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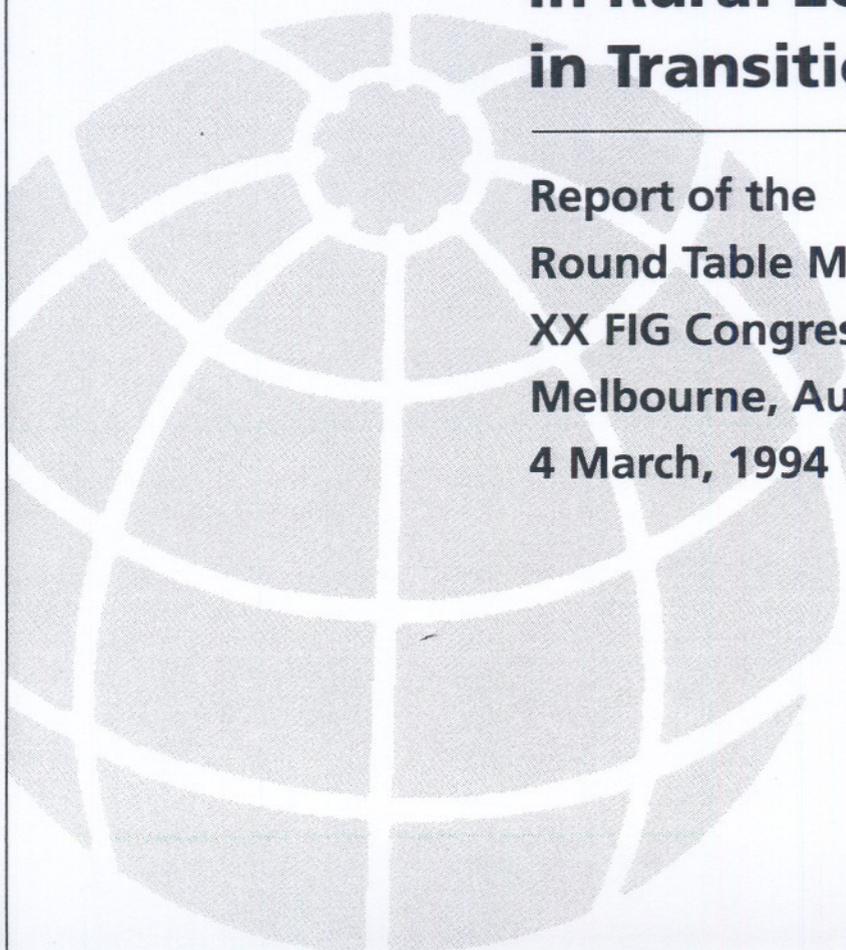
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FAO and FIG Future Collaboration in Cadastral Reform in Rural Economies in Transition

Report of the
Round Table Meeting
XX FIG Congress
Melbourne, Australia
4 March, 1994



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FAO and FIG Future Collaboration in Cadastral Reform in Rural Economies in Transition

**Report of the Round Table Meeting in Melbourne, Australia
4 March, 1994, jointly hosted by the UN Food and Agriculture
Organisation (FAO) and The International Federation of Surveyors
(FIG)**

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PREFACE

The workshop to which this report refers was held immediately prior to XX Congress of the International Federation of Surveyors (FIG) in Melbourne in March, 1994. Dr James Riddell, Senior Officer of the Land Tenure and Settlement Group within the UN Food and Agriculture Organisation (FAO) had been invited to be a keynote speaker at the Congress. Taking advantage of the presence in Australia of many international experts and, thanks to the United Nations and other supporters, the presence of many delegates from developing countries, it was decided to hold this "Round Table" meeting as a means of opening up further dialogue between FAO and FIG on the range of issues contained within the theme of "Cadastral Reform in Rural Economies in Transition" and to do so by inviting a number of representative delegates from various regions of the world to tell of the achievements and needs of their particular country in the area of cadastre, land registration and land management.

It was agreed that the report should be produced as a joint publication of FIG and FAO and we do so as a means of stimulating discussion and action to achieve those things which emerged as key issues if the ownership, administration and management of land in developing countries, or countries whose economies are in transition, is to support productive agriculture and a healthy people with a secure and sustainable future.

FIG thanks FAO for the assistance it gave and for its readiness to cooperate in what was clearly a valuable event. We commend the report to as wide a readership as is possible.

