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2001 number 2

The second issue of ITC News in 2001 ... with some delay, but here it is! We still haven't recruited a new managing editor but, thanks to contributions from ITC staff and students, I have succeeded yet again in producing an issue. We will keep you informed of our progress.

On 6 September, the Professional Master graduation ceremony took place. These graduates – now alumni – will receive ITC News for the first time, and I look forward to receiving not only their comments but also their contributions in the future. One of the aims of the newsletter is to stimulate dialogue and the exchange of information within the ITC network.

All of you must sometimes wonder what has become of your fellow students from years ago. That's why we welcome articles from our alumni – stories about how you use the knowledge gained at ITC, and telling us about experiences in your own countries and your current positions.

You can send your articles, either by e-mail or post, to the acting managing editor. It is important to include high-quality pictures and/or illustrations with appropriate captions. If you wish, these can be returned to you later on.

I'm now looking forward to receiving my mail!

Janneke Kalf, Acting Managing Editor

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The views expressed by the contributors do not necessarily reflect those of ITC

JIK Joint Educational Programme in Iran: Successful Kick-Off

Arno van Lieshout Sjaak Beerens

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On 21 July 2001, in Tehran, Iran, the JIK joint international MSc/PM programme in Remote Sensing and Geographical Information Systems kicked off with a grand opening ceremony.

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This educational programme is a collaborative effort of the Iranian Ministry of Jahad and Agriculture, the Khajeh Nasir Toosi University of Technology (KNTUT) and ITC. It is organised at the KNTUT Faculty of Civil Engineering, which is located in the centre of Tehran.

The opening ceremony was attended by some 150 people, including course participants and representatives from various organisations, and was well covered by the national media. Deputy ministers from the Ministry of Culture and Higher Education (Dr. Jafar Towfighi) and the Ministry of Jahad and Agriculture (Dr. Gharayazi, who is also president of the Natural Resource and Agriculture Research, Education and Extension Organization) took part in the presentations. Moreover, the ceremony served as an occasion of reunion for many alumni who had followed previous courses conducted jointly by ITC and its Iranian counterparts.

A total of 48 course participants had registered for the course, including people from Pakistan, Sudan and Ghana (four in total). Course participants can choose from three specialisations:

- Watershed and Environmental Management
- Rangeland and Agricultural Management
- Geo-informatics.

Two degree courses are offered: a 12-month Professional Master's degree course conducted entirely in Iran, and an 18-month Master of Science degree course, the last five months of which are spent at ITC in Enschede, the Netherlands.

In all three specialisations, the focus is on the application of remote sensing and GIS to specific research questions encountered by the participants. Fieldwork is an important component of both the MSc and the PM course. The programme has a modular structure similar to that of courses at ITC. The teaching staff consists of ITC PhD and MSc alumni and senior staff mem-





S.A. Mirtaheri, president of KNTUT at the opening ceremony



Dr. B. Aminipouri, JIK programme director welcomes the quests at the opening ceremony

bers of the KNTUT and the Soil Conservation and Watershed Management Research Centre. Iranian staff members have visited ITC to familiarise themselves with ITC teaching methods and prepare, jointly with ITC staff members, dedicated case studies and exercises.

In view of the successful start (in fact only 30 participants had been expected for the first courses), the partners have discussed extending the programme to include other specialisations, starting in 2002. An intensive marketing campaign for the programme starting in July 2002 is envisaged, directed at the Middle East, Central Asia and Northern Africa.



S.A. Mirtaheri, president of KNTUT and Sjaak J.J. Beerens, director external affairs at farewell function

Guests at the JIK opening ceremony at KNTUT campus ground

For more information, please contact the Programme Office in Tehran

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REPORT on:

FINANCING OF PROJECTS IN ENERGY, ENVIRONMENT AND CLIMATE CHANGE

Training workshop for the public and private sector

Mike McCall mccall@itc.nl

ITC and the Technology
& Development Group
(TDG) of the University
of Twente (UT) jointly
held an international
course from 1st May to
2nd June 2001 entitled
"Financing of Projects in
Energy, Environment
and Climate Change Training Workshop for
the Public and Private
Sector ".

The joint courses generically known as ICREPE or "International Courses in Rural Energy Planning & the Environment" represent a long-running, successful co-operation between UT and ITC which should get even stronger in the near future. This was the 19th ICREPE course since they began in 1983.

In the ICREPE-2001 course, staff from ITC, TDG and other UT departments were involved in the training, in addition to visitors from relevant government agencies and the commercial sector. The course included field trips and site visits to renewable energy producers, utilities, and sustainable environment consumers throughout eastern Netherlands.

The objectives and target groups of the ICREPE courses have always been similar to those of ITC's main courses, that is, training southern professionals in applied development issues. The Rural Energy components of ICREPE vary from year to year, with a focus sometimes on renewable energy policy, or

energy project planning, or environmental impacts of energy projects & programmes, or on biomass and forest energy technologies.

The ICREPE-2001 topic of "projects in energy, environment and climate change" is directly relevant to one of ITC's new research spearheads - "Geoinformation Science & Earth Observation for Global Change', where the challenges are in selecting indicators, measuring, analysing, monitoring, and applying spatial measures of global environmental changes, including the impacts of GHG (greenhouse gas) emissions on global climate and the consequences for ecosystems and human society.

ICREPE-2001 focused on the financing conditions for project proposals tackling energy, environment and climate change. Therefore it was a practical training workshop on how to design and prepare fundable projects seeking public- or private-sector financial support. The participants worked on specific proposals relevant to their own

Organised by:

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working conditions and institutions - proposals that can be submitted to UN agencies, World Bank, Netherlands Government Ministries, Shell Foundation, etc. for actual financing. Thus, proposal documents were written according to the actual Terms of Reference and guideline specifications of particular funding agencies and programmes, and they included the predicted environmental impacts, economic & financial analysis, institutional feasibility, etc. as well as the technological factors.



The nine participants from Nepal, Ethiopia, India, Peru, Philippines and the Netherlands, and staff



There were nine participants from Nepal, Ethiopia, India, Peru, Philippines and the Netherlands. New this year were informal awards to the project proposal considered "most likely to succeed with a funding agency", to the best formulated document, and to the "most innovative project" - a proposal to renovate a disused freight-carrying ropeway from the Indian rail head to Kathmandu, which, if built, would eliminate the need for thousands of GHG-emitting lorry trips.

For information about ICREPE-'02 in May 2002, contact the Joint Course Administrator, Ir. Joop Neinders, at email: courses@tdg.utwente.nl

Training in Environmental Impact Assessment

Tom Loran loran@itc.nl



Presentation of case study results

In order to enhance spatial decision making in environmental impact assessment (EIA) using GIS and remote sensing techniques, a special training programme was organised at the University College for Lands and Architectural Studies (UCLAS) in Dar es Salaam, Tanzania. Joan Looijen, a lecturer with ITC's ACE division, took part in presenting the course, together with staff from the University of Dar es Salaam, the Institute of Resource

Assessment (IRA) and the National Environmental Management Council of Tanzania. The EIA course, which lasted three weeks, covered all the steps and procedures in the assessment process, and focused on the use of GIS and multicriterion evaluation in the different phases of the EIA process.

