

# **SUSTAINABLE LAND DEVELOPMENT AND LAND MANAGEMENT IN URBAN AND RURAL AREAS - ABOUT SURVEYORS' CONTRIBUTION TO BUILDING A BETTER WORLD**

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## **Key words:**

### **SUSTAINABLE LAND DEVELOPMENT AND LAND MANAGEMENT ARE AMONG THE GREATEST CHALLENGES OF THE NEW MILLENNIUM**

There is no need for any long exposition as to why Sustainable Land Development and Land Management both regionally and world-wide are among the greatest challenges and tasks of the new millennium. They are simply important pre-requisites for as many people as possible to live in conditions of the greatest freedom and self-determination, and thus make important contributions to this. It is a question of fairness, quality of life and freedom. But is it fair and compatible with human dignity or viable when - as demonstrated by the EXPO 2000 in Hanover (by Braun/Virchow) - we find in the average global village of 1000 inhabitants:

- 206 illiterates (over 15 years)
- 130 malnourished persons
- 165 persons who earn less than 1 US\$ per day
- 426 persons who are engaged in agricultural activities
- and the village's richest person owns more than the combined income of 577 of the village's poorest people?

It is thus explicable and understandable but in its consequences by no means always consistent with human dignity and a viable future where, particularly in developing countries, an uninterrupted rural to urban migration continues with the well known consequences of proliferating informal settlements, unsafe or unclear rights of tenure, enormous hygiene, social and administrative problems, etc. This global process of urbanisation - the UNCHS speaks of 30,000 urban centres in the southern hemisphere (Hundsatz, 2001) - is however structurally not comparable with the urbanisation rate and town development problems in industrial countries. Urbanisation here means something different, or at least does not to the same extent mean the growth of mega-cities.

It is understandable and welcome that in the light of this background, particularly urgent in developing countries - as clearly demonstrated at the Istanbul + 5 UN Special Session of the General Assembly from 6-8 June 2001 in New York, the UNCHS has launched the two global campaigns for secure tenure and for urban governance. All FIG member associations and especially town and country regional development experts will strongly support these important initiatives. They gladly respond to the invitation of the UN General Assembly's

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“Declaration on Cities and other Human Settlements in the New Millennium” (UN-GA, 2001)  
“to join in renewed dedication to our shared vision for a more just and equitable world”.

A just and equitable world will surely only exist when we provide for a balance between urban and rural areas, when, as expressed in the above mentioned UN-Declaration (op. cit.), we register that “while addressing urban poverty, it is essential to eradicate poverty and to improve living conditions as well as to create employment and educational opportunities in rural settlements and small and medium-sized cities and towns in rural areas”.

Every one of us knows that these are the right wishes or aims but unbelievably difficult to realise in practice - the trend and economic power continue to be directed without change to cities!

Every one of us will therefore willingly accept that we must finally overcome the so-called urban-rural divide or controversy (Hundsatz, 2001) and replace it by an interdependent rural-urban continuum. It is a question of balance and of compensation of deficits. And we should consider that a neglect of rural areas and the omission of appropriate regional planning e.g. in transitional or developing countries lead to immeasurable and in part irreversible damage. That is why the **Potsdam rural 21 declaration** (2001) called on all states in the world to develop their own policies for rural areas. This declaration is based mainly on the statements of the representatives who were present from the World Bank, FAO, UNCHS and the EU Commission, as well as from a large number of Asian and African states. The FAO Director General Jacques Diouf (2001) made a strong call for a balanced partnership between urban and rural areas and regarding absent rural concepts in many countries demanded “Investment in rural areas in order to strengthen their manifold functions in society”. It has indeed long been clear that concepts for fighting poverty or securing food supplies require a broad palette of initiatives e.g. by concepts for the development of rural areas (DSE/GTZ/DLG, 2001). Diouf’s call can be applied without any qualification to the highly developed EU, 80% of the area of which is of a rural nature. And although or - better - particularly because in Europe the (economic) future is very much seen as lying in the towns, urban regions or conurbations and which is where massive investment takes place, there are compensatory structural funds and programmes on a massive scale for rural areas. Other measures include assistance programmes for rural development and regional economies.

