOD and water demand. Brown's (1995) somewhat scary projections for land conflicts between urban and rural use in China are different from the lower figures in UNU-IAS and Lindert (1996).

There is also considerable variability in estimates of water-logged and otherwise degraded land and for India estimates vary from 50 million hectares to 13 million hectares. There is similar variability in global estimate. The present author based on his Indian experience and also some cross country work tends to agree with N. Alexandratos (1995), that many so called global estimates are informed opinions, the problems are less severe and sustainable development strategies can make an appreciable impact.

Pricing of water use is clearly important when such scarcities emerge. This is particularly true for irrigation and ground water use. Investments in technology are also seen as particularly beneficial, both on water supply and distribution and on water using activities like newer crop varieties (See ADB, 2000). Alagh (2000) in his technological projections for the UNU study for India shows that at the present phase water saving technologies are not there in the field. Hybrid paddy in both India and China needs more water per hectare than HYVs and is also more demanding in terms of stress. But more appropriate cropping sequences across agro climatic regions will be watersaving. It would be useful to more precisely outline the role of water development and management strategies in some large countries with different agro-climatic regimes, which are a "World within the World", (Alagh, 1994) to determine these issues in a more systematic manner.

Policy Simulations

A useful way of responding to the neglect of policy and investment foci in the land and water development sectors, is to press for an understanding of Scenarios on widespread growth of a sustainable kind, food security and water security. We use available studies on rural Development Scenarios in the Asia Region. The projections of AT 2010 are well known and we don't repeat them here. Recently ADB has used IFPRI studies to project such scenarios. The table below brings out the critical role of land and water development policies on elimination of poverty and malnutrition.

Rural poverty is very high in the region, consisting of 669 million persons in the Nineties, out of which 266 million are in the People's Republic of China (PRC) and 250 million in India, according to IFPRI studies used by ADB. IFPRI's global IMPACT model, projects a Business as Usual Scenario of "Low Investment Weak Reform", and preferred Scenario of "High Investment Strong Reforms", Water Investments and policies are a central component of differences in the two scenarios :

Poverty removal and malnutrition amelioration based on water development Asia

Region	Per Capita Food Availability (k.cal/day)					Rural Poverty (mn.)		Eliminating Malnutrition (malnourished children 0-5 yrs)		
	1970	1993		2010		2020	1970	1993	2010	
			A	B	C				D	E
India	2083	2397	2559	2764	3201	213	250	76	59	31
Other S.Asia	2184	2370	2510	2719	3201	72	64	100	83	41
PRC	2019	2680	2913	2913	3535	364	266	24	17	0.4
South East Asia	1945	2525	2626	2626	3193	74	90	16	13	4
Developing Asia	2045	2525	2646	2646	3275	722	669	140	113	45

Source: ADB, 2000 based on work by IFPRI

A = Low Investment: Weak Reform
B = High Investment: Strong Reform
C = Eliminating Malnutrition
D = Baseline for Malnutrition
E = Eliminating Malnutrition

Scenario	*Name*	*Water Growth*	*Use*
A	Low Investment Weak Reform	0	-10%
B	High Investment Strong Reform	5%	10%

Table 2 clearly shows the importance of growth of irrigation and improved water use on poverty and malnutrition amelioration. By 2010, if land and water scarcity and degradation are avoided by better policies, river basin management is taken up, user managed irrigation is implemented, water rights, pricing and markets are introduced and ground water management is enforced, per capita availability of calories increases from the present levels of around 2500 K.Cal per capita availability to 2850 K.cal./per person on an average in Developing Asia. By 2020 and actually even before that malnutrition can be eliminated. Land and Water policies, have of course to be a part of a larger reform of good governance and economic reform.

Summary

The objective of this paper is to outline a research agenda for the problem of water and food security. It is a part of an effort by Most to trancend disciplinary boundaries in matters of emerging global concerns.

There has during the last decade been great concern on the efficient working of water institutions and reform processes related with these concerns. More recently the issue of development is also being raised. Given water scarcities, conflicts on scarce resources and rising demands, development issues relating to water use including inter basin transfers are gaining attention. The question of optimal policies towards water projects is coming to the fore again. The Mekong, the California Water Development Master Plans and water

sharing in the Iberian peninsula are examples. There has during the last decade been great concern on the efficient working of water plans and water sharing in the Iberian peninsula (See Agreement, Mekong River Basin, 1995, Aires, 2000 and Hart, 1995) are examples. Given the primacy of water rights, storage designs are now smaller and concern for riparian rights much higher. There is also much greater recognition of the rights of project affected persons and rehabilitation. Sensitivity to cultural roots is also emerging although the literature is still of an economistic variety. The economic issues that arise with interbasin transfer of water projects are just emerging, as also techno-economic models which integrate modern water conveyance technologies with agriculture and rural conditions in densely populated countries. The Mekong Agreement was also another approach to conflict resolution with a three tier structure built in for problem solution. At the highest level a political machinery, at the second level a bureaucratic structure and at the third level an expert system, provided new approaches, as compared to earlier more partial systems. There is need for work on such developments and their implications for project design and impacts on energy and food requirements of poor populations.

Water Scarcity has received considerable policy attention in recent years. The standard definition has been in terms of annual per capita availability of fresh water. There is some evidence from micro studies to suggest that recharge figures for groundwater may have to be revised upwards, if basin level planning is done and if interbasin transfer of water is planned. Concepts of water stress and water scarcity have been developed based on an index of per capita fresh water needs (Malin Falkenmark, 1991). They are of an average ready reckoner kind. These indicators are admittedly of a rough kind. Water flows do not follow administrative or political boundaries. Aquifiers are confined by geo-physical and not political and administrative features. Climate also determines the demand for water, including evaporative demand.

Water availability in fact is now also estimated as a part of structural analysis and advanced project level design. For example, the Mike She Model of the Australian Murray Darling Basin Plan models is used by the New South Wales Department of Land and Water Conservation. While it is used for integrated catchment modelling, for the basin, it's main features "are that it can represent all major flow features in an area and is well suited to describe the dynamic interaction between the surface and subsurface water systems.". Recent interesting work includes sensitivity of estimated resource flows of water available with integration of surface flows with local small storage projects. The quantities themselves are sensitive to detailed resource inventorying as compared to initial assessments based on empirical formulas, projections of a preliminary kind and in some cases 'guesswork'.

There is a synergy in water as a resource emerging from complimentary and sustainable use with more holistic approaches and this can only be captured with more integrated methods of measurement. An example is the simultaneous use of tanks and surface conveyance strategies. More precise assessments can in many cases make the difference between scarcity and conflict, on the one hand, and possibilities of a judicious management strategy on the other.

The argument here is that conceptually, the measurement of water availability has to be in the context of a physical system and therefore is in the ecological domain. This would be a strong argument for integrating such work with the long tradition of FAO's cooperative

work with UNESCO on agro-economic zoning. For example, the soil and land categories worked with here are the following :

1. Dry Semi Arid
2. Moist Semi Arid
3. Sub-Humid
4. Humid
5. Marginal in 2,3,4.
6. Fluvisols/Gleysols
7. Marginal Fluvisols/Gleysols
8. Irrigated Desert

(FAO, 1978/81, 1982, and more recently, FAO,1993, Ch,2,4, Table A5.)

FAO's global work of this kind is interesting and given modern imagery, even useful for preliminary classificatory kind of exercises. Yet, it is much too "global" for direct or even conceptual use. The categories behind agro-economic zoning, of soil or land type, water and climate are very important. Climate here refers to weather i.e. temperature and rainfall (both levels and variation). Water is both surface and ground. These concepts have been described well by geographers and a classic description is by the Russian academic Dr. Galina Sadasyuk (See Alagh, 1991 for a detailed discussion). G. Sadasyuk and P. Sengupta,(1968) for example, divided India into 18 agro-climatic zones and 44 sub-regions (See Alagh, 1988 and Planning Commission, 1989). Similar exercizes have been developed in other large countries, for example, Brazil, Indonesia and even France (See Ignacy Sachs, 1992, Lutfi Nasution, 1993).

The argument is therefore that of a new research effort at integrating water resource assessment work with agro-climatic regional categories and that of improving the precision of the estimates and setting the base for more work on the features which augment the availability of fresh water in a renewable manner. The plea here is for a fairly large research effort, which corresponding to agro-climatic concepts defined in a regional context, simultaneously models water availability. Surface-groundwater interaction models are by now common. It is being suggested that such modelling should be attempted more systematically, not in response to project formulation work, but with instruments of a water conserving or water augmentation nature built in. In a three to five year framework, it should be possible to generate knowledge, from which generalisation could begin. It is extremely likely that assessments of water as a resource will gain another dimension.

Techniques of estimating water demand for industry and agriculture are well known. There is much less clarity on water requirements for personal consumption. The minimum water requirement for basic needs ranges from 400 to 2000 cumet/percaput annually according to different experts (Rosegrant and Ringler, 1998). This is obviously an area for further work.

Most sensible policy studies see the need for a "dual" approach. Drinking water for poor populations is seen as a minimum need, within the framework of market driven systems. Votaries of market driven systems also see the need for "transitional strategies". A way out may be a strategy which models a simultaneously functioning market for water and a rationing system. These kind of models have been used extensively in dual market pricing

in food security systems and can be adapted for water markets. These kinds of models for the water sector can play an important support role for any transitional strategy moving away from allocation to market dominated principles.

Agricultural demand both increases in quantum as growth increases and the structure diversifies. The relationship of these kind of demand changes with water demand are only now beginning to be modelled. In large developing countries they lead to quantum breaks in past trends. Larger and improved water supply systems, alternately technology of water conveyance and crop water requirements, will have to improve in a dramatic manner.

It is now recognized that hunger, deprivation and unemployment were minimized in areas where widespread agricultural growth took place, generally supported by market incentives. The performance of areas with low and/or uncertain rainfall regimes was poor and uneven. “Marketization”, “commercialization” and sometimes “globalization” led to serious problems, with socio-economic deprivation, destabilisation, and environmental disaster, as two sides of the same coin. There is evidence of the systematic decline of peasant and community organizations in rural areas. There was in many areas a certain balance between social activity and resource endowments in different agro-climatic regimes, with traditional economic and cultural styles related to soils, climate and resource endowments. This fragile equilibrium was being disturbed, before the current emphasis on globalisation.

These vicious circles coexist with many positive experiences. There are examples of households and communities which have coped with the similar fragile land and water endowments and have met energy, food and at the basic level employment and income deficits in a sustainable manner. They are of a magnitude where they can be called as “alternative” organizational methods, rather than demonstration projects. Studies of these organizations showed high economic rates of return. Watershed development, for settled agriculture alternately tree crops, reclamation of saline lands, farmers run lower level irrigation systems, aquifier management in difficult situations, like coastal aquifiers, tribal lift irrigation cooperatives, tank irrigation have all been reported and studied. The success stories are community and leadership based. They operate in aggressively functioning markets with private land ownership and agricultural operations at the household level. However there was for land or water management, limited and well defined cooperation. This could be drainage, soil shaping, contour management, improvement and management of lower level canals, controlled grazing and so on. They estimated the land and water development costs, the labour component, ‘outside finance’, the output in terms of food requirements met, energy requirements met and fodder supplies.

Established systems understand well defined and linear models of organization. Their hierarchies and structures are understood. It is hybrid systems which are difficult to replicate. Rules of replication of systems which combine limited forms of cooperation with private and market dominated systems are difficult to configure. In spite of good economic returns, many such efforts incurred financial losses.

Financial support to such efforts also needs effort at institutional reform. Collateral becomes difficult to organize in partial cooperative forms of organizations and bankers generally find community collateral unacceptable. Many of these projects require lending through a weather cycle, for example a watershed development cycle. Labour contribu-

tions of the community make it difficult to work out margin requirements. There is an interesting discussion of reform issues from a bankers perspective to refinance the loan component of such projects in an annual report of a national bank for agricultural and rural development

There is obviously need to design a policy of initial and targeted subsidies for such efforts and also financing reform. This is a complex issue. The economic imperative will be to operate a hard budget constraint, otherwise resources will be wasted. On the other hand viable projects have to be supported.

There is a similar vast literature on irrigation performance and management systems. The struggle for defining rules which permit local initiative without open ended subsidies is being recognized. More important there is now an awareness that there will also have to be evolved a set of disincentives, in other words rules which discourage perverse behaviour.

There is an interesting literature which is now emerging which empirically questions the proposition that decentralisation and self management automatically increase performance levels. There can be a decline in government expenditures on the water sector. More important there can be the lack of a policy focus which monitors performance and makes an effort to anticipate and develop systemic solutions to emerging problems. Empirical studies therefore show mixed results The available results are of an extremely tentative nature needing systematic empirical study.

On land and water and the problems of ecologically fragile areas, Agenda 21 seeks a comprehensive approach and asks for the implementation of sustainable development investment plans and strategies at the national level through international co-operation.

The literature on capacities and designs leads to interesting questions. On the one hand it is argued that there has been an excessive emphasis on building physical capacities. Traditional management systems in particular it is argued are being swamped. On the other hand it is argued that physical capacities have fallen short. The argument that the link between techno-managerial arrangements and local performance goals must be understood before measuring performance or proposing interventions probably contains an important clue (Ambler, 1991, p.11). Alagh and Buch have shown that in planning distribution systems in developing countries using hydraulic techniques developed elsewhere, for example full supply hydraulic distribution systems operating in the developed world needs a lot of innovative systems work. In the California Aquaduct or the Canal de Provence, there were very few farmers as compared to the examples they studied. The behaviour of large farming populations then has to be studied and built into capacity and design parameters. Alagh and Buch (1995) show the use of acreage response studies and water allocation and distribution systems working on conjunctive use principles with the operation authority monitoring and if necessary intervening. The Mekong Basin Indicative Plan asks for such work to be intensified. They refer to the Alagh – Buch model as “an excellent example of how agricultural econometric models are used in water resource planning to help design and manage large irrigation systems.” (Mekong River Commission, 1996). This is an area of high priority work for project design and policies.

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and interbasin transfer of water will remain. For example the stipulation in the Mekong agreement to cooperate on the maintenance of flows "To enable the acceptable natural reverse flow of the Tonle Sap to take place during the wet season" (Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, Art. 6), shows a sensitivity to water rights not seen earlier. These sensitivities will have important design and structural implications and work of an interdisciplinary nature not seen earlier, when the economist, the social anthropologist and the social worker were seen as add-ons after project design rather than a part of the engineering design team. Replication of these examples will need systematic work, training and manuals.

There are recent examples of difficult cultural issues being grossly mishandled by those who would know better. The important issue is that while socio-economic rehabilitation policies have been given priority, the underlying premises of the debates on sustainable development and rehabilitation, have a strong developed country focus and very little effort is made to adjust institutions and the terms of debate to the structures of poor countries where the developments take place. This is a part of the larger failure to place reform debates in specific socio-cultural settings and therefore the lack of enduring change in institutions, including those in the water sector (Alagh, 1999).

Ambiguity in definitions of adequate supply of water for personal consumption, drinking and sanitation have been noted earlier. The relationship between safe drinking water availability and morbidity in rural areas in developing countries is well known. In an open access water regime, the definition of inadequate supply is tenuous. The dynamics of lack of access needs quantification after precise study.

There is interesting speculation on an energy-demography trap (ADB, 1999). Infant mortality rates go up in large non-commercial energy use households. Higher fertility rates and negative gender outcomes are seen. The relationship with low income and thin employment completes the cycle. It needs to be emphasised that the role of water here is through agricultural intensification. Uma Lele, N.Kumar, Y.K.Alagh. N.C. Saxena and K. Mitra (World Bank, 2000) report that in India, forest cover did not go down in the period for which reliable satellite based data is available (1980 onwards) because of intensification of agricultural land with rapid increase in irrigation. These kind of relationships between water, land scarcity, bio-diversity and agricultural demands need further validation.

Institutions which succeed in providing drinking water have obviously to be enmeshed in a larger institutional setting. The implementation of water supply infrastructure involves deployment of large resources in third world countries, which would require borrowing. This can only be possible if local institutions are financially viable. Replicability would also need reform at the treasury level to facilitate trade in municipal paper. It is quite clear that at national and global levels, there are not available at the present time workable models to make appreciable advance towards resolving key problems like drinking water in rural areas.

Recently urban examples show how modern technology dominated infrastructure projects can be integrated with the "walled city" if the traditional strengths of urban communities are taken advantage of. Water is literally a part of culture and purely economistic studies do not go very far.

Large developing economies like China, Brazil, India and Indonesia, show that in terms of the current and anticipated growth trends, apart from shortages of water for direct use, the requirements of water for intensification of land use for agriculture and forest cover, sanitation in urban areas, and energy requirements in a sustainable manner will require sharp breaks with the past and business as usual will not work. Studies on technology and 'appropriate' institutions as a panacea, with an underlying sense of urgency, the work is of a preliminary nature and needs considerable focus. Most models bring out the cost of delay in starting on the preferred policy. Conflicts show up in 'land scarcity' or sustainability crises, for example deforestation. Improved water use is invariably an important part of the mediating strategy in terms of allowing intensive agriculture and releasing land for sustainable use. There is also considerable variability in estimates of water-logged and otherwise degraded land. These issues need to be settled.

There has during the last decade been great concern on the efficient working of water institutions and reform processes related with these concerns. More recently the issue of development is also being raised. Given water scarcities, conflicts on scarce resources and rising demands, development issues relating to water use including inter basin transfers are gaining attention. The question of optimal policies towards water projects is coming to the fore again. The Mekong, the California Water Development Master Plans and water sharing in the Iberian peninsula are examples. There has during the last decade been great concern on the efficient working of water Plans and water sharing in the Iberian peninsula (See Agreement, Mekong River Basin, 1995, Aires, 2000 and Hart, 1996) are examples. Given the primacy of water rights, storage designs are now smaller and concern for riparian rights much higher. There is also much greater recognition of the rights of project affected persons and rehabilitation. Sensitivity to cultural roots is also emerging although the literature is still of an economistic variety. The economic issues that arise with inter-basin transfer of water projects are just emerging, as also techno-economic models which integrate modern water conveyance technologies with agriculture and rural conditions in densely populated countries. The Mekong Agreement was also another approach to conflict resolution with a three tier structure built in for problem solution. At the highest level a political machinery, at the second level a bureaucratic structure and at the third level an expert system, provided new approaches, as compared to earlier more partial systems. There is need for work on such developments and their implications for project design and impacts on energy and food requirements of poor populations.

References

Alagh, Y., 1979, Task Force on Minimum Need and Effective Demand, See, Govrnment of India, 1979, below.

———, et.al., 1984, Policy Modelling for Planning in India, in E. Thorbecke, ed., below.

———,1988, Guidelines for Agroclimatic Planning: A Draft for Discussion, Journal of Land Development.

———, 1991, Indian Development Planning and Policy. WIDER Studies in Development Economics, Helsinki and Delhi, Vikas.

———, 1991, Sustainable Development, From Concept to Action: Techniques for Planners, UNCED.

—- and M. Khattab, 1993, Food Security Information System for Arab Republic of Egypt, Vol.3 (Models), Cairo, FAO.

———, 1994, Planning and Policies for Indian Agricultural Research, 25th Lal Bahadur Shastri Shastri Lecture, reprinted in ICAR, Landmarks in Indian Agriculture.

———, Next Phase of Agroclimatic Research, in ARPU volume 2 of same title, New Delhi, Concept.

———, and D. Buch, 1995, The SSP and Sustainable Development, in W. Fisher, Columbia University Seminars, below.

——-,2000, Water and Food Security in South Asia, Invited Plenary Lecture at World Water Forum and Ministerial Meeting, The Hague.
——-, 2000, Global Sustainable Future and Developing Countries, Tokyo, UNU/IAS.
——-, 2000, Report of the High Level Committee on Legislation for Corporatisation of Cooperatives, New Delhi, Ministry of Company Affairs.
——-, 2000, Sustainable Development: India 2020, Tokyo, UNU/IAS
——-, 2000, Popular Participation and Planning: Case Studies, Bangkok, U.N., ESCAP Transport Bulletin.
Aires, C., Shared Rivers Management in the Iberian Peninsula, Tokyo, UNU/IAS.
Ambler, J., 1991, Bounding The System, in IMMI, below, pp.3-12.
Alexandratos, N., (Ed.), 1995, World Agriculture Towards 2010 ,An FAO Study, Chichister, Wiley.
Asian Development Bank (ADB), 1999, The Growth and Sustainability of Agriculture in Asia, Manila, ADB.
ADB, 2000, Rural Asia: Beyond the Green Revolution, Manila, ADB.
ADB, 2000 Rural Asia: Companian Volumes (I-III), Oxford, University Press.
Aziz, I., 2000, Indonesia's Sustainable Development Framework, 2020, Tokyo, UNU/IAS.
Bhalla, G., and Y.Alagh, Performance in Indian Agriculture, New Delhi, Sterling.
Brown, L., Who Will Feed China?, New York, Norton.
Chopra,. K., and G. Kadekodi,1993, Watershed Development, Economic and Political Weekly, June 26, pp, A61-A67.
Cosgrove, W., and F. Rijsberman, The Challenge of Making the World Water Vision A Reality, Tokyo, UNU/IAS.
Chambers, R., 1988, Managing Canal Irrigation: Practical Analysis from South Asia, Cambridge, University Press.
Degan, C., 1995, The Narmada in Myth and History, in W. Fisher, (ed.) below, pp. 47-70.
De Los Reyes, and S. Jopillo, 1987, An Evaluation of NIA's Participatory Communal Programme, in IMMI, below.
Doshi, B., 1994, Urban Renewal in Indore: The ARANYA Experiment, Ahmedabad, Sangat and New Delhi, DFID.
F.A.O., 1978/81, 1982, Agro-Economic Zoning Atlas, Rome, FAO-UNESCO.
F.A.O., 1993, Agriculture Towards 2010, Rome, F.A.O., for final published version see, N. Alexandratos.
Falkenmark, M., J. Lundqvist and C. Widstrand, 1989, Aspect of Vulnerability in Semi-Arid Development, Natural Resource Forum, pp. 258-267.
Falkenmark, M., 1991, Urgent Need for Water Perspective, Water International, Vol. 16, pp. 229-240.
Fisher, W., 1969, Clustering and Aggregation in Economics, Baltimore, John Hopkins.
Fisher, W., 1995, Towards Sustainable Development, Columbia University Seminar Series, New York, Sharpe.
Helleiner, G., 1986, Balance of Payments Experience and Growth Prospects in Developing Countries, World Development, Vol. 14, pp.877-908.
Hayaami, Y., 1981, Understanding Village Communitty and the Direction of Agricultural Change in Asia, Delhi, IEG Occasional Paper, New Series, No. 1.
International Institute of Irrigation Management (IIIM), 1987, Public Interventions in Farmer Managed Irrigation Systems, Colombo, IIIM.
———, 1991, Performance Measurement in Farmer Managed Irrigation Systems, Colombo, IIMI.
Korten, D., (Ed.), 1986, Communitty Management : Asian Experience and Perspective, New Haven, Kumarian.
Lele, U., N. Kumar, Y. Alagh, N. Saxena, and K. Mitra, 2000, Forestry in India: An Evaluation, Washington, World Bank.
Lindert, P., 1996, The Bad Earth, Davis, UCAL Agricultural History Center.
Manor, S., and J. Chambouleyron, 1991, in IIIM above.
Nasution, L., 1993, Agricultural Regionalistion of Indonesia, Bogor, Agricultural, Research Centre.
Ostrom, I., 1994, Neither Market Nor State: Governance of Common Pool Resources, Washington, IFPRI.
———, et.al., 1996, Rules, Games and Common Pool Resources, Ann Arbor, University of Michigan Press.
Pronk, J., and M. Haq, 1992, Sustainable Development: From Concept to Action, UNCED and UNDP.

