

## *The International Federation of Surveyors (FIG)*

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### **What is a surveyor ?**

A surveyor is a professional person with the academic qualifications and technical expertise to practise the science of measurement and mapping; to assemble and manage geographic related information; to use that information for efficient administration of land and properties and the and the natural and built environment; and to instigate the advancement and development of such practices.

Practice of the surveyor's profession may involve one or more of the following activities which may be carried out in association with other professionals: positioning and mapping; land and engineering surveying; spatial information management; boundary surveying and land registration; land administration and land-use planning; land valuation and real estate management; and construction economics and management.

In the application of these activities surveyors take into account the relevant legal, economic, environmental and social aspects affecting each project.



## What is FIG?

FIG is the premier international organization representing the interests of surveyors worldwide. It is a federation of the national member associations and covers the whole range of professional fields within the global surveying community. It provides an international forum for discussion and development aiming to promote professional practice and standards.

FIG was founded in 1878 in Paris and was known as the Fédération Internationale des Géomètres. This has become anglicized to the International Federation of Surveyors. It is a UN-recognized non-government organization (NGO), representing more than 100 countries throughout the world, and its aim is to ensure that the disciplines of surveying and all who practise them meet the needs of the markets and communities that they serve.

In general, FIG will strive to enhance the global standing of the surveying profession through both education and practice, increase political relations both at national and international level, help eradicating poverty, promote democratisation, and facilitate economic, social and environmental sustainability.

FIG's activities are governed by a work plan, which is regularly reviewed against a longer-term strategic plan. The current work plan 2007-2010 is entitled "Building the Capacity". FIG recognises the particular needs of capacity building in developing countries to meet the challenges of fighting poverty and developing a basis for a sustainable future.

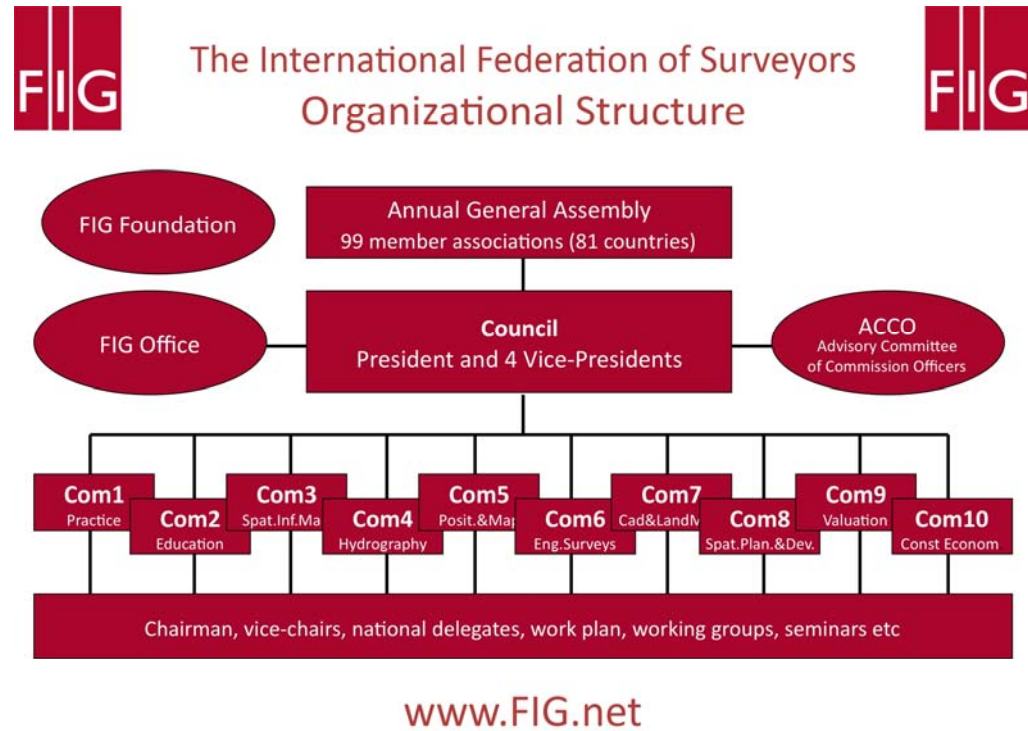


FIG also recognises that markets for surveyors' services are constantly changing. The plan therefore lays emphasis on strengthening professional institutions; promoting professional development; and encouraging surveyors to acquire new skills and techniques for meeting the needs of society and the environment.

