A remarkable sign of the times is that professionals the world over seem to be in constant pursuit of personal goals and new challenges. And the staff of ITC - and that includes the editorial staff of ITC News - are certainly no exception. Hendrik Prins, managing editor of ITC News and indeed the person who actually laid its foundations, recently left ITC to take up a new position. We regret, but at the same time respect, his decision and wish him all the best in his future career.

Priority was given to finding a replacement for Hendrik, but in the short term without success. A rather unfortunate situation when so many important changes are taking place at ITC - changes we think you should know about.

Fortunately, we found Janneke Kalf, secretary to the Directorate, willing to take on the role of acting managing editor for the current edition of ITC News. We think she has done a great job in compiling and editing this issue, which allows us to keep you abreast of developments at ITC.

Sjaak J.J. Beerens MSc, ITC Director External Affairs

The first quarter of ITC’s 51st year of existence witnessed a major change in its management structure. On 1 March 2001, with the assignment of a Director for External Affairs and a Director for Internal Affairs, the management team of ITC became complete. Both directors make their appearance in this issue.

ITC’s emphasis on adjusting its orientation to address the needs of its clients is confirmed in articles on short courses in Spain and current fieldwork conditions in the Philippines, and a report on the start of the JIK Joint International Educational Programme with partners in Iran, which leads to Professional Master and Master of Science degrees.

Marjan Kreijns, ITC representative in the People’s Republic of China, reports extensively on the visit of ITC’s new rector, Prof. Dr. M. Molenaar, to that country, which coincided with the visit of the Netherlands’ Minister of Education, Cultural Affairs and Science.

Other interesting features this time round include a report on a seminar on debt and the environment (the concluding activity of ITC’s 50th anniversary), reports on various projects and long-term fellowship arrangements, and several announcements.

I’d also like to draw your special attention to the article on Theo Rijnberg - well-known to alumni and other ITC relations alike - and the occasion of his retirement from ITC.

Janneke Kalf, Acting Managing Editor
New Management Team at the Helm

Janneke Kalf

A new rector, a new director of external affairs and a new director internal affairs - the new management team is now complete, ready to steer ITC along the paths ahead.

In his inaugural address (published in the 2000-4 issue of ITC News), the new rector, Prof. Dr. Ir. Martien Molenaar, highlighted the changing role of ITC both within the Dutch integrated system of higher education and in response to the current market climate. New challenges demand new measures, and with this in mind the directorate has been restructured to meet the tasks ahead.

Director External Affairs

Sjaak J.J. Beerens MSc (23-12-1951), a name already well known within ITC circles, was recently appointed director of external affairs, reason enough to learn something more of his career to date.

"I studied geography (specialising in the geography of developing countries) at the University of Utrecht and combined this with agricultural development economics at Wageningen Agricultural University - as it was then still called. After extended study assignments in Malawi and Tanzania, I eventually graduated from the University of Utrecht in 1978. Not many people know this but following graduation, I joined ITC for a six-month stint as an assistant lecturer with the Integrated Survey Department, to support student fieldwork in Tunisia. It was my first acquaintance with international education in general and with ITC in particular, and I was immediately impressed by the dedication and commitment of both staff and students.

I then joined one of the largest consulting firms in the Netherlands, the DHV Group. After a range of short assignments across the world, working as a specialist on projects in Chad, Suriname, Tanzania, Bangladesh, Sudan and Myanmar (then still known as Burma), I moved to Indonesia in 1981, initially for an eight-month assignment but eventually staying on till 1992. During this period, I worked on a series of projects, first as a specialist but later as team leader and project manager on large integrated rural development projects. Finally, I was appointed project director, with responsibility for project marketing and direction.

After returning to the Netherlands in 1992, I became project director with DHV Consultants and was responsible for project acquisition and supervision in South and Southeast Asia. This frequently entailed short missions to Pakistan, India, Indonesia and the..."
Philippines. Throughout my employment at DHV, I remained in touch with ITC, either through joint projects or through project counterpart staff who participated in courses at ITC and kept me abreast of ongoing developments.

In 1995 I rejoined ITC, this time as Head of the Bureau Project Coordination (BPC). Supported by the ITC management, and through the combined efforts of the dedicated and enthusiastic staff of BPC and the scientific divisions, we managed to double the turnover of ITC’s project operations within three years. During this period, I experienced the strengths, capabilities and potential that enable ITC to operate in a market environment. I also observed the onset of change in political (funding) support for international education, which spelled challenging times ahead for ITC.

During my term as head of BPC, I was regularly called on by the directorate to provide advice and support on policy matters related to ITC’s external funding position and strategy. When the Board of Governors decided that the new directorate was to be strengthened by a director of external affairs who would be responsible for external relations and funding, I could not resist the opportunity to pursue the interests of ITC at directorate level.

ITC is a rather complex organisation, with a combination of academic and professional staff. To guide such an organisation through the prevailing political and funding storms and enable it to become a key player in the Netherlands’ internationalisation of higher education is a very interesting task. We must understand, however, that the coming period will also demand adjustments from not only the ITC organisation but also the individual staff members. Orientation towards the client, flexibility to adapt to competitive market conditions, and improved discipline to meet the various administrative requirements of external clients are just some of the aspects that ITC will face.

With a background combining experience in the commercial sector in the developing world with experience of international education over the past five years, and supported by motivated and committed staff, I feel confident that we can face the challenges ahead.”

Director Internal Affairs
And now to the third member of the team, Gerard W. van Dorp MSc (2-7-48), ITC’s new director of internal affairs.

“Born in Haarlem, I come from a boisterous family (one brother and three sisters) which now extends across the Netherlands. Two characteristics seem to have left their mark. I tend to come across as somewhat high-powered - at least so I’m told - and extending my horizons, yes that’s certainly something that appeals.

After my time at teacher training college in Gorinchem and Zwolle, where I met my wife, we both took up teaching appointments in Rotterdam. Our daughter was born there. An evening course in economics opened the way for me to become a teacher at the newly established HEAO in Zwolle. It
was here that our son was born, making our family complete. From 1984, as head of the Hogeschool Drenthe, I was closely involved in establishing the HEAO in Emmen. Three years later, I had the opportunity to become chairman of the board at the Chr. Agrarische Hogeschool in Dronte. Agriculture then - a fascinating world of foreign contacts, possibilities and dangers that we can read about in the newspapers every day.

And then it seemed time for something completely different. As an independent interim manager, I have carried out various tasks over the last three months ... but that didn’t quite fit the bill. Excitement, spectacle, yes, but oh so lonely. I missed the contact with colleagues. I’m someone who likes to be part of an organisation, to embark on a venture together with others. Whether it be sport, sailing or playing in a band, I think it’s more rewarding when you can give of your best with and for your friends and colleagues. That’s what attracted me to teaching.

For me ITC is a challenge in two ways: getting to know education at university level and getting to know a totally new group of students and colleagues. For ITC the challenge is to maintain its position as a "little university" within the existing order. In the function of director of internal affairs, I hope to make a contribution by drawing on the knowledge and experience I have gained in the past."