Grahame K. Lindsay
Secretary General FIG
13 March 1995

1 INTRODUCTION

Reason for the Round Table Workshop

Undoubtedly, the world is now undergoing considerable change, with a population expansion, massive migration to urban areas, small nations emerging from larger ones, and an urgent need for implementation of improved land management practices in many areas of the world, particularly in the countries of Africa, Asia, Eastern Europe, and South America. Improved land management implies the need for improved and efficient land registration and cadastral record keeping in one form or another.

The FAO is in the forefront of the aid agencies that offer help to countries in need of assistance to achieve these objectives. FIG is a federation of national surveying associations which has within its membership some of the knowledge and technical expertise so desperately needed by many countries in their efforts to achieve self sufficiency. It is in everybody's interests that the two organisations work together to meet the common need.

Desired Results

This Round Table workshop has been organised in the hope that the people in attendance, through their discussions, can identify issues and problems common to their countries — issues and problems that FAO and FIG can jointly address. It is then hoped that strategies can be developed whereby FAO and FIG can work together to assist such countries in overcoming their problems. In the words of the Letter of Agreement to delegates by which this meeting came into existence, its purpose is:

- to determine priority needs in land records development, through cadastre and land registration reform needed in the participants countries for effective land development; and
- to determine how coordinated activity of the two organisations can best meet the needs of member states.

Statement of FIG Aims and Functions

The FIG is an international non-governmental organisation accredited to the United Nations that works in three languages (English, French and German), and whose aim is to ensure that the practice of surveying throughout the world meets the needs of the communities which it serves. The FIG wishes to be creative, constructive and productive — not reactive in meeting these needs. Its aims are:

- To group the national associations or organisations of surveyors of all countries with the object of interchanging views on matters of general interest to the profession;
- To organise liaison between the different member associations;
- To make known information on the social conditions prevailing amongst professional surveyors in individual countries so that each may take advantage of the improvements obtained;
- To encourage, subsidise and disseminate the results of professional research and discoveries useful to surveyors in the scientific, technical, legal, economic and social spheres;
- To co-ordinate professional training in accordance with modern methods; and
- To foster good relations with the proper authorities and the exchange of surveying personnel between different countries.

The FIG definition of a surveyor is:

A professional person with the academic qualifications and technical expertise to practice the science of measurement; to assemble and assess land and geographic related information; to use that information for the purpose of planning and implementing the efficient administration of the land, the sea and structures thereon; and to instigate the advancement and development of such practices.

With this definition in mind, the practice of the surveyors profession may involve one or more of the following activities which may occur either on, above or below the surface of the land or the sea and may be carried out in association with other professionals. These activities are:

- The determination of the size and shape of the earth and the measurement of all data needed to define the size, position, shape and contour of any part of the earth's surface;
- The positioning of objects in space and the positioning and monitoring of physical features, structures and engineering works on, above or below the surface of the earth;
- The determination of the position of the boundaries of public or private land, including national and international boundaries, and the registration of those lands with the appropriate authorities;
- The design establishment and administration of land and geographic information systems and the collection, storage, analysis and management of data within those systems;
- The study of the natural and social environment, the measurement of land and marine resources and the use of the data in the planning of development in urban, rural and regional areas;
- The planning, development and redevelopment of property, whether urban or rural and whether land or buildings;
- The assessment of value and the management of property, whether urban or rural and whether land or buildings;
- The planning, measurement and management of construction works, including the estimation costs;
- The production of plans, maps, files, charts and reports.

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

Statement by the FAO

There is now a world-wide revolution in the way people think about the human-land relationship. It is not only taking place in the former Soviet countries, but in indigenous common property systems as well. Formerly quiet and seemingly isolated tribal societies are suddenly demanding some form of cadastre and registration to protect their patrimony and cultural integrity. Indeed, it is a world-wide phenomenon.

The sudden demand for better land records did not come about because of a sudden realisation that a market economy is superior. Rather, the demand for clearer, more secure rights in land is the result of other longer trend processes. There are two other reasons for this demand as well. The first is the steady incorporation of the world into the international consumer economy which is more than youth knowing the names of popular music groups, soft drinks and motor cars. It is also a process of change in the way people see themselves, and their relationships to others and their environment. The other major reason is that other systems have become bankrupt and the plight of the former Soviet economies is in the daily news. Less noted, but equally evident is the fact that the traditional economies of Africa, Asia and Latin America have come to the limits of their adaptability.

It is also evident that those countries that will be able to feed their populations will be those that make the successful transition to new economic forms. History has taught us, however, that this transformation is far too often accompanied by needless suffering and dislocation. Good land records and fair land transactions help reduce the worst effects of land speculation and other practices that lead to unequal land distribution.