## **SUSTAINABLE RURAL DEVELOPMENT AND LAND MANAGEMENT DETERMINE THE ESTABLISHMENT OF OVERALL AIMS AND TASKS**

The nature of the tasks is clear. It is a matter of sustainable development and indeed of a sustainable development which is

- global and local
- in urban and rural areas
- in developed countries, countries in transition and in developing countries.

It is also more and more - however different the challenges in urban and rural areas may be - a matter of respecting and implementing the principles of good governance and the requirements of a civil society. In practice it is a matter - applicable equally to rural and urban areas - of putting into operation the “Habitat Agenda Key Commitments and Strategies” (UNCHS, 2001):

#### **Shelter**

- equal access to land;
- security of tenure;
- the right to adequate housing;
- equal access to credit;
- access to basic services.

#### **Social Development and Eradication of Poverty**

- equal opportunities for a healthy and safe life;
- social integration of disadvantaged groups;
- gender equality.

#### **Environmental Management**

- geographically balanced settlement structures;
- effective management of supply and demand for water;
- reductions in urban pollution;
- disaster-prevention and rebuilding of settlements;
- effective and environmentally sound transportation systems;
- mechanisms to prepare and implement local environmental plans and local Agenda 21 initiatives.

#### **Economic Development**

- to strengthen small and micro-enterprises, particularly those developed by women;
- to encourage public-private sector partnerships;
- to stimulate productive employment opportunities.

#### **Governance**

- decentralization and strengthening of local authorities;
- participation and civic engagement;
- transparent, accountable and efficient governance of towns, cities and metropolitan areas.

#### **International Cooperation**

- enhanced international cooperation and partnerships.

It becomes clear that overall, i.e. laterally oriented and multi-disciplinary, perceptions, effective planning and jointly developed concepts are necessary. This does not exclude the possibility that, although an overall and systematic view and way of proceeding are necessary, in certain instances a restriction to crucial points and key projects may or will be indicated. On the other hand too strict restriction to individual sectors without lateral inter-action should be avoided. This happened for example in some Central European countries where, following the recognition and restoration of property rights and land registration, which were important, a fairly strict agriculturally oriented new organisation of property took place. This was not however embedded in an overall concept. The overall aspect and rural development measures

were neglected. This must now be made good by all EU accession candidates in the context of the overall concepts for rural development which they have to put forward (Magel, 2001 a).

The above is true also for towns and for urban development; above all the new challenges “inclusive city”, “urban governance” etc., which have been worked out and formulated on a global basis by the UNCHS. Whether it is a matter of cities in developed countries which lose their previous inhabitants to the immediate or wider spread surrounding areas (“sprawling cities”) and which have their central areas populated by socially weaker or more difficult marginal groups or a matter of cities in developing countries which also have on their outskirts growing numbers of persons who have fled the land and which in consequence lose their structure and control - it is always a matter of implementing perceptions and strategies, as set out briefly below:

- need for modern administration and for more strategic thinking and action as well as orientation on effectiveness
- need to establish models which are viable and are oriented towards the future, such as we were able to experience many times at the Istanbul + 5 Summit in New York
- new distribution of functions between state, local authorities, economy and citizens in the context of an emerging ‘Civil Society’
- new planning and participation procedures, and connected with these a new understanding of the role of the administration in the sense of moderator and facilitator, but also still as a reliable provider of core services.
- development and use of new information technologies combined with the creation of new jobs in this area
- regional cooperation crossing local authority boundaries etc. (Magel/Jahnke, 2001)

Urban land management experts of the Urban Management Programmes of the UNCHS (Ansari, von Einsiedel, 1998) graphically describe the problems in many Asian countries:

1. inappropriate, overly detailed and inflexible planning, regulating and legal framework
2. overly centralised responsibilities but fragmented implementation authorities
3. weak cadastral, registration and tenure records as well as lack of effective land information systems
4. lack of cooperation among government agencies concerned.”