Ms. Anna Maembe, who graduated from ITC two years ago and is now working for Tanzania's National

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Environmental Management Council, not only contributed to the teaching effort, but also organised two very interesting field visits to an EIA project site in Bagamoyo. The visits were made to an area where a commercial company is planning to establish ponds and related facilities for semi-intensive shrimp farming. As this area is located within a mangrove area, the objective of the field visits was to select a site for prawn farming that would have minimum effect on the environment.

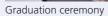
The course was organised as part of the regular training programme of the EISCAP project, a programme in which UCLAS and ITC co-operate in presenting short application courses on the use of GIS and remote sensing techniques. This was already the second EIA course to be given, and a third is S LEGISTE

being organised, together with UCLAS

and the Institute for Environment and

at Makarere

Resources,

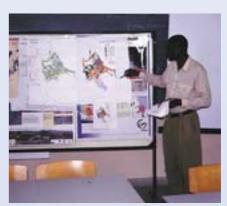


Natural

University, Uganda.



Anna Maembe, ITC graduate, teaching in the course



Presentation of mangrove zonation in Bagamoyo study area



Field observations in Bagamoyo area



Field visit of abandoned shrimp ponds

ITC Rector and Director External Affairs visit Indonesia and Thailand

Sjaak Beerens beerens@itc.nl

Prof. Martien Molenaar and Director External Affairs Sjaak Beerens visited Indonesia and Thailand from 15 to 25 May 2001. The dual purpose of the visit was to discuss ITC's policy with respect to the decentralization of education and to participate in the 3rd ISPRS Workshop on Dynamic and Multidimensional GIS in Bangkok, Thailand.

INDONESIA

Over the past 50 years, more than 1,000 professionals from Indonesia have graduated from ITC (out of a total of 14,500). These same 50 years have seen institutional collaboration with many academic and professional organisations in the country. These activities have resulted in a special relationship between Indonesia and ITC.

With this special relationship in mind, Rector Prof. Martien Molenaar and Director External Affairs Sjaak Beerens visited a number of ITC alumni and organisations in Indonesia to discuss the outline of the new strategy (as laid down in the new rector's inaugural address in December 2000) and, in particular, the decentralisation of education – a dominant feature of this new strategy.

Meetings were held with staff from:

 Faculty of Geography, Gadjah Mada University (UGM), Yogyakarta, which accommodates the remote sensing

- laboratory (PUSPICS) established in co-operation with ITC
- Department of Geodetic Engineering, Bandung Institute of Technology (ITB), Bandung, where the former sister institute, the Centre for Education in Photogrammetry and Cartography (PPFK), has been incorporated as a laboratory for photogrammetry, cartography and remote sensing
- South-East Asian Regional Centre for Tropical Biology (SEAMEO-BIOTROP), Bogor, which operates under the academic umbrella of the Bogor Institute of Agriculture (IPB)
- National Institute of Aeronautics and Space (LAPAN), Jakarta.

These discussions revealed both a sound basis and some interesting opportunities for establishing decentralised joint education programmes. Interest among the universities originates from the autonomy assigned to the main universities in Indonesia, including UGM, ITB and IPB, which also implies the funding of operations from course fees for postgraduate education. Collaboration with ITC will make postgraduate studies more appealing.

Besides meeting with potential partners for decentralisation, a meeting and dinner was arranged with the two Indonesian Honorary Fellows of ITC, Prof. Ir. Soekiman Atmosoedaryo (Ministry of Forestry and Fellow since 1976) and Prof. Dr. Ir. Jacub Rais (former chairman of BAKOSURTANAL, the National Coordination Agency for Surveys and Mapping, and Honorary Fellow

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Meeting with Indonesian Honorary Fellows Prof. Dr. J. Rais (first from left), Prof. Ir. Soekiman Atmosoedaryo (third from left) and Prof.Ir. Rubini Atmawidjaja MSc (second from right)



Prof. Molenaar flanked by ITC Honorary Fellow Prof Dr. J. Rais (left) and staff of SEAMEO-BIOTROP, Bogor

since 1988). Respects were paid to the family of the late Ir. Pranoto Asmoro (also former chairman of BAKOSURTANAL and Honorary Fellow since 1976), who passed away in April this year (see Obituary, page 18).

Finally, a meeting was arranged with (part of) the Board of the Netherlands Alumni Association Indonesia (IKANED) to discuss the setting up of a separate chapter for ITC alumni within IKANED. This will allow a more direct link with ITC alumni in Indonesia. Part of the new policy of ITC is to have more intensive relations with alumni for the purposes of aftercare, involvement in ongoing activities and general communication/information.

THAILAND

Prof. Molenaar delivered a keynote address at the 3rd ISPRS Workshop on Dynamic and Multidimensional GIS (combined with the 10th Annual Conference of CPGIS on Geoinformatics). This event was also attended by Prof. Dr. Shunji Murai, former president of the Asian Institute of Technology (AIT) and ITC Honorary Fellow since 1993. At the end of the workshop, it was announced that the 4th ISPRS Workshop on Dynamic and Multidimensional GIS will be organised at ITC in June/July 2003.

Within the framework of ITC's policy to decentralise part of its education by entering into partnership with other organisations, a meeting was held with Dr. Jean-Louis Armand, president of the Asian Institute of Technology. The idea of a joint postgraduate educational programme – possibly enhanced by short courses on specific topics – was supported by both AIT and ITC. It was decided to elaborate this collaboration, which would cover the Greater Mekong and South Asian regions.



Prof. Molenaar and Prof.Dr. Sudarmadji, dean of Faculty of Geography, UGM, Yogyakarta.....



with Prof Lilik Hendrajaya, rector of the Bandung Institute of Technology....



with staff of the Faculty of Geography of Gadjah Mada University, Yogyakarta....



and at the Department of Geodetic Engineering of the Bandung Institute of Technology with Dr.Ir. Irawan Soemarto

ITC Participates in ESRI User Conference in San Diego

Jyosyula Sastry

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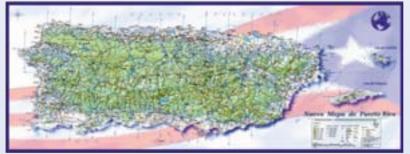
Prof. Wolfgang Kainz and Mr. Jyosyula Sastry represented ITC at the ESRI Annual User Conference held in San Diego from 9 to 13 July 2001.

During his opening address, Mr. Jack Dangermond shared with his audience the ESRI vision of the future of GIS (www.esri.com/uc).