However, one cannot simply introduce a system as it exists elsewhere. Attempts to move systems of land records, etc. from USA, Great Britain, France, Germany or Australia have often been failures. For example, even though French-speaking West Africa has had a Torrens-based system of land registration and cadastre on the books since the end of the nineteenth century, at the time of independence only three percent of the land had ever been registered.

One could cite similar results from efforts made under the Alliance for Progress program as well as numerous other initiatives. These imported systems simply did not meet local cultivators needs. Land record systems, like other aspects of the development process, must also be culturally sensitive. This Round Table meeting has been assembled so both FAO & FIG can learn from the experiences of those in the countries of the regions of the world present and participating.

It is like a meeting of early explorers, knowing that a new world exists and needing to chart a course to enter into it.

2. COUNTRY REPORT SUMMARIES

In this session, speakers summarised the situation in their respective countries by each giving a short presentation. Summaries of their reports are contained in this section, while their detailed papers can be obtained from the FIG Bureau office.

Brazil

While Brazil has been working towards establishing a "technical cadastre" for about 25 years, it has been noted that there is a considerable discrepancy between the area of titled land and the corresponding geographic area. As such, it has been suspected that taxes are not being paid on about 30% of titled land. The reasons for this situation are varied, however the problem is not helped by the lack of large scale property maps and in some regions the best scale possible is only 1:250,000. Brazil's key problems in establishing the cadastre are:

- The lack of large scale property mapping;
- The shortage of skilled personnel;
- The absence of a clear cartographic policy at each level of government;
- Difficulty in gaining government recognition of the importance of the project;
- Cadastral map products that often do not meet user's needs;
- The need to educate the community in the benefits of the program and the need to follow the legislation.

If these issues can be overcome, it is felt the benefits will include:

- The international exchange of personnel, leading to a better understanding of the problems in Brazil and the means by which they may be addressed.
- Integration of activities between the government, universities and industry;
- Graduate courses in cadastral studies;
- University extension to bring knowledge and recognition to the government and community;

- Recognition of the need for better planning for activities such as agriculture.
- Investment in cadastral mapping.

Fiji

Fiji has four types of land: freehold, Crown, State and Native land. Two types of land tenure exist, being western and customary tenure. Some 50% of native land is being leased out at present, while a considerable amount of other native land is used for development, giving rise to a shortage of land available for use by the indigenous people. Currently, a national land information system is being developed, but several problems are foreseen with respect to how the cultural aspects of customary tenure are to be dealt with in the system. These are:

- Developers are often not aware of the location of sacred land, with the potential for conflict with local communities;
- Certain information about the land holdings of tribal chiefs is not meant to be divulged to the public;
- There is concern with the costs of granting leases to native land, with the result that "underground" or unofficial leasing agreements are common;
- There is a fear that introduction of a cadastral system which has public access may see sacred lands damaged, and also result in the loss of power which currently vests in tribal elders by virtue of their inherent knowledge of land matters and entitlements.
- The current form of customary tenure has changed greatly over the past 100 years, and does not truly reflect the original practices prior to the colonial administration of last century.

Indonesia

Indonesia is now in the second 5-year stage of a long-term plan to reform land administration throughout the country. The project will cost about US\$100 million and will see approximately 78 million land parcels registered in the titling system. Prior to this program, the problems facing Indonesia included:

- Only about 25% of land parcels were registered;
- Exorbitant prices for scarce urban land with facilities available;
- Inefficient land markets due to uncertainty of ownership arising from the use of unwritten land transactions;
- Boundary demarcation problems for both state and customary land;
- The lack of adequate cadastral map and geodetic control;
- The lack of registered land in rural areas to be used as collateral by farmers.

Several benefits will arise from the project, such as:

- Simpler, cheaper and quicker land registration procedures;
- Increased role of the private sector;
- New regulations supporting a systematic approach to land titling and registration;
- Increased political awareness of the importance of land registration;
- Sound land administration as the basis for social, economic and cultural development.

The National Land Agency, as the responsible agency for the reforms, was created as a separate Ministry in 1993.