They see the need for action as lying in

1. expanding effective participation of the private business sector,
2. enhancing community self-reliance and support to community-based initiatives,
3. strengthening the role and capacity of local government,
4. promoting the role of non-governmental organisations in bridging the interests of the community, the government (both local and central) and the private business sectors.”

This means in relation to important, technically concrete fields of action in the context of town planning:

1. Good husbandry land management by reducing the growth of built up settlement areas or by re-using disused urban land (from green field to brown field development);
2. Preventive environmental protection by saving energy and developing renewable energy, protection and care of ground water and local water resources, encouraging the recycling of material, reducing the amount of waste;
3. Influencing mobility patterns compatible with urban conditions by connecting places of residence and work to the public passenger transport system, reducing the amount of space required for individual vehicle traffic, better combination of residential and work functions, etc.:

And it means:

4. Socially responsible provision of dwellings, as well as
5. Business assistance through safeguard economic locations (Fuhrich, 1999).

Priorities and intensities of the fields of action naturally differ depending on whether it is for example a matter of cities in Europe or of cities with millions of inhabitants with “informal settlements” in South America, Africa or Asia.

Above all however it is a matter of sustainability. It is clear that, from an ecological and social point of view, important, positive and to some extent even measurable contributions to sustainability can be brought about e.g. by reducing individual traffic. But does this have a positive effect on sustainability in other fields, in the business sector? Think only of the automobile industry and the jobs in that branch. What I want to say here is that the adjective ‘sustainable’- used nowadays almost only automatically - is in danger either of becoming simply an empty phrase or of being used or misused as a misleading label. I plead therefore for more responsibility in its use and associate myself with the formulation adopted in German regional planning: “Sustainability exists where a fair weighing up of all interests has taken place”. The FIG has also made a contribution on the subject of sustainability which is worth reading (FIG, Agenda 21). In doing so it wisely refrained from giving criteria or measurable indicators capable of being measured, even though this is what many desire.

Key word “fair weighing up”: the great European regional planner Martin Lendi, Eidgenössische Technische Hochschule Zurich (cited in Kiehl, 2001), says “Sustainability is a continuing process without finally determined problems and aims”. That is why the mandate of sustainable action is in the first instance a mandate to pause, to reflect and to discuss values and guiding concepts. Reflection and contemplation must lead to future oriented and well grounded proposals - and, it is to be hoped, to the necessary changes in the behaviour of people. Experience teaches us: knowing the factual background or data is not of itself sufficient - we need fundamentally ethical values, such as we know them within our own FIG (see FIG publication No. 17). This ethical aspect unites also the three great themes: Sustainability, Civil Society and Good Governance!

## **ABOUT SURVEYORS' CONTRIBUTION TO SUSTAINABLE LAND DEVELOPMENT AND LAND MANAGEMENT**

It is particularly gratifying - and this joint symposium here in Nairobi is a fresh indication and high point - that the UN agencies have in the last decade systematically recognised and made use of the competence and strength of NGOs. For the FIG it is an honour and a professional enrichment to be available to the UN agencies as a recognised partner, either by itself or - as was the case recently in New York and as is now envisaged next year at the RIO + 10 summit in Johannesburg - with sister organisations such as e.g. in the context of the Habitat Professionals Forum. Not only do real and deep insights into the “World in Transition” as well as consequences for their own professional activities result from this for the FIG and its member associations, but the need for a permanent dialogue with the political world is also confirmed (Magel, 2001 b). How and from whom, if not from experts, should e.g. politicians obtain the decisive stimuli, indicators and proposals for a proper land policy or for functioning taxation and land market systems etc.?!

This is not the place to present in detail the many indispensable contributions of surveyors to the tasks described above concerning Urban and Rural Land Development and Land Management. I should like here, as far as the international sector is concerned, to refer inter alia to the excellent publications of the FIG, in particular Publications Nos 3, 4 and 5 (Sustainable Development and Land Management), Nos 10 and 11 (Cadastre), No 13 (Land Tenure, Land Management and Land Information Systems), No 23 already mentioned (FIG Agenda 21) and naturally to the Bogor and particularly the Bathurst Declarations (No 21); finally also to the most recent work about Women’s Access to Land - FIG Guidelines (Publication No 24). And I have not even mentioned the equally important and indispensable contributions to the education and training for “classical” surveying and sensing, for marine geodesy, for remote sensing, etc. All of these are also essential.