So a new rector, a new director of external affairs and a new director internal affairs - the management team is now complete, ready to steer ITC along the paths ahead.
In view of these needs, demand has rapidly increased for intensive short courses that introduce students to the capabilities of GIS. Consequently, over the last six years intensive GIS courses of short duration have been given to students of applied geosciences at the University of Salamanca (Spain) and the Technical University of Delft. The objective of these courses has been to initiate students in the application of GIS as a tool for integrating data in the phase of data acquisition, as well as for manipulating and analysing geo-data.

The simplicity and user-friendliness of the ILWIS system make it an ideal instrument for students. In just a few days, they can obtain sufficient hands-on experience to gain an understanding of the applicability of geoinformation systems within a particular field.

Two former ITC MSc students, Montse Ferrer and Eduardo Garcia, organise the one-week courses at the University of Salamanca. Course participants come from a wide range of professional backgrounds, from geology and geography to landscape ecology and water management. In view of the broad spectrum of interests, subjects on image processing, data management, data analysis and data presentation are part of the programme, offering students an overall view of GIS capabilities. The courses have always been evaluated extremely positively.
and many participants have chosen the ILWIS system for their further explo-
lations into the field of GIS. The courses at the Technical University of Delft, with a duration of about two weeks, were initially designed based on existing tutorials in the User's Guide and Application Guide. Although stu-
dents were generally impressed by the potential of GIS, it was noticed that training based on exercises in the ILWIS User’s Guide was often considered to be a demonstration of a toolbox of GIS operations. Less experienced students have difficulty in translating GIS opera-
tions that are demonstrated in the guide by examples outside their partic-
ular professional fields into applications related to their own work. Therefore, new cases have been constructed in which students apply all the basic GIS operations directly related to their own fields of specialisation. A case study based on a data set obtained over sev-
eral years of fieldwork and consisting of all kinds of GIS operations has been compiled for the engineering geology students of the Technical University of Delft. The exercises involve aspects of the image processing of satellite im-
ages, the georeferencing of these data, the reclassification of a geological map into an engineering geological map based on field observations, and the adaptation of this engineering geologi-
cal map based on geomorphological data. Furthermore, the outline and vol-
ume of a dam lake are calculated in a DTM, and a road along the dam lake is reallocated.

A similar development, taking as subject the environmental assessment of an area in the south of the province of Salamanca, is under consideration for future courses at the University of Sala-
manca.

Planning and Co-ordination in Bagac

Dick van der Zee

Fieldwork is a very important part of the Professional Master’s
degree courses of the NRM programme. All the knowledge
and skills acquired in earlier modules can be practised in a real-
life case study - and simulations can be no substitute. For the
planning and coordination team last year, this meant a project
in the municipality of Bagac, in the province of Bataan, the
Philippines.

To organise such a fieldwork project - the third of its kind in succession in the Philippines - a good counterpart is essential. In this particular case, that
Preparations were carried out at ITC, and on arrival the team presented its terms of reference and working plan to the mayor. The mayor and his staff - the planning officer, Ms. Eugenia Galvez deserves special mention - received us with warm hospitality. In cooperation with municipal staff, a series of discussion sessions was organised with the various stakeholder groups involved. These sessions enabled an inventory to be made of the problems as perceived by the stakeholders. The team then constructed a problem tree, translated it into an objective tree, and on this basis designed a logical framework with five different but interrelated strategies for further development. All more or less according to the book, except that the theory ill equips you to cope with the different reactions of different stakeholders. Planning and coordination is very much an activity involving people, discussion sessions and office work. People cooperated enthusiastically in all the discussion sessions. However, office work alone is not enough, and a number of site visits served to visualise some of the problems identified. Successive days of heavy downpours in the wake of a typhoon kept us grounded longer than we liked, though.

Some team members noticed how the municipal planners were struggling with their map for the comprehensive land use plan and offered to assist them with the aid of the GIS on their laptops. In a few days, they had succeeded in producing a land use plan map acceptable to the municipal planning officer and according to the specifications required. They had to rely on the facilities in the NEDA III office to produce a hard-copy print.

At the end of the stay, the results and a preliminary report were presented to the mayor and his staff and to all other persons that had cooperated. Back at ITC, the report was finalised. As usual, the foreword states that “the opinions expressed in this document do not necessarily repre-
sent those of the Institute*. However, the teaching staff that have reviewed the report are impressed by its high quality and professionalism, and believe that the authors (the course participants) deserve to be complimented on their achievements. It is hoped that the contents of the report can make a real contribution to the further development of the beautiful municipality of Bagac.

Fieldwork is of course work, but not exclusively so. Good fieldwork is impossible without a good atmosphere and a good team spirit. Several excursions and parties served to create these essentials. The Guesthouse of the National Power Corporation was an excellent base, with good facilities, good food and, in particular, very friendly and hospitable people. For some of the participants, certain experiences outside the work context may have left a lasting impression - our computer specialist, for example, who was dragged onto the dance floor and discovered some talents he had previously been unaware of ... and one mother who can proudly tell her children that she "swam" in the ocean. All in all, it was a pleasant group of likeable people and I wish every one of them all the best, as well as success in their careers.

The problems of the area have certainly not been exhausted by this one short fieldwork project. There is a need and the scope for further studies - by other specialisations too. Bagac may serve as a suitable training ground for combined fieldwork, with mutual benefit to both. Therefore, it has been decided that this year three specialisations of the NRM programme will go to the same area and continue on the basis of the results of last year's work. In a later issue of the ITC News, I may report on that.
Martien Molenaar has visited China several times during the last few years, always returning highly enthusiastic about current developments in the country. It is certainly no coincidence that his first trip abroad as rector was to China. ITC has always enjoyed a special relationship with China and almost 400 Chinese alumni have studied at the Institute. Furthermore, since China opened its doors to the outside world in 1979, ITC has been engaged in several projects. Mr. Paul Schoonackers (ITC project officer to China) and Ms. Marjan Kreijns (ITC representative in China) organised and accompanied Martien Molenaar throughout his visit. He had discussions with several important ITC partner organisations, including the Ministry of Land and Resources, the State Bureau of Surveying and Mapping, Wuhan University and Xi’an University, and also participated in various activities that had been specially arranged.

**Education Fair**
The China International Higher Education Tour (CIHET) was held in February. This exhibition tour organised education fairs in five cities across China, with ITC participating in the two-day fairs in Beijing and Shanghai. In total, 22 higher education institutions from the Netherlands took part, forming a street of Dutch booths (the Holland Pavilion). A huge number of people visited both fairs (26,000 in Beijing and 22,000 in Shanghai) and many found their way to our booth. Several alumni assisted in providing information to people interested in studying at ITC and living in Enschede. This clearly shows that Chinese interest in overseas studies is on the rise. We attach great importance to this development and our operations within China will consequently intensify. Martien Molenaar and Minister Hermans visited the ITC booth on 18 February, when ITC alumna Wu Run presented an ITC brochure to the minister. The colourful Holland Pavilion and the minister’s visit attracted plenty of media attention.