Ten commissions lead FIG's technical and professional work. Each member association appoints a delegate to each of the commissions. Detailed information on the work of the commissions, their work plans, working groups, seminars, newsletters and publications can be found at the FIG website: [www.FIG.net](http://www.FIG.net)

## FIG approach to natural disaster prevention and management

Due to the increasing frequency of disasters worldwide and their humanitarian and economic consequences, a lot of international organizations, and NGOs are looking at developing techniques and tools for disaster risk management, such as UN/ISDR (2004), FIG (2006) and RICS (2009).

The process of disaster risk management forms an ongoing circle of activities related to the situation *before* (risk identification, prevention, preparedness), *during* (emergency relief) and *after* a disaster (recovery, reconstruction) where the latter should then feed back into improving the resilience of vulnerable communities and reduce future risks leading towards sustainable development.

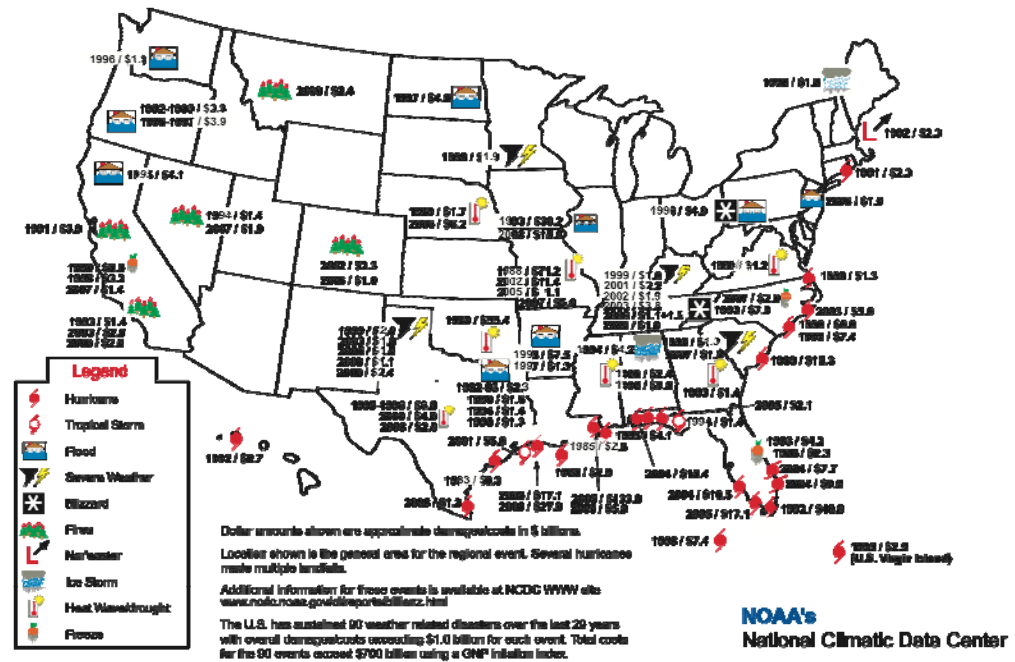
The contribution of surveyors relate mainly to the situation before and after a disaster while emergency relief during the disaster is undertaken mainly by the humanitarian organizations.



improve, simplify and to shorten the disaster management process.

The FIG publication no 38: The Contribution of the Surveying Profession to Disaster Risk Management (2006) clearly outlines the wide scope of surveyor's abilities including land management, geodetic engineering, geo-informatics, satellite technology, and remote sensing that can make an important contribution to

## Billion Dollar Weather Disasters 1980 - 2008



Billion dollar weather disaster in the USA 1980-2008. (Source: NOAA)

The total number of disasters (such as drought, earthquake, flood, slide, volcanic eruption, hurricane, etc.) has increased from about 150 in 1980 to more than 400 in 2000. In the USA, for example, more than 90 weather disasters have occurred the last 30 years with the total costs exceeding 700 billion USD.

There is wisdom in the statement of Kofi Annan, the former UN Secretary General: "While many people are aware of the terrible impact of disasters throughout the world, few realise this is a problem that we can do something about."