Sachs, I., 1991, Background Paper for the Hague Declaration, extensively reprinted in Nature and by RIS.
Sadasyuk, G., and P. Sengupta, 1968, Economic Regionalisation of India: Problems and Approaches, New Delhi, Census of India, Monograph No. 8 of Census 1960.
Siy, R., Averting Bureaucratisation of a Communitty Managed Resource, in D.C. Korten, above.
Small, L., and I. Carruthers, 1991, Farmer Financed Irrigation, Cambridge, University Press.
Sonntag, N., 1996, Adaptive Management Policy Exercises: Two Methods for Integrated Resource Management, in MRC., above, p. 27.
United Nations, UNU/IAS, Papers read at Conference on Sustainable Future of the Global System, Tokyo.
Vaidya, C., 1999, Private Sector Participation in Financing and Management of Urban Water Supply and Sanitation Projects, Delhi USAID FIRE Project, reprinted in 31st Annual IWWA Technical Volume.
Vermillon, D., 1997, Impacts of Irrigation Management Transfer: A Review of the Evidence, Colombo, IIIM.
Wade, R., 1982, Employment, Water Control and Water Supply Institutions, Sussex, IDS.

Conceptualizing social transformations: lessons from Eastern Europe

By Nikolai Genov

Having accomplished its first phase, the *Management of Social Transformations* (MOST) Programme of UNESCO has reached the point of uncontested recognition. Now it is the right time to re-think its aims and means in order to retain continuity and introduce innovations for increasing the Programme's intellectual and organizational efficiency. The experience from MOST projects might be quite helpful in this process. Especially instructive in this respect would be studies on countries and regions undergoing fast transformations. Eastern Europe is undoubtedly one of them since the societies in the region have experienced simultaneous and profound changes in all their characteristics during the nineties. This is the reason why the following conceptualizations will focus on the experience collected in the preparation and implementation of the MOST project "Personal and Institutional Strategies for Coping with Transformation Risks in Central and Eastern Europe" coordinated by the author.

The above project is relevant since the prospects of MOST Programme greatly depends on the ability of affiliated researchers to detect, as Max Weber did, profound changes in the 'spirit of time'. In the midst of the turmoil after the First World War he warned scientists that the certainty of unifying ideologies was lost. The many small gods of everyday preferences have grasped the opportunity to wage their devastating wars. All-pervading conflicts and disenchantment have become the norm in a situation of uncertainty and rapid change (Weber, 1992 [1919]: 101).

With many variations from country to country and from year to year, the situation in Eastern Europe during the nineties has been comparable to this picture. The dust of political rallies of excited millions settled fast. The millions tasted the fruits of the promised land. Mixed feelings accompany the new experience. The freedom of speech, organization and travel is a civilizational achievement together with the abundance of goods on the market. Mass unemployment and the loss of life chances by large segments of Eastern European societies is the other side of the coin.

What can social scientists learn from this sobering experience? Most of all, they have to adjust their concepts and methodology to a reality influx. In some national cases the change has reached the phase of institutional and value-normative stabilization. In others the wave of rapid social innovations continues. Most societies in the region are still plagued by disparities between aspirations and need-satisfaction, knowledge and practical action, change and order. Because of their instability and the high level of uncertainty they can still be properly labelled *risk societies*.

In conditions like these social sciences cannot escape the fate of being at risk themselves. Their cognitive capacities and practical relevance are put on a severe test in an environment which does not pay too much attention to science. What is most at stake is the

integrity of knowledge about social dynamics. There are various ways to react to the extraordinary situation. The promising one is to turn the challenge into opportunity by strengthening the reflexivity of sociological theorizing and research. Referring to the above MOST project this means to highlight both the social and the intellectual context of the studies on the Eastern European societal transformation.

Social Dynamics and Intellectual Paradigms

The Eastern European experience is unique but it is just a special case of the worldwide social change of everyday life and deep social structures. The high speed of *globalization* puts its imprint on all social interactions. The overall trend of *individualization* cuts across social systems, functions and processes. Together with the increase of social complexity due to the ongoing differentiation and integration, social dynamics puts well-established patterns of hierarchic government on trial. The high complexity of processes brought about by actors with diverging interests comes to the forefront. The efforts to cope with social complexity by means of polyarchic frameworks involve state institutions and business organizations, political parties and voluntary associations and social movements fostering social innovations. Their guiding idea is the improvement of knowledge and management (governance) of social dynamics (Albrow, 1996; Beck, 1997; Castells, 1999; Genov, 1999).

Therefore, the changes in social reality constitute the major reason why the uniting core of theoretical advancement in social sciences today is the issue of social dynamics. More precisely, there is a burning need to theoretically clarify sources, processes and results of social development. The task is to elaborate on a reformed evolutionism taking into account continuity and radical change in social reality, the trends of global development together with the permanent innovations at the level of micro-social interactions.

A major reference point for solving the task is the concept of social structures and functions. However, today it is practically uncontested that there is no privileged concept of *one* social structure opening the paved way to explanations of social development. There is no concept of *one* social function offering enough explanatory space for the study of stability and development in social reality. A *range* of well-differentiated analytical concepts is needed in order to accumulate and systematically analyze empirical data, to draw generalizations, to substantiate explanatory hypotheses and carry out effective prognostic procedures.
In addition, the special attention paid by social scientists to globalization brought about a series of innovations in the study of social development:

First, globalization clearly involves a large variety of actors and structures having different paths and logic of change. Against this background, the traditional teleological understanding of social development understood as a progressive improvement of social relations and processes gives way to a neutral definition of qualitative social change. Nowadays it is pertinent to conceive it either as a substantial improvement of the adaptability of a social system to its environment or as a decline and dissolution of the system's structures and functions. This re-definition of social development raises many questions as to the progressivist overtones of modernization theory.

Second, the major traditional point of reference of theorizing and research on social development is the concept of society. More specifically, it is the concept of society understood

as a nation-state. The recent studies on globalization, regionalization and on their local manifestation in 'glocalization' revealed an extraordinary variety of micro social causes and reasons of broader social processes and their consequences. That is why the trans-national and trans-cultural comparisons became so important. They are best adapted for research on achievements and contradictions of 'glocalization'.

Third, as a result of the debates on the state and perspectives of global environment the concept of sustainable development came to intellectual fashion. Currently it is more and more getting social content and relevance. This effect comes about from the study of social relations and processes, which foster or hinder sustainability.
How could social sciences successfully cope with the tremendous challenge of this social and intellectual development? The search for answer to this question will focus on the convergence and divergence in the efforts of social scientists to cope with the complex and complicated contemporary social development.

The Issue of Global Trends

Neither mainstream sociology in Western Europe and North America nor the national sociological traditions in Eastern Europe possessed in the eighties elaborated concepts suitable for predicting the radical move from state socialist institutional arrangements to what had to become a post-state-socialist social order. The conceptual vacuum was immediately filled in after 1989 by the fuzzy idea of transition. In fact, it seemed to be productive since Eastern European societies undoubtedly had to move from political over-centralization towards decentralized market economy and political pluralism. Moreover, it seemed that the transition could be fast and easy since it had to focus on the transfer of sophisticated and well-functioning institutional patterns from the West to Eastern Europe. The warnings that the envisaged rationalization cannot be as smooth were rare exceptions (Genov, 1991). In fact, the tensions and conflicts, which appeared later on the surface, were in-built in the very logic of the rationalization process. At the end of the eighties the societies in Eastern Europe have reached the point of an intensive structural and cultural imbalance in the relations between individual and collective, instrumental and autonomous, long-term and short-term social rationality. It was objectively impossible to reestablish the balance soon, easily and at a low social cost.

Moreover, Eastern Europeans had to learn that there were numerous variants of market economy and political democracy which could not be transferred from the West to Eastern Europe without local adaptations. They turned out to be substantial, painful and time consuming. Complicated issues to be resolved concerned for instance the sequence of reforms, the relations between 'top-down' and 'bottom-up' changes and the role of civil society and the state in the process (Morawski, 1996). Another crucial reason for the difficulties was connected with the fact that institutional patterns in Western Europe and North America were also experiencing the pressure to adjust to profound changes due to the accelerated globalization. Thus, Eastern European societies found themselves under the double pressure of the catching-up rationalization following already established institutional patterns and the innovative adjustment to the new challenges of globalization. The latter task had to be resolved in Eastern Europe together with similar processes in the most advanced societies (Széll and Ehlert, 2001).

Given the historical circumstances, it was too easy to explain the unexpected troubles of the transition of Eastern European societies towards market economy and democratic pol-

itics just by referring to civilizational deficiencies. The problem was by far more complex and was reflected in the multidimensional concept of *societal transformation under the impact of global social trends* (Genov, 2000). After various elaborations, the major trends in question could be reduced to four which penetrate all present-day societies, albeit to a different extent and with different intensity. The channels of their penetration include the global transfer of technology, worldwide commercial and financial transactions, transnational political processes and the diffusion of cultural patterns by means of telecommunications. Individual and collective actors may refer to these trends explicitly or not. Even when unaware of them, actors contribute to their diffusion (Genov, 1997).

First, this holds true for the spread of ideas and institutional configurations of *instrumental activism*. The key point of the process is the concentration on instrumental values and behavioural patterns which make out the core of modern industrialism, or, broadly seen, of the Western type of *Weltbeherrschung* (domination of the world) in Max Weber's terminology (Weber, 1988 [1919]: 1f.). After Weber it is taken for granted that, once *Weltbeherrschung* has been defined as the major goal, the instruments of activity have become the major issue. In fact, instrumental value-normative orientations are a vital moving force of modern production and economic exchange. They animate competitive political systems as well as the culture of entrepreneurship and responsibility. They dominate the lifeworld in advanced societies and make out the central part of their 'secularized religion'. Following this pattern of value-normative orientation and institutional arrangements, the West was able to secure its domination on the rest of the world. That is why the moving forces and the effects of instrumental activism are in the centre of problems, which invigorate and yet plague the modern civilization. These problems are well documented in the discussion on the vaguely defined but existentially relevant vision of *sustainable development*. It is now practically taken for granted that sustainable development is not possible in the context of deepening economic and social disparities. Thus, the crucial cognitive, normative and practical issue concerns the possibility to reach and maintain a 'win-win' situation for both instrumental activism *and* sustainable development.

Second, another powerful global trend contains the evolution and diffusion of the modern patterns of *individualization*. It makes itself manifest in the widening of the pool of options for individual development and realization as well as in the increase of personal capacities to make decisions adequate to the situation. In the advanced industrial societies, innovations in market economy, competitive politics and in pluralist culture made individualization the major feature of social development taking the form of *institutionalized individualism* as Talcott Parsons called it (Parsons, 1978: 321). The trend is complex and controversial. The growing autonomy of individuals has anomic implications leading to disorientation and deviance coupled with organizational pathologies. Nevertheless, individualization is a blessing for millions despite the uncertainty and the responsibilities it shifts onto the shoulders of individuals. There are numerous specifics concerning the extent and the forms in which this applies to the social development in Eastern Europe.

Third, another global trend, which guides developments in Eastern Europe is the *upgrading of organizational rationality*. It concerns the timely and sufficient *differentiation* of social structures and functions. Another characteristic of the trend is the strengthening of social *integration*. Both tasks are being mainly resolved in modern societies by formal organizations. Western-type organizational bureaucracies are able to efficiently allocate resources in a way unattainable for traditional societies. However, bureaucracies tend to

abuse resources for servicing their own apparatus first of all. In this way, they close themselves to changes in the organizational environment, blunt the 'cutting edge' of their creativity and power of innovation, and lose positions in the competitive world. This scenario might attain catastrophic features when the organization in question is the state. Pathological developments of this type might become rather costly for society. This is of crucial relevance for Eastern Europe since the democratization wave there is a historically important case of upgrading rationality of organizational structures and processes. The process has brought about massive dissatisfaction. Its causes and reasons invite for a careful examination. The issue deserving a special attention in this context is exactly the changing role of the state. Another key issue concerns the link of states with supranational processes of regional integration and globalization.

Fourth, during the last decades the global civilization has experienced an accelerated *universalization of value-normative systems*. The trend is being intensively pushed forward by the electronic media. Its deeper causes and reasons are rooted in the spread of universal technological standards, in the globalization of economy, in global political interdependencies as well as in the globalization of culture and life styles. There is no doubt that the same technological problems handled by basically the same technologies cannot but produce and support similar cultural patterns of problem management. The universal trend of individualization brings about strikingly similar cultural effects worldwide. Universal patterns of upgrading organizational rationality come to stabilize and support the uniform technological rationality and the trend towards paradoxical homogenizing effects of individualization. Global cultural homogenization develops its own inertia. However, together with the increasing cultural universalization, the world is becoming culturally more and more diversified. New 'tribal' affiliations, new religious or life-style identities really matter more in ideological and practical terms in affluent societies fostering individualization. Openings to the toleration of cultural and behavioral diversity go hand in hand with self-protective cultural closures of privileged or threatened groups.

Societal Transformation and Risk

Against the above background, the specific national cases of rapid social development in Eastern European countries during the nineties have at least one common feature. It is the transformation of all subsystems of these societies in order to adjust to global trends. On the analytical level, the concept of societal transformation understood in this way refers to the impact of global trends on key *systemic* characteristics of each society. This implies the attainment of a new quality of four parameters of the particular societal system at least.

First, the productive infrastructure has to be transformed in order to bring about new technological chains and new patterns of participation in the international division of labor. In historically specific terms, this mainly means an adjustment to the requirements of global information technologies. Eastern European societies are rather underdeveloped in this respect as a rule (World Employment Report, 2001).

Second, new patterns of economic organization are evolving. The change typically concerns the ownership but also investments, production, distribution and supply. In the given context, the key issue of economic restructuring is the adjustment to the increasingly globalized markets.

Third, the distribution and use of political power takes qualitatively different forms from

the ones regulating state socialism. This implies substantial changes in the structure and performance of state institutions, but also of other bodies of decision-making and control. The major direction of change is the establishment of a working division of powers and the involvement of civil society in well-coordinated governance.

Fourth, values and norms change in the way to allow the emergence and stabilization of pluralist institutions. The very core of the developing new values is the modern concept of universal human rights (Held et al., 1999). Thus, the current transformation in Eastern Europe can be schematically presented along typical issues, tasks and effects:

Systemic dimensions of the transformation in Eastern Europe

Issue	Task	Potential effect
Technological restructuring	Informatization	Adjustment to the global information technologies
Economic restructuring	Marketization	Adjustment to the global markets
Political restructuring	Democratization	Adjustment to the global rationalization of politics
Cultural restructuring	Universalization	Adjustment to the global innovations in culture

This multidimensional concept of social transformation is intended to theoretically reproduce the growing complexity of social processes and the concomitant uncertainty and risks. The concept does not build upon any assumption about inevitability, linearity and secured success of the rapid social development. To the contrary, the only underlying assumption concerns the potential for tensions in the course of the adaptation to global trends. There could be successful adaptation in one field and unsuccessful adaptation in another, success in the adaptation of specific groups and organizations and failure of others, evolutionary achievements of a particular societal transformation and devastating results of others.

Sociology has only one promising move in order to efficiently react to the challenge of social structures, which permanently are in *statu nascendi*. This is the orientation towards constructivist approaches in theory building. The relative importance of ontologically based concepts of social structures and processes diminishes. This holds true first of all for concepts strongly influenced by historical circumstances, for instance for the concept of society understood as national statehood. However, there are in-built traps in the very constructivist approach to theory building in sociology. One potential extreme is the understanding of the theoretical frameworks just as a net of *sensitizing concepts* intended to foster the historical analysis. This understanding might lead to doubts about the very possibility to develop generalized sociological knowledge having a systematic explanatory potential. The productive task is different: How to develop this type of explanatory knowledge and apply it on more and more complicated and dynamic processes in social reality?

One prospective answer seems to read as follows: The task can be resolved by developing the explanatory potential of sociology around a concept offering heuristic potentials both for historical explanations and for building theoretical systems in several directions. *First*, it should secure constructive freedom and, at the same time, ontological foundation for the development of sociological knowledge. *Second*, this would basically mean to resolve the traditional sociological dilemma concerning the relations between the individual and the social institutions. *Third*, the same should apply to the dilemma to relating the explanatory potential of technological and economic structures, on the one side, and of ideas, on the other. *Fourth*, given the trend towards an increase of the relative importance of social change in the building and use of the sociological conceptual framework, it is necessary to leave enough cognitive space for balancing ideas of change and stability, of spontaneity and organization in social life. *Fifth*, this is a rather essential point because of the inherent connection between social events and social structures. *Sixth*, the sought for a uniting idea of systematic theorizing in sociology should also successfully link the cognitive innovations in sociological knowledge and its capacities to offer orientations for decisions and action in the practical management of social dynamics on the global, regional, national and local level.

Given the required conceptual generalization we assume that the central concept of sociological theorizing in question is *social interaction* understood as *exchange of matter, energy and information between social actors*. The major analytical dimensions of the concept refer to individual and collective *social actors*, their *relations* and the *social processes* in which they are involved.

Following this conceptualization, the adjustment to more developed institutional and behavioural patterns reflects on changes in the major *action characteristics* of society. New types of ***actors*** emerge in the course of the current transformation in Eastern Europe. Private entrepreneurs, democratically responsible state officials and associations of civil society take the lead as bearers of new forms of social and economic organization. Problems in this context are well represented in the convergence and divergence of interests of *individuals* and *organizations*. Another set of uncertainties refers to the difficult balance of interests of *domestic* and *international* actors, the latter being regional organizations like the European Union or global ones like the International Monetary Fund. New actors bring about and sustain new social ***relations***. They are marked by the shifting focus from the distribution of political power to the economic reproduction and from hierarchical to associational relations. There is no doubt that the current transformation in Eastern Europe engenders an immense variety of relations of *coordination* and *conflict*, of well established *hierarchy* or recently negotiated *polyarchy*. The emergence of new actors and relations is a ***process,*** which usually brings about a variety of expectations, desires, actions and results. *Short-term* goals and effects characterize some of the processes. Others are bound to exert *long-term* impacts on

Action dimensions of the transformation

Dimension	Tasks	Effects
Actors	Initiative and responsibility	Competitiveness
Relations	Balancing hierarchy and poliarchy	Meritocracy
Processes	Effective allocation of resources	Innovation

individuals, groups and societies. In terms of social space, some processes have or will have only *local* relevance by influencing specific groups or communities. Other processes have or will have regional or even global relevance.

Bearing in mind the already attained level of cultural and organizational development, one could have assumed at the beginning of the nineties that the transformation was to be implemented in the form of a controlled social innovation. Some processes in the region tentatively followed this pattern of change. However, in most parts of the region neo-liberal policies favored spontaneous market forces deviating from the pattern of organized change. Complications were conditioned by the fact that exactly at the end of the eighties and the beginning of the nineties the world economy was moving through a recession cycle.

Consequently, the experience of the nineties forced the need to change the conception of change in the region. It is clear now that the technological lag between the Eastern and the Western parts of the continent has deep historical roots and cannot be easily overcome but might even become broader. In a number of cases, competitive politics brought about turmoil and disappointments all over Eastern Europe. Commercialization undermined moral and aesthetic values and norms. The expected diversity of actors and paths of their development came about in principle, but unemployment, impoverishment and crime preclude individuals and groups from self-realization and future prospects. The previous hierarchical system of social relations dominated by party affiliations was replaced by other inequalities mainly based on the steep differentiation of incomes and wealth. Due to the worsening standard of living and quality of life, social time actually decelerated for large segments of Eastern European societies. This development immediately threw doubts on the meritocratic effects of the transition.

Analytical dimensions of a risk situation

Registration	Action form	Prediction	Norm
What is the effect?	EVALUATION OF REACTION	What will be the effect?	What criteria for evaluation are acceptable?
Who reacts in which way?	REACTION (MANAGEMENT)	Who will react in which way?	What forms of reaction are acceptable?
Who (what) causes risk?	SEARCH FOR CAUSES (REASONS)	Who (what) will cause it?	What causes of risk are acceptable?
What is the intensity of risk?	RISK ASSESSMENT	What will be the intensity of risk?	What intensity of risk is acceptable?
What poses a risk?	IDENTIFICATION OF RISK	What will pose a risk?	Is this risk acceptable?

Moreover, it turned out that the cultural and institutional legacy of state socialism has been much more influential than assumed at the beginning of the transformation. Now it is a commonly shared view that the prevailing egalitarian and statist characteristics of the previous social system corresponded to influential economic and political preferences of large segments in the Eastern European societies.