There were two entries from ITC at the conference. First, Mr. Victor Cuadrado (cuadrado@itc.nl) submitted a map entitled Nuevo Mapa de Puerto Rico. This map, which illustrates and explores ArcView 3.2 capabilities for cartography and visualisation, was well received. An Internet mapping entry enti-

tled NetCities, which was prepared using ArcIMs and aimed at disseminating knowledge via online examples of how geoinformation can be used to strengthen civic societies, was submitted by the author. It was prepared by a team of PM students: Sastry (GIM), Setiawan (GFM), Simon Putra (UPLA) and Chogyel (GIM). More on NetCities can be found at http://kartoweb.itc.nl/ netcities or at the ESRI website http: //www.esri.com/events/uc/results/imm entries.html. Students at ITC are exposed to the latest technologies and concepts, and often work in interdisciplinary groups. NetCities is a typical example of work produced in this environment.

For copies of conference and exhibit material, please contact the author.



Nuevo Mapa de Puerto Rico



NetCities internet mapping entry (http://kartoweb.itc.nl/netcities)

Introducing ILWIS 3.0 Academic!

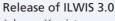
Lyande Eelderink Petra Budde

eelderink@itc.nl budde@itc.nl

After more than two years' hard work,

14 June 2001 saw the release of ILWIS 3.0 Academic at ITC in Enschede.

Wim Koolhoven, ILWIS project leader, officially handed over the completely modernised version of the ILWIS product to Sjaak Beerens, ITC's director of external affairs.



Jelger Kooistra gave an interesting demonstration to the audience, illustrating the highlights of the new software.

Ordering: Information and Policy

ITC and PCI Geomatics collaborate on the development and commercial distribution of the ILWIS software. Under this agreement, ITC pursues academic aims in keeping with its mission, including the distribution of the Academic version of ILWIS, whereas PCI Geomatics is responsible for sales in the commercial sector.

ITC staff members, students, alumni and collaborating institutes/individuals can obtain the ILWIS 3.0 Academic version from the ITC Bookshop in Enschede. This distribution is restricted to "cash counter sales" only and ITC will not be arranging shipment. Alumni and collaborating institutes/individuals who are unable to visit the ITC Bookshop are invited to download the software from: http://www.itc.nl/ilwis/ordering/framesordering.html. All other orders can be placed with PCI Geomatics, who also arranges shipment.



Some of the main improvements of ILWIS 3.0 are:

- 32-bit application, thus fully compatible with Windows 95, 98, ME, NT4 and 2000
- Completely modernised user-interface
- Use of long file names
- Easier data management
- Better output
- Tabbed Property sheets offering a

- quick insight into dependencies
- In-built PCI GeoGateway module to import and export a wealth of file formats
- Help in the new HTML Help format.

ILWIS 3.0 comes complete with a fully updated user's guide. The *ILWIS 3.0 User's Guide* is intended to teach the basic GIS and image processing techniques. The guide includes not only numerous explanations, exercises and procedures for first-time users, but also topics for more experienced users. It can be used in a course environment or for self-tuition purposes.

Below you will find some figures and explanations of the new features in ILWIS 3.0 Main window, Map window and Layout window.

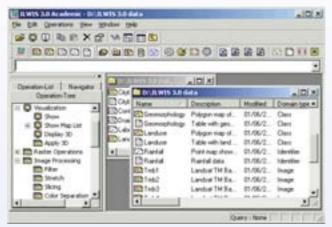
ILWIS 3.0 Main Window

In the Main window, data management has been improved. First of all, multiple Catalogs can be opened. Secondly, you can select multiple objects in a Catalog and open them (using the context-sensitive menu) or copy them to another Catalog (e.g. by using drag and drop). Furthermore, within a Catalog, you now have the possibility to sort objects alphabetically according to size, the time last modified, etc., and you can get extra information on objects by using Details View. With the object selection toolbar, you can easily select the objects that should be visible in a Catalog.

The purpose of the *Operation-tree* is to shorten the list of operations. It shows operations in groups, similar to the Operations menu. By using the



Wim Koolhoven handed over the completely modernised version of the ILWIS product to Sjaak Beerens



Main window with two Catalogs (the Catalog on top is in Details View) and the Operation-tree

The ILWIS project team

Navigator tab, you can open other directories as a Catalog, and return to previous directories by using the history. The command line gives easier access to previously used expressions because the history is available in a list box.

ILWIS 3.0 Map Window

In a Map window, you will find the dockable Layer Management pane, which lists as a tree view all the layers that have been added to the Map window. From Layer Management, you can easily see map legends, open the properties of a layer, change the order of layers, etc. Also, a window showing the attributes of a selected map unit

and a small histogram window can be docked into the Map window. As the contents of Map windows are stored in the memory, Map windows will redraw maps much quicker than before.

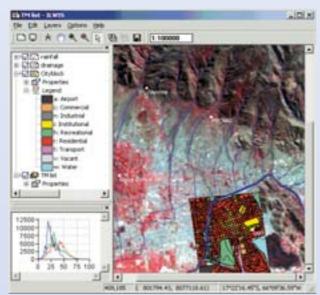
In addition, you can now zoom with any zoom factor and browse through a map using panning. The scale at which maps should be displayed can be specified and is continuously reported.

ILWIS 3.0 Layout Window

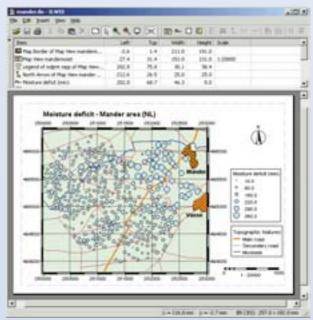
The new object type *layout* has been introduced to produce (printed) output. A layout is a virtual sheet of paper on which you can position one or more map views and additional annotation. You can specify the scale at which each map view should be displayed and later printed. As annotation, you can add legends, texts, a North arrow, a scale bar, scale text, a map border (including co-ordinates and ticks), boxes, bitmaps and pictures, and a page border. All "objects" added to a layout can be handled via the *Layout Management pane*.

For more information on ILWIS 3.0 Academic, you are invited to have a look at our webpages:

http://www.itc.nl/ilwis



Map window containing a colour composite and some vector maps, the Layer Management pane, and a docked histogram window showing the histogram of the red, green and blue bands of the colour composite



Layout window: contains a layout consisting of a map view and various annotations, and the Layout Management pane

Chairman Indian Space Research Organisation Visits ITC

Mukund Rao Sjaak Beerens

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gaged in an elaborate space pro-

gramme tuned to national develop-

ment. One of its major elements is the

remote sensing programme of IRS

(Indian Remote Sensing Satellite) mis-

Dr. K. Kasturirangan, chairman of the Indian Space Research Organisation (ISRO), visits ITC to discuss collaboration in research and education activities.