Latvia

The land reform necessary to re-establish private land ownership commenced in Latvia in 1990. By 1993, the first stage of the project had been completed with the allocation of land use rights. The second stage is now underway, and a 5 year program will see the introduction of a computer-based land registration system. To date, some 52,000 properties (with an average area of 10 ha) have been entered into a preliminary land register. The cadastral system is based on the German method of land books, and will be administered by the Ministry of Justice through 34 regional offices. While there were no licensed land surveyors under the previous regime, already some 50 surveyors have been trained. The main problems facing Latvia in cadastral reform are:

- Incomplete cadastral and data security and privacy legislation;
- Insufficient skilled personnel in the regional offices;

- Poor data communication between both regional offices and city-based government departments;
- Lack of trust by the community in the computer system;
- Lack of finance to acquire software and hardware;
- The absence of legislation to enable mortgages to occur.

Lithuania

Following the re-establishment of independence in 1991, the Republic of Lithuania faces a critical challenge to develop and strengthen its economy. As such, its policy of land and property privatisation forms a key component in the reform program, and it is essential that an appropriate system of land registration be established to enable the creation of a land market. This task is the responsibility of the Ministry of Agriculture and the Department of Land Management, with the intention being to restore the cadastre to its status at the time of the 1948 confiscation of land and setting up of collective farms. The government wants to restore land to the original owners in the next 5-7 years, and the cadastral project has the short-term goal of restoring property to owners; a medium-term goal of ensuring security of title; and a long-term goal of enabling effective land management practices. The land register is distributed amongst 11 cities and 44 district centres, and the intention is to privatise about 80% of the country with the remaining 20% staying as public land. As at February 1994, about 105,000 land owners have been recorded in the land register. The key problems faced in Lithuania are:

- The lack of a complete legislative framework for land transactions;
- Difficulty in ensuring consistent data quality and staff skills throughout the 55 locations;
- The volume of land parcels to be privatised (2.5 million);
- The backlog occurring in data entry due to a lack of software and hardware;
- An incomplete geodetic network and mapping program.

Nigeria

Prior to 1978, there were two land tenure systems in Nigeria broadly affecting the southern and northern states respectively. The system in the southern parts of the country saw land owned by communities, villages and families, whereby the head of the group had absolute control of the land. Family members could be assigned use of the land without tributes paid to the head of the family or community. Delimitation of boundaries was not given serious consideration and the general boundary approach of referring to hedges, trees and prominent features was adopted. However, with urban settlement and development, stricter procedures were required to define boundaries. Interests in land were registered by state and federal government under a deeds-based system, and while there was no guarantee of ownership consideration was given to priority of registration.

In Northern Nigeria the land tenure system was such that rural lands were owned by the Local Native Authority while urban lands were owned by State Governments. Land transactions were normally with one of the government bodies, and land holdings were usually leaseholds for specified periods. This centrally-controlled system provided for simpler transactions and less incidence of problems associated with overlap and encroachment — resulting in minimal litigation.

The Land Use Act 1978 was based on the northern Nigerian land tenure system and represents perhaps the most revolutionary land reform in Nigeria in recent times. All lands vest in the territory of each state, which are empowered to hold the land in trust for the people. The Governor is responsible for the allocation of all land.

Advantages of the Land Reforms

- Governments can acquire land cheaply for development and public purposes;
- A single national land tenure system will reduce costly litigation in the southern states;
- Valid and reliable titles to land will be created;
- Land speculation in urban centres will be reduced;
- Rights in land are more freely transferable between persons.

Problems that Need to be Addressed

- Lack of up to date mapping;
- No inventories of land use;
- Urban migration is placing additional pressures upon the demand for land;
- Sporadic and uncontrolled land development;
- Most Nigerians are still unable to afford land;
- Wealthier members of the community have already obtained large tracts of land;
- Significant delays in processing certificates of occupancy;
- People who originally had titles to their land may now have an instrument which is inferior to their original holding;
- The title recording system is localised and fragmented;
- Lack of cooperation between those who collect data and those who use it;

Peru

Peru has a critical need for effective cadastral, land registration and land management systems. There is a need for up to date mapping at a variety of large scales, and for a comprehensive land data system. The cadastre will be used for multiple purposes and not just for reform of land titling and taxation. There will be private enterprise involvement in the project and increased levels of staff training in cadastral activities. Already, there has been progress in developing the system, with municipalities required to commit 5% of their tax income to help fund the urban program, however there are still several pressing problems:

- An urban cadastral co-ordinating and policy making body at the national level;
- National cadastral legislation and regulations;
- A cadastral information system;
- Internal and external funding for the urban cadastre;
- International technical co-operation for staff training and execution of the cadastre.