**Prof. Dr.Ir. Martien Molenaar’s first visit abroad as rector of ITC was to the People’s Republic of China from 18 to 24 February 2001.**

**During this period, the Netherlands Minister of Education, Culture and Science, Drs. L.M.L.H.A. Hermans, also paid an official visit.**

Mr. Hermans, the Netherlands Minister of Education, Culture and Science, and ITC’s Rector, Professor Molenaar visited the ITC booth

Ms. Wu Run, ITC alumna, presents an ITC brochure to Minister Hermans
Match-Making Conference

The Sino-Dutch Higher Education Match-Making Conference on 19 February was organised by the China Center for International Education Exchange and The Netherlands Organization for International Cooperation in Higher Education (NUFFIC). This match-making conference was held to promote cooperation and exchanges between China and the Netherlands. In the opening speech of the conference, Minister Hermans stressed the important relationship between the two countries. Zhang Tianbao, the Chinese Vice-Minister of Education, said that Chinese universities were undergoing a shake-up and, in order to successfully carry out educational reform, they wanted to learn from and build on the experiences of other countries.

Martien Molenaar, in conjunction with Prof. Liu Jingnan (vice-president of Wuhan University), gave a presentation on ITC’s successful association with the Wuhan Technical University of Surveying and Mapping (WTUSM). Cooperation dates back to 1979, to a time when WTUSM was the only university in China specialising in the field of surveying and mapping. WTUSM recently merged with Wuhan University (WUDA), creating one of the key comprehensive universities in China, with some 40,000 students.

In 1986, ITC and WTUSM embarked on a joint project to establish the Educational Center for Urban and Rural Surveys, Planning and Management (ECURSPAM). This project, funded by the Dutch Government to the tune of 10 million guilders, was in response to an urgent need within China for planners, particularly urban planners, to cope with the dramatic increase in the rate of urbanisation. These planners needed to be equipped with knowledge of modern and more efficient planning tools and techniques, such as geographical information systems and remote sensing. To transfer such knowledge, the Center developed courses in urban planning and management at BSc and MSc levels.

Within the framework of the project, WTUSM staff were trained at ITC, ITC staff assisted in designing the curriculum and in initial lecturing, and a computer lab was set up. The project eventually resulted in a thriving School of Urban Studies, which offers a four-year BSc programme on urban planning and a three-year MSc programme on urban planning and management. The total number of teaching staff is 53, with the number in urban planning being 33. So far, 372 BSc students, 66 postgraduate students and 50 MSc students have graduated. In October 2000, there were 313 BSc and 85 MSc urban planning students attending SUS.

In conclusion, Martien Molenaar said that the cooperation between ITC and Wuhan Technical University had been very successful to date, and he was confident this excellent relationship would continue to grow with Wuhan University as well.

Netherlands Alumni Reception

During his visit to China, the Dutch Minister of Education invited all Chinese alumni who had graduated in the Netherlands to a reception at the Great Wall Sheraton Hotel. In his speech, Minister Hermans stated that these alumni were important ambassadors
for the special relationship between China and the Netherlands. In reply, Prof. Yang Kai, one of the first Chinese alumni of ITC, expressed gratitude on behalf of his fellow alumni for the opportunity to study in the Netherlands. Furthermore, he confirmed that this had had a tremendous impact not only on their personal careers but also on China.

A large number of ITC alumni and several ITC staff attended the reception - an excellent opportunity to introduce ITC’s new rector to the alumni and to discuss their current activities. In turn, Martien Molenaar introduced some of the alumni to Minister Hermans, and some interesting discussions ensued regarding the impact of their studies on their current jobs. Although most of the alumni had not seen one another for a long time, some did remember fellow students from their days at ITC.

It was very nice for them to meet up again with old friends, and to exchange stories and reminiscences of the Netherlands.

**Wuhan University**

The Wuhan University of Surveying and Mapping (WTUSM), one of five official sister institutes of ITC, recently merged with Wuhan University (WUDA). Martien Molenaar is an honorary professor of the University and has visited Wuhan on a number of occasions. As the new rector of ITC, he went to Wuhan to discuss with the university management the ongoing cooperation between the two institutes. A new Memorandum of Understanding was signed, linking ITC and WUDA as sister institutes of higher learning.

ITC would like to increasingly involve its sister institutes throughout the world in its educational programmes, and for good reasons: (1) it is more cost-effective and (2) it leads to higher productivity. Moreover, a problem frequently encountered is the difficulty mid-career professionals experience in being away from their work and families for periods of up to 18 months. Therefore, ITC wants to pursue a strategy of decentralisation of education. This will offer participants programmes or parts of programmes in their home countries. Students can collect credit points both at home and at ITC, which will eventually result in a joint logo diploma.
The ongoing project of strengthening the School of Urban Studies will end in December 2002. Martien Molenaar is currently discussing with Wuhan University the modalities of such a joint educational programme. These discussions focus primarily on (1) quality assurance and (2) the monitoring system. Prof. Hou Jiechang, president of Wuhan University, expressed his satisfaction regarding the new link with ITC.

**Shanghai**

Following his visit to Wuhan, Martien Molenaar went to Shanghai, where he participated in a round-table conference on "Education and Business in Interaction". This conference was organised by the China-Holland Education and Research Center and was attended by the Dutch Minister of Education, the vice-mayor of Shanghai, a limited group of top Chinese and Dutch university officials, as well as by some business leaders. As mentioned earlier, ITC was also represented at the education fair held in Shanghai.

**Conclusion**

The support ITC gives to China has had a tremendous impact and Martien Molenaar’s visit underlines this. China is developing quite rapidly and ITC attaches great importance to continuing to support China in several areas of development. The establishment of joint educational programmes, as well as providing continuous support to organisations, is of high priority. ITC will focus on the creation, interpretation and management of reliable information, especially when dealing with the complex transition process towards sustainable development - a process that encompasses food security, sustainable industrial and urban development, land policy, poverty reduction, environmental protection and global change.

In August 2000, ITC established a permanent office in Beijing to support the ongoing activities, and appointed Ms. Wu Run (ITC alumna) as local assistant on a part-time basis (wurun@imm.ac.cn).

For more information on ITC in China, please contact:

Marjan Kreijns, ITC representative in China (kreijns@163bj.com)
Paul Schoonackers, ITC project officer for China (schoonackers@itc.nl).
Debt and Environment: Measuring the Environmental Impacts of International Debt Burdens

Mike McCall mccall@itc.nl

Motivation for the seminar was provided by the ongoing world-wide grassroots campaign to cancel, or at least to reduce, the unsupportable international debts of the developing countries in Africa and elsewhere, called the Jubilee 2000 initiative.

The sub-title of the seminar reflected the specific interests and expertise of the ITC - "Exploring and measuring the impacts of the international debt burden on the bio-physical environment and socio-economic conditions of the indebted countries”.

ITC’s mission statement includes ".... contribute to meeting the development co-operation goals of the Netherlands government & international development agencies with regard to ... geographic information in the resolution of development problems.” ITC endeavoured to meet these objectives for half a century by training students in a wide range of subjects connected to the acquisition, analysis and utilisation of spatial information for human development based in the use of physical resources. ITC has always had a development purpose and public service perspective. ITC’s 50th birthday seminar therefore emphasised the scientific acquisition, collection and use of geo-information for the resolution, or at least the assessment, of a primary development problem - that of the crippling sovereign debt of so many countries in the South.