This is the typical context of permanent production and reproduction of risks understood as probability of disfunctional impacts of processes on a given social system. As seen from this point of view, Eastern European societies are still risk societies *per ce* in much broader terms than this applies to societies in Western Europe. The conceptual outline of risk situations facing social systems in the region might be presented as follows:

How could the analytical framework connecting ideas of global trends, national transformations and risks help the efforts to conceptually cope with the above dynamic and controversial situation in the Eastern European region?

Instrumental Activism and Sustainability

The introduction of market mechanisms after decades of central planning is a civilizational step forward in social rationalization. The evolutionary universality of the market economy has been suppressed for decades and needed reestablishment in its own right. This is part and parcel of the normalization of social relations and processes in Eastern Europe. Nevertheless, the normalization itself is full of tensions requiring careful conceptualizations. They have to be certainly more comprehensive than the idea of a transition from organized disorder towards disorganized order (Domanski and Rychard, 1997: 9f).

First of all, constraints of rationalization are connected with the difficult balance between the *autonomous* and *instrumental* values. In its official ideology state socialism was oriented towards the autonomous values of egalitarianism and solidarity. No question, everyday life deviated from the ideological clichés. Therefore, one may interpret the ongoing transformation as a step towards bringing together autonomous and instrumental values mostly by means of market mechanisms. However, the controversy is already in-built in the process since market mechanisms are instrumental in principle. Profit could be presented as an autonomous value only in a rather limited context. This might be a reason for theoretical and practical concerns since there could be no stable social order based on instrumental values alone. The empirical evidence supporting the point is abundant. The rapid instrumental commercialization of social life brought about new forms of alienation and critically undermined the ultimate values of solidarity and social justice.

The above problems are closely related to the tensions between the *short-term* and the *long-term* rationality in the course of the ongoing rationalization. At least in the first decades after the Second World War state socialism was ideologically oriented towards long-term strategic aims of action. They included visions about mass well being and the development of strong collectivist solidarity. Under the specific historical conditions both aims increasingly turned out unrealistic. They had to be pushed to the more and more distant future and to be replaced by short-term goals of everyday life. However, it was exactly in this context of a shortened time perspective that the centralized planning turned out to be less efficient compared to the mechanisms of market economy.
Contrary to widespread expectations, the re-introduction of market mechanisms did not immediately provoke an enlargement of the time perspective of everyday life. The gener-

al de-stabilization of life in the course of transformation caused an additional shortening of the time perspective of orientations, decisions and actions of large groups in Eastern Europe. This metamorphosis of social time and the concomitant social pathologies offer a broad area for sociological theorizing and for enlightening empirical studies on the definition and use of time.

The rapid instrumentalization of social life by means of market mechanisms brings about still another problem connected with the trend towards *Weltbeherrschung*. The spread of instrumental activity potentially involves a new round of exploitation of natural, social and human resources. Neither the careless abuse of the nature nor the degradation of social and human resources could promise sustainable development. That is why sociological conceptualizations and the empirical studies on environmental imbalances, forms of social isolation and marginalization undermining social solidarity and integration might be quite helpful in illuminating the traps of instrumental activity.

A special issue in this context is the spread of private entrepreneurship as the major incorporation of instrumental activity under the given historical conditions. The point is that in a variety of cases private entrepreneurs operate in Eastern Europe on the verge of what is legally allowed and what is a criminal or semi-criminal activity. This could hardly be a good promise for societal integration and sustainability in institutional and value-normative terms in the long run.

Individualization and Societal Dynamics

The ideological assumption of a flattened social-structural landscape of state socialist societies precluding individualization could hardly pass the theoretical and historical proof. At the end of the eighties Eastern European societies were clearly structured in terms of income, political power and prestige thus allowing a wide variety of specific paths of individualization. The accelerated individualization in the course of the nineties continued some of these paths and opened a new window of opportunities (Slomczynski and Szabad, 2000).

There is no doubt that state socialism laid the stress on the rationality of collective actors and generally neglected the need to tolerate and properly remunerate the rationality of individuals. This is the background of another major dilemma of the current transformation. It concerns the complex and dynamic relationships between *individual* and *collective* rationality. The experience accumulated in the nineties provides abundant evidence that the rapid individualization in Eastern Europe all too often came about at the expense of the collective rationality. Thus the burning theoretical and mostly practical problem concerns the possibility to retain and to develop the evolutionary achievements of individualization and to simultaneously reduce its extremes by strengthening the social and cultural status of collective rationality.

In theoretical terms, the sociological tradition offers enough arguments supporting the case that a stable social order cannot be established and maintained on the basis of the value-normative assumptions and institutional arrangements of extreme individualism. The crime wave, which flooded Eastern Europe during the nineties, provides strong evidence supporting the point. One important explanatory strategy connects this process with the rapid rise of personal expectations at the beginning of the decade. The expectations met a widespread decline of practical opportunities for personal development and realization in

the context of a deepening economic differentiation. This imbalance between rising expectations and diminishing resources to meet them became one of the major factors for the criminalization of economy and social life in most countries in the region after 1989. White-collar crime notwithstanding, a large proportion of criminal acts can be explained to a great extent by dysfunctional effects of unemployment and the ensuing impoverishment. Theoretical models and empirical studies clearly reveal the destructive impact of unemployment on work motivation, education, training, social habits, definition of the self and respect of social norms by unemployed persons. Another factor determining this development was the spontaneous or intentional weakening of crucial state institutions, including the legal system.

The achievements, problems and prospects of individualization are being typically conceptualized in the advanced societies in connection with the idea of a *new* middle class. Its members are defined by their possession of specific cultural capitals circulated on the market by professional groups of middle-level managers, engineers, university teachers, researchers, physicians, etc. This large social group is considered as rather different from the *old* middle class based on property and traditional production skills in small businesses. The rapid development of Eastern European societies put both ideas into question. In fact, the new middle class in the above sense was numerous all over Eastern Europe before 1989. Contrary to developments in the advanced societies, this social group suffered substantial losses in terms of income, political power and prestige during the nineties. On the other side, hopes for success in individualization and general social advancement and political stability were connected with the re-emergence or strengthening of the old middle class based on property. In most Eastern European societies it could not develop according to the expectations. Flourishing small private entrepreneurship still remains very much desirable in the region. This development poses serious conceptual challenges to sociology since the problem is not just focused on individualization alone. The major issue in the given context concerns the social-structural basis of the emerging social order.

The series of open questions makes it clear that the need to elaborate on concepts covering the individualization will continue to be a focal point of sociological theorizing. One of the major reasons for this in Eastern Europe is the strong statist tradition in the region. The reliance on state paternalism hampers the private initiative and responsibility both in institutional and in value-normative terms. Another long-term limitation facing the development and realization of individuals will be the economic underdevelopment of most societies in the region. Last but not least, the civil society there is also immature and cannot secure the institutional rights of individuals. That is why the social policy has to cope with manifold manifestations of anomie being facilitated by extremes of the ongoing individualization. They are closely connected with developments in the organizational framework of society as well.

Open Ended Upgrading of Organizational Rationality

The differentiation of economy, politics and culture is the major evolutionary characteristic of the changes in Eastern European societies during the nineties. Together with it, an accelerated differentiation in each of these action spheres is also taking place. Both types of differentiation are basically manifestations of the universal trend towards upgrading of rationality of organizational structures, functions and processes. The rationalization has another side as well, namely the search for new means and forms of achieving and maintaining social integration.

Both aspects of organizational rationalization are most visible in politics. The social and economic system was dominated before 1989 by the formalized politics of the party-state. This is the reason for the search of rationalized patterns of politics in the retreat of the state from its previous massive intervention into economy and culture. This is a step forward in the modernization of Eastern European societies. Each action sphere is expected to develop its own mechanisms of innovation and control thus contributing to the permanent innovation of the societal system.
Research carried out during the nineties has revealed substantial deviations from this optimal path of modernization via upgrading rationality of organizations. The crucial problem in this context concerns the role of the state. The predominance of neo-liberal ideology at the beginning of the reforms guided the practical strategy to withdraw the state from research and technological development, culture, education, health care and even from social protection. There were widespread hopes that the emerging civil society would take the lead in the guidance of the profound changes. The result of this strategy could only be the rise of social pathologies in terms of social disorganization, anomic behavior and civic irresponsibility.

This experience pressed for a reconsideration of the role of the state in privatization, in the institutionalization of competitive politics and in the pluralization of culture. The conclusion from the learning process is the view that the rational management of the complex and complicated transformation requires an active involvement of a 'small' but efficient state in the governance of the complicated and dynamic processes. It is the only actor possessing the organizational capacities to manage the transformation by respecting the needs and interests of a large variety of other actors. The changes made it also manifest that the Eastern European states have to manage the task by paying special attention to the interests of diverse international actors as well.

As seen from a theoretical point of view, one more conclusion from this learning process deserves special attention. It reads that the market itself cannot autonomously provide for the conditions of its own discipline, transparency and efficiency. It is exactly this conclusion, however, which puts serious requirements to the state with a view to the danger of corruption among badly paid state officers as well as for developing and maintaining clientelistic and oligarchic relationships which escape the rules of competitive politics and democratic control. A special problem in this context is the need to develop and maintain democratic patterns of economic management under the conditions of privatization, weakened trade unions and uncertain state regulation of economic processes. Given these organizational circumstances and the tremendous changes in the social structure during the transformation, serious theoretical efforts are needed to systematically explain the trends in the political orientations of major social groups (Jasińska-Kania, 1996).

Generally seen, the controversial path of reforms has shown two major characteristics of the current upgrading of organizational rationality. The first one is the need to quickly resolve difficult political tasks in mostly unfavorable domestic and international environments. The second concerns the contradictions of the reform process itself. In both respects one may identify dilemmas requiring fine conceptualizations. Democratic participation has been established already in decision-making all over Eastern Europe. However, various actors quickly learned to abuse the democratic decision-making and to avoid the mechanisms of democratic control. The disappointments are rather strong since there were influential and somewhat utopian visions about the efficiency of democratic proce-

dures and of civil society at the beginning of the nineties. The broader relevance of this negative experience has been reflected in the conceptualizations and in the practical action of local actors but also of major international institutions (Entering the 21st century, 1999).

Universality and Particularism in Value-normative Structures

The dissolution of isolationist barriers in Eastern Europe opened the way for *universalization of value-normative systems*. This global trend dominates the spirit of the new constitutional arrangements in the region. Their core is the idea of universal human rights. However, even the most sophisticated legal rules cannot by themselves resolve the numerous social, political and cultural problems, which appeared in the course of the transformation or were intensified by it. The crucial one concerns the various forms of social disintegration due to the economic and social isolation and marginalization of large social groups. In some cases, it has important ethnic nuances, which are usually explosive in the long run.

In more general terms, the new forms of social and economic differentiation, which developed during the nineties, have sobering implications for the desirable value-normative universalization. To the opposite of it, one may expect value-normative particularisms based on social-structural differences. New 'tribal' affiliations develop along the lines of professional interests and hobby activities. As seen from this point of view, Eastern European societies are not an exception in the global cultural context (See World Culture Report, 2000). Sociology of culture is expected to reflect on these trends and to conceptualize on them. The major issue is the development of new identities corresponding to the new positions in the social structure. Since social structure is still in flux and there is a strong cultural legacy from the state socialist past, one may often observe effects of split consciousness and co-existence of contradicting value-normative orientations. The most intriguing task seems to be the elaboration on systematic analytical tools allowing a precise diagnosis and prognostication of trends in value-normative preferences.

Conclusions

It is a proven fact that not one established researcher representing a major theoretical orientation in social sciences predicted the extraordinary historical dynamics in Eastern Europe during the nineties. This might lead to the conclusion about their rather limited or even negligible prognostic capacities. Since the logical structure of prognoses is basically the same as that of explanations, the conclusion might be generalized concerning the limited or negligible explanatory capacities of social science disciplines. This would be too strong a conclusion underestimating a large number of precise analyses of accumulating tensions in the social structure of Eastern European societies before the start of the transformation. Therefore, the adequate statement should be different: The explanatory and predictive capacities of social sciences could increase substantially provided their theories system would be consequently constructed by focusing on the sources, course and consequences of social development (See also Genov, 2001; Tomasi, 2001).

The reason for this conclusion is quite obvious. Being constructive or destructive, continuous or discontinuous, development is the most visible and the most complicated characteristic of social reality. However, social development often resists the efforts for systematic explanation. This is mostly due to the complexity of causes and reasons bringing about and sustaining development at the various structural levels of social reality. It offers more options for the 'butterfly effect' as compared to nature namely for substantial

changes launched by the smallest move like the move of butterfly's wing. In social reality this function can perform factors absent in the nature like knowledge and emotions, will and interests of people.

Besides the need of explanatory conceptualizations, there is the need to permanently elaborate on operationalizations of the conceptual framework for research on social development. The aim is to increase the sensitivity of concepts to changes in social reality. This is the only promising perspective for timely recognition of the appearance of new social structures and new social problems. As seen from another angle, this is the condition for strengthening the practical relevance of sociology. Currently this means to increase its capacity to serve the cognitive needs of the emerging information society.

The efforts to conceptualize the rapid social development in Eastern Europe meet basically the same opportunities and constraints which are typical for the current situation of theoretical social science in general (Kazancigil and Makinson, 1999). In the European context one can observe similar processes in the Western and in the Eastern parts of the continent. We witness a strong trend towards pluralization of theoretical paradigms together with a substantial enlargement of the field of the studied structures and processes. The strong thematic orientation of social sciences towards risk research has strengthened the need to conceptualize the dynamic relations between cognitive development of social sciences and their involvement in the resolution of practical problems. More precisely, new patterns of intensive involvement of Eastern European scientists in public opinion polls and marketing research came about during the nineties. They opened various ways for their practical influence. On the other side, the strong market orientation of these studies contributed to the widespread doubts about their theoretical substance and about the academic objectivity of social sciences.

In the context of this controversial situation some requirements concerning sociological conceptualizations seem to be especially relevant.

First, the thematic orientation of conceptualizations and empirical research should be more intensively focused on studies of the connection between national transformations and trends of global social development.

Second, in order to resolve these tasks social scientists need more and more intensive cooperation between representatives of various social science disciplines (Dobrochyński, 2001).

Third, this means, that the conceptualizations serving transnational comparative studies will have to have priority.

Fourth, in order to be efficient in resolving the above tasks, consequent development of a systematic conceptual framework for the study of social development is needed which includes well-differentiated and operationally tested concepts.

Fifth, given the trends of pluralism and eclecticism, a substantial effort of reflexive theory construction is needed which refers to the disciplinary traditions, to intellectual developments in related sciences, to changes in social life and to potential cognitive and practical results.

Among the numerous paradigmatic viewpoints, which could be activated for the purpose, the following seem to be most promising:

1. To establish a consequent cognitive connection between global, regional and local (national and sub-national) processes;
2. To interpret the causes, course and outcomes of these processes systematically in the context of specific action spheres;
3. To show a capacity to explain and prognosticate the dynamics of emergence of new actors and their performance at various structural levels of social interaction;
4. To combine the study on historical specifics of transformation processes in space and time with the capacity to achieve theoretical generalizations and to operationalize theoretical abstractions.

The implementation of this program for conceptual advancement in the study on social development presupposes interdisciplinarity, cross-paradigmatic interactions and a cross-fertilization of theoretical and empirical research. This is the only way to develop social science that has a clear cognitive value and is able to guide the practical management of social transformations.

References

Albrow, M (1996) The Global Age. Cambridge: Polity Press.

Beck, U (1997) Was ist Globalisierung? Frankfurt a/M: Suhrkamp.

Castells, M (1999) End of Millenium. Oxford: Blackwell.

Dobroczyński, M., Ed (2001) Europa wschodnia w obliczu integracji i globalizacji. Warszawa: Wydawnictwa naukowe wydzialu zarzaldzania Uniwersitetu Warszawskiego.

Domanski, H. and A. Rychard (1997) 'Wprowadzenie. Dekompozicja – chaos – procesy restructurizacji'. In: H. Domanski, H. and A. Rychard, Eds. Elementy nowego adu. Warszawa: IFIS, pp. 7-29.

Entering the 21st Century: World Development Report 1999/2000 (1999) New York: World Bank and Oxford University Press.

Genov, N (1991) 'The Transition to Democracy in Eastern Europe: Trends and Paradoxes of Social Rationalization'. International Social Science Journal, N 128, pp.131-141.

Genov, N (1997a) 'Four Global Trends: Rise and Limitations'. International Sociology, N 4, December, pp. 409-428.

Genov, N (1999) Managing Transformations in Eastern Europe. Paris and Sofia: UNESCO-MOST and Regional and Global development.

Genov, N (2000) 'Global Trends and Societal Transformations in Eastern Europe'. International Social Science Journal, 166, December, pp. 605-613.

Genov, N., Ed (2001) Prospects of Sociology in Bulgaria. Sofia: Sofia University "Kliment Ohridski" Press (in Bulgarian).

Held, D., A. McGrew, D. Goldblatt and J. Perraton (1999) Global Transformations: Politics, Economics and Culture. Cambridge: Polity Press.

Jasińska-Kania, A (1996) Miedzy neo-liberalizme I neo-socializmem: problemy krystalizacji prawicowych I lewicowych ideologii I wartości w Polsce'. In: M. Marody, Ed. Oswajanie rzeczywistości. Miedzy realnim socjalizmen I realna demokracja. Warszawa: ISS, pp. 114-137.

Kazancigil, A. and D. Makinson. Eds (1999) World Social Science Report 1999. Paris: UNESCO.

Morawski, W (1996) 'Demokracja i gospodarka'. In: M. Marody and Ewa Gucwa-Leśni, Eds. Podstawy życia spolecznego w Polsce. Warszawa: ISS, pp. 74-86.

Parsons, T (1978) Action Theory and the Human Condition. New York: The Free Press.

Slomczynski, K.M. and G. Szabad (2000) 'Structural Determinants of Political Experience: A Refutation of the

"Death of Class" Thesis'. In: K.M.Slomczynski, Ed. Social Patterns of Being Political. Warsaw: IFIS, pp.187-210.

Széll, G. and W. Ehlert, Eds (2001) New Democracies and Old Societies in Europe. Frankfurt am Main: Peter Lang.

Tomasi, L., Ed (2001) New Horizons in Sociological Theory and Research. Aldershot etc: Ashgate.

Weber, M (1988 [1919]) Gesammelte Aufsätze zur Religionssoziologie, Vol. 1. Tübingen: J.C.B.Mohr (Paul Siebeck).

Weber, M (1992[1919]) 'Wissenschaft als Beruf'. In: Max Weber. Gesamtausgabe. Bd. 17. Tübingen: J.C.B. Mohr (Paul Siebeck).

World Culture Report (2000) Paris: UNESCO.

World Employment Report. Life at Work in the Information Society (2001) Geneva: International Labour Office.

Social sustainability in a globalizing world: context, theory and methodology explored

By Juliette Koning[1]

Introduction

This paper is an exploration into the meaning and assessment of social sustainability. It explores three issues: first of all how to contextualize present-day discussions of sustainable development. Where discussions in the time of the profiling work on sustainable development, known as the Brundtland Commission, were inspired by end-of-the-world scenarios and the huge problems of the carrying capacity of the earth, today's world is in the grip of social transformations related to globalization and ongoing urbanization. This does not mean however, that the two discussions are not connected or that the latter has taken over in importance of the former. In fact a challenge might be found in trying to integrate issues of sustainable development and of globalization. The second exploration is a theoretical one as it tries to discern to what extent discussions of social capital, and attempts to operationalize it, are relevant and of use for a better understanding of social sustainability. The third exploration lies in the field of methodology. While discussions on assessing sustainable development have gone through many different phases, finding a proper tool or methodology to assess and monitor it is still quite ambiguous. Social sustainability as such is, as far as known, hardly ever been subject of operationalization and assessment. The third exploration lies exactly in this latter field.

This paper thus tries to come to a better and more contextualized understanding of the concept of social sustainability and tries to explore the possibilities of establishing a framework, i.e. a suitable methodology, in order to operationalize and monitor it. With regard to finding a suitable framework I shall refer to a Dutch research project of Telos, a research centre that developed a method for monitoring sustainable development in the province of Brabant. It is hoped that by doing so social sustainability obtains a valid place on the agenda of both policy makers and academics. The background is formed by the question how globalization and transformation relate to the issue of sustainable development and social sustainability. Admittedly, this is a difficult question. However, one important step in approaching the answer lies in finding first of all a tool or methodology to monitor and assess sustainable development. Once we are able to establish such a framework we might reach the next step and that is to unravel the effects of globalization and transformation on present-day societies.

The paper is constructed as follows. The focus of the next section is on the emerging processes of globalization and urbanization in present-day societies. Although sustainable development has a relevance of its own, the way it is discussed now cannot be disconnected from these more recent and emergent processes. This is followed by a section in which I shall briefly outline some of the ongoing debates on sustainable development in order to set the stage for exploring social sustainability, which is considered to be an integral part of sustainable development. The next part gives a short review of discussions on social capital as social sustainability encompasses social and cultural capital. To what

extent is the debate on social capital useful in establishing what social sustainability enhances? Do indicators of social capital exist that could be relevant for social sustainability? Against this background, the next section discusses the approach and methodology developed by Telos for monitoring sustainability in a Dutch province. In this part I shall discuss the approach adopted and the use of indicators in order to assess such a process. This is followed by a part that clarifies in detail the operationalization, the indicators and the assessment of social and cultural capital as applied in this method. As both this paper and the work by Telos is work in progress, in the last part of the paper I shall raise questions and discuss implications for further research.

Sustainable development in a globalizing and urbanizing world

The core of this paper concerns social sustainability. This raises the question why social sustainability is considered an important topic and what it adds to discussions on social transformation and social change? This is both a question of relevance and contextualization. According to Giddens (2001: 42-45) there are three main factors that have a consistent impact on social change: the physical environment and economic factors (technological innovation), political organization (political decision-making and distinct political agencies) and cultural influences (religion, communication systems and leadership expressed in the content of ideas and how we think). Social change itself is thus nothing new and as Giddens has pointed out several consistent factors can be traced throughout history. What makes it a prominent feature of modern societies is that the pace (speed) and scale (encompassing) of the transformations have intensified over the last decades, culminating in what is called the process of globalization. Societies and cultures are much more interdependent than they ever were before.[2] Generally globalization is seen as the process which makes the world 'one single place', i.e. increased homogenization and a by now firmly established interdependence in social, cultural, political, technological and economic terms.