Poland

The land cadastre in Poland is an official register of land and buildings prepared mainly for taxation purposes. It contains information about land owners, area, soils and incomes. There are two cadastral systems in use, one based on the former Prussian cadastre and the other on the Austrian cadastre. Cadastral mapping has been underway for many years, but several problems still exist which prevent effective implementation of a national system. These are:

- The political, social, environmental and economic will to improve the cadastre;
- A new approach to land ownership, with the emphasis being upon privatisation;
- The difficulty of deciding what it is that should be registered. Should it be the parcel, boundaries, owners or land use ?
- Determining the best technological choices.
- How can information be best presented about land to users ?
- A need to integrate the cadastre with other systems to satisfy other needs, for example, planning.

Zimbabwe

The current system of land registration in Zimbabwe is by way of registration of title deeds. The State guarantees title and administers the system, but it is time consuming, expensive and complex. A Land Tenure Commission is now operating to investigate appropriate means of cadastral reform. Zimbabwe has three means of land tenure: customary title; State title; and freehold title; and the imbalance in land ownership is reflected in the fact that 42% of the agricultural land is owned by just 5% of the population. The major problems experienced in Zimbabwe are:

- The need for consolidation of the 21 statutes affecting land registration, coupled with the complexity of the existing Roman-Dutch system;
- Difficulty in co-ordinating the activities of the four government departments tasked with land development, delivery and conveyancing;

- The systems are expensive, complicated and slow, with many parties being involved, and it cannot be expanded to handle communal areas;
- Existing surveying and registration technologies are old;
- The Roman-Dutch system does not serve the entire population.

To help overcome these problems, it is considered that Zimbabwe needs:

- A complete multi-purpose cadastre for the country;
- A single system capable of covering all tenures;
- Land adjudication processes;
- Registration and protection of rights;
- Finance and new technology;
- Institutional change, such as re-organisation of the government ministries dealing with land;
- Introduction of minimum and maximum land parcel sizes to ensure equitable holdings;
- Communal land re-organisation for more planned settlement;

3. KEY PROBLEMS AND ISSUES

In considering the key problems and issues affecting the development of effective land records systems, the question was first posed as to whether these systems are indeed needed in the first place. While it was generally agreed that these systems are essential, it was noted that the primary requirement is for the creation of sustainable development which deals with improving peoples quality of life. To achieve this aim, land records systems are needed in order to provide social justice, enhanced productivity, for economic reasons (for example, taxes), and for political purposes. Thus, land records systems are viewed as a means towards an end. Several key problems and issues were identified as serious impediments to cadastral reform. These are:

- The need for land policies at the national level;
- The need to determine the type of land tenure to be defined by the land title;

- The need to develop the necessary legislative frameworks;
- The need to ensure that related projects are coordinated with each other and not performed in isolation;
- The requirement to identify the problems and objectives to be met in defining a solution;
- The need to consider the economics of different solutions;
- Determining the needs at the local level to meet user requirements;
- The requirement to communicate the benefits of new systems to the population;
- The need for mapping and inventories to be established as part of land records systems;
- The need for appropriate uses and forms of new technology;
- The need to establish appropriate processes, systems and institutional arrangements;
- The need to define the roles of the academic, private and public sectors of the community in land records systems;
- The need for education and training programs;
- The requirement for standards to be developed to support the system;
- The need to consider community land rights to ensure social justice;
- The need to consider what types of valuation systems are required for the system.

4. SOLUTIONS TO PROBLEMS AND ISSUES

There are several ways in which FAO and FIG can assist member associations and countries to solve their problems associated with cadastral reform.

These include:

- Setting up FAO/FIG round table workshops in host countries to specifically examine their problems, or those of a group of neighbouring countries;
- Running conferences and seminars in host countries, with the option of giving executive briefings to key government personnel;

- Provision of advice by experts on land records and cadastre, diagnostic assistance and missions to assist in cadastral development;
- Exchanging personnel for education and training purposes;
- Assistance in ensuring that FIG and FAO recommendations and resolutions reach senior politicians and public servants.
- Assistance in identifying and choosing suitable consultants;
- Assistance in choosing appropriate technology, and co-ordination of technology introduction by foreign companies especially in cases where local standards are likely to be overridden;
- Assistance in establishing land use and land rights inventories;
- Advice to farmers as to what agricultural benefits they could obtain through the introduction of cadastral and land management programs;
- Provision of short reports documenting examples of both good and bad projects (using the O.I.C.R.F. resources);

Ways in Which FIG Can Assist

In some of the examples listed above, the FAO is clearly best suited to directly assisting a country with a problem, but in cases where FIG expertise is required, it is envisaged that the nine FIG Commissions could assist in the following areas:

Commission 1

Professional Standards & Practice. Role of the private sector, development of business plans, marketing practices, ethics, and professional standards for consultants.