Nine speakers came from institutions in the Netherlands government, international research centres and NGOs, and from ITC. They presented in three sessions; the first being to position the significance of environmental impacts within the wider setting of unsustainable debt burdens and the SAPs (structural adjustment programmes) imposed on debtor countries.

After the opening and introduction by the Rector of ITC and the Seminar Coordinator, Greetje Witte-Rang of Oikos set the scene with an eloquent account of the Jubilee 2000 arguments and its justification of and proposals for debt reduction. J. Smeets of the Ministry of Foreign Affairs, Dept. of UN & International Financial Institutions, informed the seminar of the Netherlands government position that the HIPC (Highly Indebted Poor Countries) programme of the World Bank and IMF should be fully and comprehensively implemented.
Reinhoud Post from the CMER (Netherlands Commission for Environmental Impact Assessment) critiqued the Bank and IMF’s avoidance of carrying out SEAs (strategic environmental assessments) of the impacts of SAPs in debtor countries. The first session ended with an insider’s account of how NGOs and civil society in the Dominican Republic utilised ‘debt-for-nature’ funds, told by José Martinez-Guridy, MSc student at ITC.

The second session examined research fields directly related to identifying and modelling environmental impacts of debt and SAPs. Damanjit Singh of WWF-UK reviewed the seminal WWF work of David Reed and others on measuring and explaining the environmental impacts of structural adjustment in 9 specific countries – notably the unmitigated ‘mining’ of natural resource stocks of fish, forestry, wildlife, the land degradation due to both intensification and intensification of agriculture, and the many associated damages to human health.

Jan Joost Kessler of AIDEnvironment also presented an Indonesian study, of forest conversion to oil palms, as a concrete example of how SAPs affect natural environment. He emphasised that there are positive as well as negative impacts, especially the removal of perverse agro-chemical subsidies. He introduced the issue of appropriate environmental indicators, and argued for the incorporation of SEA in structural adjustment strategies.

Laurent Sedogo and Mohamed Said, PhD students at ITC, provided an overview of how geo-information tools and remote sensing are already widely used to measure indicators of environmental impacts. This was illustrated with several African studies from within ITC, many of which were also on poster presentations outside the auditorium. They argued for further development of these geo-information tools for application to debt and SAP impact studies.

Sven Wunder of CIFOR (Center for International Forestry Research) presented research on modelling how private and public capital flows and debts relate to “green” (resource losses) and “brown” (pollution) environmental problems. Case studies referred to countries facing resource ‘booms’ in Latin America and Africa, as well as a high indebtedness, like Indonesia. An important conclusion was that debt reduction could likewise lead to higher levels of deforestation and land degradation.
Finally, there was time for a short questions and answers session from the audience to all the speakers and for their summary ‘recommendations’. The Q&A session brought out much criticism of current SAPs and HIPC initiatives, as directly experienced by ITC students from South countries. But concern was also expressed at the methodological problems facing identification and measurement of appropriate indicators of environmental changes.

Interesting though brief recommendations came from all the speakers. One consistent theme was the absolute necessity to include SEAs or EIAs of structural adjustment and HIPC strategies before they are implemented; moreover these assessments should be made by the Bank and national government and civil societies together. A second theme was for the opportunities and threats from global trade to be considered. Finally, the call was for rapid and practical measures using the tools and models that we have already.

As for the positioning of ITC, it has specialised expertise and experience which are directly relevant. There are many data acquisition and analysis techniques applicable to the identification, measurement and evaluation of environmental impacts. ITC’s mission and expertise in the application of skills in geo-information acquisition, handling and use towards development goals sit at the interface between the collection of sound reliable environmental data, their interpretation into spatial information, and the analysis of the implications of environmental change. There are therefore needs and opportunities for ITC to apply its science and its special capacity to monitor, measure and evaluate the environmental impacts resulting from debt repayment programmes.

The seminar had an audience of about one hundred altogether. As well as ITC staff and students, other visitors came from DGIS, IUCN, universities, consultants, and NGOs in Enschede and the region.

A document summarising the presentations and the discussions is being produced.

For further information contact mccall@itc.nl
Italian Air Force Short Course

John Horn

For over a decade ITC has maintained close links with the mapping and aeronautical charting sections of the Italian Air Force. This has included offering both regular and short courses in “Production Photogrammetry” and “Integrated Geoinformatics” at ITC Enschede and running tailor made courses in “Aerial Photography Quality Control” at the “Centro Informazioni Geotopografiche Aeronautiche (CIGA)” near Rome.

ITC was recently delighted to welcome back two of its alumni, Lieutenant Colonel Giancarlo Saporito and Major Stefano Gusmano (of the Scuola di Aerocooperazione, Guidonia), for a one month course in Remote Sensing and Image Processing.

The School hopes to set up its own such training courses in the near future and these two senior officers were keen to update their knowledge in the technical aspects of the subject.

A broad range of expertise from a number of different ITC staff and divisions was co-ordinated to provide the course, which was largely held in the facilities of the newly established Remote Sensing and Geoinformatics Laboratory.

Apart from extensive theoretical and practical exercises in the core subjects, an element of Educational Technology was included in the programme to assist the participants in their task of preparing their own teaching modules.

ITC is frequently asked to assist in the “Training of Trainers” and this activity is now considered to be an important part of the Institute’s role in promoting the application of Remote Sensing and GIS technology to a world-wide audience.
Crop Monitoring of China
Paul Schoonackers

The Institute of Geography and Resources (IGR) is an organisation under the aegis of the Chinese Academy of Sciences (CAS). It is mandated to implement the project “Crop Monitoring of China”. The purpose of this project is to provide instant information on the distribution, the growing condition, and the yield of the main crops before they are harvested. This will allow the government to take decisions on pricing, imports, and planning for crop failure in the case of insect pests or drought. The project is very important for the food security of China, but it is also very complicated in terms of the technology and skills involved. In the first phase, the focus was on the collection of data and straightforward yield estimation. However, the emphasis has now shifted to monitoring and forecasting. As the staff charged with implementing the project lacked knowledge in this field, a proposal was made for a special three-month course on crop monitoring (hence CROMO). This proposal was accepted under NUFFIC’s Special Fellowship Programme. Ten IGR staff members were nominated for the training programme. They started the course in October 2000 and returned to China just before Christmas. Part of the project was to produce a “back-home action plan” to ensure that what has been learned is applied as efficiently as possible. The participants were very enthusiastic about the course.

An International Advanced School in RS & GIS

ITC Starts Joint Educational Programme with Partners in Iran
Ali A. Abkar
Sjaak Beerens

ITC will shortly start a joint international MSc/PM Programme in Remote Sensing and Geographical Information Systems in Iran. To this end ITC has entered into an agreement with the Iranian Ministry of Jahad-e-Sazandegi and the Khajeh Nasir Toosi University of Technology in Tehran, Iran.

Jointly these partners have formed JIK an Iranian advanced school officially accepted by the Ministry of Science, Research and Technology of Iran, making it the first Iranian international school for advanced studies in remote sensing and geographical information systems.

