

# Under-represented Groups in Surveying

NEWSLETTER NO. 1/02

**JOINT COMMISSION WORKING GROUP  
ON UNDER-REPRESENTED GROUPS IN SURVEYING**

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## **MIXED MESSAGE: CONFLICTING IMAGES EMERGE FROM SPRING CONFERENCE**

By Wendy J. Woodbury Straight, USA

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Gender mainstreaming was a major theme in the wings of the spring surveyors' conference in Washington, DC. Speakers highlighted the success of female surveyors in Germany, the United Kingdom, Sweden, Austria, and the United States. Other presenters were on hand to discuss the global issue of women's access to land, examining the surveyor's role in the equal application of title and registration development.

However, a few other events at the convention pointed backward. First, a sexist display found its way into the sprawling exhibit hall. Second, the national surveyors' association, which is 97 percent male, featured a presentation for the recruitment of boys. Third, a longstanding forum for women in surveying failed to find a new leader. It subsequently disbanded.

## **ON THE PLUS SIDE**

Two sessions for presenters, organized by Gabriele Dasse (Germany) and Gail Oliver (U.S.), comprised a joint meeting of the Task Force on Under-represented Groups in Surveying and the Forum for Equal Opportunity. The Task Force is sponsored by Commission 1 (Professional Standards and Practice) and Commission 2 (Professional Education) of the International Federation of Surveyors (FIG). The Forum falls under the auspices of the National Society of Professional Surveyors (NSPS), a member organization of the American Congress on Surveying and Mapping (ACSM.) The joint sessions were held on April 24.



The first session: from left Gail Oliver, Gerda Schennach, Gabriele Dasse, Karin Haldrup, Wendy J. Woodbury Straight

In addition to a report on the 20-year history of the Forum, participants in the two sessions heard the following presentations: *Challenges for Women in a Changing Profession* (Gerda Schennach, Austria); *Wanted: Women Engineers* (Gabriele Dasse, Germany); *Mainstreaming Gender Issues in Land Administration: Awareness, Attention, and Action* (Karin Haldrup, Denmark); *Why Are Young Women Attracted to Survey Education in Sweden* (Boo G. Lilje, Sweden); and *A Gender for Change: The Future for Women in Surveying* (Pat Turrell, United Kingdom).

Women's issues were addressed elsewhere at the conference as well. On April 23, Agneta Ericsson of Sweden had presented a related topic, *Women's Access to Land*, in a session on land administration sponsored by FIG Commission 7 (topics in Cadastre and Land Management). Highlights from each paper will be featured in upcoming editions of this newsletter. Published papers may be found in the proceedings of the conference.

#### UNIVERSAL ISSUES

The importance of role models was a consistent theme throughout the presentations. Group discussion revolved around the idea of a "critical mass," the percentage of women within an institution or an industry that suddenly allows newcomers to feel welcome.

Such a number has been achieved by educational institutions in Sweden, quickly establishing a gender balance that better reflects the country's demographics.

Another common theme was the importance of professional associations in the recruitment and retention of young women into the surveying and mapping arena. Numbers suggest that the more women there are in the profession, the easier it is for them to participate in efforts to enhance the professional environment.

For example, the geomatics industry in Germany has a significantly higher percentage of female involvement than does the surveying industry in the United States. Yet, unlike America, Germany has no shortage of established women who are able to engage in recruitment and retention activities targeted toward young women in geomatics.

Equality in land tenure was another common topic of discussion. An example of an organization working to monitor women's access to land is *Swedesurvey*, a state-owned company that serves as a consultant for land management, GIS, and geospatial solutions around the world.

Through cultural, religious, or legislative traditions, women and men are often treated differently with regard to land. *Swedesurvey* advocates the equal allocation of land through the use of efficient administration systems.

#### DISCRIMINATION STILL FOUND IN AMERICA

In spite of an ACSM policy calling for exhibit displays that "represent the professional image of the industry," a company relatively new to the surveying software market featured "booth babes," female models in shorts and tee shirts. Oliver, who is the outgoing chair of the Forum, asked if the firm would be willing to feature male models in similar clothing, to which the reply was, "Absolutely not." Indicating the lack of clout wielded by America's small percentage of females in today's industry, a company spokesperson told Oliver that the use of female models was a business decision that seemed to be working.

