

Zeitschrift: Geomatik Schweiz : Geoinformation und Landmanagement =
Géomatique Suisse : géoinformation et gestion du territoire =
Geomatica Svizzera : geoinformazione e gestione del territorio

Herausgeber: geosuisse : Schweizerischer Verband für Geomatik und
Landmanagement

Band: 105 (2007)

Heft: 2

Artikel: Für eine gerechtere Welt : die Rolle der Vermesser für eine nachhaltige
Entwicklung = For a more just world : the surveyor's role for achieving
sustainable development

Autor: Töpfer, Klaus

DOI: <https://doi.org/10.5169/seals-236406>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 07.08.2025

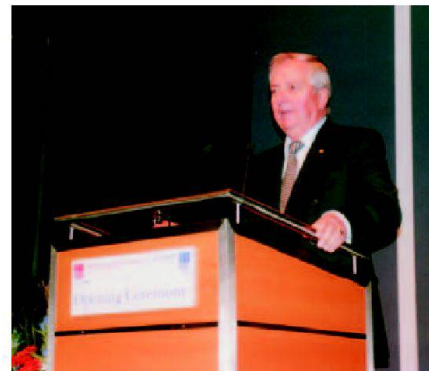
ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

Für eine gerechtere Welt – die Rolle der Vermesser für eine nachhaltige Entwicklung

For a More Just World – the Surveyor's Role for Achieving Sustainable Development

Keynote zur Eröffnung des XXIII. FIG-Kongresses in München am 10. Oktober 2006 von Prof. Dr. Klaus Töpfer, langjähriger Executive Director des UN Umweltprogramms.

Opening Keynote Address at the XXIII FIG Congress in Munich on 10 October 2006 of Prof. Dr. Klaus Töpfer, Long-time Executive Director of the United Nations Environment Programme.



Prof. Dr. Klaus Töpfer

Measurement! President Magel mentioned this best seller in Germany «Measuring the world». I think an old dream all along the development of your profession. A dream, an ever young and an ever new dream, a challenge for all generations: measuring the world. What is the shape, what is the structure, what is the potential of this blue planet Earth in its regions, in its differentiations, in its position in the cosmos. Up to the Galileo fight, the Earth – a flat disc? The Earth – a globe? Today we are smiling but underline measuring the world is far from being only something like a technical endeavor. It's linked with perceptions, it's linked with ideas, ideologies. Therefore we must see all this development in the past to create, to develop and to understand maps. The results of historic, of courageous expeditions from Christopher Columbus, via Vasco da Gama and Magellan. All creating maps and drawing boundaries: boundaries of nature, boundaries of political responsibilities, boundaries as well of human knowledge.

Maps measuring the world, always the integration of scientific knowledge, of art and interpretation. Maps, measuring the world, drawing boundaries – always used and misused as a demonstration of power, as instruments in power struggles. I served more than eight years in the United Nations system and I learned this more than once: maps and boundaries, names for rivers, for seas: these are instruments misused for propaganda, even for manipulation. I can only recommend to have an eye on this book from Jean Paul Bon «Cartographie, géographie et propagande». You will be immediately aware that what you are doing is far way from technical activities only. It is in the centre of mankind and the mass society. This sentence of Alexander von Humboldt, quoted in the book «Measuring the world»: Let me translate this sentence from the German version: «To measure, to survey the world is an outstanding art. To measure is a great responsibility. We are not allowed to take it easy.» This quote is linked with the great

Alexander von Humboldt in a discussion with Gauss in a very important dialogue. Then you are aware of the truth: only what is measured counts and we have to do a lot to prove that measurement is linked with values, but that measuring, that quantification of interrelations mirroring the world first and for most have to be a scientific responsibility, combined with the society connotation.

Measuring the world in a time of unprecedented changes. Changes in a variety of dimensions. Of course simply in the number of people living on this blue planet Earth. When I was born, nearly seventy years ago on this planet Earth only 2.4 billion people were living. Now we have 6.5 billion global citizens. Dramatic changes in one generation. That is change, unprecedented, especially if you go a little bit more in the detail of this. Two out of three new born babies in this world right now are born in or for cities: two of three! We have daily over 80,000 city dwellers more. We are discussing the challenges to organize megacities. We are aware of an extensive, nearly a cancerous growth of these conurbations. In the very same moment, ladies and gentlemen, in the other part of the world there is not the need to discuss a dynamic growth, not even growth of population at all. We are confronted with the decrease of population, the decrease of population in cities. We are confronted with totally new structures in cities because they are losing their traditional, historical profile. They are losing their history, their tradition in a time of deindustrialisation. More and more cities have to be reinvented. Very visible example that the world we are living in is a world of separation, of two kinds of countries and regions. It was great to listen Prime Minister Stoiber. He mentioned that the per capita income in this Free State of Bavaria is 32,000 euros, that means something about 40,000 dollars. President Magel underlined the indicator for poverty in our world, he mentioned two dollar a day. Indeed: It is only one dollar a day. So you have to compare in this