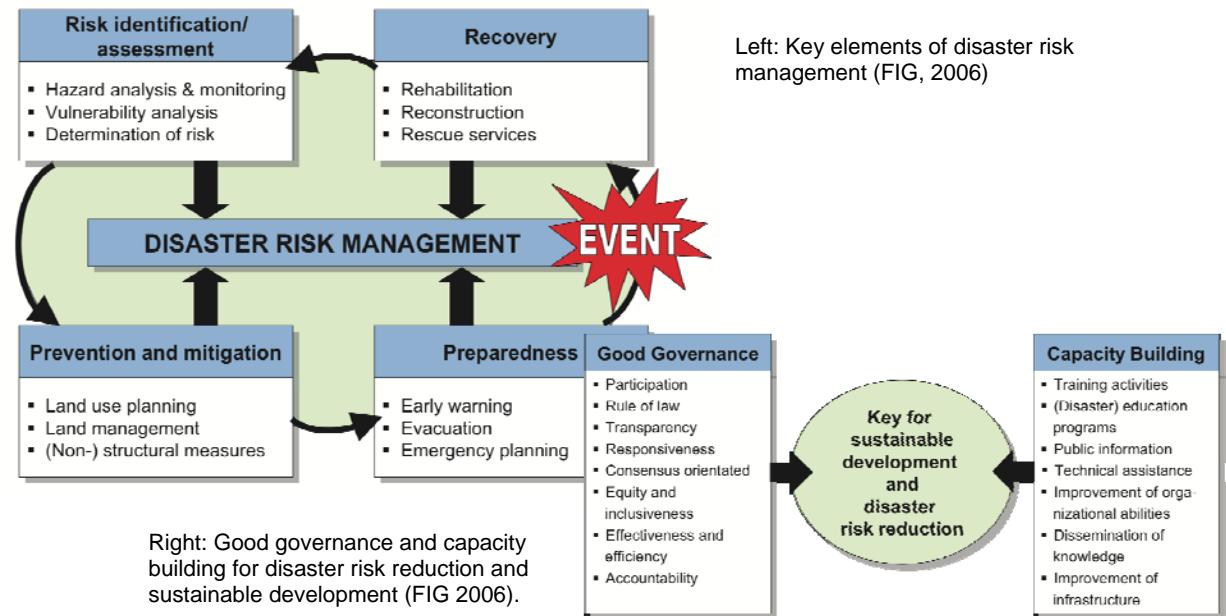
## Land administration systems in support of natural disaster risk management

Sustainable land administration systems provide clear identification of the individual land parcels and land rights attached to these parcels. This information on the people to land relationship is crucial in the immediate post disaster situation. Following the relief and early recovery transition period – where focus is on the overriding humanitarian efforts of saving lives and providing immediate relief – the recovery and reconstruction phase will to a large extent relate to re-establishing the situation of legal rights to land and properties and the reconstruction of buildings and infrastructure. Sustainable land administration systems provide the basis for managing these processes.

Disaster risks should be identified as area zones in the land use plans and land information systems with the relevant risk assessments and information attached. Such disaster risk zones may relate to sea level rise, earthquakes, volcano eruption, flooding, draught, hurricanes, etc, and the information should relate to the predicted risks as known through statistics and positioning measurement systems.

By combining the disaster risk information with the relevant information on land tenure, land value, and land use the necessary risk prevention and mitigation measures can be identified and assessed in relation to legal, economic, physical, and social consequences.

In disaster zones relevant measures should be taken to build the preparedness for managing any disaster events. Land is necessary for emergency shelter and for restoration of livelihoods. Land grabbing is a key risk in this process. Humanitarian actors are therefore confronted with the land issue as they undertake emergency shelter and protection activity.



Left: Key elements of disaster risk management (FIG, 2006)

Right: Good governance and capacity building for disaster risk reduction and sustainable development (FIG 2006).

## Building the capacity for disaster prevention and management

Good governance and capacity building are central components in the process and implementation of disaster risk management and sustainable development.

The capacity to be prepared for and manage natural disasters will of course include the use of early warning systems that provide timely and effective information in due time for taking the necessary actions and preparing for an efficient response.

Another key issue is to establish the necessary political commitment for integrating mitigating

measures and disaster risk reduction into the land administration systems, and to implement these policies through organisational structures and regulatory frameworks.

FIG (2006): The Contribution of the Surveying Profession to Disaster Risk Management. FIG Publication No. 38. FIG Office, Copenhagen, Denmark.

RICS (2009): The Built Environment Professions in Disaster Risk Reduction and Response. RICS, London.

UN-ISDR (2004): Living with Risks: A Global Review of Disaster Reduction Initiatives. United Nations.