Notwithstanding the ongoing processes that make the world more closely connected in all these areas (via internet, travel, migration, transnational corporations) recent outbursts of religious and ethnic conflicts all over the world show that globalizing trends do not automatically lead to one common identity. The local and the global are in fact closely related which is expressed in the term glocalization. Glocalization places growing cultural heterogeneity next to the massive and global exchange of people, goods and ideas. "The reinvention of local traditions and identities is seen as an answer to the loss of identity through homogenization" (de Haan 2000: 354-55).

What are the effects of these globalizing and glocalizing trends on societies? Although it is difficult to find detailed studies, in general there is agreement that global integration has unequal outcomes both between countries as for groups within countries. For some people and countries there are opportunities, for others there is growing exclusion. Obviously power differences and unequal access to resources have always characterized human societies, but "globalisation is accompanied by new patterns of inequality and polarisation" (de Ruijter 1997: 383). "Progressive spatial segregation, separation and exclusion" are seen as an integral part of the process of globalization (Bauman 1998: 3).

Whereas globalization is integrating economy, culture and governance, it is fragmenting societies in an era of shrinking time and space, and disappearing borders. The innovative and dynamic sides of globalization go hand in hand with disruptive and marginalizing

consequences. According to some, people experience "loss of control over their lives, their environment, their jobs, their sense of place, their community" next to the enjoyment of "wealth, travel, and cultural creativity" (Macnagthen 2001: 8). According to the UNDP (1999) there are serious risks within the globalizing process embodying new markets, new actors, new rules and norms, and new tools of communication, for human security. The new risks and uncertainties are created by "the social production of wealth" and "techno-economic development" (Beck 1992: 19). Risks are now a global danger, ecological and high-tech risks are no longer tied to their place of origin but instead "endanger all forms of life on this planet (ibid. 22).[3] These risks stand out because national governments and international responses can no longer tackle such risks: the collapse of financial markets, global diseases, global warming, global crime, growing gaps in income, and closed labour markets for unskilled labour (UNDP 1999).

This two-sided process of globalization with new inequalities and risks is especially visible in urban areas all over the world. The process of globalization, the spread of information technology, and national and international migration intensify the process of urbanization and by now half of the world population lives in urban localities and this percentage is expected to grow to 63% in 2025 (UN prediction in Giddens 2001: 573). For Europe, America and Australia it is estimated that by now some 80% live in urban areas. In all, the majority of humanity is becoming urbanised and large cities are becoming the main habitat (Girardet 1999: 9-10).
With the globalizing economy, we can witness the growth of a new type of city: the global city as multinational headquarter of finance and producer services (Sassen 1991). This take-over of services (at the cost of manufacturing) led to the concentration of high-income workers in cities and the "valorization of specialized services and professional workers" (Sassen 1998: 142). New social forms emerge in this global city in developed countries, such as "the growth of an informal economy", "high-income commercial and residential gentrification" and "the sharp rise of homelessness" which express some of the new inequalities (Sassen 1994: 99-100). Cities in North America and Europe have seen a growing gap between rich and poor, dividing those that were able to benefit from the global processes and those that did not (unskilled and semi-skilled labours and migrants). In this process, cities became spatially divided too with concentrations of the less well to do in certain neighbourhoods and the better off often in wealthy suburbs. Research revealed that the social ills in the first are higher. These "neighbourhoods in crisis" encounter more severe problems than other neighbourhoods such as unemployment, poor housing, high levels of crime and drug abuse, poor education, no or not user-friendly green spaces, environmental problems, a feeling of exclusion from society and disillusionment and a lack of trust in the future (Devuyst 2001: 2-3). As far as the Netherlands is concerned, large cities show negative trends compared to the rest of the country. In the larger cities the growth of new job opportunities is slower, unemployment is higher, average income is lower, the general health situation is worse, educational attainments lag behind, and crime is higher (De Ruijter 2001: 21).

Generalized urbanization is part of the process of economic globalization and the information revolution. We live in the 'information age' and cities in this context are faced with several new challenges that lie in the field of work and employment, security (in its broadest meaning, i.e. from citizen security to peaceful coexistence and basic needs), sense (lending social and cultural meaning to daily life), sustainability (quality of life and the local challenge of preservation), and governability (Borja and Castells 1997: 233-34).

Globalization, glocalization, new risks and uncertainties, new social forms and inequalities, and wide-ranging urbanization form the context for discussing sustainable development and social sustainability. The Brundtland report (Our Common Future, WCED 1987) played an important role in the internationalization of the ideas of sustainable development. Although it is not a report written in the sprit of the discussions of globalization as they take place today (taking into account that the report was written in the mid 1980s) it can certainly be marked as a response to ongoing global transformations and growing inequalities (after all the commission was asked to formulate a global agenda for change). As stated in the chairman's foreword, the links between poverty, inequality and environmental degradation became the major theme, "what is needed now is a new era of economic growth – growth that is forceful and at the same time socially and environmentally sustainable" (WCED 1987: xii).

The social dimension of sustainable development has received far less attention than the economic and ecological dimensions, both in policy circles and in academic writings. An intriguing finding especially because sustainable development is so closely linked with well-being, future generations, quality of life, and in itself can be defined as a "social project" (Devuyst 2001: 1). In Agenda 21, the United Nations programme of action from the UNCED conference in Rio de Janeiro in 1992, the social dimension is more pronounced as well as the understanding that the issues at stake are of a global nature. In the preamble of Agenda 21 the global problems are stated as "a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being" (UNCED 1992: 15). Nevertheless, sustainable development has for long and still is, mainly a concept in which ecological crises and economic growth issues predominate. Fortunately, recently attempts have been made to incorporate the social dimension more soundly and to work towards the development of indicators of social sustainability. Sustainable development has reached the stage where it is seen as "a topic of research that is social at its core" (Becker et al 1997: 9). Social sustainability might even turn out to be an appealing concept to diminish the gap between globalization and sustainable development discourses.

From sustainable development to social sustainability

Before it is possible to address the issue whether social sustainability is something for which we can find a suitable methodology, we need to have a clear sense of what social sustainability denotes. With this we enter into the debate on sustainable development. Sustainable development is still a rather contested concept and common agreement is difficult to attain.[4] This paper shall nevertheless take position in order to stimulate debate, raise questions, and work towards a framework for studying and monitoring social sustainability.

Sustainable development from Brundtland onwards

The most common way to refer to sustainable development is that "humanity has the ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987: 8). The main task of the World Commission on Environment and Development was to formulate a global agenda for change in which one of the aims was "the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment, and development" (ibid. ix). From a social sci-

ence perspective, "sustainability addresses the question of how societies can shape their modes of change" and refers to "the viability of socially shaped relationships between society and nature over longer periods of time" (Becker, Jahn and Stiess 1999: 4). As such the field is defined as basically social, "addressing virtually the entire process by which societies manage the material conditions of their reproduction, including the social, economic, political and cultural principles that guide the distribution of environmental resources" (ibid). In this change is a central element and sustainability thus includes both "sustaining a particular resilient state and adjusting to changing internal and external conditions" (Köhn and Gowdy 2001: 3).

From a systems perspective a useful contribution can be found to understanding and monitoring sustainable development. It is argued that in order to assess societal development, first of all the different relevant subsystems of the society must be identified. These encompass both subsystems that constitute society as those on which society depends: individual development, social system, government, infrastructure, economic system, and resources and environment. Each of these subsystems must be viable in order for the society to be viable. These six are aggregated into three subsystems in order to keep the number of indicators manageable. Hence, the human system (social system, individual development and government), the support system (infrastructure and economic system), and the natural system (resources and environment). These three subsystems "correspond to the three categories of capital that are often used in analyses of the total system" (Bossel 1999: 17-19).

This capital approach to operationalize sustainable development can be found in various writings but often different labels for the capitals are used. The World Bank works with four capitals, man-made, natural, human and social, which they try to value in terms of savings and wealth. Although it is still work in progress in all these fields, they admit that for social capital (social sustainability) no appropriate way has been found yet (Seragaldin 1996). In studies on sustainable rural livelihoods, as elaborated upon by researchers from the Institute of Development Studies in Sussex, the livelihood resources are defined as capital.[5] Livelihood is constructed from natural, economic, human, and social capital. The latter consists of social resources such as networks, social claims, social relations, affiliations and associations (Scoones 1998). In the systems approach referred to above, the three main subsystems that constitute the total societal system can be translated into human capital, structural capital and natural capital (Bossel 1999). The idea of capital is broader than its pure economic connotation. Capital in sustainability debates often denotes the idea of a resource in which (or with which) can be invested in other resources with possible expected returns. In the section on social capital I shall come back to the meaning of 'capital' in social capital.

Hence, it has become more or less accepted that sustainable development is development that is economically, environmentally and socially/culturally sustainable (expressed in capitals). Although there seems to be agreement that environmental and economic sustainability can be equated with environmental and economic well-being, it is perceived as more problematic to equate social and cultural sustainability with social and cultural well-being. The questions raised are: what is meant by 'social' and 'cultural', and whether socially/culturally sustainable must be perceived as a means or an end (McNeill 2000: 17).

In trying to define environmentally sustainable development (ESD) the World Bank devel-

oped a triangle in which an economic, ecological and social dimension is incorporated and which departs from the idea of sustainability as an opportunity "to leave future generations as many opportunities as we ourselves have had, if not more". Any proposal the Bank will fund must be sustainable in these three areas. Economic sustainable in their framework means sustainable growth, capital efficiency, efficient use of resources and investments. Ecologically sustainable incorporates ecosystem integrity, carrying capacity and conservation of natural resources. Social sustainability implies equity, social mobility, social cohesion, participation, empowerment and cultural identity (Serageldin 1996: 3). It is important to note that the World Bank explicitly uses 'environmental' sustainable development thereby placing the social and economic realms in a subdued position in the overall development process.

Where in the discussion on sustainable development economic and environmental sustainability became to mean economic growth (green GDP) and at the same time environmental protection, the role and meaning of social and cultural features was for a long time left untouched. The reason might very well be that defining social and cultural prerequisites means entering a normative discussion. What is more, the social sciences have stayed rather quiet in the debate on sustainable development as such. Although societal impacts have entered the discussion these were mainly described in non-social terms (Becker, Jahn & Stiess 1999).

Also in policy fields, sustainable development mainly found its expression in environmental or public planning. For example, in the Netherlands issues related to sustainable development were until the early 1980s incorporated into the Ministry of Public Health since the focus was on the 'impact' of environmental disturbances on human health. In 1982 environmental policy became part of the Ministry of Housing, Spatial Planning and the Environment (VROM) that since has published five national environmental policy plans. The plans follow the general definition (mentioned above) of sustainable development but with the target that environmental problems must be solved within one generation. The mainly environmental focus becomes clear from the setting of targets in reduction percentages for climate change, acidification, dispersion of toxic waste, waste disposal, groundwater depletion and so on of which the indicators are monitored by the Dutch Institute of Public Health and the Environment (RIVM). The role of economic growth has been more recently incorporated with the idea of "delinkage, i.e. striving at the same time for lasting economic growth and diminishing environmental pressure". No role is as of yet designed to social and cultural development as part of sustainable development policy (Boersema and Bertels 2000: 81-83).

Only recently, in light of the upcoming UN Earth Conference on Sustainable Development in Johannesburg in 2002 where governments were to present their national sustainable development strategy, a national strategy for sustainable development has been developed in the Netherlands in which most ministries are represented.[6] The suggested thematic focus encompasses: demographic change (migration and elderly); vital cities (quality of life in urban areas); climate change, energy and mobility; water; food, agriculture, nature and biodiversity; sustainable production and consumption; poverty alleviation and prevention of dichotomies. The Dutch national strategy follows the recognized dimensions of sustainable development: social, cultural, economic, and ecological. It tries, as work in progress, to develop a set of national indicators for the above-mentioned thematic fields. Three levels are taken into consideration, the present situation, conditions for sustainable

development for future generations, and the impact of Dutch developments on global developments. For the social dimension this implies subsequently the questions of: how satisfied are we now, to what extent is there security and safety in our environment and social structures, and what is being done about social relationships with and between people outside the Netherlands. For the cultural dimension these are: do we recognize our identities, how tolerant are we to others, and to what extent are other cultures respected and how do we support their existence. Apart from the emptiness of such general endeavours, it is rather questionable how to ever translate them into suitable indicators.

Social sustainability

What we can witness in debates on sustainable development is a slowly emerging interest in the social and cultural elements but at the same time denoting what it means remains vague. The central issues seem to lie in the field of establishing the role of social and cultural features within the concept of sustainable development, whether it is a goal or a means, whether there are useful concepts from within the social sciences in order to operationalize them, whether indicators can be found to monitor and measure it, and to what extent social sustainability can be a tool in itself to foster social developments.

As far as establishing the social and cultural features is concerned, in a discussion on whole and partial sustainability Sachs makes a distinction between social, cultural, ecological, environmental, territorial, economic and political dimensions. If all criteria of partial sustainability are met we might gain whole sustainability. Leaving aside this discussion as such, it is worthwhile to focus on his interpretation of social and cultural sustainability. Social sustainability includes achieving a fair degree of social homogeneity, equitable income distribution, employment that allows the creation of decent livelihoods, and equitable access to resources and social services. Cultural sustainability includes a balance between respect for tradition and innovation, and self-reliance, endogeneity and self-confidence. These criteria are meant to give an indication of "the desired direction of processes, rather than a final state" (Sachs 1999: 32-33).

Social sustainability has played a more distinct role in debates on (rural) livelihood in developing countries. In these debates it is defined as the capability of a human unit (individual, household or family) to gain and maintain an adequate and decent livelihood. As such the human unit must be able to cope with shocks and stress, adapt to, exploit and create change, and assure continuity in situations of for instance declining labour opportunities and wages, declining yields, droughts, floods, collapse of a market, and indebtedness. Social sustainability has an intergenerational dimension via the transfer of assets and/or skills, and land and knowledge from parents to children (Chambers and Conway 1992: 14-17). Other descriptions of social sustainability include an emphasis on social equity, and minimising social exclusion (DFID 1999). It should incorporate normative implications of sustainability such as gender equity, social justice and quality of life. Indicators should consider access to information (including education and mass media), connectedness, physical, psychological and reproductive health, access to life sustaining activities (nutrition, housing, employment, access to land and resources), and safety in and out of home (Becker, Jahn, Steiss and Wehling 1997: 27).

Sustainable development in urban areas has high priority because of the condensed nature of the social, economic and environmental problems. As such it must involve more than a 'green approach' as "the social explosion of the poor and working class districts […] , first

in the United States and then in western Europe, has shown in its full ugliness the social (and economic, cultural and political) exclusion of major population groups" (Borja and Castells 1997: 146). Social sustainability in urban society hence denotes "the inclusion of all population groups […] through guaranteed access to housing…and the right to work" (ibid. 137). Only then improved living conditions can be achieved. A tool is found in social policies aimed at social integration via education, employment, access to housing and changes of mentality and habits (ibid. 136). Other work on social sustainability in an urban context argues that the ongoing globalizing processes referred to above, have made cities "focal arenas of social transformation" (Stren and Polese 2000: 9). In this process, and especially during the last decade, social inequality, cultural conflict and political fragmentation within urban boundaries have sharpened. Social sustainability is seen as a useful concept, "the polar opposite of exclusion both in territorial and social terms", in order to address the challenges that cities all over the world face (ibid. 16). Social sustainable development is subsequently defined as "development that is compatible with the harmonious evolution of civil society, fostering an environment conductive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population" (ibid. 15-16).

In general terms social sustainability (both in rural and urban context) refers to a society that is socially just, equal, without social exclusion and with a decent quality of life, or livelihood, for all. It cannot be denied that there is hardly any disagreement on this. As such social sustainability is both a means and an end. It is an end in itself as something, a socially just or sustainable society, to be attained. At the same time it is a means, on the one hand by operationalizing these general aims into indicators that can measure it and on the other hand as a condition to be sustained for future generations. So far social sustainability seems clear (although the scale dimension cannot be forgotten). The next step, trying to find appropriate indicators as a way to monitor and measure social sustainability is far from unambiguous. This field is hampered by results and although attempts are made to make lists of indicators, how these subsequently can be measured is a field that has hardly been explored. In a later section I shall discuss one fruitful attempt to do so.

The social dimension of sustainable development, social sustainability, is often translated into social capital as a first step to operationalize its meaning. In the next part I shall look into the concept of social capital in order to establish whether the way it has developed in social sciences is fruitful for a further elaboration of social sustainability.

Social capital: interpretations and views

Social capital has become a popular concept in the last decade but has also led to different interpretations and uses. Bourdieu (1983) is among the first to have used social capital (and various other forms of capital such as symbolic, linguistic, cultural) in ways that it is now being used. Social capital as defined by Bourdieu is "the sum of resources…that accrue to an individual or a group by virtue of possessing a durable network…of relationships of mutual acquaintance and recognition" (in Woolcock 1998: 189). As to whose social capital is meant by the concept, Bourdieu points to individuals and groups but others also apply it to communities (Inkeles 2000).[7] A seminal article on the topic is written by Portes who summarizes the various definitions of the concept to conclude that there is emerging consensus that social capital "stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures" (1998: 6). He pin-

points that the sociological analysis of social capital is focused on relationships between actors or between an individual actor and a group. By what he calls a "conceptual twist" introduced by political scientists, social capital became a resource possessed by communities (towns, cities, nations) of which the work of Putnam is most well known (ibid.: 18). The latter defines social capital as the "features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating coordinated actions" (Putnam 1993: 167). From this it is concluded that membership in (horizontal) associations strengthens political (good governance) and economic (economic prosperity) efficiency. In his later work, studying the changing character of American society, Putnam shows that social networks have value and that these social networks (and the norms of reciprocity and trustworthiness that arise from them) can simultaneously be a private and public good. The costs and benefits of social connections can accrue both to the individual making the connections as to the wider society of which he/she is part (2000: 19-20). Some forms of social capital have "bonding (exclusive)" qualities, where other forms have "bridging (inclusive)" qualities. Bonding forms of social capital tend to "reinforce exclusive identities and homogeneous groups" (ethnic fraternal organizations), the bridging forms are "outward looking and encompass people across diverse social cleavages" (civil right movements) (ibid.: 22).

A broad interpretation of social capital includes both social structure at large and the norms guiding interpersonal behaviour. In this view social capital is defined as "a variety of different entities, with two elements in common: they all consist of some aspect of social structure, and they facilitate certain actions of actors – whether personal or corporate actors – within the structure" (Coleman 1988: S98). Apart from horizontal associations (that predominate in the work of Putnam 1993), this broader perspective also includes vertical associations, that are "characterized by more hierarchical relationships and an unequal power distribution among members" (Grootaert 1998: 3).

Woolcock, who gives an excellent overview of the economic and sociological theories to which the concept can be traced back, is especially interested in the potential of social capital ("the nature and extent of a community's personal and institutional relationships") for development and policy purposes. Accordingly he proposes that a "community's prospects for effecting sustainable, equitable and participatory economic development" are minimal in situations where inequalities (gender, class, ethnicity) are widespread: poverty is rampant and no sufficient social safety nets are in function; uniform laws are weak; polities are not freely and fairly elected; groups have little shared concern in common outcomes; a basic sense of order is undermined by war and famine; and minorities are discriminated (1998: 182).

This community focus also plays a role in studies on development. Social capital is recognized as one of the five vital capitals for sustaining people's livelihoods (together with natural, human, physical and financial/economic capital). It is argued that social capital contributes significantly to sustainable development and that without it there can be no human well-being. Social capital is the "glue that holds societies together" and refers to the "internal social and cultural coherence of society, the norms and values that govern interactions among people and the institutions in which they are embedded" (Grooteart 1998: Foreword). Social bonds and social norms (social capital) are seen as the constituent elements of sustainable development and livelihoods. Apart from economic benefits that could be generated through social capital there are several other benefits such as enhanced

well being, a sense of identity and belonging, social status and prestige. This perspective looks at the quality of various types of 'connectedness' that affect people for better or for worse. As such, elements of trust, reciprocity, exchange, norms and sanctions, and networks and groups are the vocal points (Carney 1999).

An important contribution to the debate on social capital is the focus on the less positive sides of social capital in order to relieve it from the utopian idea that it is inherently something 'good'.[8] Negative consequences of social capital are "exclusion of outsiders, excess claims on group members, restrictions on individual freedom, and downward levelling norms (Portes 1998: 15).

After having briefly touched upon some of the meanings and interpretations of social capital, it is necessary to spend a few words on capital as such. There are three characteristics that social capital shares with other forms of capital: it is a resource into which other resources can be invested with an expected (uncertain) return, it is both appropriable and convertible, and it can be a substitute or a complement to other resources. However, unlike financial capital, social capital needs maintenance, and it is located not in actors but in their relations (Adler and Kwon 1999: 3-4).

Far from having been exhaustive in the above overview, several core elements of social capital can be detected. First and foremost it pinpoints that membership of a social network (social relationships) is a resource from which benefits can accrue to actors and to the wider society. These benefits can be economic and political efficiency, but can also lie in the social domain such as a sense of belonging, status and prestige. Furthermore, norms and values play a central role in facilitating collective action and regulate the interactions among people and the institutions in which they are embedded. Connectedness, trust, reciprocity and exchange are the ingredients of the social relationships that lie at the core of social capital and either have a positive or negative impact on the outcome.[9] This leads to the possible risks of social capital, and these encompass exclusion of outsiders, power differentials between the dominant and subordinate group, excess claims, and restrictions to individual freedom.

Indicators for social capital?

The question left to be dealt with is how the characteristics of social capital get translated into specific indicators in order to establish the role or 'function' of social capital and subsequently whether these indicators of social capital encompass the intentions expressed in the notion of social sustainability. This question, although of utmost importance, is at the same time the most difficult question to ask as there are not many studies on how social capital can be translated into indicators.