Contacts between ITC and the Indian Government with regard to remote sensing date back to the 1960s, when ITC supported the establishment in Dehra Dun of the Indian Photo-interpretation Institute (IPI) - later renamed the Indian Institute for Remote Sensing (IIRS) – a training unit of the National Remote Sensing Agency (NRSA), under the Department of Space (DOS), Government of India, and one of ITC's sister institutes. At the moment, IIRS and ITC are collaborating in a project on education and training in the field of disaster management and geo-informatics.

India has its own successful and ambitious space programme under the auspices of the Department of Space (DOS). DOS, through the Indian Space Research Organisation (ISRO), is en-

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Dr. K. Kasturirangan, chairman of ISRO, held a seminar in the ITC Auditorium on India's space programme, with particular reference to the earth observation component

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sions. Today these provide data worldwide. IRS operational and research applications are co-ordinated under a national natural resources management system (NNRMS) – a multi-agency programme for using remote sensing and GIS for natural resources management in the country and also for advanced research. ISRO carries out research in remote sensing and GIS applications, much of which bears similarities to ITC's own research spearheads. ISRO's remote sensing research programme is very much development-oriented, particularly with respect to providing geospatial information to strengthen decision making at local level and improvements in society.

On 15 June 2001, Dr. K. Kasturirangan, chairman of ISRO, held a seminar in the ITC Auditorium on India's space programme, with particular reference to the earth observation component. This was very well attended by both staff and students.

Subsequent discussions between Dr. Kasturirangan and ITC's directorate resulted in an agreement to broaden the scope of ISRO and ITC collaboration to include – alongside existing education and training – research and consultancy. Dr. Kasturirangan also took part in discussions on the greater involvement of ITC in the activities of the UN

Centre for Space Science and Technology Education in Asia and the Pacific (CSSTE-AP) in Dehra Dun. It was agreed that ITC and ISRO would identify possible areas of research interest, the aim being to undertake collaborative research programmes in the development of techniques and the applications of remote sensing and GIS. ISRO and ITC would also look for opportunities where they could jointly channel application strengths and cater to market demands for natural resources management and sustainable development applications.

ITC also aims to link up with CSSTE-AP. CSSTE-AP, hosted by ISRO/India, operates under the aegis of the UN Office for Outer Space Affairs (UN-OOSA) and is the first of the five regional UN centres to be established. The objective of these UN centres is to enhance the national capabilities of the member states in the different areas of space science and technology that can contribute

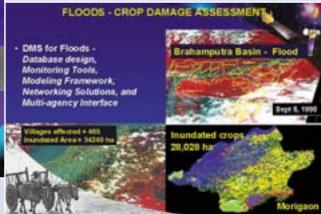
their social and economic development. CSSTE-AP was established in India in 1995. The Centre provides four 21month Master's programmes, including a nine-month postgraduate diploma module. One of these programmes is in remote sensing and GIS and is conducted at IIRS, ITC's sister institute. ITC staff also contribute to the CSSTE-AP course as visiting experts. After the nine months at Dehra Dun, participants return to their home country to complete a one-year project, leading to the award of an MTech. In view of ITC's decentralisation strategy, collaboration and the linking of educational programmes with CSSTE-AP, and also with IIRS, are now under consideration.

ITC, ISRO and CSSTE-AP aim to work together not only in furthering common goals but also in ensuring the availability of quality education, research and consultancy in the field of geo-spatial information.



Components of India's Earth Observation programme





Municipal Cadastre in Trujillo, Peru ...

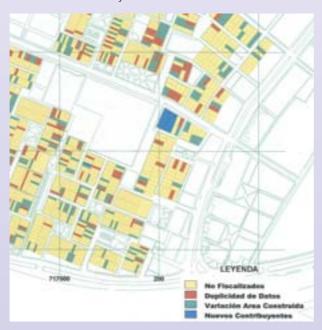
Mind the Implementation Gap!

Jan Turkstra turkstra@itc.nl

"As there is no national cadastre in Peru, municipalities are responsible for creating cadastral systems for property tax collection. While the law and regulations on local cadastres are clear and relatively simple, the question of why so few municipalities have a working system still remains. It seems that the implementation gap is underestimated.

PEGUP Project

Since 1998, ITC and the Institute for Housing and Urban Development Studies, Rotterdam, have been working with local partners in Lima, Arequipa and Trujillo on the PEGUP project (Programa de Educación en Gestión Urbana para el Perú; Peru Urban Management Education Programme). Within this project, ITC has assisted in the development and implementation of a cadastral information system for and with the Municipality of Trujillo.



Large-Scale Map

When early in 1999 a large-scale base map of the city became available from the privatised telephone company, Telefonica de Peru, the municipality asked the PEGUP project to assist in integrating this map with the existing property database. Although the municipality's ambition to create a multipurpose cadastre ran high, this has since been reduced to a 'first things first' approach, initially concentrating on improving municipal property tax revenues.

Information System

A proposal was made for a coding system and the map was converted into a GIS system with a link to the existing database. On-the-spot training at the university (also a PEGUP partner) enabled 25,000 urban parcels (the city has approximately 40,000 parcels in total) to be labelled with the cadastral code within several months. However, it came as no surprise to find that the attribute data lacked information on many parcels and, consequently, the owners didn't pay any property tax.

Property Tax

The municipal council required the costs and benefits of a cadastral system to be quantified. So, for one neighbourhood (2,540 parcels), a comparison was made by verifying the actual property in the area (building material, number of floors, land use) and using the database. Costs of updating the database and the increase in tax revenues proved to be very beneficial for the municipality, and notice was immediately sent to the inhabitants. The council adopted a resolution, and citywide implementation could begin.

The Implementation Gap

The shift from a relatively simple pilot project to the operational phase made it necessary to involve more partners, such as the water company and the public register, and to link their databases to the municipal system in order to facilitate comparisons and reduce the cost of updates. At this stage of the project, much more time was spent in mainly overcoming institutional barriers and in selling the idea that working together by using GIS can improve the quality of information.

Lessons Learned

- Step-by-step approach with clear benefits for all partners
- Keep an information system as simple as possible
- Embedding through personal and institutional incentives
- Political support is essential.

Land "Rites": Land Tenure for the Urban Poor

Jan Turkstra and Ayako Kagawa

"Legal security of tenure and equal access to land for all people" was one of the agreements of the Habitat II conference in Istanbul in 1986. During a recent UN general assembly meeting held in New York (6 to 8 June), the results of the Habitat agenda were evaluated. ITC participated as a registered UN-NGO. Research on the land tenure situation in 15 countries was presented, including a case study conducted by ITC on formalising informal property in Peru. Four cases (including the one on Peru) were shown in a film transmitted by BBC World.

A review of the land tenure situation in 15 countries showed that in many cities pressure of eviction and insecurity of tenure are not only still present but in some cases even increasing. This is one of the reasons that the United Nations for Human Settlements (Habitat) launched a "global campaign for secure tenure". What is particularly striking is the fact that the local context is very important. Approaches such as individual titling and registration might work in some countries but in others they may be ineffective or even have negative impacts on the tenure security of the urban poor.