Equally disheartening for women at the convention was the appearance of a workshop sponsored by NSPS to educate young boys about the surveying profession, “thereby giving the future generation an insight into our profession and possibly recruiting the next generation of professional surveyors.”

The program was intended to augment the Boy Scout Surveying Merit Badge, which was developed by NSPS several years ago. Because there is no similar merit badge at the Girl Scout level, NSPS has struggled to provide equal opportunity for girls. To date, NSPS has no educational program aimed at both girls and boys of middle-school age, but it does offer the gender-neutral Trigstar program for high school students.

The low percentage of women in United States surveying has had other repercussions. Contractors have used the low numbers to argue that they cannot fulfill minority set-asides.

Another downside of the poor representation of women has been the burnout rate of women who have been active in their professional associations. With few women in the ranks, those who participate are often asked to serve on more than a normal share of committees. They do so courteously, in order to present themselves as role models, but they are quickly exhausted from carrying multiple loads.

The NSPS Forum for Equal Opportunity was formerly known as the Forum for Women in Surveying. The DC conference was the termination of Oliver’s second consecutive term as chair of the group.

Conference participants noted that the expense of travel is one reason that no successor for Oliver has been found; another reason is the reprioritization of family life in post-9/11 America. In the past several months, many surveyors, both male and female, have found it emotionally necessary to work more closely to their homes.

The conference took place from April 19 through April 26. It was known as the XXII FIG International Congress, and as the ACSM Annual Conference. The convention was produced in conjunction with the Annual Conference of the American Society for Photogrammetry and Remote Sensing, and it was co-sponsored by the Appraisal Institute.

By Wendy J. Woodbury Straight, e-mail: [wendy@netsync.net](mailto:wendy@netsync.net)

## WHAT IS NEW IN FIG CONCERNING UNDER-REPRESENTED GROUPS IN SURVEYING



The time span of the FIG Task Force on Under-represented Groups was limited and ended in 2002 with the FIG Congress in Washington. Task Force Chair Gabriele Dasse informed the members of the General Assembly about the Task Force activities with a final report and she got the opportunity to give a speech during the General Assembly. All information concerning the Task Force are still available on the following homepage:

<http://www.fig.net/figtree/tf/underrep/tfunrep.htm>

Gabriele Dasse during the General Assembly

Under the lead of FIG Commission 1 now a **Working Group Under-represented Groups in Surveying** is established. This is a Joint working group with other FIG Technical Commissions.

### Policy issues

Survey the role of minorities in the world of surveying and the benefit of diversity.

Analyse the present status of under-represented groups and be aware of good practices concerning the support of under-represented groups in FIG member associations, in professions and at universities.

Enhance fair competition for minority groups.

## Chair

Gabriele Dasse (Germany), e-mail: [gabriele.dasse@gv.hamburg.de](mailto:gabriele.dasse@gv.hamburg.de)

## Specific Projects

Continuing with a FIG network for under-represented groups in surveying to enhance the distribution of information.

Intensify the work within the FIG Commissions to support women and cultural and language minorities.

Evaluation of FIG Washington Congress registration concerning gender, age, commissions and continents.

Organise joint Commission working group meetings or workshops during the working weeks.

## Publications

Quarterly Newsletter to publish good practices

Provide guidelines for FIG (Congress 2006)

## Final report

In the Munich Congress

## PERSONALITIES



**Diane A Dumashie**, PhD., BSc., MRICS is the FIG UK delegate Commission 8 (Spatial planning and development) and chairs the working groups focusing on Mega-city urbanisation/informal settlements and public liaison tools in Coastal Cities. Her aim is to facilitate communication, collaboration and exchange of ideas. Attending two working weeks and one congress encourages her that the FIG framework is able to deliver this objective.

Although in the early 1990's she was seconded onto a Comm 7 working group to lend her experience to coastal issues, over the past two years Diane's Involvement is with Comm 8. She is keen to utilise her skills and experience in project development management and technical experience in land ownership

strategies, including specialist knowledge in Marine Resource management and facilitating sustainable development in maritime areas. Motivated by the Under represented Surveyors group, and the interest that this generates, Diane's aim over the next four years is to seek to involve the network in her working group areas particularly focusing on gender, informal settlements, housing and coastal issues associated with cities. There is opportunity for this to work across commissions.