What is the role of indicators? Obviously, an indicator has to indicate something else (Falk and Harrison 1998). Their major role is to provide significant information about certain developments. As such indicators are a means devised to reduce a large quantity of data, or complex phenomena, to its simplest form in a "(quasi)quantitative way". Quasi means that "although indicators are mostly quantitative in nature, in principle indicators could also be qualitative" and these might be preferable in cases where "the subject of interest is not inherently quantifiable" (Rotmans 1997: 190). Hence, the indicator set must be comprehensive and compact, covering all relevant aspects; they must represent the interest of different stakeholders; the goal of indicators is that they are needed to guide poli-

cies and decisions at all levels of society (Bossel 1999: 7). An important facet of indicators is that they are "context-bound and that without specifying the context in which they should operate, indicators are meaningless" (Rotmans 1997: 191).

What comes forward from attempts to measure social capital with indicators is first of all that these take place at various levels (either for an individual, a community, a country or for large-scale national populations). Secondly, as might be obvious from the above overview on how to define social capital, different meanings of social capital are taken as point of departure. Some focus on associations and the role of social capital in economic and political efficiency and social capital as a source of trust (Putnam 1993), on building social capital through learning at the community level (Falk and Kilpatrick 2000), on trust and cooperativeness across large-scale populations (Inkeles 2000), and on the role of social capital as an element of sustainable development (Grootaert 1998). The latter, as it tries to link social capital to sustainability issues, might be of interest here.

Grootaert (1998) argues that social capital has been the missing link in sustainable development thinking as the three forms of capital that were commonly used, i.e. natural capital, physical or produced capital and human capital, could not include the way in which the actors interact and organize themselves to generate growth and development. There are two suggested ways to select indicators: based on the relationships and institutions involved, and according to the impact of social capital on the development process (growth, equity, poverty alleviation). This work in progress by the World Bank takes social capital to denote (horizontal) associations and institutions. There is supposedly a positive impact on well-being, quality of education, environmental management, and so on (while the adverse impacts are also acknowledged). The subsequent set of indicators includes among others type of association, degree of internal homogeneity, membership requirements, type of services provided, extent of trust, etc. Also sets for the national level are presented that have been used for cross-country research, these included aspects of civil and political society, social integration and legal and governance aspects (ibid.: 15). Although more explicit than most studies, two issues are rather unclear: exactly how (and why) the economic benefits that seem to result from the horizontal organizations are equated with sustainable development, and how the indicators are measured.

To return to the question above on the translation of social capital into indicators, it can be concluded that there is quite a variety of indicators used, which is a result of the fact that there is also a wide variety of interpretations of social capital. Hence a list of indicators for 'social capital' as such does not exist. Linking social capital and indicators can only be done meaningfully if there is a clear conceptual and operational definition of the concept, and the study by Grootaert (1998) is a good attempt. As to the second part of that question, whether indicators of social capital encompass the intentions of social sustainability, the same ambiguity arises. The mere fact that both positive and negative consequences are inherent in social capital asks for caution in itself. In case social capital has positive effects, whether these directly accrue to social sustainability is still a field to be explored further. In the sections below where the work of Telos is discussed, it is shown that various characteristics of social capital can be used for explicating the social and cultural dimensions of sustainable development of which some find their way either in requirements or in indicators. It shall be shown that notwithstanding the wide-ranging meanings of social capital, this is still not inclusive enough to express social sustainability and sustainable development more in general.

Monitoring sustainable development

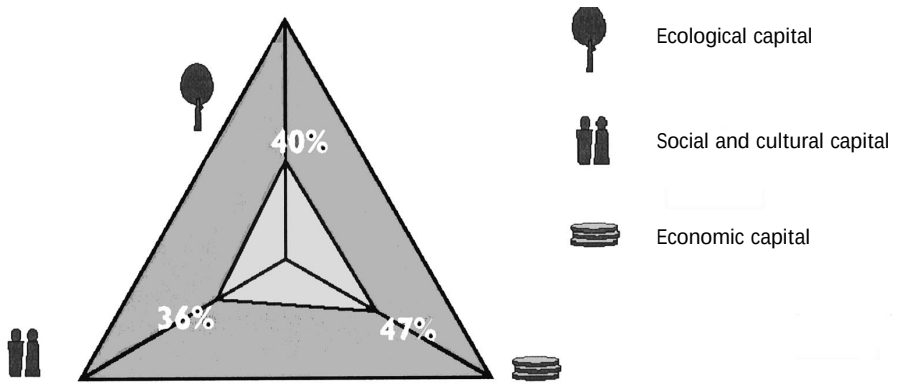
In the Netherlands, Telos has developed both a method and a monitoring 'instrument' to assess sustainable development in one of the Dutch provinces, Brabant.[10] The first step in this process was to develop a method, which involved finding the modus operandi for denoting sustainable development in such a way that it could function as a monitor. The point of departure is that sustainable development is an integral, normative and dynamic process in which ecological, economic, and social and cultural dimensions prevail. Although some interesting methods have been developed that measure sustainable development (such as green GDP and ISEW[11]) these are mainly oriented at economic and environmental factors and lack tools to include social and cultural dimensions.[12] In the search for methods that can substantiate the social and cultural realms, work in the field of system analysis has been explored. Bossel's (1999) approach that the three main subsystems need to function in an optimal way before the societal system can be sustainable, has been explained above. Although there is enough attention for social dimensions and the methods used are worthwhile, the theoretical backing of some of the main elements in this approach is rather weak. This counts especially for the role of the so-called orientors, "labels for certain categories of concerns or interests" (ibid. 25). A list of basic orientors (existence, effectiveness, freedom of action, security, adaptability, coexistence, psychological needs) is used as a checklist in search for suitable indicators (as the indicators give information about these prime orientors). Indicators for sustainable development depend on the satisfaction of these orientors, which would ensure a path of sustainable development. The problem lies mainly in the validation of these orientors for which a whole range of explanations are sought ranging from human emotions, punishment as applied by most societies, the Bible, human needs theory, cultural theory, social systems theory, psychology, and computer experiments on the evolution of intelligence in artificial life (ibid. 35-37).

A more practical systems approach in order to monitor the interaction between various societal developments has been developed by ICIS.[13] This is visualized in a triangle with a human, welfare, and environmental dimension, subsequently translated into social and cultural capital, economic capital, and environmental capital. The dynamics between short and long term developments of the capital forms are defined as flows (ICIS 2000). Sustainable development in this model is thus seen in terms of capitals and flows. In order to operationalize sustainable development indicators need to be developed that represent both capital forms as flows. There is a marked difference between the two sets of indicators, the "flow indicators are made up of measurable quantities, whereas capital indicators are abstract, characterised by dimensions". This is one of the reasons why capital indicators are as of yet underdeveloped (Rotmans 1997: 191).

Inspired by these approaches Telos developed a method that consists of three capitals, social and cultural, economic, and ecological, presented in a triangle (see figure 1).[14]

It is argued that sustainable development is development that must be aimed at the optimization of the three capitals, must sustain over future generations, and must sustain globally. In other words, there can be no transfer of costs to other capitals, over time, and to other areas. In this framework, each capital is considered to have an optimum (normatively set the centre of the triangle is point 0, while the corners of the triangle represent 1, the lines from the centre to the corner show the sustainability score of the capitals). Reaching the optimum (for each capital) means reaching sustainable development. In figure 1,

Figure 1. The Sustainability Triangle



the light coloured inner triangle shows the sustainable situation as monitored (in this case for Brabant) while the darker outer triangle shows the optimum situation.

Each capital is made up of stocks, i.e. the essential elements that determine the quality and quantity of the capitals. The stocks for each capital have been established on the basis of the relevant literature in each of these fields and were discussed for their potential and importance with scholars, policy makers, and stakeholders. The following list of capitals and stocks for assessing sustainable development (in Brabant) was the result.

Social and Cultural Capital	Economic Capital	Ecological Capital
Citizenship	Economic structure	Nature
Health	Labour	Soil
Education	Capital goods	Surface water
Solidarity	Knowledge	Air
Living conditions	Infrastructure	Subsoil water
Cultural diversity	Minerals	
Consumption Behaviour		

As each stock is in itself too complex an entity to measure and monitor, indicators have been chosen on the basis of certain requirements posed on each stock. Several requirements have been formulated on the basis of literature and policy and have been subsequently discussed in interactive sessions with stakeholders and experts. This resulted in a final list of requirements. For example, the stock health and healthcare facilities, which is part of social and cultural capital, has as requirements that the population must be healthy in physical and mental terms, that health care facilities must be easily available and accessible, people must behave healthy, and there must be a right balance between labour time and leisure time. The subsequent indicators (in this case perceptions of personal health, percentage of people that have environment related illnesses, the average waiting time for specialist care, perceptions on having enough leisure time, suicide ratio, percentage of people that have unhealthy behaviour, and percentage of vacancies for health care personnel) must give an indication to what extent these requirements have been met.

Whereas the stocks are quite fixed (as they are based on research, literature study, and expert and stakeholder consultation) the requirements and indicators are strongly dependent and related to developments of scope (theme, scale, aggregation level). For instance, the requirements and indicators that have been set to monitor sustainable development at a provincial level might not be the same as those for monitoring national or urban sustainable development. The model is thus partly flexible.

How about the indicators? Following general qualities of indicators (that they must be simple and manageable, see the discussion in the former section) the number of indicators is kept small, with a maximum of eight for each stock. These eight (or less) indicators, that together form the content of the stock, are not necessarily all of the same importance or weight as they are not automatically equally important in the composition of the stock. Both stocks and indicators have been weighed by dividing a total of 100 points over the number of stock or indicators. The weighing of the stocks (belonging to each of the capitals) was carried out by stakeholders, while groups of experts were consulted to do the weighing of the indicators per stock for the capital that is their field of expertise. The chosen set of indicators and their relevance (as expressed in the weights) is supposed to give enough information on the stock while at the same time communication with specific user groups is an option.
Within the Telos approach, each indicator receives a score (measurement) that gives insight into its state or condition. This score can be either quantitative or qualitative, and is related to normative targets that as far as possible have been objectified. These targets are foremost based on scientific literature and policy studies and documents. If these are not available the targets are subtracted from what can be considered as a societal 'consensus'. As a last tool, targets can be based on developments in time and (geographical) space. Four classes have been defined: unacceptable (red: immediate action is needed), worrisome (orange: needs immediate attention), acceptable (yellow: short term goal), and desirable (gold: long term goal). Per indicator it can thus be determined in which class the score falls. The total scores of the indicators of a stock make up the end-score of this particular stock, and the total score of all the stocks make up the end score of the particular capital to which they belong.

This is summarized in figure 2. The circle represents one stock. In the circle the scores for the (in this example) 5 indicators are incorporated (they look like pieces of a pie, and their colour represent the class in which they fall). The fuller the pieces of the circle, the better the indicators have scored. If the outer ring is reached the optimum of this particular stock is reached as well. The total of the filled area of the circle establishes the end score of the stock (in the figure represented in the pillar). The pillar in which all the stocks are taken together shows the total score of the capital.

To monitor changes over time, for each indicator it has been attempted to find data that represent both the situation now (2001) and the situation of five years back (1995). This is helpful in determining whether a desirable development is taking place. In Figure 3 this is represented by the arrows. If the arrow points to the centre of the circle this implies that there has been a deterioration compared to the former situation, if the arrow points to the edge of the circle there has been an improvement. If aggregated to the level of the capitals it means that the arrows should point to each of the angles as this is a movement towards sustainable development.

Figure 2. Capitals, Stocks and Indicators

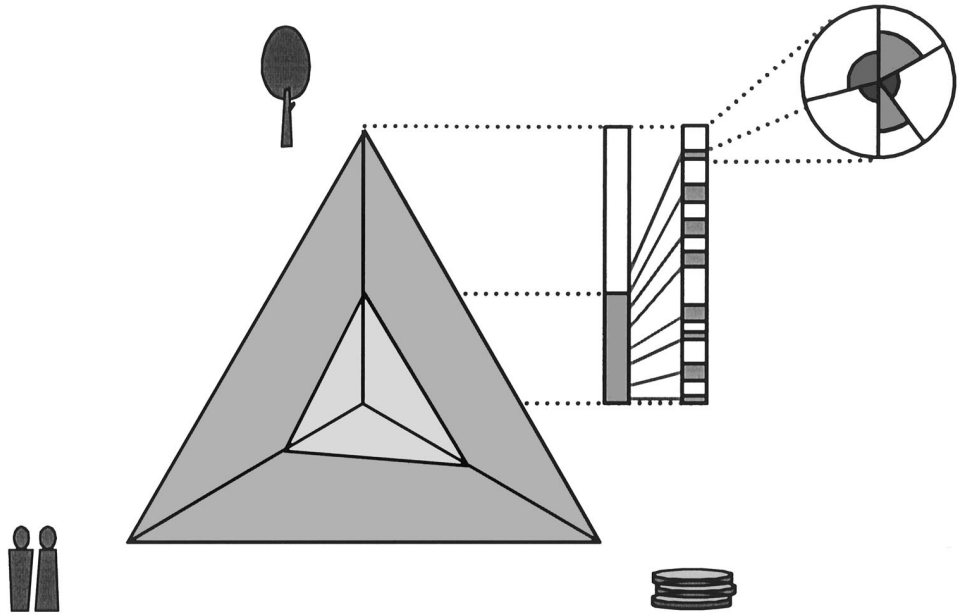
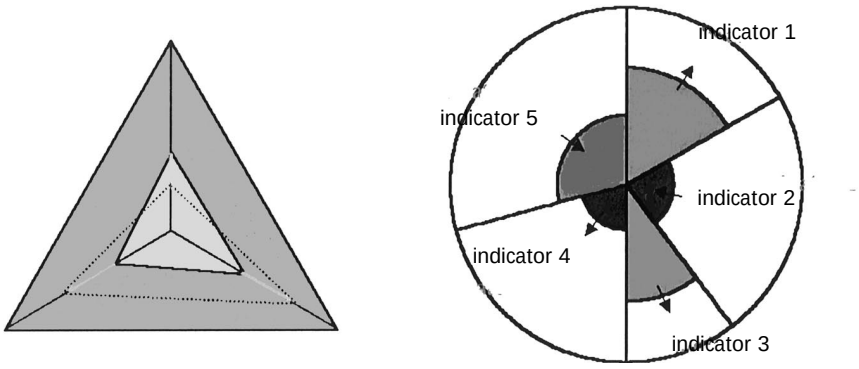


Figure 3. Changes over time



In this approach the capitals are closely related to the stocks and their indicators. However, the capitals (and thus sustainable development as such) are also affected by other conditions that are not included in the stocks. These conditions have the status of context variables as they do not meet one of the preconditions of stocks, namely that they can be influenced from within the location for which sustainable development is monitored. As the model is also aimed at stimulating change (of behaviour or policies) in a more sustainable direction this influence-prerequisite is important.[15] The context variables how-

ever, cannot be completely ignored either as they do co-condition the context in which sustainable development takes place. Such context variables are for instance, geographical location, institutional arrangements, and technological developments.

Although the method here presented starts with capitals and then explains stocks and indicators, the way the method has been developed needs some clarification. An important point of departure has been the wish to measure and monitor all three capitals in a similar way. No preset sustainability norm for the capitals have been set but instead the starting point was to select the most central elements (on the basis of literature study and policy documents) in the field of economic, ecological, and social and cultural dimensions and for these elements (later translated into stocks) it was established (later translated into requirements) what the (sustainable) end goal must be. These have been operationalized with the indicator sets that have subsequently been measured on the basis of secondary data. Working from the scores on the indicators backwards to the capitals, an assessment of sustainability resulted based on an integrated method.

As said, the above method has been applied for assessing sustainable development in the Dutch province of Brabant. The conclusion for Brabant based on the situation in 2001 (see figure 1) is that there is a challenge left in the field of sustainable development since ecological capital reached 40% of the optimum, economic capital attained 47% of the optimum, and social and cultural capital lags behind with 36% of its optimum. The next section explains in more detail the operationalization, weighing and measurement, of social and cultural capital.

Social and cultural capital: operationalization[16]

The operationalization of social and cultural capital is needed to formulate the central elements (stocks) that form the social and cultural capital of the society.[17] Above we saw that the stocks for social and cultural capital comprise: citizenship, health, education, solidarity, living conditions, cultural diversity, and consumption behaviour. The weighing of these stocks, where 100 points could be divided and which was carried out by stakeholders, has led to the following priorities.

Stock	Weight
Citizenship	19,5
Health and Health Care	16,0
Education	16,0
Solidarity	15,0
Living conditions	14,0
Cultural diversity	10,0
Consumption behaviour	9,5
Total	100,0

How have the indicators been chosen and on the basis of what? As point of departure several relevant concepts from social sciences and of policy documents have been explored for their possible contribution to this process of operationalization. The synthesis of these findings (and in addition consultation with experts and input from ongoing social debates) has resulted in the formulation of the stocks mentioned above.

The concepts that have been explored are: social capital, social infrastructure, well-being, culture, and social sustainability. Social capital and social sustainability have already been examined in earlier sections. For formulating the stocks the following elements from social capital and social sustainability were taken into consideration. The existence of networks, norms of reciprocity, and trust in society all have an effect on productivity and well-being. Social capital as such has an important impact on education, health and health care, social policy and economic development. These issues come back in the stocks health, education, and citizenship. Social justice, social cohesion, participation, solidarity between and within societies, and a decent livelihood (personal well-being and well-being of the society as a whole) are dimensions of social sustainability that have been taken into account, resulting for instance in the stock solidarity and citizenship.

Well-being and social infrastructure are the other two related concepts that have been explored. Well-being has two dimensions; it can refer to personal well-being and to collective well-being. In the latter sense it denotes those services in a society that serve as the basis for fulfilling human needs and personal development. It not only concerns material services and needs, like employment, public transportation, education and so on but also immaterial needs such as social justice and equal opportunities. Those indexes that try to measure collective well-being often focus on the more objective elements (such as the social and cultural planning agency, SCP) covering areas like housing conditions, health, purchasing power, leisure time, mobility, social participation, involvement in sports, holiday behaviour, educational level and participation in paid employment. One of the reasons for the often more objective focus is that the results and findings must be translatable into policy. However, it is not enough to explain well-being solely in terms of objective measurements. Subjective perceptions are considered part and parcel of well-being and therefore they are integrated into the formulation of social and cultural capital.

Well-being thus has three dimensions. First of all a normative dimension expressed in the idea of equal opportunities (no dichotomies). Secondly, there is a policy dimension, well-being as translated in policies in the field of employment, housing, health, education, social participation, culture (cultural diversity and cultural heritage), mobility and leisure time. Thirdly, well-being as an individual quality expressed in independence and self-realization. As such the concept of well-being has been a vital impetus in operationalizing the capital and in formulating the various stocks.

Social infrastructure (social quality) seems to be slowly replacing the concept of well-being in policy writings. It is defined as the total of organizations, services, and social relationships that facilitate to coexist in fairness (in neighbourhoods, groups, networks, and families) and to participate in society (Engbersen and Sprinkhuizen 1997). A distinction is made between formal infrastructure which refers to those services and arrangements available in a neighbourhood or town that stimulate the social climate (a sports club or community centre), and the informal infrastructure which refers to social networks that exist in a neighbourhood or town. This informal component overlaps to some extent with social capital and is understood as the support, either individually or collectively, to society (volunteer aid). Several indicators for social quality as they come forward in the Policy Document on Well-Being of the Ministry of Health, Welfare and Sports (VWS 1999) are: economic independence, solidarity, social autonomy or self-reliance, and active participation in social processes. The latter is to a large extent co-determined by employment, health, education and housing.

A last concept that was taken into account is culture, which is in fact as difficult a concept as is social capital. Nevertheless various relevant identifications can be distinguished: symbols and meaning, norms and values, habits and learning, politics of identity, tradition, artefacts and so on. It covers the process of intellectual, mental and aesthetic development, it represents a certain way of life of a people, a period or a group, and it also corresponds to the products of artistic activities.

From this exploratory study as carried out by Telos, it is concluded that at least three dimensions come forward from the social and cultural domain that are fundamental in the light of sustainability discussions. These are the relationships of people with each other, the relationships of people with their environment, and a certain ideal or just image of society. The core principles include: a socially just society, or equal opportunities for all (social goods and services have to be open for all and should not discriminate on the basis of gender, race, age, ethnicity or class). People play a central role, their behaviour and attitude inflict on their personal lives as well as on society as a whole and the environment. As citizens they have rights and obligations and their input in formal (for instance employment) and informal (for instance volunteer aid) networks is of major importance. Finally, culture is seen as an important contribution to the more social fields, as it is a way to incorporate diversity and understanding. Culture is not just interpreted as artistic activities, but also as a way to stimulate identity (and hence empowerment and emancipation). Expressions of culture can be a tool for a better understanding of different lifestyles and different ways of thinking (and hence stimulate social cohesion).

On the basis of the background study and the general conclusions that have been drawn from that, the already mentioned stocks have been chosen. These stocks are further explicated on the basis of requirements and have subsequently been translated into indicators.[18] These can be found in the Appendix.

The way social and cultural capital has thus far been operationalized and translated into indicators needs further elaboration and research. Translating the requirements into indicators and finding matching (secondary) data (that represent the right scale) is still work in progress and the inherent problems of ‘measuring’ social dimensions needs further discussion and foundation. Furthermore, an attempt must be made to incorporate several other debates from social sciences for the reinforcement of these capitals such as debates on social cohesion, stratification and inequality, and inclusion-exclusion. Additionally, the cultural dimension is far from satisfying as it is posed now. Aspects of multiculturalism, especially if the scope is the Netherlands, must be included as well.

Notwithstanding these weaknesses, for the time being the method and monitoring tool of Telos have turned out fruitful in at least two ways. First of all, it stimulates debate among various parties that might otherwise not operate side-by-side concerning the goal and direction of sustainability (policy makers, stakeholders, citizens). This is related to the fact that the model visualizes relationships that otherwise remain rather obscured and portrays a ‘common language’ thereby crossing various boundaries. Secondly, the integrated approach makes it possible to distract policy makers and stakeholders from their own specific goals and interests. So, although the method still needs refinement, it already serves the objective of public debate and is among the first attempts to include the social dimension more soundly.