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Based on earlier research by Ayako Kagawa and the urban management (PEGUP) project in Peru in which ITC is involved, Geoffrey Payne asked the Institute to conduct research on land tenure in Peru – Peru because a project is being implemented there to formalise informal urban property on a massive scale. This research was carried out in November 2000 and a brief summary is given below.

Peru: Titled to be Entitled

In 1983, when Ms. Josefa Errelos Ramirez moved into Juan Pablo II, an informal settlement lying at the northern periphery of Metropolitan Lima, the area did not officially exist. It was only recognised by the district of Carabayllo in 1993, but no water, garbage collection or electricity were provided for the neighbourhood. However, things have changed since 1999. Garbage collectors now come twice a week, electricity has been in-



Juan Pablo II

stalled and almost all households have land titles. Land titling and registration normally involve long tedious bureaucratic procedures but these land titles were given within two weeks. So why, suddenly, did it take the residents of Juan Pablo II so little time to become owners when it had taken nearly a decade to achieve recognition?



Ms. Josefa Ramirez with a colleague from the community leaders' organisation

Formalising Informality

The Peruvian Government took into account what Hernando de Soto had voiced in the 1980s in his acclaimed book The Other Path. He saw that to stimulate economic development — if development was to be achieved — the Peruvian bureaucratic system needed a faster and simpler process of integrating the informal city into the formal city. This critique prompted the interest of the Peruvian Government in implementing a national regularisation policy.

The initiative led to the setting up of COFOPRI (Comisión de Formalización de la Propiedad Informal) in 1996. With the co-ordination of RPU (Registro Predial Urbano), the aim was to create a mortgage-based credit and real estate market through formal land ownership in previously informal settlements. With the financial backing of the World Bank, land titling and registration began on a massive scale, and today COFOPRI claims to have achieved its objective of titling one million titles.

The Secret Ingredients and Mysteries of Titling

So why was COFOPRI able to provide one million titles to residents of informal settlements over a span of just five years?

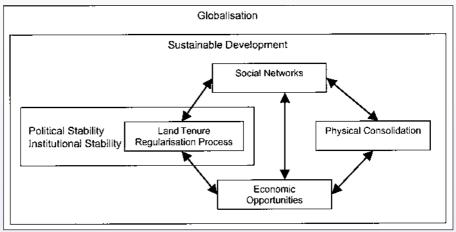
The urban population of Peru is concentrated in the coastal region, where land tends to be sandy and unproductive unless investment is made in irrigation. Also, the majority of these desert areas are owned by the State. The farther the land is from the city centre, the more likely it is to be unproductive sandy state-owned land.

Consequently, when Ms. Ramirez illegally occupied the land, the Peruvian Government did not evict her and she stayed on. This means there is little threat of eviction and it is therefore easier for Peruvians to gain de facto tenure rights to occupy and use the land — and to build their lives. This physical and legal combination of unproductive sandy areas and a tenure status of state-owned land can be seen as a major success factor in the scale of its policy implementation.

The technical mysteries in COFOPRI's formalisation process relate to the balance between quantity and quality of titles. Although one million titles have been granted to residents of informal settlements, it is important to note that some households have two titles: one given by the municipalities or former central government in the 1970s or 1980s and registered in the traditional Public Registry (Registro Publico Inmueble), the other the new COFOPRI title registered in the recently created RPU, which registers only those parcels in the informal settlements.

Regularisation and Development

A policy does not come by success easily or quickly. It needs a strong political and institutional environment so that effective legislation can be enforced. This law also needs to be linked with economic and social activities at both household and neighbourhood levels. Unless these are co-ordinated, the titles



Conceptual framework of land tenure process within the wider urban landscape

given cannot be used effectively for a better house, a better life. People like Ms. Ramirez want better employment opportunities and access to bank loans to improve their houses and educate their children.

Real Secret to the Hidden Ingredient of Titling

COFOPRI's activities are still in their infancy but it is hard to deny they have drawn the land issue of the urban poor to the attention of the rest of Peruvian society.

By focusing on formalising the informal property of the urban poor, COFOPRI has sent a strong message to Peruvians that it does care about the urban poor and that the government is willing to take action. COFOPRI has been able to bridge the gap between the formal and informal city by enhancing the "sense" of legal tenure security. In this respect, the formalisation process has led informal urban dwellers to feel they have finally become formal urban dwellers. This has affected the Peruvian urban mental landscape. Development in economic and social aspects is the next step.

The research on innovative approaches to secure tenure for the urban poor was initiated by Geoffrey Payne (gkpayne@gpa.org.uk) and sponsored by DFID (Department for International Development, UK). Besides the film, a media pack has been produced, and Settling for more: innovative approaches to tenure for the urban poor, a book edited by Geoffrey Payne, is expected to be available towards the end of 2001. Follow-up research is proposed in the form of a longitudinal study to evaluate the impact of the COFOPRI project on the consolidation and development of previously informal settlements.

For further information, please contact kagawa@itc.nl or turkstra@itc.nl

announcements

Obituary

Honorary Fellow Ir. Pranoto Asmoro Passes Away

Sjaak Beerens

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The late Major General Ir. Pranoto Asmoro

Major General Ir. Pranoto Asmoro, Honorary Fellow of ITC since 1976, passed away on 29 April 2001 in Jakarta, Indonesia, at the age of 78. He was laid to rest at Taman Makam Pahlawan (the military cemetery) at Kalibata, Jakarta, Indonesia, on 30 April.

Ir. Pranoto Asmoro graduated as a geodetic engineer from the University of Indonesia, Faculty of Engineering (now Bandung Institute of Technology), in 1958. From 1958 to 1962, he was a member of staff at the Indonesian Army Engineering College. During this period, he followed advanced courses in topography at Fort Belvoir, Virginia, USA. He was subsequently appointed director of the college (1962 to 1965).

In 1965, Ir. Pranoto Asmoro became director of the Indonesian Topographical Service, a position he held until 1970,



Ir Pranoto Asmoro (second from left) at dinner with former Rector Karl Harmsen and Indonesian Honorary Fellows



ITC's rector and director External Affairs paid a visit to the wife and family of the late Ir Pranoto Asmoro

when he founded the Indonesian National Coordination Agency for Surveys and Mapping (BAKOSURTANAL). He was the Agency's first chairman, serving from 1970 until 1975. In this position, he was part-time head of the Armed Forces Surveys and Mapping, assistant to the Minister of State for Research, secretary of the National Committee for Natural Resources, and chairman of the National Technical Committee responsible for surveys and the demarcation of the international boundary between Indonesia and Malaysia.