The JIK programme follows a long-term collaboration on joint education between the Soil Conservation and Watershed Management Research Centre (SCWMRC) of the Ministry of Jahad-e-Sazandegi and ITC. The success of this collaboration has resulted in expanding the partnership with the Faculty of Civil Engineering of K.N. Toosi University of Technology and expanding the specialisations of the programme now covering:

- Watershed and Environmental Management
- Rangeland and Agricultural Management
- Geoinformatics

In all three specialisations, the focus is on the application of remote sensing and geographical information systems. Successful completion of the pro-
gramme leads either to a Professional Master’s (PM) degree or a Master of Science (MSc) degree acknowledged both by ITC and its Iranian partners under double logo. The Programme will all be in the English language.

JIK is one of the examples of ITC’s strive for “decentralisation” of its educational programme. The 12 months PM programme is entirely conducted in Iran by staff of Iranian partners and ITC. The 18 months MSc Programme is partly taking place in Iran (some 13 months) with the thesis writing and graduation (about 5 months) taking place at ITC in Enschede.

By decentralizing its educational programmes (at this moment actively pursued in Bolivia and Iran) ITC attempts to better cater for the needs of the mid-career professionals in managerial positions who have difficulty in being absent from their work and their family for extended periods. Moreover the overall expenses related to the decentralised programmes compare favourably to those organised entirely overseas.

The programme is targeted at participants from Iran and surrounding countries, the Central Asia region in particular. The starting date for the Programme 2001/2002 is July 23rd 2001 and will be repeated every year.

More information can be obtained from:

The JIK website: http://jik.kntu.ac.ir

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Fax: +31.53.4874238
E-mail: education@itc.nl
As part of its mission in the field of capacity building, ITC is increasingly trying to establish structural relationships with organisations in developing countries. One mechanism in this respect is the so-called “Cost-Sharing Fellowship Agreement”. Under this agreement, ITC commits itself to allocating a number of fellowships for a period of several years to the same partner organisation, with the provision that the partner organisation makes a financial contribution (tickets and tuition fees). The advantage for the partner organisation is that it can realise its long-term manpower development plan in a more structured manner (no ad hoc fellowships). The advantage for ITC is that it can train more people with the fixed number of fellowships. A number of such cost-sharing fellowship agreements are already in effect. The counterpart organisations are the Ministry of Land and Resources (MLR), the State Bureau of Surveying and Mapping (SBSM), the Hubei Provincial Department of Land and Resources and the Heilong Jiang Bureau of Surveying and Mapping - all from China. Similar agreements have been concluded with the Urban Development Authority (UDA) in Sri Lanka and the General Department of Land Administration (GDLA) in Vietnam.

Long-term fellowships
Paul Schoonackers schoonackers@itc.nl

Free offer
New Image Viewing Environment available free from PCI Geomatics

PCI Geomatics announces the official release of their free software viewing environment technology, Geomatica FreeView, available for immediate download from the PCI Geomatics web site (www.pcigeomatics.com).

Geomatica FreeView is a new viewing environment for working with a variety of data, including imagery, vectors, and ancillary data such as graphical bitmaps. Geomatica FreeView allows the viewing, enhancing, and examination of remotely sensed imagery such as LANDSAT, SPOT, RADARSAT, IKONOS, ERS-1, NOAA AVHRR, and aerial photography.

Readable geospatial data formats include Oracle 8i Spatial® (with Oracle Geoinmage® data management), MrSID®, TIFF, NITF, Arc/Info shape files, and SICAD, just to name a few. Users can employ FreeView to integrate GIS data with imagery and view the associated attribute data. Geomatica FreeView also offers basic enhancement features, cursor controls, efficient roam capabilities, and detailed online help.

Geomatica FreeView provides seamless access to the most complete range of geospatial data formats in the market – free. Geomatica FreeView is available from the PCI Geomatics web site (www.pcigeomatics.com) where updates will be made available.
URBAN GEOINFORMATICS International Conference
Wuhan, China 16-19 October 2001

Marjan Kreijns, ITC representative China
kreijns@163bj.com

The School of Urban Studies (SUS) at Wuhan University will host an international conference on urban geoinformatics from 16 to 19 October 2001 in Wuhan, China.

The conference will be organised by the School of Urban Studies (SUS) and the Chinese Society of Urban Planning. SUS is one of ITC’s five sister institutes. The long relationship between the two institutions was further strengthened during the visit to Wuhan in February 2001 of ITC’s rector, Prof. Dr. Ir. Martien Molenaar (see article in this issue of ITC News).

Geographical information systems (GIS) and remote sensing provide reliable and relevant spatial information for planning and managing fast-growing cities. In line with this, the conference will focus on the following topics:

1. Urban Geoinformatics
2. Theory and Design for Urban Planning
3. Design, Development and Applications of Urban Planning & Management Information Systems
4. Development Strategies of UGIS
5. UGIS Education
6. Strategies for Urbanisation in Developing Countries
7. Sustainable Development for Cities

For ITC alumni there is an additional reason to attend the conference. It will give them the opportunity to renew their contacts with ITC and meet ITC staff and fellow alumni.

Wuhan
The conference will take place in Wuhan, capital of Hubei Province and one of the top 10 largest cities in China. It has a population of 8.31 million. Situated at the junction of the Yangtze River and its biggest tributary, the Hanshui River, the city is divided into three parts: Wuchang, Hankou and Hanyang. Geographically, it lies at the centre of China, with air, land and river links to all major cities in the country, such as Beijing, Shanghai, Chongqing, Xi’an, Guangzhou, Shenzhen and Hong Kong. In addition to being the industrial and commercial centre of central and southern China, Wuhan ranks third nationwide as regards the number of institutions for higher education and scientific research. A rapidly developing city itself, Wuhan forms a “gold bridge” linking developed coastal China with the underdeveloped interior in the country’s “Go-West” campaign. One of China’s four photoelectronics valleys is located in Wuhan’s East Lake New Technology Development Zone. This attracts flows of capital, information and technology.

Wuhan, capital of Hubei Province
ANNOUNCEMENTS

and presents a new facet of the country’s industrial development. Among the scenic sights of the city are the Yellow Crane Tower, the Guiyuan Temple, East Lake Park and Moshan Hill, the Ancient Chu Culture Town and the Ancient Lute Platform.

Wuhan University, host of the conference, is the largest and most influential university in central and southern China, with a history dating back 108 years. Its campus on Luoja Hill alongside East Lake covers an area of 3.6 km². More than 40,000 full-time students follow some 200 different programmes at bachelor’s, master’s, doctoral or post-doctoral level in the six faculties (humanities, social science, sciences, engineering, informatics and medical science) and several national laboratories and research centres.

For more information and registration forms, please contact the organising committee:

Prof. Lan Yunchao  
School of Urban Studies  
Wuhan University  
129 Luoyu Road, Wuhan 430079  
P.R. China  
Tel: +86 27 8788 5922 x 2181  
Fax: +86 27 8786 4683  
E-mail: sus@wtusm.edu.cn  
Web: www.wtusm.edu.cn

A new Memorandum of Understanding was signed in February to link ITC and Wuhan University.

Special Offer for ITC Alumni

In co-operation with ITC, Eurimage is pleased to announce an extension of its special offer on satellite data valid until September 30, 2001.