world Euro 32,000 or 40,000 Dollar per capita with something between 350 and 500 US Dollar per capita. My simple question, friends and colleagues: In this world of globalization, of global markets for goods and services, of global information available, of mobility: do we believe that this world is a stable world, a peaceful world? These huge differences between 40,000 Dollars per capita and 5,000 Dollars per capita, that means between Europe and the African coast is the Mediterranean Sea, is the distance between the coast of Mauritania and Senegal and the Canary Islands! We learned in Germany, combined with this wonderful gift of reunification that there was a difference between the western part and the eastern part, a quite reasonable gap in welfare. For all the time before reunification this was a stable situation because there was a wall between those two parts. It's like with a dam which is stabilizing different levels of water. We didn't ask really what is happening if this dam is removed. We were all more or less afraid that this division of our country will not end quite soon. At the end of the day it changed in one night. The difference in this world is much higher. I can only underline that to work together for development of the developing countries, the poor countries in this world, is not only charity, is not only an ethical obligation, it is an investment in our peaceful perspective in the life to come. Otherwise we will not live in a peaceful world.

In addition, ladies and gentlemen: We must be aware, that the externalization of costs of our well-being has negative consequences for the poor, the developing countries around the world. This was one of my main experiences living more than eight years in Nairobi, in Kenya, in Africa. This externalization of costs to the environment, to other people, to coming generations is a matter of fact. That we are discussing climate change now has nothing to do with the emissions of CO₂ or other green-

house gases from Africa or from the developing world all together. In my lifetime the CO₂-content in the world, in the atmosphere, increased something about 30 percent. These 30 percent are coming from the now developed countries. And you can imagine, if you argue now: we, the developed countries, have unfortunately fully used the assimilation capacity of the atmosphere for CO₂ free of charge, and therefore you in the developing countries are not allowed to add your CO₂ emission, because this would cause climate change – they will not be very happy about this message. They are convinced that it is unfair that the developed countries used the atmosphere free of charge and that they have to pay now for the same services of nature. Their question: What are you doing to change this? This is the situation in our world and we have to be aware of those topics. Our obligation to fight climate change is not charity, but is an investment for a peaceful world.

Finally: It happened that at the end of the last millennium, in the year 2000, the General Assembly of the UN asked for a special Millenni-

um Assembly in New York. All Heads of State and Heads of Government participated, more than 180, and they agreed unanimously that we need something like a road map for the future, for our common responsibility in this world. They decided on eight Millennium Development Goals. I don't want to use this time of my speech to go through all those goals. They are starting with the goal to reduce poverty in this world to 50 percent in the year 2015. Nearly 1.5 billion people are living in our times below the poverty line of one dollar a day. This goal is linked with halving the number of people living under the condition of hunger. In this world of affluence nearly 800 million people are living under the condition of hunger, while the so-called rich developed world is throwing away daily more food than it is needed to feed those 800 million! Implementing this road map is also concentrated on improving the position of women, it is concentrated to education of young people, to fight diseases, especially AIDS/HIV and malaria. It is concentrated to protect nature capital by giving the chance for people to have access to water.

Finally these MDG's are asking for a change in our global cooperation, what was started with the so-called Doha round. We know that this Doha round of the World Trade Organization unfortunately collapsed. The expectation of developing countries couldn't be fulfilled. The developing world is still waiting for the implementation of the 0.7 percentage goal – to make 0.7% of GNP available for development cooperation.

We have the road map, we know the direction we have to go. I'm happy to say: There are lots of progress to realize the MDG'S, no doubt. There is no reason for resignation, there is no reason for the conviction that it's impossible to reach these noble targets. There are quite a lot of pockets of remaining problems, mainly in Africa, but in other countries, too. To concretize this road map, Secretary General Kofi Annan prepared for the 60th anniversary of the United Nation's system in the year 2005, a paper under the headline: «In Larger Freedom». His main challenge: What can we do to live in freedom and peace in the future of this world? Kofi Annan differentiated three parts:

Quel que soit «la direction»...