Always a very strong supporter of cooperation between Indonesia and ITC, he was the guiding force behind the establishment in Bandung of the Centre for Education in Photogrammetry and Cartography (PPFK), the former ITC sister institute that has since been incorporated as a laboratory into the Department of Geodetic Engineering of the Bandung Institute of Technology. In recognition of his contribution to the establishment of PPFK, ITC's Board of Governors nominated Ir. Pranoto Asmoro Honorary Fellow in 1976.

In April 2000, Ir. Pranoto Asmoro, together with Ir. Soekiman Atmosoedarjo (Fellow since 1976) and Prof. Dr. Ir. Jacub Rais (Fellow since 1988), met with Prof. Martien Molenaar, rector of ITC, in Jakarta. Ir. Pranoto Asmoro is survived by his wife and five children. During their visit to Indonesia in May, Prof. Molenaar and Director External Affairs Sjaak Beerens paid a visit to the wife and family of the late Ir. Pranoto Asmoro to pay their respects.

ITC Participates in AFRICAGIS

Mireille Meester

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ITC will actively participate in the 5th AFRICAGIS Conference and Exhibition, which will be held at the headquarters of the United Nations Environment Programme (UNEP) in Nairobi, Kenya, from 5 to 9 November 2001.

The objective of AFRICAGIS is to provide a platform for geoinformation professionals from Africa and abroad to learn about the application of geoinformation technology, and to hear about the latest products and technological developments. It will also provide an opportunity for interaction among practitioners – the chance to share information and knowledge in order to further the development and application of geoinformation technologies to meet African needs.

AFRICAGIS '01 is the fifth in the series, and will be hosted jointly by the Ministry of Lands and Settlement of Kenya and the United Nations Environmental Programme (UNEP), with the support of the Geoinformation Society of Kenya, the Regional Centre for Mapping of Resources for Development (RCMRD), the International Centre of Insect Physiology & Ecology (ICIPE) and many other Kenyan institutions.

Theme

The theme for AFRICAGIS '01 is "Enhancing socio-economic development with geo-spatial knowledge". This theme has been chosen to position geoinformation and its exploitation in the domain of the information economy, which is driving the world today. The conference will explore the challenges and options for using geoinformation and communication tech-

Alumni attending the AFRICAGIS conference who are interested in the Academic version of ILWIS 3.0 (introduction elsewhere in this issue of ITC News) will have a chance to buy this software (NLG 295 / US\$ 125 / €135). If you are interested in this offer, you can contact Lyande Eelderink, ILWIS network co-ordinator (ilwis@itc.nl). Please mention that you want to collect ILWIS 3.0 at the AFRICAGIS conference.

nologies to describe, disseminate and exploit knowledge about the available "assets" for sustainable development and socio-economic growth in Africa.

Four sub-themes will address various aspects of the main theme:

- "Policy, decisions and sustainable development bridging the knowledge gap"
- "Geography and the new economy

 competing with geo-spatial knowledge"
- "Investing in, and exploiting data"
- "Empowerment through the strategic use of geoinformation".

ITC Participation

ITC will actively participate in AFRICAGIS in various ways:

- Prof. Dr. Wolfgang Kainz plans to hold a workshop on "Fuzzy Logic in GIS and Applications"
- ITC will have a booth at the exhibition, where it will present its current educational programme, research programme and project services
- Exhibition of our partner organisations, such as EISCAP from Dar Es Salaam, Tanzania.

Furthermore, a refresher course will be organised on Data Analysis for Natural Resource Management, starting 12 November. This refresher course will be organised in collaboration with the Regional Center for Mapping of Resources for Development, headed by Dr. Wilber Ottichilo, ITC alumnus.

During the conference, ITC will organise a reception in Nairobi for ITC alumni – they will soon be receiving more information.

Mireille Meester of the Communication Department (meester@itc.nl) will be co-ordinating ITC's participation.

If you would like more information about the conference, you can visit the AFRICAGIS website at:

http://www.icipe.org/africagis2001.

Seminar 'Governance and the use of GIS in Developing Countries', ITC, The Netherlands, 15th-18th May 2002

Karen Buchanan

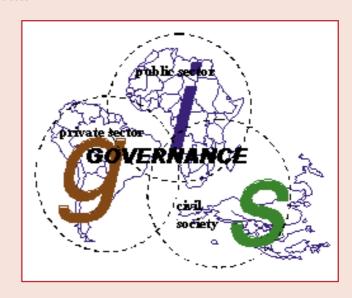
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Why is governance and the use of GIS relevant to countries in the South? Many ITC alumni will already be involved in governance issues and well aware that across all levels of government there has long been the need to develop improved systems of governance that will enable society to develop in more sustainable and equitable manner. The scope of governance not only includes the delivery of key public services but also the provision of a mechanism to facilitate stronger relationships between civil society, the public sector, non-governmental, voluntary, and private sector organisations and to increase and improve actual participation in development and decision-making processes.

The spatial aspects of governance can be supported by the use of Geographic Information Technology (GIT) tools. These can improve the quantity and quality of spatial information and enhance analytical capabilities, which in turn should lead to a better understanding of development problems and their possible solutions, for all included in the governance process.

This will be the sixth Seminar on GIS and Developing Countries and is being co-organised by the International GISDECO Committee and ITC Local Committee. The main purpose of the seminar is to facilitate the exchange of knowledge and practical experience between experts and users of GIS applied to governance issues. The seminar will explore how various stakeholder groups are using GIS, and how this is explicitly or implicitly affecting governance systems in developing countries, by addressing issues related to applications in urban and rural settings. A wide range of contributions to the seminar is invited in the form of papers, presentations and posters. We look forward to welcoming many of you back to Enschede as participants in this GISDECO seminar next May.

For more information please visit the GISDECO homepage http://www.geog.uu.nl/gisdeco/gisdeco.html



Global Spatial Data Infrastructures

lan Masser masser@itc.nl

More than 250 participants from 49 countries attended the 5th Global Spatial Data Infrastructure conference (GSDI 5). The Conference took place in Cartagena, Colombia during May 22-24, 2001.

Organized under the theme "Sustainable Development: GSDI for Improved Decision-Making", the event was an exciting and informative opportunity for geodata producers and SDI technology developers to share ideas and experiences with decision-makers from public and private sectors. The Colombian government took a leading role with GSDI through its national mapping agency, Agustin Codazzi Geographic Institute -IGAC, one of ITC's sister institutes. The set of resolutions and papers submitted to GSDI 5 are available at: http://codazzi4.igac.gov.co/gsdi5 and at: http://www.gsdi.org

GSDI 5 highlights included:

- GSDI to produce a statement on the need for global data sets for sustainable development, to be tabled at the forthcoming UN Rio+10 Summit taking place at Johannesburg, South Africa in 2002
- To better achieve its goal and objectives, GSDI resolved that in the short term intends to evolve into a public/private not-for-profit organization

- Industry participation increases, moving from conventional conference sponsorship to a direct involvement in GSDI activities
- In memory of the late John Estes, Chair, International Steering Committee on Global Mapping (ISCGM).
 Jack Dangermond, ESRI President launched a five million dollars grant for GSDI and Global Mapping
- PC IDEA and its sister committee for Asia and the Pacific -PCGIAP, signed a Memorandum of Understanding, addressed to promote common ground areas for SDI development at the regional level.