- In order to enable the Alumni of ITC courses to start real exploitation of data in their pilot initiatives we are offering 50% discount on the first 10 ERS products ordered

- For operational application projects with ERS, we are offering up to 40% discount with no limitation on data volume

- A special discount will also be applied to Landsat5 and Landsat7 data, depending on data volume and availability from the archive (up to 30%)

These discounts are applicable only to single scenes from selected archives and the offer cannot be combined with other special offer or discounts.

For more information, please contact Luciana Di Domenico at Eurimage  
- tel. +39.06.40694224, - fax +39.06.40694232, - e-mail didomenico@eurimage.com
Alumni associations

Listing of all Netherlands and ITC alumni associations. Alumni who would like to set-up similar associations in their own country can contact ITC.

ARGENTINA
Asociacion Cultural Argentino-Nederlandesa de ex-Becarios (ACANEB)
c/o Royal Netherlands Embassy
Avda. de Mayo 701, Piso 19
1084 Buenos Aires, Argentina
Phone: 54.1.3343474 Fax: 54.1.3342717

BANGLADESH
Netherlands Alumni Association of Bangladesh
Mr. Oaz H. Kabir, Secretary General
42/7 Block F, Babar Road
Mohammadpur, Dhaka 1207, Bangladesh
Phone: 880.2.323855

BULGARIA
Bulgarian-Dutch Alumni Association
P.O. Box 1196
Sofia - 1000, Bulgaria
President: Dr. Tihomir B. Mustakov
Phone: 359.2.769230 Fax: 359.2.518601

ECUADOR
Asociacion Ecuatoriana de ex-Becarios y Nederlandesa del Reino de los Paises Bajos
Avenida 10 de Agosto 3815 y Mariana de Jesus
Tercer piso, Oficina 302, Edificio Villacis
Quito, Ecuador
Phone: 012 213 7004 and 2746513

EGYPT
Netherlands Alumni Association
c/o Dr. Wadid Erian
54-Ahmed El Sawy Street
c/o Dr. Wadid Erian
Kuniga, Jakarta 12950, Indonesia
President: Prof. Dr. Koesnadi Hardjasoe-mantri
Phone: 62.21.511515 Fax: 62.21.5700734

KENYA
Netherlands Association of Alumni Kenya
plana Royal Netherlands Embassy
Box 41537
Nairobi, Kenya
Chairman: Mr. I.M. Kilonzo
Phone: 254.2.227111 Fax: 254.2.339155

KOREA
Korea Netherlands Alumni Association
C.P.O. Box 7173
Seoul, Korea Final Information
President: Dr. Woo, Hae Seung
Phone: 82.2.2524597 (office), 82.342.702.8966 (home)

MALAYSIA
Alumni Association of Malaysia
c/o Royal Netherlands Embassy
4 Jalan Mesra
55000 Kuala Lumpur, Malaysia
Phone: 60.3.2485151 Fax: 60.3.2411959

NEPAL
Netherlands Alumni Association of Nepal
c/o SNV Nepal
P.O. Box 1966
Kathmandu, Nepal
Phone: 977.1.522915

PERU
Asociacion de Ex-Becarios
Los Abedules 261
Urbi. Camacho
Lima, Peru
Presidente: Sra. Teresa Barba
Phone: 51.14.358474; 337800

PHILIPPINES
Netherlands Fellowship Foundation of the Philippines Inc. (NFFPI)
Land Geology Division
Mines and Geoscience Bureau
North Avenue
Diliman, Quezon City, The Philippines
President: Dr. Ricarte Jabelosa
Fax: 63.2.9288544

SINGAPORE
The Netherlands Alumni Association of Singapore (NAAS)
P.O. Box 99
Bras Basah Post Branch, Singapore 0718
President: Mr. Soon See Cheong
Fax: 65.7382979

SRI LANKA
The Netherlands Alumni Association of Lanka
No. 95, Prince Street
Colombo 11, Sri Lanka
President: Mr. R.P. Wimalasena
Phone: 94.1.581998 Fax: 94.1.581145

TAIWAN
Netherlands Alumni Association of Taiwan
c/o Prof. Dr. Daniel Jiang
Graduate Institute of Civil and Hydraulic Engineering
Feng Chia University
5th floor, C-H Building
100, Wenhu Road
Taichung, Republic of China
Phone: 886.4.2528158 Fax: 886.4.2960877
Email: dhjiang@fcums1.fcu.edu.tw

THAILAND
Netherlands Alumni Association of Thailand (NAAT)
Chief, Foreign Relations Sub-Division
Thai Industrial Standards Institute
Rama 6 Road
Bangkok 10400, Thailand
President: Mrs. Uraiwan Chandry
Phone: 66.2.2464085; 2461174 Fax: 66.2.2467987

UGANDA
ITC Alumni Association Uganda
Department of Forest Products Engineering
Faculty of Forestry and Nature Conservation
Makerere University
P.O. Box 7062
Kampala, Uganda
Mr. Mwambu George Charles Magomu,
Organising Secretary
Phone: 256.41.533647; 536468 Fax: 256.41.533574

VIETNAM
Vietnam Netherlands Alumni Club (VNA)
105A Quan Thanh Street
Hanoi, Vietnam
Chairman: Prof. Dr. Pham Huy Dung
Phone: 84.4.8454547 Fax: 84.4.8432756

ITALIAN
ITC News
June 2001
“In the 21st century, science and scientists will be judged not only for how well they generate new knowledge, but also for how well they help solve local and global problems. Scientists in every nation must take action to ensure that policy makers and the public make their decisions based on the best available information”.


I was impressed when I read the above statement. I took time to think on the responsibility scientists have, especially in developing countries usually subject to severe environmental and socio-economic strains. I also thought what, as a scientist, I have been doing, what I have been taught and how I have managed (or not managed) to put that knowledge into practice.

As a former ITC trainee in applied geomorphology back in the early 80s (under H. Th. Prof. Verstappen), I was shown not to unlink science and technology developments and applications from the needs of those societies within which one carries out scientific research. Those societies are the ones paying for this research and development. Therefore, they deserve something in return.

I have kept that in mind during the last almost twenty years; during this period, I would finish my academic career and undertake professional practice in the academic realm at one of the largest universities in Latin America. Thus, training others, or, as it has been described lately, capacity building, should play a key role and have high priority. I realised that if I wanted to succeed in this, I should also give very high priority to fund-raising, project and report writing. This is not a simple task, especially if you prefer being in the field or in your laboratory. Instead, you become an accountant, a manager, and you become afraid of forgetting, for instance, that you were trained as a geomorphologist.

What should the actual outcome of scientific research be? The scientific establishment urges us to publish in international journals with a science citation index rating. I am only partly satisfied with this because I think that validation by peers is only part of the assessment. We also need validation by non-peers, validation by our societies. This is not a simple matter. Mechanisms and indicators to evaluate this are not as straightforward as those used in the scientific environment. However, if we do not accomplish this, we will probably not be properly judged, as indicated by Alberts (quoted above).

The challenge is carrying out meaningful research, meaningful for both Academia and the social groups that
need data and information to back-up their decision-making processes. Some 6 years ago, together with Dr. A. Velazquez, also an ITC trainee in 1987 (under Prof. I. Zonneveld), I undertook a systematic participatory investigation in a Mexican indigenous community. Since then, we have supervised at least ten students working towards their theses, written several scientific papers in indexed journals, but above all, we have supported this forest community in forming its own automated resource management plan and earning the green certification for their sustainable use of the pine forest.