Preliminary findings and further discussion

It might be an unsatisfactory way to end this paper, but it must be stated that the exploration has not yet finished. It has been a first attempt to link various discussions, i.e. globalization, sustainable development, social capital and social sustainability, to a mixture of objectives, i.e. context, theory and methodology. In this 'concluding' section I shall try to distil several preliminary findings from this exploration and link them to points for further discussion as a way of continuing the search for a firm integration of social and cultural dimensions into an overall and well contextualized method of assessing sustainability.

As to the issue of contextualization, the paper has shown that by trying to bring together debates on sustainable development and globalization and urbanization, both are reinforced and represent the major concerns of present-day societies. More importantly by unravelling the social dimension which receives more explicit attention in the latter debates, insight might be gained into which major social issues should be included into a proper framework of sustainable development. Hence the contextualization gives input for a better understanding of 'the social', and linking both debates is a fruitful and in fact necessary undertaking. An interesting question would be to what extent a sustainable society or world would have a positive impact on the many side-effects of globalization and urbanization as touched upon in this paper.

As to theory, the meaning and content of social sustainability and the way the concept of social capital might be of relevance here, and the capital approach as such have been topic of exploration. To start with the latter, assessing sustainable development is often expressed in a capital approach. Whether this is the most fruitful way is still a matter of discussion (although the work done by Telos shows that as of yet it is at least very useful in stimulating public debate, a contribution that cannot be overlooked). The questions relate to whether the characteristics of the capitals are not too dissimilar to incorporate them into one framework (whereas for social capital it is suggested that it can grow while used – as collective action leads to the potential of more collaboration – the other capitals seem to diminish with use), and whether the monetary insinuation that goes hand in hand with the term capital is not too obstructing (for instance where it is an established concept in theory, in policy circles it is often unknown beside this more economic meaning).

Social sustainability has, in this paper, been singled out in order to seek theoretical backing for the social and cultural dimensions of sustainable development. As a first step, social sustainability is considered to be closely related to social and cultural capital, and the views and operationalization of social capital as it has evolved in social and political sciences is investigated (thereby immediately showing and acknowledging that theoretical backing for the cultural domain is still lacking and is so far only expressed as a part of the social domain). Although this exploration needs quite some additional work, three preliminary findings can be brought forward.
First of all, social sustainability denotes appealing viewpoints: a society that is just, where there is no exclusion of social groups, with a decent livelihood for all, and a society characterized by emancipation, freedom and solidarity. Things we all agree with. However, how to get there has rarely been explained, and in cases where this is attempted it is still difficult to see how common agreement (in the form of public debate) is found among all involved parties. In the field of attaining inclusive cities such an attempt has been made by focusing on city policies in the field of governance; social and cultural policies; social infrastructure and public services; urban land and housing; urban transport and accessi-

bility; and employment, economic revitalization, and the building of inclusive public spaces (Stren and Polese 2000). Although a fruitful attempt which has the purpose of cross-country comparison, the above remark on common agreement also counts here, as well as to what extent achievements in these fields might realize the social just (urban) society.

Secondly, in order to operationalize social sustainability from a social science perspective, the concept of social capital is considered a good starting point (to some extent for the simple reason that the concept denotes the capital input known in approaches that try to assess sustainable development). The exploration shows however, that it is a very ambiguous concept. Although there is definitely a challenge to work towards a better and more clearer delineation of the various strings of debate (the individual versus collective interpretations, the more economically versus the more social operationalizations), the question here is what we can learn from this concept and whether it can be translated into indicators if we want to use it for assessing social sustainability. Social capital turned out to supply input for social and cultural requirements. However, it is too narrow for operationalizing social and cultural capital into indicators for the sustainability method as developed by Telos.

Thirdly, and closely related to the second issue, is the question whether the ways in which social capital has been given a meaning in social and political sciences, fits the discussion on social sustainability in the first place (in fact this should be the preceding question). Furthermore, if social capital is conceived as having some value which however at the same time is considered to be too narrow to grasp it all (as recognized by Telos), what other concepts come to the fore to be explored for this purpose? In the former section I have given some examples (social cohesion, inequality and stratification, multiculturalism) that according to me are relevant for further exploration. Are these indeed relevant and if so how?

Regarding methodology this paper has explained the method developed by Telos to assess sustainable development in a Dutch province. As explained this is work in progress. What needs immediate attention is foremost the problem of scale and scope, the availability of data, and a better theoretical backing. The latter two have been dealt with above, so I shall limit myself here to the problem of scope and scale. This is probably the single most challenging part as far as the method is concerned. The issue of scale and scope relates to the generalness (general applicability) of the framework. Is it possible (and needed) to find a framework that is applicable at the local, regional, and national level? Is it possible (and needed) to come to a method that can incorporate the rural and urban dimension, the problematique of northern and southern countries? The method developed by Telos is now in this phase. An important question is, to what extent can it be applied to other provinces in the Netherlands, or even outside the Netherlands? At the same time we are trying to find out to what extent this model should (or not) be modified in order to fit the urban dimension as we are now starting a project to monitor the sustainability of one middle-large city in the Netherlands. As explained above, the stocks are considered to be of relevance for all levels (at least in the Netherlands) and the challenge lies in finding suitable indicators that represent the problems that play at, for instance, the urban level compared to those we used for the provincial one. An overview of prominent urban issues in economic, ecological and social and cultural terms, should give the impetus for finding the appropriate indicators.

From these overall findings and points for further discussion it can be concluded that there is quite a challenge left to continue along the path here chosen. The final aim is to come to a firmly established method in order to assess sustainable development in which the social and cultural aspects are recognized, operationalized, and backed by theory and which should have the purpose of stimulating debate among all parties involved (with subsequent policy and learning outcomes).

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Notes

1 Associate-Researcher at Globus, Institute for Globalization and Sustainable Development and senior staff of Telos, a network organization in which participate Tilburg University, Eindhoven University of Technology, Etin consultants, PON Institute for Research and Development, and the Province of Noord Brabant.

2 For a detailed overview of the growing interactions between nations and people see The Human Development Report 1999 (UNDP 1999).

3 The approach of Beck (1992) is at the same time a plea for including the social (new social inequalities when risks positions and class positions overlap), cultural (changing value orientations: the falling apart of the progress consensus) and political (new forms of activism) dimensions in debates on risks that are often confined to environmental and natural science.

4 Sustainability is interpreted in many different ways and it is hard to find common agreement on its meaning and research implications. Some suggest that there are more than seventy different interpretations to delineate sustainable development (Elliot 2000: 6). Others suggest that it is almost impossible to find a definition of sustainability that might be applicable to all places at all times (Köhn and Gowdy 2001: 3). Furthermore, discussions loom large as to how to predict or measure the needs of future generations, and in practice most attention goes to the sustainability of the present generation (Dobson 2000).

5 These researchers developed the concept of livelihood sustainability out of dissatisfaction with existing modes of analyzing change and uncertainty. It is argued that production, employment and cash incomes that are often used as the sole indicators for well-being are industrial preoccupations which cannot reflect sustainability in non-industrial contexts.

6 The information presented here is based on work in progress (NSDO 2001).

7 Inkeles includes four categories of phenomena in social capital available to a community: social institutions, culture patterns, modes of communication and association and psychosocial characteristics (2000: 22-23).

8 There are also various theoretical and empirical weaknesses to the concept. These include that it explains too much with too little, that it remains unclear whether social capital is the infrastructure or the content of social relationships, and that it can justify contradictory public policy measures (Woolcock 1998: 155-156).

9 An interesting overview of benefits and risks of social capital from the perspective of organization studies is found in Adler and Kwon (1999).

10 The following information is based various documents of Telos (2000, 2001a, 2001b).

11 For details on Green National Product and the Index of Sustainable Economic Welfare, see Cobb and Cobb (1994).

12 Bossel (1999: 12-14) discusses the shortcomings of various types of indicators that try to assess sustainable development. Single indicators (like GDP) are bound to miss vital aspects, and aggregate indexes (like ISEW, Index of Sustainable Economic Welfare; GPI, Genuine Progress Indicator; HDI, Human Development Indicator) hide deficits in some sectors and put together items that cannot be measured in the same units. Aggregate indicators like the Ecological Footprint and SPI, Sustainable Progress Index, do not capture the social dimensions. While the Barometer of Sustainability, which combines ecosystem well-being and human well-being, has the disadvantage of aggregating unbalanced indicators for both dimensions. The

more systematic PSR (Pressure, State, Response) and PSIR (Pressure, State, Impact, Response) frameworks seem to lack the dynamic nature of the processes. And finally, extensive lists of indicators are according to Bossel often not a systematic and complete reflection of the total system. His conclusion is that only a systems approach can structure the search for indicators. The method developed by Telos that is discussed below shows that lists of indicators can be quite useful in monitoring sustainable development if based on a theoretical framework, input from experts and stakeholders, and corresponds to requirements.

13 The International Centre for Integrative Studies (ICIS) is affiliated with the University of Maastricht.

14 In the next section I shall pay special attention to social and cultural capital as these play an important role in discussions on social sustainability. Economic capital is based on the narrow definition of prosperity as in the approach to sustainable development the norms that ecological capital and social and cultural capital pose on economic capital are already included. Prosperity in the narrow sense implies that the income level is such that it can fulfil the sought-after needs. In other words, the norm that must be reached within economic capital is primarily the generation of a high enough income level. As such economic capital focuses more specifically on the material production of goods and services. The central questions are: what is the desired (macro or meso) income level and what is needed to attain this? Ecological capital is interpreted as the total sum of biotic (living) and a-biotic (non-living) elements of nature. The biotic elements of an ecosystem include all flora and fauna. An important tool for establishing the quality of this flora and fauna is the biodiversity of the ecosystem. The a-biotic elements are soil, water and air. This is a rather traditional subdivision. The quality of the a-biotic elements strongly influence the possibilities of the flora and fauna to develop further. From a sustainable development point of view the stock minerals is included in ecological capital.

15 The four classes and their colours mentioned above have the same purpose. It has proven to be especially useful in relating back to policy makers, user groups and stakeholders as it is immediately clear for which indicators, stocks and capitals immediate action is needed.

16 Within Telos, the operationalization and validation of social and cultural capital has been the work of Nasrin Tabibian and Marc Bekkers from the PON Institute. It has to be stressed that in the approach taken by Telos sustainable development comprises all three capitals. Taking aside one capital as I am doing in this paper is thus contrary to this underlying principle. For the same reason, Telos does not define social sustainability as such, since social and cultural capital is an integral part of sustainable development.

17 The formulation of stocks, requirements and indicators results in a general framework, the final step of collecting the secondary data (filling in the framework) took place for the provincial level (Brabant). However, since ongoing debates on (the direction of) social policy in the Netherlands and in Brabant have been incorporated, this sets limits to the overall general nature of the framework (as obviously the choice of concepts used for operationalization already implies as well).

18 The secondary data that quantify the indicators are assembled from various institutions and statistical agencies, but also from reports, policy documents, and literature. These include among others the Central Buro of Statistics, the Statistical Handbook of Brabant, Social and Cultural Enquiries by Etin consultants, the Social and Cultural Planning Agency. It has not been possible to always find the data that represent the provincial level and therefore also national data have been used. As this is work in progress, in this field more substantial work needs to be done.

19 Thanks to Reini Raatgever for contributing to this argument.

References

Adler, P. and S. Kwon (1999) Social Capital: the Good, the Bad, and the Ugly. Modified version of a paper presented at the 1999 Academy of management meeting in Chicago. University of Southern California: Marshall School of Business.

Bauman, Z (1998) *Globalization. The Human Consequences*. Cambridge: Polity Press.

Beck, U (1992) *Risk Society. Towards a new Modernity*. London: Sage Publications.

Becker, E., T. Jahn, I. Stiess and P. Wehling (1997) Sustainability: A Cross-Disciplinary Concept for Social Transformations. Unesco, Most Policy Paper 6.

Becker, E., T. Jahn and I. Steiss (1999) Exploring Uncommon Ground: Sustainability and the Social Sciences. In E. Becker & T. Jahn (eds.) *Sustainability and the Social Sciences. A Cross-Disciplinary Approach to Integrating Environmental Considerations into Theoretical Reorientation*. London and New York: Zed Books, pp.1-22.

Boersema, J. and J. Bertels (2000) Sustainable Development in the Developed Countries: Will Theory and Practice Meet? In K. Lee, A. Holland & D. McNeill (eds*) Global Sustainable Development in the 21st Century*. Edinburgh: Edinburgh University Press, pp. 77-96.

Borja, J. and M. Castells (1997) *Local and Global. The Management of Cities in the Information Age*. London: Earthscan Publications Ltd.

Bossel, H (1999) Indicators for Sustainable Development: Theory, Method, Applications. A Report to the Balaton Group. Winnipeg, Canada: International Institute for Sustainable Development.

Bourdieu, P (1983) Oekonomisches Kapital, Kulturelles Kapital und Soziales Kapital. *Soziale Welt*. Supplement 2: 183-198.

Carney, D (1999) Social Capital. Key Sheet for Sustainable Livelihoods. Department for International Development [http://www.oneworld.org/odi/keysheets]

Chambers, R. and G. Conway (1992) Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. Institute of Development Studies, Sussex. Discussion paper 296.

Cobb, C. and J. Cobb (1994) *The Green National Product, a Proposed Index of Sustainable Economic Welfare*. Lanham, Maryland: University Press of America.

Coleman, J (1988) Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94 (Supplement) S95-S120.

Devuyst, D (2001) Introduction. In D. Devuyst, L. Hens & R. Impens (eds) *Neighbourhoods in Crisis and Sustainable Urban Development*. Brussels: VUB University Press, pp. 1-4.

DFID (1999) Sustainable Livelihoods Guidance Sheets. Department for International Development, Government of the United Kingdom.

Dobson, A (2000) Sustainable Development and the Defence of the Natural World. In K. Lee, A. Holland & D. McNeill (eds.) *Global Sustainable Development in the 21st Century*. Edinburgh: Edinburgh University Press, pp 49-61.

Elliott, J (2000) *An Introduction to Sustainable Development*. London and new York: Routledge.

Ellis, F (2000) *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.

Engbersen, R and Sprinkhuizen (1997) Nederland aan de monitor: het systematisch en periodiek volgen van maatschappelijke ontwikkelingen. Utrecht: NIZW.

Falk, I. and S. Kilpatrick (2000). What *is* Social Capital? A Study of Interaction in a Rural Community. *Sociologia Ruralis* 40, 1: 87-110.

Falk, I and L. Harrison (1998) Indicators of Social Capital: Social Capital as the Product of Local Interactive Learning Processes. Paper D4/1998 in the CRLRA Discussion Paper Series. University of Tasmania: Centre for Research and Learning in Regional Australia.

Giddens, A (2001) *Sociology*. Cambridge: Polity Press.

Girardet, H (1999) *Creating Sustainable Cities*. Devon: Green Books Ltd.

Grootaert, C (1998) Social Capital: The Missing Link? Social Capital Working Paper Series no. 3. The World Bank.

Haan, L. de (2000) Globalization, Localization and Sustainable Livelihood. *Sociologia Ruralis* 40, 3:339-365.

ICIS (2000) Werken met het Denkmodel [Working with the Conceptual Model]. Working paper I00-D002, International Centre for Integrative Studies, Maastricht: University of Maastricht.

Inkeles, A (2000) Measuring Social Capital and its Consequences. *Policy Sciences* 33: 245-268.

Köhn, J. and J. Gowdy (2001) Sustainability as a Management Concept. In J. Köhn, J. Gowdy & J van der Straaten (eds.) *Sustainability in Action. Sectoral and Regional Case Studies*. Cheltenham: Edward Elgar Publishing, pp.

Macnagthen, P (2001) Sustainable Development in Urban Areas: Setting the Scene. In D. Devuyst, L. Hens &

R. Impens (eds) *Neighbourhoods in Crisis and Sustainable Urban Development*. Brussels: VUB University Press, pp. 5-18.

McNeill, D (2000) The Concept of Sustainable Development. In K. Lee, A. Holland & D. McNeill (eds) *Global Sustainable Development in the 21st Century. Edinburgh: Edinburgh University Press*, pp. 10-30.

NSDO (2001) First Conceptual Framework of the National Strategy for Sustainable Development.

Portes, A (1998) Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology* 24,1:1-14.

Putnam, R (1993) *Making Democracy Work. Civic Traditions in Modern Italy*. Princeton: Princeton University Press.

Putnam, R (2000) *Bowling Alone. The Collapse and Revival of American Community*. New York: Touchstone.

Rotmans, J (1997) Indicators for Sustainable Development. In J. Rotmans and B. de Vries (eds) *Perspectives on Global Chance. The TARGETS Approach*. Cambridge: Cambridge University Press, pp187-204.

Ruijter, A. de (1997) The Era of Glocalisation. In T. van Naerssen, M. Rutten and A. Zomers (eds) *The Diversity of Development. Essays in Honour of Jan Kleinpenning*. Van Gorcum, pp.381-388.

Ruijter, A. de (2000) De Multiculturele Arena [The Multicultural Arena]. Oratie Katholieke Universiteit Brabant.

Sachs, I (1999) Social Sustainability and Whole Development: Exploring the Dimensions of Sustainable Development. In E. Becker & T. Jahn (eds.) *Sustainability and the Social Sciences. A Cross-Disciplinary Approach to Integrating Environmental Considerations into Theoretical Reorientation*. London and New York: Zed Books,pp.

Sassen, S (1991) *The Global City. New York, London, Tokyo*. Princeton: Princeton University Press.

Sassen, S (1994) *Cities in a World Economy*. Thousand Oaks: Pine Forge Press.

Sassen, S (1998) *Globalization and its Discontents*. New York: The New Press.

Scoones, I (1998) Sustainable Rural Livelihoods. A Framework for Analysis. Working Paper. Institute of Development Studies, Sussex.

Serageldin, I (1996) Sustainability and the Wealth of Nations. First Steps in an Ongoing Journey. Environmentally Sustainable Development Studies and Monograph Series 5. Washinton D.C.: The World Bank.

Stren, R. and M. Polese (2000) Understanding the new Sociocultural Dynamics of Cities: Comparative Urban Policy in a Global Context. In M. Polese and R. Stren (eds) *The Social Sustainability of Cities. Diversity and the Management of Change*. Toronto: University of Toronto Press, pp. 3-38.

Telos (2000) De Telos Methode [The Telos Method]. Tiburg: Telos.

Telos (2001a) De Duurzaamheidbalans van Noord-Brabant 2001 [Sustainable Development in Brabant 2001]. Tilburg: Telos.

Telos (2001b) De Duurzaamheidbalans van Noord-Brabant 2001. De Verantwoording [Sustainable Development in Brabant 2001: Monitoring and Measuring Explained]. Tilburg: Telos.

UNCED (1992) Earth Summit Agenda 21: the United Nations Programme of Action from Rio. New York: United Nations.

UNDP (1999) *Human Development in this Age of Globalization*. Human Development Report 1999. New York, Oxford: Oxford University Press

VWS (1999) Werken aan sociale kwaliteit: welzijnsnota 1999-2001. Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

WCED (1987) *Our Common Future*. Oxford, New York: Oxford University Press.

Woolcock, M (1998) Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework. *Theory and Society*, 27:151-208.

Appendix

Social and cultural capital: stocks, requirements, indicators and weights

Stock: Citizenship

Requirements

– Citizens must be able to support themselves (to a great extent)
– There must be equal sharing of employment and care time among men and women
– There must be an adequate number of people who do voluntary work
– Citizens must be, and feel, included in political processes

Indicators	*Weight*
1. % of population 15-65 doing paid work for at least 12 hours a week	18,4
2. % of volunteers on the population of 18 years and older	16,1
3. perception on the possibility to have an impact on (local) political processes	12,2
4. % of non-employed labour-seeking on total working population	11,9
5. difference in the division of care tasks among men and women	11,1
6. % long-term unemployed registered as seeking employment for more than three years	10,3
7. % of volunteer aid suppliers on the population of 18 years and older	10,0
8. turnout % during the last national elections	10,0

Stock: Health and health care facilities

Requirements

– People must be healthy in physical and mental terms, their health situation should not deteriorate
– Health care facilities must be easily accessible and available
– People must refrain from unhealthy behaviour
– There must be an appropriate balance between labour and leisure time

Indicators	*Weight*
1. % of population that judges their own health good or excellent	21,2
2. % deceased because of environment related illnesses (cancer, heart and vascular disease and bronchitus)	17,3
3. average waiting time for non-urgent specialised care	16,3
4. % of population that is satisfied with their own leisure time	15,3
5. suicide ratio as indication of psychiatric problems	11,3
6. % of population that has unhealthy behaviour (heavy smoking and drinking, overweight)	9,8
7. % of vacancies for care and nursing personnel	8,8

Stock: Education (formal and non-formal)

Requirements

– The level of schooling of the population must be good
– Good quality of education

– There must be sufficient educational facilities
– There must exist a proper link between education and the labour market
– Education must anticipate on societal tasks (role in community)
– There must be sufficient options for (non-formal) education, especially so for migrants, allochthonous, newcomers and for older people

Indicators	*Weight*
1. % early school drop-outs	23,1
2. % functional illiterate of 17 years and older	19,5
3. permilage of people that join basic (non-formal) education	12,5
4. % recent graduates that find employment within six months	12,1
5. length of waiting lists for NT-2 [Dutch as second language] projects	12,0
6. % vacant hours in educational institutions	9,1
7. % schools with a high cito-scores (primary schools)	6,1
8 % community schools	
5,6	

Stock: Solidarity

Requirements

– A decent living standard for all
– No excessive income disparities
– Income disparities and employment opportunities must not correlate with social background, and cultural and ethnic affiliation of social groups
– Equal educational opportunities for all social groups
– Equal health opportunities for all social groups

Indicators	*Weight*
1. % poor households (on or below the social minimum)	21,0
2. gini-index for income disparities	15,7
3. differences in chance of unemployment among allochthonous and autochtonous groups % unemployed for the worst scoring group compared with the average unemployment rate)	14,0
4. differences in educational achievements: highest level attained % worst scoring compared to average employment level)	13,5
5. differences in chance of poverty (% poor of the worst scoring group compared with the average percentage of poor households on the total population)	12,6
6. health differences among poor and non-poor	12,0
7. differences in chance of school drop-out (% of worst scoring group compared to average school drop-outs)	11,2

Stock: Living conditions

Requirements

– Guaranteed safety of citizens and their property
– Citizens must feel safe in their own surroundings
– Citizens must be satisfied with the quality of their homes/houses
– Adequate availability of services that play a crucial role in the continuity of daily life and in partaking in society

– Sufficient green space in the neighbourhood
– There should be no neighbourhoods where social problems accumulate

Indicators	*Weight*
1. % of people who feel at times unsafe	16,8
2. % neighbourhoods in crisis on all neighbourhoods (neighbourhoods with a concentration of social problems, low income levels, low educational levels, high unemployment)	16,8
3. % of households that feels that there are sufficient neighbourhood services	16,2
4. registered crime rate	14,0
5. % of people that are satisfied with their own home/house	14,0
6. incidence of severe traffic accidents	12,2
7. % of households that feel there is enough green space in the neighbourhood	10,0

Stock: Cultural diversity

Requirements
– No discrimination
– Equal access to all aspects of cultural life, both active and passive
– Cultural policy must pay attention to cultural heritages and the preservation of objects of cultural value as well as of landscapes

Indicators	*Weight*
1. % young people that visits cultural accommodations	17,7
2. % of people that is active in amateur art	17,7
3. % of people that does not object to an allochtonous neighbour	16,1
4. % young people registered as user in a public library	14,7
5. % high quality objects of cultural heritage	12,9
6. number reported acts of racism and discrimination	10,7
7. % high quality historical landscapes	10,2

Stock: Consumption Behaviour (attitude to)

Requirements
– Each and every citizen must be prepared to let environmental needs prevail over material desires
– Each and every citizen must show this in his or her actual consumption behaviour

Indicators	*Weight*
1. degree of environmental-mindedness among the population	22,1
2. amount of household waste per head of the population	20,6
3. degree of used green energy on total energy use (household level)	19,6
4. household water use per head of the population	19,1
5. average annual mileage of private cars	18,6

Organizing multiculturalism: managing the multiplication of experienced difference

By Hans Siebers

Introduction

If it was ever able to do so in the nineties, the Washington consensus on the need for economic growth, free trade, liberalization, good governance and new public management can no longer claim a monopoly on public opinion and policy thinking about social transformation. Opposition has been mobilized in the streets of Seattle, Göteborg and Genua, and terrorist attacks have even struck against its outstanding symbols. One may seriously question the validity and credibility of the arguments put forward by this kind of opposition, but one cannot ignore the fact that this consensus finds it very hard to explain current contradictions and conflicts embedded in our global condition. These contradictions and conflicts challenge our conceptual and analytical frameworks as well as our policy thinking.