Leica System 1200, le système topographique le plus complet au monde



Leica System 1200 associe la station totale la plus évoluée et performante à l'outil RTK le plus rapide et fiable sur le marché. Utilisez les mêmes composants pour Leica SmartStation et Leica SmartPole – ceux qui conviennent le mieux. Parfaitement complémentaires, SmartStation et SmartPole font du System 1200 le système de lever le plus complet au monde, caractérisé par une haute flexibilité et une conception évolutive.

Leica Geosystems SA
Rue de Lausanne 60, CH-1020 Renens
Tél. 021/633 07 20, Fax 021/633 07 21
info.swiss@leica-geosystems.com
www.leica-geosystems.ch

We need freedom from want, we need freedom from fear, and we need freedom to live in human dignity. He underlined that those three contributions to larger freedom are very intensively interrelated. The one cannot be reached without backing by the others. Freedom from want, meaning that we have to give the people the perspective of a reasonable life for themselves and their families, their children, to overcome poverty, mainly concentrated on the implementation of the Millennium Development Goals. Freedom from fear, to fight against conflicts, wars, terrorism, knowing that we can reach sustainable development only in a world of peace and cooperation. War is and will ever be the most risky, dangerous and destructive development for the people in need and for all of us on this globe. And freedom to live in human dignity! Meaning the respect for human rights, all around the world, in all cultural situations, in all regions, in all spiritual values and religious structures. Respect to good governance, to the rule of law. If you combine the one with the other contribution to larger freedom than you can

come back very concretely to what you have on your agenda. I don't believe that we will come to a freedom from want if we cannot have a rule based system of property rights and secure tenure. It is a clear condition for this. We learned it again and again, you can say it in one word: if you want to create conflicts, even wars, then destroy cadastres. We saw it again and again, we saw it for example in Kosovo. In those days I was the Head of «UN-Habitat». We started in Kosovo a new cadastre system, backed by governments, for example by Norway and by others. Simply to make the cadastre a basis for freedom in the society, a basis for investment. By the way, we learned the importance of property rights in Germany as well. The question how to handle the property rights after reunification was one of the most severe discussions we had in this country. Reconstitution of property rights from the time before, knowing that lots of those properties changed to become other people's property, «Volkseigentum», difficult to translate. If you go now in the new Bundesländer, if you go to the eastern part of Berlin, and you see

a building which is not yet renovated, not restructured, you can to 99 percent say this is linked with the fact that there are no clear property rights. What are you doing in your professional work is in the center of peace, in the center of solving conflicts and problems in this world.

Let me make a little footnote: Once I learned as a student by my professor at the university: if you speak a little bit longer, don't hesitate to make a little attention stop. Therefore my «attention stop» is coming now, please be aware of this. In this city of Munich, quite a time ago, a well-known cabaret artist, Carl Valentin, mentioned an idea, which I loved very much as the 6th speaker in the morning session: «Everything is already said, but not yet from everybody». Therefore I have to apologize that I repeat the one or the other information from previous speakers!

The challenge of secure tenure, I can only stimulate governments to invest more in this field. It has the highest return on investment in the development agenda. I'm happy that you have a lot of positive developments. Your prize win-

choisissez la solution professionnelle

Leica SmartPole

SmartAntenne ATX1230
La SmartAntenne GNSS, intègre les technologies GPS et GLONASS et présente des performances de poursuite optimales avec SmartTrack+. Compatible avec SmartPole, SmartStation ou SmartRover.

Haute performance Réflecteur 360°
Le réflecteur 360° permet de réaliser des mesures de haute précision, s'adapte à une Leica Smart-Antenne et résiste aussi à une chute.

Réglage de hauteur à verrouillage rapide
La nouvelle canne télescopique à verrouillage rapide permet de régler la bonne hauteur de réflecteur en quelques instants en garantissant la conservation de la hauteur même en cas de traitement rude.

Contrôleur RX1250Tc
L'écran couleur tactile de dernière génération fournit un affichage clair, à haut contraste et visible dans toutes les conditions.

Conception ergonomique
La nouvelle canne télescopique comprend une poignée gainée à la fois douce au toucher et robuste qui assure une utilisation confortable durant toute la journée, indépendamment du temps.