To achieve the Commission objectives Diane draws from her experience spread over 18 years. With over ten years at senior levels, she manages development, monitor and evaluate large-scale projects including, financial appraisals and fiscal evaluations, preparation of instructions for, and negotiations of complex legal documentation. This combines with an understanding in both corporate industry and SME's business development, acquired due to involvement in decision making allied to board level.

Three years ago, Dumashie Associates was founded in order to utilise her long experience of trouble-shooting, path-smoothing and adding value to complex developments, with a specialism in difficult areas such as coastal areas, but also redundant urban/ industrialised land. The focus of Diane's work is increasingly orientated to community level.

Diane specialises in integrating land economics and business strategies with environmental and sustainable issues. This may be working for the public or private sector. She has monitored and evaluated central, regional and local government environmental policy in Integrated Coastal Area

Management (ICAM). Experience gained in an Environmental Consultancy provides a full understanding of the engineering constraints along waterfront land. This adds to her research capability in Marine Resource Management and interest in community development issues relating to ICAM, which combined with Cadastre experience enables her to add significant value in land, real estate and community development of the land/ marine environmental interface.

She's steered projects in London and on Merseyside in the UK – and internationally on sites as far apart as Ghana, Hawaii, the USA, Poland and Brussels. Such as helping British Gas release profit from a 100 acre former coastal oil refinery land it no longer needed. Advised corporate aggregate operator on how to make better use of riverside site adjacent to the London Dome. Worked with New Town commissions to seek ways to maximise best value associated with their landholdings in the context of community objectives. Project managed large development sites to build up to 1,500 new homes for all sectors of society. As well as helped doctors build modern surgeries in environmentally sensitive areas.

Chronologically Diane entered surveying as a graduate, trained for a period at the Greater London Council and a leading asset management Property Consultancy. Then moved into the Corporate sector for Allied Lyons, then as a project manager for Marks & Spencers, helping it to find and upgrade land for its stores and distribution centres. She became a senior surveyor with Marriott, helping it to grow its hotel business, then became a development consultant with GVA Grimley before setting up her own business. Along the way in the corporate sector she's acted as property director and guided the successful take-over of a 150-outlet chain of pizza restaurants, as well as involvement with the environmental sector assisting the oil and gas, ports and aggregates sectors in coastal and marine areas).

Diane desire to share best practice extends to the local level where she also participates in national and local committees of the RICS covering issues relating to coastal lands and education. Diane's current key area of work is allied to sustainable planning approaches involving the community to regenerate public land and property for housing. Working to foster the transfer of knowledge and skills Diane welcomes contact from the members of the Under represented surveyors groups.

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## **WHY ARE YOUNG WOMEN ATTRACTED TO SURVEY EDUCATION IN SWEDEN BY BOO G. LILJE, SWEDEN**



Surveying in Sweden is the ideal educational programme for those interesting in engineering, law and economics.

Education of surveyors started in Sweden 1628. The education was in the beginning concentrated on map production. In the middle of the 18<sup>th</sup> century re-allotment of Swedish rural land was the main task of the Surveyors. Knowledge in legal matters as well as in economic subjects was expected.

The education was organised by The National Land Survey. In 1936 the first surveyors graduated with a MSc from The Swedish Royal Institute of Technology, Stockholm (KTH). Education is from 1992 conducted even at Lund Technical Institute (LTH).

The first female Land Surveyor graduated in 1963. Thus it took 335 years before Sweden got its first female Land Surveyor. Other male occupations were Forestry Officer and Veterinary Surgeon. It was for the next ten years (1962 – 1972) still unusual with female students at the Surveying Program. Only 13 females graduated out of a total number of 338 (3,8%). The number of female Land Surveyors increased considerable during the next ten years (1973 – 1982) and out of 467 graduates all together, 107 were females (22,9%). This development continued during the next ten years (38,9%) and nowadays the female Land Surveyors are in majority. During the last ten years the female graduates are 52,6% out of all graduates.