This is not much. There are many communities without such a plan or without such a sustained practice. But it is, undoubtedly, a start. We wanted to show our scientific establishment that practising good science can also mean practising useful science.

Dr. Gerardo Bocco, Depto. Ecología de los Recursos Naturales, Instituto de Ecología Universidad Nacional Autónoma de México, Campus Morelia A.P. 27-3 (Xangari) 58089 Morelia, Michoacán, México
Tel: (52) 4 3222724.
Fax: (52) 4 3222719
e-mail: gbocco@oikos.unam.mx
http: www.oikos.unam.mx/ laboratorios/geoecologia

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**We bid farewell to Theo Rijnberg**

**ITC’s fellowship officer and co-ordinator of alumni affairs**

Janneke Kalf kalf@itc.nl

On 12 January 2001, the restaurant and bar of ITC were crowded with staff members, past and present, and guests from all points of the compass, come to bid farewell to Theo Rijnberg and his family. Theo had served ITC since 1 March 1969 and took early retirement as of 1 January 2001.

During these almost 32 years, he assumed many responsibilities both at the Institute and abroad on many short-term missions and projects of more prolonged duration. The first 12 years were spent with the ITC-UNESCO Centre for Integrated Surveys. In the beginning, the former merchant navy and Royal Navy officer Theo Rijnberg had to be transferred in order to play his part in development surveys. In these surveys, the aspects of project development, survey design and survey implementation claimed his particular attention. No wonder his principal duties were related to the fieldwork component of the Centre’s standard course. In later years, this grounding led to functions as mission chief and team leader in projects in African and Asian countries, including Mali, Mauritania, the Sudan, Thailand, Sri Lanka and Indonesia.

At the end of 1981, he was charged with setting up a project bureau within the Institute. He managed this bureau till early 1986, when he went to Indonesia. These five years were marked by a large number of so-called “international education projects”, which aimed at the institutional strengthening of existing education departments in third world countries and the establishment of more ITC sister institutes.
His first post in Indonesia - his country of birth (1940), by the way - was in his birthplace Malang, seat of the Kali Konto project. Within a year, he was transferred to Bogor to direct the School of Environmental Management of the Ministry of Forestry. He returned to Enschede in early 1992 and, after a one-year period as interim head of the project bureau, took up the post of education co-ordinator.

Among his principal duties were those of fellowship officer and the co-ordination of alumni affairs. That’s how many of ITC’s alumni have come to know Theo: from his signature at the bottom of fellowship contracts, from contacts at home and abroad during education fairs, and from other alumni-oriented activities. A couple of articles that he has published in ITC News complete the story.

Besides his work at ITC, Theo has been deeply involved in social and community affairs, both in Enschede and beyond. For these services, he was made Knight of the Order of Orange Nassau by the Queen - a proud occasion indeed!

During the farewell party, the rector, on behalf of all ITC personnel, presented him with a miniature of the ITC Cronkel. Theo also received a scanner to extend his home computer facilities. In his farewell speech, Theo made it abundantly clear that he had had a wonderful time at ITC, for which he was truly grateful. He had been extremely happy … well, you can see for yourself. Just look at the photo of Theo and his wife Annet!

We wish Theo and Annet all the best for the future.

Roelof Schoppers wins the Henk Scholten Award 2000

Corné van Elzakker

elzakker@itc.nl

ITC’s prime tasks are in education, research and in advisory services. Therefore, excellence in these fields is relevant for the Institute and, hence, the relevance of the biannual Research Award and Education Award.

But it is also important to realise that the core activities of ITC are not just executed by individuals on their own small islands. Most of our work is team-work and we all know, from soccer for instance, that good teams are more productive than just a group of individuals. For good teams you do not only need people who are just good in teaching or in research. You also need good team players like midfielders who take care of the lines of communication and people who promote and stimulate the “we”-feeling in the Institute. Named after the person who is a good example of a team-builder, the Henk
Scholten Award is presented at the Institute every year to remind us all of the importance of doing our work in teams of staff and students alike.

On 21 December at the start of ITC’s End-of-the-Year party the Award for the year 2000 was presented by the new Rector Prof. Dr. Ir. Martien Molenaar together with Mr. Henk Scholten himself to Mr. Roelof Schoppers.

Roelof works at the central ITC Reception desk. Of course, this is a pivot function in the ITC team, but the way he fills it in is appreciated highly by students and staff alike. Therefore, Roelof may truly be called: “the warm and friendly face of ITC”. As one of the persons who has nominated Roelof has put it: “We find Mr. Schoppers to be very kind, helpful, amiable. He always has a ready smile as he attends to our queries and requests. His warmth in responding to the requests of students like us made us feel at home. In certain instances, he has shown genuine interest in conversing with us. He is efficient and has given a good impression of the quality of staff here at the ITC.”

Persons qualify for the Henk Scholten Award if:

- they are an ITC staff member or student or a former ITC staff member or student;
- they have stimulated the “we-feeling” or have demonstrated teambuilding capacities at the Institute for a considerable period of time (teams usually consist of staff and students alike);
- they have fostered and promoted social and working relationships within the Institute as a whole for a considerable period of time;
- they have done this voluntarily, beyond their usual tasks resulting from function or participation in a course programme.

The Henk Scholten Award Committee 2000 is composed of a representative of the SAB (Dorman Alfred Chimhamhiwa), a representative of the PhD-students (Ale Raza), a representative of the Directorate (Marja Verburg), a representative of the ITC staff (Corne van Elzakker) and a representative of the personnel association InTerContact (Monique Romarck).

The Henk Scholten Award (consisting of a certificate and a holiday voucher) has been presented at ITC for the first time in 1997 to Wilma Grootenboer. In 1998 the winner was Johan Weggen and in 1999 it was Ale Raza. In view of the fact that, luckily, the “pool” of candidates is not empty yet (last time, 11 different persons were nominated by 72 staff and students) there will definitely be a new winner in 2001 again. THANK YOU to all staff and students who nominated candidates and THANK YOU candidates for being such good team-players and -builders!
Making Cities Work

Rapid urban growth, changes in socio-political systems, need for urban productivity and increasing gaps between rich and poor resulting in social problems, place tremendous demands on the management of towns and cities. Over the years, the Institute for Housing and Urban Development Studies (IHS) has proven it can help. IHS offers training, research, advisory services and supports in institutional development projects.

Since the institute’s establishment in 1958, more than 4,500 urban professionals from 120 different nations have made their way to IHS classrooms to take part in a postgraduate diploma course, a Master Programme or a PhD Programme.

IHS offers 5 Master programmes in co-operation with well-known universities. The international scope of the programmes - reflected in concepts, theories, case studies and international visits - provides a context for addressing fluctuating factors and tools to implement positive change.

Over the years, the Institute for Housing and Urban Development Studies (IHS) has proven it can help, IHS offers training, research, advisory services and supports in institutional development projects. Since the institute’s establishment in 1958, more than 4,500 urban professionals from 120 different nations have made their way to IHS classrooms to take part in a postgraduate diploma course, a Master Programme or a PhD Programme.