It is clear from all this: Sustainable Land Development and Land Management are not possible without the fundamental contributions of surveyors in the context of Good Governance and the aims of Sustainability. To be mentioned today are above all the so often mentioned sectors Secure Tenure, Access to Land, Land Administration and Land Management including Land Use, Land Registration, Cadastre and many more. Land Development and Land Management are also not possible - and that is after all the theme here in Nairobi - without spatial information, spatial data infrastructure and spatial information management, without GIS and the contributions of surveyors.

In the sense of FIG Discussion in Singapore 1995 on Integrated Competence, embodied in the triad “Land, Property and Construction Managing” (Kennie, 1998), surveyors can also make important and politically highly valued contributions in the field of “Construction” including the related planning competence. FIG Commissions 7, 8 and 10 are particularly concerned with this field. The contributions go beyond the area of surveying, registration, preparation, appraisal, modelling as well as beyond the valuation and adjustment of property and land in urban and rural areas. It is a matter of the planning and realisation e.g. of visions, overall

concepts or guide lines for the future, urban and rural infrastructures, of establishing spatial development concepts for regions and settlements, of sustainable land use models, of natural resource management, of the necessary legal regulations or financial concepts; it is a matter of participation, moderation, of conflict management with mediation, etc.

The ‘planning and shaping’ surveyor is in some European countries an important objective of university education, as is the case in the Technical University Munich and particularly in my chair. It is a matter of preparation for later careers e.g. in state administrations for land development, in local authorities or in private practice.

If surveyors in the sense of the call by FIG President Bob Foster (2001) wish to expand their professional sphere and in particular to win more socio-political influence, then they and the geodetic education institutions should concern themselves still more with the ‘Land, Property and Construction Managing’ sphere, basing themselves naturally on the central tools ‘Data Gathering’ and ‘Data Managing and Manipulation’, called Modelling (Kennie, loc. cit.).

Far be it from me to seek to make other professions superfluous or to promote the dilettante surveyor. My aim is the “well-grounded specialized generalist”! Such a person must be highly professional. In order to achieve this aim the different branches within the surveying profession must for example come closer together. The FIG Commissions - as has happened here recently in Nairobi - can in this respect set an example. From my point of view bringing together for example the special field Spatial Data Infrastructure/GIS with Land Development and Land Management is an indispensable universal and practical requirement.

Broadening the scope of our activities in the above sense (Foster loc. cit.) in the context of questions of land management and land tenure is also the aim of the Master’s course “LAND MANAGEMENT AND LAND TENURE IN URBAN AND RURAL DEVELOPMENT” which is being newly offered at the Technical University Munich from the autumn of 2001. It is gratifying that also African participants of both sexes have been able to gain admission as pioneers to this course.

Sustainable and participatory land development and land management carried out in a highly professional manner are not only necessary prerequisites for strengthening rural and urban areas and their societies, they are also in their philosophy and implementation ideal embodiments of the democratic good governance principles.

This close connection between urban-/rural- land development and good governance is not new. A look at the two famous 14<sup>th</sup> century wall frescoes by Ambrogio Lorenzetti about good and bad governance in the world famous Palazzo Pubblico at Siena in Italy shows us that earlier generations also realised how important is the co-existence of urban and rural areas and populations and how essential good governance is in the form of equity, responsibility, reliability and active support of both urban and rural areas. And nevertheless: the development in many parts of our earth has been very different.

Are we today, almost 700 years later, in a better position, can we have confidence in our hopeful visions? I believe that the answer is yes, we have after all the United Nations and their competent agencies, we have an advanced state of knowledge, methods, techniques and instruments, and we have the many NGOs and experts, including the FIG. All of them are inspired by the desire to make their contribution to building a better world.

Let us go forward together along this way.

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