The Land Survey Education in Sweden is a comparatively small Educational Program. It is therefore important to make the education known to the students in compulsory school. As competence in highest grade of mathematics is required, the marketing of the Education should start early to interest the young ones to choose the line of natural science. These efforts do not differ between boys and girls. However first priority is to make the education well known.

In Sweden the name “Land Surveyor” is unknown to most Swedes. The Educational Board in Lund has seriously discussed to change the name of the Educational Program. However the Board has not been able to find a more suitable name. Therefore the Board has decided to market the trade-mark “Land Surveyor”.

If it is easy to be accepted to an Educational Program, the Program loses in interest and status among the students. It is therefore important to get both a lot of applicants and a high entrance-points.

In Lund we have managed to raise the numbers of applicants as well as the level of entrance.

Year	1997	1998	1999	2000	2001
First hand applicants	38	33	46	50	59
First hand applicants per seat	1.3	1.2	1.5	1.7	2.0
Total number of applicants	387	356	395	386	443
Total number of applicants per seat	13	12	13	13	15
Entrance points				13.42	15.84

(15 points means the testimonial “very well” in all subjects. “20 points means the maximum testimonial in all subjects)

The women nowadays are equal with men or in majority at the Surveying Program.

Accepted women to the Surveying Program at Lund Technical Institute

Year	Total	Women	% women	Year	Total	Women	% women
1992	33	18	54,5	1997	33	20	60,6
1993	33	13	39,4	1998	33	18	54,5
1994	33	14	42,4	1999	42	20	47,6
1995	33	16	48,5	2000	50	23	46,0
1996	31	17	54,8	2001	35	17	48,6
					356	176	49,4

All the students at the Surveying Program at Lund were asked to answer the question “Why they had chosen the Surveying Program” in order to investigate if there is a difference in attitude between the boys and the girls.

#### Why did You choose the Surveying Program

	Girls		Boys		Total	
	Number	%	Number	%	Number	%
Interest	24	45,3	17	40,5	41	43,2
The education has good reputation	2	3,8	1	2,4	3	3,2
The width of the education is attractive	44	83,0	28	66,7	72	75,8
The facultative education is extensive	2	3,8	5	11,9	7	7,4
Interested in certain specialisation	12	22,6	11	26,2	23	24,2
Interested in future tasks	18	34,0	12	28,6	30	31,6
Expectations of a high salary	8	15,1	13	31,0	21	22,1
Wanted to become MSc	28	52,8	26	61,9	54	56,8
Relatives in the occupation	2	3,8	5	11,9	7	7,4
Others	6	11,3	8	19,0	14	14,7
	146		126		272	

As can be seen, there is no significant difference between the reasons why a boy or a girl has chosen the Surveying Program.

The Surveying Program is not the most popular Program among the young women. As can be seen from the table the Biotechnology Program together with the Chemical Program is the most attractive Program among the young women. These Programs are considered technical of a “softer” kind. The students need not to study hard technical subjects for example about concrete, etc. Next the young women go for the artistic programs as Architecture and Industrial Design. The Surveying Program follows after these chemical and artistic Programs.

The most important factor for the young women to choose the Surveying Program is the width of the education. The combination techniques, laws and economics is of importance and attracts those who wants to get a MSc

Important in itself for the students at the Surveying Program is to become MSc without studying a lot of technical subjects as physics, tenacity, etc. The students often points out how important it is to get a technical academic exam. Discussions have taken place to increase the number of applicants by decreasing the entrance qualifications and accept those with lower mathematic competence. This will lead to a non-technical MSc and will make the education less attractive for a lot of applicants. It will also give Sweden a new kind of Surveyors. So far there has been no proposal.

We find the interest of the occupation first in third place. This factor has for the students at LTH as a whole, the highest ranking. But it is a well-known fact, that the students applying for a seat in the Surveying Program, has no or very little knowledge about the education and the future tasks related to the education. The students choose the Program by the two reasons mentioned above. Those students who have marked the factor “Interest” have also to a great extend marked the factors “Interested in future tasks” and “Interested in certain specialization”. These students want often to specialize in Real Estate Valuation or Real Estate Management.

The Surveying Program attracts young women by being a MSc-education with a lot of non-technical subjects. The combination techniques, laws and economics is the trade-mark of the

education. The young women is in majority and sets the level of the social life at the Program. This is of importance when marketing the education.

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