Within this vacuum of conceptual credibility, contradictions and problems of social transformation tend to become framed in terms of cultural difference. 'Our way of life' is at stake here, as we are told. It is the 'believers' against 'infidels', the 'coalition of the free world' against the 'jihad against the crusaders'. It is the game of the construction of 'them' versus 'us' in which all kinds of symbols are manipulated in propaganda wars waged through CNN and Al Jazeera. It is a war of symbols, meanings and images, not of information about what is really happening. Such information is among the first victims of modern warfare. Within this framework of war any credible explanation about the social transformations that lie behind these contradictions and conflicts has become difficult.

The fact that this war is framed in terms of cultural difference explains why it immediately has become associated with problems of multicultural society in for example The Netherlands. In my hometown an Islamic school was set on fire a few days after the twin tower and pentagon disaster. It has become intertwined with a row about declarations of several imams about supposed Islamic viewpoints on homosexuality. One of the new politicians running for parliament in the 2002 elections called for a 'cold war on Islam' and tried to mobilize votes based on a campaign against 'foreigners'.

Apparently, multiculturalism has become the global-local theatre in which current problems of social transformation and contradiction are performed, or does multiculturalism itself constitute the heart of these problems? What is appearance and what is reality in this respect seems hard to tell. On the one hand the question is raised how multiculturalism is related to unequal access to resources. Problems of cultural difference cannot be isolated from its political and economic framework. On the other hand problems of multiculturalism cannot be reduced to mere reflections of the 'real' problems in some economic and political 'infrastructure'. The relatively autonomous dynamics of cultural problems must also be acknowledged.

The objective of this chapter is to design a conceptual outline for thinking about managing problems of multiculturalism in a variety of specific contexts. Moreover, an effort will be made to apply this conceptual framework to the case of The Netherlands in order to assess its applicability and its analytical usefulness. First I will outline some of the historical background factors which shape contemporary multiculturalism in terms of the multiplication of experienced difference. Second, drawing on some of the founding fathers of social sciences, I will identify five basic management principles. Third, I will examine the usefulness and relevance in general and theoretical terms of these management principles related to the issue of the multiplication of experienced difference. Fourth, I will point to the need for comparative studies in which the multiplication of experienced difference in relation to these management principles will be operationalized and contextualized. Fifth, as an overture to such an operationalization and contextualization, I will relate these management principles in an essayistic manner to the case of The Netherlands.

Cultural difference emphasized

The proliferation of cultural differences and the rise of multiculturalism are closely linked to two current trends which in literature are coined as glocalization and fragmentation. Glocalization (Robertson 1995; De Ruijter 1997) is a complex, multifaceted and multilayered process, but the principle that stands at its roots is about time-space compression. It refers to the fact that flows of people, goods, capital, finance, commodities, images, symbols, technology and information increasingly span the globe (See Appadurai, 1996; Hannerz, 1992 and 1996). Distant localities are linked in such a way that local happenings are shaped by events occurring many miles away and vice versa. Social relations become disembedded, that is, they are increasingly "lifted out" of the context of local interaction (Giddens, 1990).

As a result, the framework of a rather circumscribed and relatively closed national community steered by a national state promoting nationalist and moral grand narratives has become fragmented (See Bauman 1993 and 1995). The state finds it increasingly difficult to legitimize its policies. Overall grand narratives, such as the ones of progress, development and emancipation, which used to cluster and co-ordinate the thinking and practice of large numbers of individuals, are losing their credibility. In The Netherlands even education policies no longer try to 'civilize' or educate their pupils or to imbue them with a sense of nationalism as they used to do (See Elias 1939 and Gellner 1983), but focus in an instrumentalist way on improving their career perspectives.

Regarding the combined effects of glocalization and fragmentation there is much discussion. In my view it is difficult to establish whether in the end these effects point to homogenizing or rather heterogenizing effects. Questions of more or less difference are impossible to answer in an overall way. Nevertheless, we may assume that due to glocalization contemporary people are increasingly facing and experiencing cultural difference and different cultural influences whereas fragmentation undermines their relatively safe and stable idea of cultural and institutional embeddedness. The combined effects of both trends create uncertainty, insecurity, anxiety and identity challenges. Elsewhere (Siebers 1999) I have pointed out that there are two basic responses to these effects: one may be called creolization or hybridization, articulating elements from several sources, and the other may be labelled as fundamentalism. The latter tries to rectify invented tradition and oppose exogenous elements using basically modern media, technology and resources (See Gellner 1992).

Theoretical sources of management principles

The fact that the multiplication of experienced difference raises anxiety touches the heart of one of the conventional concerns expressed in social sciences, i.e. the problem of social cohesion. In one way or another all the founding fathers of social sciences have dealt with this problem, but especially Emile Durkheim (1893) has put it on the forefront of this thinking. He feared a state of lawlessness and moral deficiency and confusion, i.e. anomie, but he found answers to his problem in two respects. First he outlined the shift from mechanic to organic solidarity in the wake of the rise of modern society leading to a stage in which the division of labour made individual people dependent on each others' activities. It is the baker buying meat from the butcher and the latter purchasing bread from the former. Each had an interest in the other to live and continue to work. In short, cohesion may rise from practical complementarity or compatibility. A second source of cohesion Durkheim identified in the rise of a conscience collective: a culture, or grand narrative or discourse to put it in current terms, which is shared by all members of society and regulates their individual behaviour in function of the common interest. It underscores the existence of the community or society as a socially integrated entity. Both aspects of Durkheim's work have laid the groundwork for functionalist approaches in contemporary social sciences stressing cohesion, harmony and social integration.

Interestingly, neo-Marxist writers such as Nicos Poulantzas and Louis Althusser, drawing on Antonio Gramsci, have put forward a similar argument as Durkheim's conscience collective claiming that class society is kept together by a common ideology produced and distributed by ideological state apparatuses (Althusser 1971; Poulantzas 1975). A different current of thinking focusing on class society has put forward the possibility and need for compromise to be reached in negotiations between representatives of the classes involved. Such compromise is not only based on common interests but also regulates opposing interests in an effort to meet both sides somewhere in between. The prerequisite for such compromise to become feasible is that the classes involved consider themselves to be represented by legitimate and organic institutions.

Another line of thought runs through the work of Max Weber, Karl Mannheim and Jürgen Habermas. They use different terms, but basically they all distinguish two kinds of rationality, which may be labelled as formal and substantial. Both kinds of rationality encompass a principle of co-ordination, cohesion and the gearing together of individual actions. As Weber (1947) outlined in his famous work on bureaucracy, formal rationality stresses the importance of rationally designed rules, regulations and protocols which have to be applied by bureaucrats in both their internal functioning in the organization and in their interactions with clients, customers or citizens. Obedience to and the enforcement of the rule of law can be deduced as the central issue here in both the operating of individual organizations and the regulation of society. Of course, the negative side of formal rationality was also stressed by Weber in his concern for the loss of value rationality as a consequence of the domination of formal rationality. The latter would undermine the capacity of individuals to pass value judgements, make decisions in their own social context based on moral standards and considerations. In this way social life would become inherently senseless and valueless. Kafkian images of individuals crushed in bureaucratic machines come to the fore here.

Habermas (1981) shares Weber's concern for the loss of value rationality situated in the life-world as it is threatened by instrumental rationality ruling in the expansive system of

state and market. However, Habermas has elaborated further on the value of substantive rationality in his theory of communicative action. Such action entails a principle of cohesion pointing to joint discussion of all who are involved in a certain issue of conflict on the basis of reasonable arguments. It calls on all to distinguish three kinds of arguments. The first kind of arguments is of a cognitive nature referring to 'truth' claims concerning reality (to be understood in phenomenological and not positivistical terms). The second kind of arguments puts forward normative or moral claims regarding how reality should be. The third category of arguments is of an expressive kind related to how reality is experienced in emotional or esthetical terms. It also requires those participating in the discussion to apply the appropriate criterion to each of the kind of claims: 'truth' regarding cognitive claims, 'correctness' in the case of the norms applied in moral claims, and 'sincerity' as far as expressions are concerned. Agreement reached through discussion based on reasonable arguments put forward in line with the appropriate criteria may work out as a principle co-ordinating the actions of all involved.

To sum up, we have gathered five principles of management or co-ordination: practical complementarity and compatibility, a shared culture or ideology, institutionalized compromise, obedience to the rule of rational laws and regulations, and agreement on reasonable arguments. It must be stressed that these principles refer to cultural as well as economic and political matters. Shared ideology is about culture and the same holds true regarding agreements on reasonable arguments, but the latter also touches institutional aspects and political processes. Of course, institutional aspects and political processes touch the heart of rational laws and regulations as well as of institutionalized compromise. Such compromise may result in each of the parties and individuals involved to get something out of practical complementarity or compatibility. This practical complementarity and compatibility has been deduced from the economics of division of labour, which may be beneficial to all involved in co-operation. As such these five management principles may provide a framework for dealing with problems stemming from the multiplication of experienced difference: not only in strict cultural, but also in economic and political terms.

Management of cultural difference: general and theoretical remarks

In applying these management principles to the multiplication of experienced difference, we will first make a number of general and theoretical comments. In a strict sense the management of the multiplication of experienced difference seems an oxymoron, because every attempt to deal with the anxieties, the fear, the conflicts or violence stemming from this experienced difference must result in these differences to become less pronounced or being experienced in a less frightful or conflictive way. In other words, the management of experienced difference itself requires cultural change curbing the range of possible cultural multiplicity. It cannot stand the idea of culture as something static or essentialist in which 'anything goes' or in which cultural difference as such is sacred. By contrast, it entails a critical and dynamic conception of culture and of cultural difference as well as a minimum level of cultural sharing.

Shared culture

However, that does not mean that the principle of undifferentiated shared culture would stand a critical scrutiny. To the contrary, the multiplication of cultural difference as such entails the loss of shared culture, discourse, ideology or grand narratives. The loss of shared culture and its possible negative or dangerous experiences and consequences is the issue itself. It must be stressed here, though, that this loss of shared culture is not limited

to relations between allochthonous and autochthonous people, between 'migrants' and 'natives'. Affirmative post-modern writers such as Zygmunt Bauman (1993 and 1995) and Jean-François Lyotard (1984) claim that the loss of joint grand narratives is a basic trait of contemporary society. If there still is a considerable level of shared meanings an sich among the so-called autochthonous population, these meanings find it increasingly difficult to become apparent für sich or to be celebrated, ritualized, expressed or confirmed in daily practice. The loss of shared culture is common to both allochthonous and autochthonous people. As such the principle of undifferentiated shared culture does not bring us much further because it would imply the ignoring of both glocalization and fragmentation as the basic drives behind the multiplication of experienced difference.

Practical complementarity and compatibility

The multiplication of experienced difference is in itself much more in tune with the management principle of complementarity or compatibility of practices (See also De Ruijter 2000). Durkheim's concept of organic solidarity entails that different people can live and work together without the need for sharing meanings or ideas or for explicit social intervention as long as the activity of one does not obstruct or conflict with the activity of the other and as long as both have an interest in respecting the activity of the other. In fact, as has been discussed elsewhere (Siebers, Verweel and De Ruijter 2001), for two people to work together there is no need for a common motivational framework or shared inspiration as long as both get out of the co-operation what they seek. Compatibility or complementarity of actions may provide an important source of co-ordination as it unfolds in practice. It shows that the multiplication of experienced difference as such does not necessarily provoke problems of conflict.

The principle of practical complementarity and compatibility shows that there is no need for practical uniformity. Even more, such practical uniformity is highly undesirable because it obstructs the operating of the economy and organizations which are all based on a division of labour, i.e. on a diversity of practices and ensuing repertoires and discourses. It does require, though, market regulation and redistribution policies – global, national, regional, local – which allows each to benefit from his or her action within the co-operation. After all, it only works when all involved get access to valuable resources.

Moreover, from the principle of practical complementarity and compatibility follows that there is no need for discursive univocality either. It encourages us to adopt a more relaxed attitude towards differences of opinion and culture. The positive side of a relaxed or even indifferent attitude is that it allows for a considerable space for differences of meanings and opinions as long as they are not translated into conflictive actions. In addition, we may assume that a hybrid or creolizing culture may encourage people to adopt a positive attitude towards other cultures, but even that is not the crucial point. Even in the case of people developing a culture with fundamentalist traits for themselves, their dealing with their culture in relation to the culture of others is what matters. Culture is one thing, the way to deal with it is another, perhaps much more important matter.

A relaxed or even indifferent attitude also allows us to recognize that social space in modern society has always been very much differentiated. In modern society there has always been a considerable diversity of drivel, gossip, policy and legal discourse, each related to different spheres of social action. Any attempt to try to enforce uniformity in this respect has always been very dangerous. There is no reason why the same principle of differenti-

ation of spheres of social action should not be applied in multicultural society. In other words, as an 'infidel' I do not need to feel threatened by unflattering declarations uttered in a mosque regarding infidels as long as I am not obstructed in my daily practices in the social spheres I operate in.

Institutionalized compromise

In the practice of modern society institutionalized compromise has come to play an important role in mediating and solving contradictions and conflicts. This holds true regarding both contradictions and conflicts of political power and of labour and industrial relations. Negotiations between representatives of employers' organizations and trade unions over wage levels and labour conditions are a good example. However, the perspectives for such a principle to fruitfully become applied to the case of the multiplication of experienced difference may not be very bright. To an important extent this experience of cultural difference bears individual traits which raises the question to what extent relevant institutions can be considered representative. Group identifications may become important, especially in conflictive situations, and as such provide a basis for representativity and institutionalization. Nevertheless, as people, capital, goods, information, and images increasingly cross borders it becomes difficult for conventional large institutions to develop at a national level, let alone at a supra-national level. Instead, new forms of institutional frameworks such as networks and border-crossing linkages between relatively small organizations may be more feasible, fed by new communication media. Such frameworks may provide for conflicts and tensions to be managed and mediated through a large number of small scale deals, checks and balances within such networks, but the possibilities and options for creating and establishing such networks may be quite limited.

The rule of rationally defined laws and regulations

The next principle, the formulation and obedience to rationally defined laws and regulations, cannot be ruled out. Without the rule of law supported by legitimate institutions, the multiplication of experienced difference may easily end up in massive bloodshed, as the cruelty on the Balkans demonstrates. Legal issues are involved when the right to free speech touches upon the prohibition of discrimination in the debate about e.g. Muslim views on homosexuals, currently a topic of debate in The Netherlands.

It can even be claimed that strictly legal and judicial approaches become ever more important as the conventional link between social and judicial approaches has been lost in the framework of glocalization. In conventional thinking crimes had to be dealt with basically as social phenomena. Social intervention was preferred and law enforcement had to be called in only when social intervention was insufficient. In other words, social intervention could deal with the causes of crime and as such work out to prevent crimes and the need for law enforcement. However, such a direct link between the social and the judicial requires an integrated state and society in which the ones who could become involved in criminal behaviour can be reached beforehand applying social measures. Such a link is lost when criminals may easily switch from one country to another diminishing the options for reaching them through social intervention. Where fordism has been lost in global economics – a direct link between wages and consumption/demand – the same holds true regarding the link between social intervention and legal intervention in global society.

However, rational laws no longer offer – if they ever did – a viable framework for dealing

with identity construction or identification. They force individuals to fill in their identity in static, once-and-for-all formula in official forms the moment they come in contact with the state or its organizations. Often they are only allowed to fill in the 'yes' or the 'no' boxes. For example, legal frameworks find it very difficult to come to terms with the fact that many migrants develop some kind of transnational identity construction which can neither be fitted to the category of those who 'want to integrate' nor of those who 'are going back' (See Dijkstra, Geuijen and De Ruijter 2001). A legal point of view almost always distorts identity constructions. The same holds true for bureaucratically structured organizations in which co-workers are supposed to work and function as functionaries or officials performing their role and fulfilling their tasks irrespective of whom they are.

Moreover, the formulation of and obedience to rationally defined laws and regulations in the framework of multiculturalism presupposes a civic instead of a culturally defined state. A close connection between the state and one specific cultural group will create legitimacy problems with other groups, but a civic conception of the state in terms of formal obligations and rules must run into trouble the moment one group has fundamentally different judicial conceptions than other groups. For example, the moment conceptions of legal obligations and citizenship of one group are oriented at the individual level and those of other groups, e.g. specific Islamic groups interpreting Muslim law, basically at the in-group level, the definition of a common legal framework will not be easy.[20] The post-modern problem with accepting any kind of authority must be added here. The legitimacy of legal frameworks in a multicultural (legal) context will be vulnerable the moment pragmatist considerations – 'we all have an interest in supporting a common legal system whatever its characteristics' – run short of adherents.

Communicative action

In those cases when conflicts or problems are not regulated by laws or regulations and rise into the open the other principle, i.e. communicative action, may be useful as a management principle. It stipulates the creation of a limited and circumscribed discursive common definition of the situation shaped by a reasonable agreement on the specific issue at stake. It also provides important tools to regulate such a discussion: the distinction in three kinds of arguments (cognitive, normative and expressive) with their respective criteria. It calls on reason (truth, fairness, correctness and sincerity) as the regulative or co-ordinating value to be applied in public discussions in the media, in fora, in parliament or in works councils and other meetings at work.

However, for several reasons it is not easy to reach at such a limited discursive agreement. First of all, given the condition of a limited extent of cultural common ground there is not a broad consensual basis to build upon to reach at such an agreement. Second, the rationality of an agreement on cognitive grounds referring to truth claims may be feasible, the rationality of arguments regarding the sincerity of emotional expressions seems more difficult to establish. Third, as Habermas clearly stated, for such a discussion to take place asymmetric power relations should be ruled out. As long as power and competition over scarce resources play a dominant role, such a discussion becomes difficult. Fourth, in those cases where the parties have digged themselves into fundamentalist trenches, dealing with them through a reasonable discussion may not be very feasible either.

However, these objections can also be turned into its favour. The fact that there is relatively little common ground for an agreement to be built upon is compensated by the fact

that only a limited consensus is required. Those involved are not asked to change their mind and attitude in all related aspects or a wide variety of meanings, opinions and practices, only those that are at stake in this specific case of conflict. For example, I do not have to become a Muslim in order to approve of the construction of a mosque in my neighbourhood. Second, the rationality of arguments regarding the sincerity of emotional expressions may be difficult to establish, it at least provides a bulwark against the free flows of performed emotions and expressions which so often dominate communication in public opinion and at work, considering every counter argument or relativization as inappropriate. At least a check on such free and totalizing flows of conspicuous emotions may help to prevent serious problems and conflicts in the context of the multiplication of experienced difference.

Third, the reality and viability of agreements reached in the context of serious asymmetrical power relations may of course be questioned and often calls for deconstruction as an ideology, but that does not mean that the whole story is ideological. Even in the case of the rather modest version of a communicatively founded compromise (See Alvesson 1996), the result may be the avoidance of further conflict combined with the fact that even those at the 'subaltern' positions may get something out of this discursive deal. When differences of both interests and meanings are at stake the principle of communicative action and compromise come together, but not necessarily in the shape of institutionalized or representative compromise. To put this matter of communicative action and power in a wider perspective: one may not be very optimistic about the possibilities of creating some sort of order in social reality or to check the exercize of power, but one cannot deny either that since the Enlightenment reason and rationality (both in its instrumental and communicative form) have at least provided us with some devices to criticize and partially do something about the unlimited unfolding of arbitrariness, conflict, corruption and violence.