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4. Volcanic landforms
5. Non-volcanic denudational landforms
6. Geomorphology of the lowlands
7. Coastal geomorphology and coral reefs

Herman Verstappen is Emeritus Professor of Geomorphology, ITC Division of Applied Geomorphological Surveys (AGS)

This publication is based primarily on field research carried out in the period 1949-1959, when Professor Verstappen worked almost continuously in the region, and in the period 1971-1997, when he visited Indonesia frequently for shorter and longer missions, mostly in the context of university cooperation projects. Most of the fieldwork was concentrated on Sumatra, Java, Bali, Lombok, parts of the Moluccas and Irian Jaya, while shorter visits were paid to the islands east of Lombok and to southwest and northeast Sulawesi. Many parts, evidently and regrettablely, remained unvisited and aerospace images - also extensively used elsewhere - of these areas were a major source of information in conjunction with topographic and thematic maps and with the existing earth science literature. Although the available data are incomplete, diverse in kind an quality and rather randomly distributed, a general picture of landform development in Indonesia gradually emerged. It is presented in this publication, with all uncertainties, gaps and other shortcomings as a framework and incentive for further research.

Herman Verstappen is Emeritus Professor of Geomorphology, ITC Division of Applied Geomorphological Surveys (AGS)

Outline of the Geomorphology of Indonesia
A case study on tropical geomorphology of a tectonic region
by Herman Th. Verstappen

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The Netherlands
Web site: http://www.itc.nl
CALENDAR 2001-1

Geoinformation Forum Japan
20 – 22 June 2001
Tokyo, Japan
Information: Geoinformation Forum Japan 2001, Kokuryo-kaikan, 1-3-4 Koishikawa, Bunkyoku, Tokyo 112-0002, Japan (tel 81-3-5684-3352; fax 81-3-3816 6870; e-mail geoforum@geo.or.jp; web-site www.mesh.nejp/J-Survey)

Second Symposium on Remote Sensing of Urban Areas
22 – 23 June 2001
Regensburg, Germany
Information: C Jürgens (e-mail carsten.juergens@geographie.uni-regensburg.de; web-site www.uni-regensburg.de/Fakultaeten/phil_Fak_III/Geographie/institut/termine)

Geomatics 2001
24 – 28 June 2001
Fredericton, NB, USA
Information: (tel 1-506-453-8855; fax 1-506-444-4310; e-mail wayne@gov.nb.ca)

AM/FM/GIS Conference
6 – 7 July 2001
Hyderabad, India
Information: Shanti Nivas, GIS India, 6-3-1149/1/A1, B S Maktha, Begumpet, Hyderabad 500016, India (tel 91-040-331-4141; fax 91-040-330-6770; e-mail suku@hdf1.vsnl.net.in)

21st Annual ESRI International User Conference
6 – 8 July 2001
San Diego, CA, USA
Information: ESRI (tel 1-909-793-2853, ext 1-1363; e-mail uc2001@esri.com; web-site www.esri.com/events/luc)

IEEE International Geoscience and RS Symposium (IGARSS)
9 – 13 July 2001
Sydney, Australia
Information: Tammy Stein, IGARSS, 17906 St Emillion Court, Spring, TX 77379, USA (tel 1-281-251-6067; fax 1-281-251-6068; e-mail tstein@phoenix.net; web-site www.igars2001.org

20th International Cartographic Conference
6 – 10 August 2001
Beijing, China
Information: LOC for ICC 2001, State Bureau of Surveying and Mapping, Sanlinhe Road, Beijing 100830, China (tel 86-10-6834-6614; fax 86-10-6831-1564; e-mail iccc2001@sbsm.gov.cn; web-site www.sbsm.gov.cn/icc2001

Space and Time – GIS and Remote Sensing Conference
7 – 8 September 2001
Sopron, Hungary
Information: Professor Bela Markus, uniGISopen, 8000 Szekesfehervar, PO Box 52, Hungary (fax 36-22-327-697; e-mail mbl@csim.hu; web-site geoinfo.csim.hu/events/sat

1st Annual Meeting of the RS and Photogrammetry Society
12 – 14 September 2001
London, England
Information: The RSPSoc Office, School of Geography, University of Nottingham, University Park, Nottingham NG7 2RD, England (e-mail rpssoc@nottingham.ac.uk; web-site www.rpssoc.org)

The Fifth International Airborne Remote Sensing Conference and Exhibition
17 – 20 September 2001
San Francisco, CA, USA
Information: Veridian Systems International Conferences, PO Box 134008, Ann Arbor, MI, 48113-4008 USA (tel 1-734-994-1200, ext 3234; fax 1-734-994-5123; e-mail wallman@erim-int.com; web-site www.erm-int.com/CONFIARSC.html)

GIS 2001
18 – 20 September 2001
London, England
Information: Jessica Lonnkvist (tel 44-20-8987-7584; e-mail jlonnkvist@cmp-europe.com; web-site www.gisexpo.com)

Intergeo and Geodesists’ Conference
19 – 21 September 2001
Cologne, Germany
Information: KölnMesse, PO Box 21-07-60, D-50532, Cologne, Germany (tel 49-221-821-0; fax 49-221-821-2574)

Photogrammetric Week
24 – 28 September 2001
Stuttgart, Germany
Information: Institute for Photogrammetry (Ifp), Stuttgart University, Geschwister-Scholl Strasse 24, D-70174 Stuttgart, Germany (tel 49-711-121-3201; fax 49-711-121-3297; e-mail martina.krom@ipf.uni-stuttgart.de; web-site www.ipf.uni-stuttgart.de

International Seminar on Land Information Management and Cadastral Systems
2 – 5 October 2001
Nairobi, Kenya
Information: FIG Office, Lindevangs Alle 4, DK 2000 Frederiksberg, Denmark (tel 45-3886-1081; fax 45-3886-0252; e-mail flg@ddl.org)

20th Brazilian Congress of Cartography
7 – 12 October 2001
Brazil
Information: Francisco Carlos Bragança de Souza, General Director of XX_CBC, Office Marketing, Rua 17 de Junho, 436 Porto Alegre RS Brazil, CEP 90-110-170 (tel 55-51-226-8600; fax 55-51-211-3631; e-mail xxcbc@orion.ufrgs.br; web-site www.ufrgs.br/xxcbc

Urban Geoinformatics International Conference
16-19 October 2001-04-25
Wuhan, China
Information: Prof. Lan Yunchao, School of Urban Studies, Wuhan University, 129 Luoyu Road, Wuhan 430079, P.R. China (tel +86-27-8788 5922 x 2181; fax +86-27-8786 4683; e-mail sus@wtusm.edu.cn; web-site www.wtusm.edu.cn)

International Workshop on 3D Cadastres
28 – 30 November 2001
Delft, The Netherlands
Information: Elfriede M Fendel, Delft University of Technology, Faculty of Civil Engineering and Geosciences, Department of Geodesy, Thijsseweg 1, 2629 JA Delft, The Netherlands (tel 31-15-278-4548, fax 31-15-278-2745; e-mail e.m.fendel@geo.tudelft.nl)