- when it has to be right

Leica
Geosystems

ner of this morning is one of the wonderful examples. Congratulations! Capacity building in your field of activities is urgently needed. Very, very much so. And it is a pity, and let me mention this, with those eight years experience in Africa: You can make money available in the economic cooperation, if you are investing in hardware. To make money available for the construction of a dam, a highway or a sewage water treatment plan is not very easy, but it is possible. All other hardwares are relatively easy to finance, but if you want to finance software, capacity building, training courses, good governance, reliable planning data - then you have a problem to finance these activities. We must go together and inform governments, private business and all those working in those countries: investments in this kind of software are of highest importance for the stability of these countries. We need this stability and this development for peace for us as well. This is the interrelation. I'm happy, for example, to quote Norway once more, that they invested quite some money in Tanzania, to make cadastral systems available for nine cities. Multiplying this in Tanzania is a clear signal of the importance of your activities in this field. This is the consequence: secure tenure, precondition for peace in the society, precondition for investment, especially also for direct investment. Therefore your work is the basis for development, is the centre of the peace agenda.

This goes further. I'm happy to inform you that it was possible to create this «Professional Forum for Habitat». Thank you, President Magel, and numbers of other colleagues for this initiative. Many of you invested in the very beginning in this Professional Forum – in hope, in money, in ideas, in projects. At the beginning it was a little flower, it was not yet really blossoming in those days. It is now developing quite nicely. I learned that my good friend and colleague later in Nairobi, that Anna Tibaijuka, the Executive Director of Habitat, is doing exactly the same for development in slum upgrading. We know and learn again and again: As long as we cannot come to secure tenure a slum upgrading will not be successful. You can be aware that those who have some assets to invest in their houses in slums will never do it without secure tenure, without some property rights. Because otherwise they

are increasing the risk of forced eviction if they invest in better housing without these rights. We must be aware of those interrelations. Therefore development policy needs urgently your knowledge. We need you as a premium partner. That is not window-dressing at this conference that is the urgent request for help! You should be aware that the United Nations system altogether must have this backing in a time of huge changes.

This is the one important part of the equation, but we have to go even further. We need better land management systems with better data. I was very happy to learn in Germany: It was decided in the Parliament that government should make money available for the development of data concerning land use and interrelated activities in this field, in your domain of work. What made me this decision specifically important. The Parliament underlined: To invest in reliable data are infrastructure investments with a high return on investment – they are infrastructure investments. Your work – the data, geodata, in the broad sense: They have all the qualification of infrastructure investments. Investments in this part of infrastructure are producing important external effects on lots of other decisions. They make other decisions better, more reliable. Therefore the data you are producing and using – these data are a backbone for the development agenda around the world. They are of highest importance for those who are handling, who are shaping this change. The changes will go on. They will not go on on a lower level, in a lower speed. That is not pessimistic, that is optimistic. We are more and more one planet. We should be very happy about this. We should see this as an offer for our young people. Always underlining that in the time of my father the labor market was around the church. In my time the labor market at least for the average is whole Germany, even a little bit Europe. In the time of our children the labor market will be the world. Let the young people around the world qualify themselves for this future. Make it a precondition that this integrated world is also a peaceful world, coming from the understanding of the ideas, of the ideological basis, religious believes, of the cultural identity and diversity. We need this cultural identity. I am convinced, ladies and gentlemen, dear friends and colleagues, people

will not accept globalization for the price of losing their identity. It is the contrary: The people in the globalized world need their identity otherwise they cannot handle this anonymous development in globalization. Therefore it's good to come to Bavaria with open eyes, to see that you can combine identity and diversity with a successful economic agenda. I believe we have a totally new feeling of these identities in languages, in songs, in behavior, even in the cuisine – we have a renaissance of regional identity. Globalization needs urgently identity and cultural diversity. This must be combined with the need for everybody to live up to dialogue and tolerance in an organization like FIG.

To be aware of respect, of dialogue with others is the precondition for solving problems in peace, to avoid conflicts, to avoid wars. This must be your contribution to a peaceful world, a world where there is development for each and everybody. This would be a great, an outstanding success. That's what I wish you all and I hope you really will have the chance to contribute in the way I tried a little bit to single out.

**FGS-Zentralsekretariat:
Secrétariat central PGS:
Segreteria centrale PGS:**



Schlichtungsstelle
Office de conciliation
Ufficio di conciliazione
Flühlstrasse 30 B
3612 Steffisburg
Telefon 033 438 14 62
Telefax 033 438 14 64
www.pro-geo.ch

Stellenvermittlung

Auskunft und Anmeldung:

Service de placement

pour tous renseignements:

Servizio di collocamento

per informazioni e annunci:

Alex Meyer
Rigiberg 3, 8604 Volketswil
Telefon 01 908 33 28 G