It does call on reason, which is exactly its weak point when trying to deal with fundamentalism. Here, intervention aiming at transforming its social, economic and political conditions of existence towards favouring practical complementarity or compatibility is particularly called for. Nevertheless, it must be emphasized that communicative action calls for reason rather than rationality. Although Habermas does not make this distinction, his elaboration on communicative action comes close to what Toulmin (2001) defines as reason as opposed to rationality. Different from rationality, reason allows for variable and flexible definitions of reality with its validity limited to specific situations and time frames, with a feeling for the many ways in which problems can be understood calling for modesty in style of argumentation in reaching a common definition beyond reasonable doubt, but never certain. Thus drawing on reason may be much more adequate to solve differences and conflicts through communicative action than rigid rationality with its timeless and universal validity claims.

Management of cultural difference: the case of The Netherlands

There are no easy solutions. The application of each of the five management principles to the question of the multiplication of experienced difference brings up serious comments and objections. Do these comments and objections constitute mortal blows to the very idea of management of the multiplication of experienced difference? To answer this question comparative studies of several case studies are needed including first of all a contextualization of what the multiplication of experienced difference means in each specific case and how it is embedded in political and economic issues and contradictions. For example,

the role of political institutions and of work organizations in relation to problems and issues of experienced difference constitutes such a focal point. Second, it would require an analysis of the basic concepts and practices of management which are applied in each case and of the accomplished results. Third these results can be put into perspective questioning other and different management approaches that can be elaborated and applied. It must be stressed, the results and viability of the different management concepts may be very different from one context and case to another. Until now such a study including such a contextualization has not been made about The Netherlands, but a first overview in a rather essayist mode of the relevance of the five management concepts may provide some important understandings.

Practical complementarity and compatibility

The first principle which comes to the fore in the case of The Netherlands is the practical complementarity and compatibility principle. The relatively smooth way in which the massive influx of 'guest workers' from Mediterranean countries in the 1960s and 1970s was dealt with was mainly based on this principle. The idea was that they would contribute to the national economy in practical ways doing low paid and industrial jobs without the need for intensive communication or for permanent cultural engagement. This idea turned out to be unrealistic when from the 1980s onwards massive unemployment struck exactly those sectors in which many of these 'guest workers' were employed who did not show much enthusiasm for returning to their countries of origin, when the Surinam population en masse took a plain to Amsterdam after decolonization, and The Netherlands increasingly were called upon to contribute to the accommodation of massive world-wide flows of refugees. These and other flows and developments resulted in the awareness that The Netherlands were becoming a country of immigration.

Nevertheless, practical complementarity and compatibility remains one of the basic principles behind the functioning of The Netherlands as an immigrant and multicultural society. This principle does fit quite well to the fact that here the multiplication of experienced difference basically meets with widespread indifference, discursivized as 'tolerance'. It is reflected in the rather fragile NIMBY principle: everything is all right as long as it does Not take place In My BackYard. Recently I heard two young Spanish students complaining about the fact that no one seems to notice them in my hometown. "Even the baker does not ask me how I am doing, as I regularly go and buy my bread", one of them said. She gets her bread and the baker does not hurt her, but she is not very happy either. What happens if 'the other' does enter someone else's backyard? Practical compatibility and complementarity remains vulnerable and is certainly not sufficient to prevent conflicts and problems from occurring.

Moreover, in The Netherlands we have a dangerous disadvantage in this respect. The moment indifference and NIMBY turn out to be inadequate, the basic Calvinist mechanism is triggered which prescribes transparency and coherence or even homogeneity in motives, ideas and practices denying the layered and differentiated character of spheres of social action and daily practice. Traditionally Dutch Calvinist homes were not supposed to close their curtains, even at night, because everything had to stand up to examination (not by chance the present popular series on television called 'big brother' is a Dutch invention). Such totalizing thinking easily eradicates the delicate social and meaningful boundaries of everyday life. A good example of such totalizing thinking was expressed in recent discussions in the Dutch parliament about the assumed language deficiencies of

allochthonous children at primary school age. The secretary of state of education had to defend her policies in the face of pressing demands calling for direct state intervention in those families with children at pre-school age to force those families to speak Dutch. A similar dangerous attitude is expressed in calls for prohibiting imams to do their job in their mosques, i.e. telling what the Koran says about infidels and homosexuals, because one does not like such statements. Such calls can only lead to practical escalation.

Moreover, the principle of practical complementarity and compatibility is often applied in a planned way, which is problematic. It makes no sense to work out a system of a priori defined complementary or compatible function descriptions and citizen definitions as a format for individuals to step in. Nevertheless, such planned thinking still dominates, for example, our labour market policies. Such policies still take existing and registered vacancies as their point of departure and try to mould individuals into such vacancy definitions. Such approaches contradict not only current trends in human resource management in companies and businesses in which employees are given considerable space to manoeuvre to work out in practice their own activities and tasks in the market based on their competencies instead of fulfilling a priori defined functions in a hierarchical designed organization. Such approaches also ignore the initiative and specific competencies specific individuals may develop and bring up to add something new to existing networks of compatible and complementary organizational practices (See Clegg 1994; Law 1994). For example, the upsurge of entrepreneurs and companies set up by allochthonous people calls for a facilitative or emergent instead of a directive or planned policy approach.

The rule of rationally defined laws and regulations

Where decisive action is required, though, the Dutch state finds it difficult to deliver. The need for law enforcement is not only becoming a prime political issue in The Netherlands, but also in our neighbouring countries. Recent developments such as the rapid rise of law-and-order parties in e.g. the elections in Hamburg (Schill Partei) or the suspension of basic human rights regarding suspects of terrorist crimes in law proposals in the UK point to a deeply felt need. As current crime figures in The Netherlands suggest – 1.3 million crimes and legal offences are reported on a yearly basis in a country of 16 million inhabitants and only a small part of these cases are solved by the police and judiciary system – there is not only suggestion or hysteria involved here. Security is a material or practical issue, not just a matter of image or feeling.

The Dutch state is in no easy position to enforce this principle of obedience to the rule of rational laws and regulations as its own civil servants shift their behaviour from control and enforcing laws and regulations to networking and negotiating with all stakeholders (See Frissen 1996). In practice such negotiating attitude on the part of civil servants easily ends up in breaking the law, as several recent cases in The Netherlands have shown. Two major disasters in Enschede and Volendam taking the lives of dozens of people would not have occurred if the civil servants involved would simply have applied the law.

In this respect the fact that state organizations have wholeheartedly adopted business management discourses such as client orientation and client friendliness, (internal) entrepreneurship, corporate identity, and mission statements is not very helpful either because they transmit the message that we are, in fact, dealing with human service organizations just like any other company in the market to which one is supposed to relate to as customer instead of as citizen. After all, from a customer one cannot expect obedience, but rather

negotiation and calculated behaviour based on one's own interest. In The Netherlands many state organizations are involved in a process of internal restructuring and transformation – advised to do so by highly paid consultancy firms – in an effort to leave behind precisely their bureaucratic heritage based on rules, laws and regulations.

The general fall of interest in political matters, as demonstrated in ever lower participation in elections, further complicates matters. The feasibility of obedience to the rule of law as a management principle is looking quite grim in a country with the crime figures mentioned above. All these developments point to an undermining of the rule of rational law (society) and regulations (organizations) as management principle, as such seriously questioning the viability of this principle in relation to the multiplication of experienced difference.

Moreover, it has to be added that legal actions can only become legitimate when they are applied irrespectively of the persons whom they concern. This means that from a legal point of view, crimes should be seen as crimes irrespectively of the question whether they appear in the context of multicultural society or not. In Dutch public opinion there is a remarkable inconsistency in the ways robberies and violence of Moroccan youth gangs in Amsterdam are seen and so-called 'senseless violence' of youngsters killing other youngsters in various towns and cities (Leeuwarden, Vlaardingen, Gorinchem, Arnhem) are conceived. The former are immediately understood as an outcome of multicultural society whereas the latter are not. In my view there is no reason at all to make such a distinction. From a social point of view both kinds of cases are relevant in the framework of multicultural society as a basic trait of both the allochthonous and the autochthonous (fragmentation) population. From a legal perspective both kinds of cases are also similar because multiculturalism has no relevance here.

Equality before the law in society finds it corollary in equality before regulations and procedures in work organizations. For the principle of practical complementarity of compatibility to be able to work in organizations, exceptions made in the application of rules and regulations on grounds of cultural difference may end up to be very harmful. In this respect the resistance against and counterproductive effects of positive discrimination or action become understandable. From the perspective of those who already work in the organization, the differential application of rules in the game of competitive co-operation must bring up resistance. From the point of view of the one who is introduced through positive discrimination the starting point is almost impossible, because it necessarily leads to stereotyping him or her by others. After all, he or she is conceived in terms of cultural difference instead of as what must be the conception from which co-operation becomes possible, i.e. as a potential valuable source of competencies which may benefit the organization as a whole as well as the interests of individual co-workers. In other words, it points the finger to exactly those aspects of his or her identity formation which are supposed to be irrelevant for his or her functioning based on the principle of practical complementarity or compatibility.

Institutionalized compromise and communicative action

The Dutch are quite proud of their so-called poldermodel of managing social transformation, which is considered to provide the foundation of e.g. current relatively favourable economic conditions. It stems from a historical pillarized society in which the various pillars of society – Protestant, Catholic, socialist and partly liberal – were institutionalized to

a large extent and which called for a pragmatic attitude of its leaders to conclude agreements on narrowly defined issues which allowed the state and society as such to function. Here we had a fusion of institutionalized compromise based on institutionalization and the legitimacy of the leaders as representatives of these pillars on the one hand and the willingness to reach at limited agreements on reasonable grounds without the need for sharing each others' religion or ideology on the other hand. This comes close to traits of communicative action as outlined above. A similar approach was later developed in the case of relations between employers and employees with the famous Wassenaar agreement of 1982 in which representatives of both exchanged wage restraint for a more equitable distribution of work as a means to get the economy going again.

However, pillarized society, which had its high in the 1950s, has disappeared and the present state of affairs of the institutionalization of labour relations is not very promising either. The legitimacy of the institutions involved representing employers and employees is increasingly undermined. Trade unions suffer from rapidly declining membership rates even in times of labour shortages, conventionally those times in which they are supposed to recruit new members as in the 1960s and 1970s. Collective bargaining at the national level is undermined by the increasingly global scope of functioning of individual companies on the one hand and the trend towards decentralization of negotiations on the other. Precisely in the new sectors of the economy representation is extremely low. Individualization in society and economy threatens the very legitimacy and credibility of representative institutions and negotiations.

In short, the conditions for legitimate representation and institutionalization in society do not look very promising and also in the case of multicultural society one looks in vain for overarching institutions which might represent for example the diversity of allochthonous sectors at the national level in order to reach at any credible deal. This vacuum is even filled by self-proclaimed imams appearing in the media, which in the end turn out not to be imams at all. It may be the case that networks of organizations will develop at other levels in which representatives of the state are involved and which allow for communicative deals to be concluded among them, but such networks have not yet been developed in a significant way.

Current Dutch policy conceptions: integration

Current Dutch government policies regarding the multiplication of experienced difference disclose aspects of all the management principles outlined above. Government policies have increasingly focused since the end of the 1980s on the labour market and work organizations as their loci (See Glastra 1999a & 1999b). Allochthonous people and migrants are supposed to earn their own living and therefore have to be prepared for the labour market (education and learning the language) and become integrated in work organizations. Hence companies and organizations are obliged by law to make efforts to reach at a certain percentage of employees from allochthonous background and to develop some kind of intercultural management. Here the principle of practical complementarity and compatibility comes to the fore: when 'they' are able to earn their living they no longer bother 'us' by way of informality, criminal behaviour or social benefits dependency. Moreover, the government is willing to enter into open dialogue with e.g. Muslims after the events of September 11th. Of course, the need for law enforcement will never be denied.

Nevertheless, it is quite remarkable that current government and management policies regarding the multiplication of experienced difference emphasize precisely those principles which are the most problematic: institutionalized compromise and a shared culture. In my view the fact that they maintain their popularity is related to the fact that it seems very difficult to develop an up to date and adequate understanding of our own contemporary society. It builds upon an idea of contemporary society in terms of a community which would have its own common culture and regulative institutions and in which one could become 'integrated'. As a result, integration is the key word regarding the ways we are supposed to understand and deal with the multiplication of cultural difference. The debate on multicultural society in The Netherlands focusing on the presumed 'integration problem' of migrants has even led to calls in the media for reviving national Dutch identity. Only a return to the 'good old days' of strong national identity – did they ever exist? – would allow 'us' to come to terms with the entrance and permanence of migrants, so it is claimed.

Such nostalgic calls in particular and the integration idea in general cannot be considered to be very realistic given contemporary processes of glocalization and fragmentation. They proceed from the above mentioned misconceived idea about contemporary society in communitarian terms. Apparently, the bearings of Tönnies' work (1957) pointing to the transition from community to society have not been understood at full length. The fragmentation of what once might have been a common culture or common narratives, pressured by glocalization, has already been mentioned. It leads to a disjunction between geographic space and social space (Van Binsbergen 1999). If we look at social activities and structures, which guide social life outside of work and the economy, we may conclude with Putnam (2000, for the case of the US) that relatively little – or a lot of absolutely asocial individuals (Hobsbawm 1994) – is left leading to uncertain and anxious individuals without much character (Sennett 1998). Things may in fact not look that bad, but no one can deny that private life is almost exclusively organized in private networks which are virtually inaccessible for 'others'. For 'others' there is simply no place to go to meet new people or to become socialized. All such places have been rationalized away under economic and social pressure. What is there left in the private sphere to become integrated into?
Perspectives for inclusion in work organizations do not look very bright either. Here again the idea of integration only makes things worse. Since managers have started to relativize their conventional rational methods of control and steering, they have increasingly drawn on the concept of culture as an alternative way of steering and managing their organization. Libraries and book shops are filled with a great quantity of books about organizational culture. Consultancy firms earn large amounts of money offering their service to change the culture of the organizations of their customers. Especially intercultural communication has become a booming business. In the end it often boils down to reinforcing the so-called community dimensions of the organization using culture as an integrated system of norms and values which are shared by the whole organization and which, not by chance, are supposed to provide the managers with a maximum of steering power (See Siebers, Verweel and De Ruijter 2001).

One may hope that the impact of such efforts remains limited, because if they do work out organizations will appear as real communities with a strongly manipulated culture in which 'all noses point into the same direction', as we say in Dutch. The result is that all noses that point in a slightly different direction or which demonstrate some different

colour or characteristics are easily driven out of the organization. In other words, such policies seriously restrict the space for multiculturalism to find its place within the labour market and in work organizations. Matters are made worse by the fact that not only specific qualifications and knowledge skills are currently at stake in selection processes and career assessments, but also increasingly the very characteristics of the personality and identity of the persons involved. This overall incorporation of individual co-workers is expressed in current trends in selection procedures and the popularity of personality tests and assessment training.

In other words, regarding the issue of the multiplication of experienced difference in work organizations and the labour market, the concept of integration based on community thinking is part of the problem instead of the solution. It shuts out many people for cultural instead of competence reasons. The same holds true concerning the concept of integration as the foundation of government policies. It starts with classifying individuals in general categories to which – because of statistical arguments – dangers of unemployment, dependency on social benefits and crime are associated. Next, the individuals concerned are approached in order to get them on the right track and avoid those dangers. It may not cause any surprise that if people are approached with such negative expectations in mind that they eventually end up behaving exactly this way. There is a high level of self-fulfilling prophesy involved here. Moreover, within this process of classifying these categories come to function as black boxes in which individual characteristics, competencies and qualities virtually disappear. As a result, the selection bureaucracy which deals with them loses sight of exactly those potentialities which may contribute to them finding a compatible or complementary place in network society and economy. It leads to the same negative stereotyping as we have seen above related to positive discrimination.

As a consequence current management concepts based on the idea of integration make things worse and seriously contribute to the multiplication of experienced difference to end up in escalation. Has not Georg Simmel (1955) already pointed to the fact that group integration often goes hand in hand with conflicts with ‘the other’?

Conclusions

The multiplication of experienced difference is characterizing the life-world of many people in various parts of the world. Several management principles to deal with it can be developed on the basis of the trajectories of social sciences. Here I have elaborated five of them and scrutinized them in a critical way. Furthermore, I have applied them to the case of The Netherlands in a sketchy manner.

I hold that they do provide a useful tool for understanding existing problems resulting from the multiplication of experienced difference as well as the management and policy approaches to deal with such problems. In the case of The Netherlands they have been instrumental to demonstrate that current management and policy concepts reflect a rather outdated vision on society and organizations. Articulated as the integration approach, these concepts rather add to the problems than solving them. On the other hand, other principles such as the enforcement of rational laws and regulations require more emphasis, whereas e.g. the principles of communicative action and practical complementarity and compatibility seem more promising and call for further elaboration.

Of course, the application of these same principles to different cases will bring up differ-

ent results, but that does not undermine the usefulness of these principles. Quite to the contrary: a further operationalization and contextualization of the multiplication of experienced difference within its political and economic framework in a comparative case studies approach is called for. Such an approach would also have to include the management and organizational practice aiming at dealing with this multiplication of experienced difference. The elaborated principles can become helpful not only for analyzing existing practices but also for opening up new ways for dealing with one of the central issues of our times.

References

Althusser, L., 1971, 'Ideology and Ideological State Apparatuses', in: Lenin and Philosophy, London, NLB.

Alvesson, M., 1996 Communication, Power and Organization, Berlin-New York, Walter de Gruijter.

Appadurai, A., 1996, Modernity at Large. Cultural Dimensions of Globalization, Minneapolis /London, University of Minnesota Press.

Bauman, Z., 1993 Postmodern Ethics, Oxford, Cambridge (Mass.), Blackwell.

Bauman, Z., 1995, Life in Fragments. Essays in Postmodern Morality, Oxford, Blackwell.

Binsbergen, W. van, 1999, 'Globalization and Virtuality: Analytical Problems Posed by the Contemporary Transformation of African Societies', in: B. Meyer, P. Geschiere (eds.), Globalization and Identity: Dialectics of Flows and Closure, Oxford, Blackwell, pp. 273-303.

Clegg, S., 1994, 'Power and institutions in the theory of organizations', in: J. Hassard, M. Parker (eds.), Towards a New Theory of Organizations, London/New York, Routledge, pp. 24-49.

Dijkstra, S., K. Geuijen, A. de Ruijter, 2001, 'Multiculturalism and Social Integration in Europe', in: International Political Science Review, Vol. 22, No. 1, 2001, pp. 55-84.

Durkheim, E., 1893, De la division du travail social, Paris, Alcan.

Elias, N., 1939, Über den Prozess der Zivilisation, Basel, Haus zum Falken.

Frissen, P., 1996, De virtuele staat. Politiek, bestuur, technologie: een post-modern verhaal, Schoonhoven, Academic Service.

Gellner, E., 1983, Nations and Nationalism, Oxford, Basil Blackwell.

Gellner, E., 1992, Postmodernism, Reason and Religion, London-New York, Routledge.

Giddens, A., 1990, The Consequences of Modernity, Cambridge, Polity Press.

Glastra, F., 1999a, 'Benaderingen van intercultureel management', in: Glastra, F (red.), Organisaties en diversiteit. Naar een contextuele benadering van intercultureel management, Utrecht, Lemma, pp. 25-57.

Glastra, F., 1999b, 'Over de opkomst van intercultureel management in Nederland', in: Glastra, F (red.), Organisaties en diversiteit. Naar een contextuele benadering van intercultureel management, Utrecht, Lemma, pp. 59-74.

Habermas, J., 1981, Theorie des kommunikatieven Handelns, Frankfurt-am-Main, Suhrkamp.

Hannerz, U., 1992, Cultural Complexity. Studies in the Social Organization of Meaning, New York, Columbia University Press.

Hannerz, U., 1996, Transnational Connections. Culture, People, Places, London/New York, Routledge.

Hobsbawm, E., 1994, The Age of Extremes. A History of the World, 1914-1991, New York, Vintage Books.

Kunneman, H., 1984, Habermas' Theorie van het communicatieve handelen, Meppel/ Amsterdam, Boom.

Law, J., 1994, Organizing Modernity, Oxford, Blackwell.

Lyotard, J.-F., 1984, The Postmodern Condition: A Report on Knowledge, Minneapolis, University of Minnesota Press.

Poulantzas, N., 1975, Classes in Contemporary Capitalism, London, NLB.

Putnam, R., 2000, Bowling Alone. The Collapse and Revival of American Community, New York, Simon & Schuster.

Robertson, R., 1995, 'Glocalization: Time-Space and homogeneity-heterogeneity', in: M. Featherstone, S. Lasch, R. Robertson (eds.), Global Modernities, Thousand Oaks, London, New Delhi, Sage, pp. 25-44.

Ruijter, A. de, 1997, 'The era of glocalization', in: T. van Naerssen, N. Rutten, A. Zoomers (eds.), The Diversity of Development, Assen, Van Gorcum, pp. 381-391.
Ruijter, A. de, 2000, De multiculturele arena. Oratie Faculteit Sociale Wetenschappen, Katholieke Universiteit Brabant, Tilburg, Katholieke Universiteit Brabant.
Sennett, R., 1998, The Corrosion of Character. The Personal Consequences of Work in the New Capitalism, New York-London, W.W. Norton & Company.
Siebers, H., 1999, 'We are children of the mountain'. Creolization and Modernization among the Q'eqchi'es, Amsterdam, CEDLA.
Siebers, H., P. Verweel, A. de Ruijter, 2001, Management van diversiteit in arbeidsorga-nisaties, Utrecht, Lemma.
Simmel, G., 1955, Conflict and The Web of Group-Affiliations, with a foreword by E.C. Hughes, Glencoe (Ill.), The Free Press.
Tönnies, F., 1957, Community and Society, New York, Harper and Row.
Toulmin, S., 2001, Return to Reason, Cambridge (Ma), Harvard University Press.
Weber, M., 1947, 'Bureaucracy', in: Gerth, HH., Wright Mills, C (eds.), From Max Weber. Essays in Sociology, London, Kegan Paul, pp. 196-244.
Weber, M., 1978, Economy and Society, Roth, G., Wittich, C. (eds.), Berkeley, University of California Press.