GSDI Authorities

For the period 2001-2002 Santiago Borrero, Director General, IGAC was elected as Chair, GSDI Steering Committee, replacing Derek Clarke from South Africa. At the same time lan Masser, President of the European Umbrella Organization for Geographic Information -EUROGI (and Professor of Urban Planning and Management at ITC) was appointed Vice Chair. The US Federal Geographic Data Committee continues hosting the Secretariat, with John Moeller as principal. As well, Bas Kok and Harlan Onsrud will remain as Co-chairing the Legal and Economics Working Group and Doug Nebert, as Chair of the Technical Working Group.

GSDI 6

The goal of GSDI is to advance awareness, acceptance and implementation of globally compatible spatial data infrastructure at the local, national and regional levels. GSDI 6 is being organised by the European Umbrella Organisation for Geographic Information (EUROGI) in conjunction with the Hungarian national GI association (HUNAGI). The theme for this conference is 'From global to local'. This emphasises the extent to which the GSDI must be seen a part of an overall strategy for geographic information. The decision



lan Masser (centre) with Jack Dangermond (left) –ESRI– and Derek Clarke (right) –South Africa– outgoing GSDI Steering Committee Chair



Cartagena, Colombia venue for GSDI 5



Platform party during the Opening Ceremony



Santiago Borrero, Chair GSDI Steering Committee and head of IGAC, ITC's sister institute



lan Masser with EUROGI Secretary General Anton Wolfkamp

to hold a conference on this topic in Europe at the present time is particularly appropriate given the large number of local, national and European Union initiatives that are under way to modernise government.

Conference topics will include reports on many local, national and regional SDI initiatives throughout the globe and their impact on governments. All authors, when presenting local and/or national SDI initiatives, will be expected to interpret the meaning into a global context. Leading representatives for the GI industry will also be invited to give their views on new trends and emerging technologies. Other presen-

tations will include reports on the work that is being carried out by the GSDI Secretariat and the Working Groups under the auspices of its International Steering Committee as well as briefings on current developments from each of the major regions of the world and sister organisations including UNGIWG, Global Map, Digital Earth, and GDIN.

Papers and short presentations are also invited from individuals or organisations on the following conference topics:

- Regional and national SDIs in the context of Government
- State/provincial/ metropolitan SDI experiences
- Financing SDI development
- Data sharing initiatives
- Innovations in inter-organisational collaboration: e.g. the Dutch large scale mapping project (GBKN).

Individuals or organisations wishing to make a presentation are invited to submit an abstract (200-300 words in length, plus affiliation and contact details) describing the content of their proposed presentation to EUROGI (eurogi@euronet.nl) by December 31st 2001.

Award for ITC Professor

Janneke Kalf kalf@itc.nl

Prof. Dr. John L. van Genderen, head of ITC's division of Applied Geomorphological Surveys, was recently appointed Honorary Professor of Geography at the National University of Mongolia in Ulaan Baatar. During an impressive ceremony, he received the academic robe and silver chain of office from Prof. Dr. Gonchigsumlaa, dean of the Faculty of Earth Sciences.

The vice-president of the University for Research presented the certificate outlining Prof. van Genderen's contributions over the past five years to the field of geography in general and the 10 years dedicated to DIPLOMA
of
Honorary Professor of Geography,
National University of Nanagaila

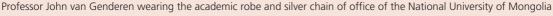
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knowledge transfer to Mongolia. ITC has trained some dozen scientists from Mongolia to date, and seven more will be coming to Enschede for the courses

starting in September 2001. Prof. van Genderen is also Honorary Professor of Remote Sensing at both Wuhan University and the XI'AN University of Science and Technology in China.

ITC would like to take this opportunity of congratulating him on this new award.







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 Geolmage® 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.

"Cadastres Revisited: The Promised Land of Land Administration": Inaugural Address by Paul van der Molen

Source: Kadaster Abroad, July 2001



Ir Paul van der Molen Visiting Professor in Land Administration and Cadastre at ITC

Paul van der Molen, Kadaster's corporate director of Land Information and Geodesy, gave his inaugural address as a visiting professor at the International Institute of Aerospace Survey and Earth Sciences (ITC) on 26 April. Before an audience of some 200 invited guests, he listed numerous examples, taken from all over the world, illustrating the importance of the land issue in the development of societies. He said that reviewing the manner in which governments dealt with land, and the role of land administration was a matter of urgency.

Role of Land Administration

He reported extensively on the role that land administration played in the implementation of land policy – by improving land tenure security, by regulating the land market, in planning and development, and in land taxation. Still, he concluded that land administration did not always support policy implementation adequately. The reasons were twofold. Without an appropriate legal framework or transparent public administration structures, land administration could only make the best of a bad job. This understanding of the context of the rule of law and good governance placed the phenomenon "land administration" right at the heart of the issue of comprehensive development. Furthermore, the people involved in land administration did not always seem blessed with a talent for organising their business.

Optimism

He did express optimism, however, as regards the future, observing that not only was the vital importance of land administration now widely recognised but there was also an increasing awareness of the relationship between land policy and land administration. Numerous innovative ideas had recently been developed with respect to integrating customary rights into the land administration activity, formalising informal settlements, land reform, cheap and fast map-making techniques, and the support of ICT.

Nevertheless, much research was still needed. The best approach would be to handle institutional matters on the one hand, and operational issues on the other. He said that ITC students should be provided with workable tools in a well-defined context.

The full text is available by e-mail from Pauline.vanElsland@kadaster.nl



Paul van der Molen giving his inaugural address at ITC

SWEDESURVEY Visits ITC

Janneke Kalf kalf@itc.nl

On Friday, 27 April, Director External Affairs Sjaak Beerens welcomed personnel from SwedeSurvey and Managing Director Sture Petterson to ITC, as part of a European study tour. The programme included lectures by Messrs. Rob Lemmens, Chrit Lemmen and Wan Bakx, as well as a guided tour of the building.



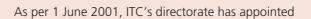
The tour of the building included a visit to ITC's Remote Sensing and GIS (RSG) laboratory



The delegation of SwedeSurvey

Appointment new head Bureau Project Services

Janneke Kalf kalf@itc.nl





Mr. Mark Noort MSc (1960) as head of the Bureau Project Services at ITC.

Mr. Noort has been project officer with ITC's Bureau Project Services since 1998. In his new capacity he will be responsible for the acquisition, implementation and administrative arrangement of all project activities carried out by ITC.

Dear Sir,

I am happy to inform that I have been offered a Part-time Lectureship at the Department of Geography and Resource Development of University of Ghana to teach Hydrology.

Would you believe that I am the Pioneer Lecturer in the field of Hydrology at the Geography Department. Look at the benefit of the training of ITC to the entire country of Ghana. Oh, bravo to ITC, bravo to NFP, bravo to The Netherlands Government.

I thank you and the entire staff for the training you gave me. God has opened many opportunities for me from the training I had from ITC. I have utilised every bit of the knowledge I acquired. Thank you, thank you. May God bless you all. Let the staff know that their labour was not in vain and that we are very appreciative of their contribution to where we are now.

ERNEST KUSI-MINKAH Ghana eminkah@hotmail.com



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 the end of 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-Neerlandesa 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. Qazi 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 Amigos del Reino de los Paises Bajos Avenida 10 de Agosto 3815 y Mariana de Jesus

Tercer piso, Oficina 302, Edificio Villacis Pazos Quito, Ecuador

President: Srta. Sigrid Vasconez Phone: 593.2.552124

EGYPT

Netherlands Alumni Association c/o Dr. Wadid Erian 54-Ahmed El Sawy Street Makram Abide, Nasr City Cairo, Egypt Phone: 012 213 7004 and 2746513 Fax: (202)5884066

GHANA

Ghana Netherlands Alumni Association (GNAA) P.O. Box 8148 Accra-North, Ghana Interim President: Mr. S.A. Amoah Phone (Netherlands Embassy): 233.21.773664 Fax (Netherlands Embassy): 233.21.773655

INDIA

Netherlands Alumni Association of India Prof. C.P. Tewari C-3/3004, Vasant Kunj New Delhi 110 070, India

Phone: 91.11.6897773

INDONESIA

IKANED

pla Nederlandse Ambassade Jalan H.R. Rasuna Said-Kavel S3 Kuniga, Jakarta 12950, Indonesia President: Prof.Dr. Koesnadi Hardjasoemantri Phone: 62.21.511515 Fax: 62.21.5700734

KENYA

Netherlands Association of Alumni Kenya p/a 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 (KNAA)

C.P.O. Box 7173 Seoul, Korea Final Information President: Dr. Woo, Hae Seung Phone: 82.2.2524597 (office), 82.342.702.8606 (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

NEPA

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PAKISTAN

Netherlands Alumni Association of Pakistan

53, Plaza Fazalul Haq Road Adjacent PIA Building, Blue Area Islamabad, Pakistan President: Mr. Syed Waqua Haider Phone: 92.51.214336; 214337

PERU

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

PHILIPPINES

Netherlands Fellowship Foundation of the Philippines Inc. (NFFPI)
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SINGAPORE

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P.O. Box 99
Bras Basah Post Branch, Singapore 0718
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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.ir. Daniel Jiang Graduate Institute of Civil and Hydraulic Engineering Feng Chia University 5th floor, C-H Building 100, Wenwha Road Taichung, Republic of China Phone: 886.4.2528158 Fax: 886.4.2960877

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Email: dhjiang@fcums1.fcu.edu.tw

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: 256.41.543647; 543648 Fax: 256.41.533574

VIETNAM

Vietnam Netherlands Alumni Club (VNAC) 105A Quan Thanh Street Hanoi, Vietnam Chaiman: Prof.dr. Pham Huy Dung Phone: 84.4.8454547 Fax: 84.4.8432756

CALENDAR 2001-2

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 fig@ddl.org)

20th Brazilian Congress of Cartography

7 – 12 October 2001 Brazil

Information: Francisco Carlos Bragança de Souza, General Director of XXCBC, 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)

3rd International Conference on Geospatial Information in Agriculture and Forestry

5 – 7 November 2001 Denver, CO, USA

Information: Veridian Geospatial Information Conference, PO Box 134008, Ann Arbor, MI 48113-4008, USA (tel 1-734-994-1200 ext 3234; fax 1-734-994-5123; e-mail nancy.wallman@veridan.com; web-site www.erim-int.com/CONF/ag)

Africa GIS-2001 Conference and Expo

5 – 9 November 2001 Nairobi, Kenya

Information: Humphrey K Njuguna (tel 254-2-444-837; fax 254-2-443-828; e-mail nasser@gathkenya.com; web-site www.icipe.org/africagis2001)

International Symposium on Spatial Data Infrastructures (SDIs)

19 – 20 November 2001 Melbourne, Australia

Information: Department of Geomatics, The University of Melbourne, Victoria 3010, Australia (fax 61-3-9347-4128; e-mail sdi@sunrise.sli.unimelb.edu.au; web-site www.sli.unimelb.edu.au/SDI)

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)

RS and GIS Accuracy Assessment Symposium

11 – 13 December 2001 Las Vegas, NV, USA

Information: (fax 1-919-541-1137; e-mail lunetta.ross@epa.gov)

Meeting of Teachers of Surveying

17 – 19 December 2001 Newcastle upon Tyne, England

Information: Stuart Edwards, Department of Geomatics, University of Newcastle, Newcastle upon Tyne, NE1 7RU, England (tel 44-191-22-5473; fax 44-191-222-8691; e-mail s.j.edwards@ncl.ac.uk)

Map India 2002

6 – 8 February 2002 New Delhi, India

Information: Map India Secretariat, CSDMS, G-4, Sector 39, Noida 201 301, U.P. India (web-site www.MapIndia.org)

Geomatica 2002

18 – 23 February 2002 Habana, Cuba

Information: GEOMATICA 2002, Ing. Tatiana Delgado Fernández, Calle 6 No 301 Esq. 3ra, Miramar, La Habana 11300, Cuba (tel 53-7-22-1794; fax 53-7-24-2869; e-mail geomatica@mic.cu)

GIS 2002

11 - 13 March 2002 Bahrain

Information: BSE (tel 973-()-727-100; fax 973-()-729-819; e-mail mohandis@batelco.com.bh; web-site www.mohandis.org)

First International Conference on the State of Remote Sensing Law

18 – 19 April 2002 Oxford, MS, USA

Information: Ms Edie King (tel 1-662-915-6951; e-mail eking@olemiss.edu)

6th Seminar on GIS and Developing Countries

15 – 18 May 2002 Enschede, The Netherlands

Information: GISDECO 2002, Internatinal Institute for Aerospace Survey and Earth Sciences, P.O. Box 6, 7500 AA Enschede, The Netherlands (fax 31-53-4874 400; e-mail GISDECO2002@itc.nl; web-site www.itc.nl)

22nd EARSeL Annual Symposium

4 – 6 June 2002 Prague, Czeck Republic

Information: EARSeL, 2 avenue Rapp, F-75340 Paris, Cedex 07, France (tel 33-1-4556-7360; fax 33-1-4556-7361; e-mail EARSeL@meteo.fr; web-site www.earsel.org)

IEEE/IGARSS 2002

24 – 28 June 2002 Toronto, Canada

Information: Tammy Stein (tel 1-281-251-6067; fax 1-281-251-6068; e-mail tstein@phoenix.net)