Commission 2

Professional Education. Communication skills, human resource development, continuing professional development, man-management training.

Commission 3

Land Information Systems. Appropriate technology, impact of technology, data transfer and standards.

Commission 4

Hydrography. Marine resource management and measurement.

Commission 5

Positioning and Measurement. Technology and mapping.

Commission 6

Engineering Surveys. Mineral surveying and rights.

Commission 7

Cadastral and Land Management. Cadastral reform, cadastral and land registration systems, land titling, land management and administration, education and training.

Commission 8

Spatial Planning and Development. Activities in conjunction with Commission 7.

Commission 9

Valuation and the Management of Real Estate. Activities in conjunction with Commission 7.

CONCLUSION

After the completion of the Round Table, it was agreed between FAO and FIG officers that the proceedings of the day would be published in a joint FAO/FIG publication.

Outcomes for FIG

For its part, FIG undertakes to consider the various problems and issues that were identified as being of importance and the suggested ways in which FIG can assist in dealing constructively with them. In doing so, it will concentrate on the following actions:

- Provide a copy of the final report to each FIG member association
- Provide a copy of the final report to each of the nine FIG Commissions and request them to consider how they can include relevant actions in their Work Plans,

- Continue to host workshops and seminars on identified topics in developing countries, either as an FIG initiative or by cooperating with other organisations,
- Finalise its proposed 'Statement on the Cadastre', being prepared by Commission 7,
- Seek to cooperate with an appropriate UN agency to develop a 'cadastral toolbox', comprising optional components of a cadastre designed to assist countries where cadastral reform is an underlying need.
- Develop a series of case studies of both successful and not so successful cadastral systems which will assist in the sharing of experiences.
- Ensure that the extensive material available through FIG's International Office of Cadastre and Land Records (OICRF) is made available to the widest possible range of users in the most effective manner,
- Assist FAO, when asked, in the identification of suitable consultants for work on relevant projects,
- Encourage the exchange of surveying personnel between countries,
- Provide information to all member associations and correspondents on matters relating to the cadastre and land management issues,
- Encourage the formation of associations of surveyors in countries where they do not already exist and seek to build them into the FIG worldwide network,
- Promote the concept of sustainable development as contained in the relevant sections of Agenda 21 from UNCED and the part that surveyors must play in it.
- Seek to work constructively with FAO to assist it in meeting its objectives.

Outcomes for FAO

For its part, FAO will cooperate with FIG to the greatest extent possible and, as appropriate, use the resources available to it through FIG when dealing with a country or countries where cadastral reform and other relevant land management and land administration issues are of importance in addressing the needs identified by and in that country.

Within the constraints provided by its charter, the money available to it and its modus operandi, FAO will support FIG initiatives where these can contribute to the resolution of the identified needs within a single country or within a region.

ANNEX 1

FAO/FIG Round Table Program

Melbourne, Australia, Commencing 9am Friday 4 March 1994

Corryong Room, World Congress Centre

Attendance from delegates from FAO, FIG and the regions of Africa, Asia, Latin America and Central Europe.

Chairman - Professor Peter Dale, Vice President of FIG

Welcome - Mr. Earl James, President of FIG

Opening Statement from FIG on its aims and functions. (Prof. P. Dale)

Opening Statement by FAO on its charter, aims and objectives.
(Dr. J. Riddell)

Each country delegate to give a short summary of the current position in their country in cadastre and land titling/land management and their country's needs. Chairman of this session Dr. R.Holmes.

Workshop session to identify the most urgent needs to be addressed.

Workshop session to develop a strategy for dealing with each issue, both in terms of FAO's charter and FIG's objectives and capabilities.

Closing session to summarise conclusions and outcomes. (Prof. P. Dale)

After the conclusion of proceedings at 6.15pm, the Australian Intergovernmental Committee on Surveying and Mapping (ICSM) hosted a reception for all delegates.

ANNEX 2

List of Participants

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Australia

Professor Peter Dale
Vice President, FIG
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Mr Peter Byrne
Vice President, FIG
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Vice President, FIG
Finland

Mr Grahame Lindsay
Secretary General, FIG
Australia

Dr Ray Holmes
XX FIG Congress Director
Australia

Mr John Curdie
Treasurer, FIG
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University of Parana, Brazil

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Licensed Land Surveyor
Fiji

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Ministry of Agriculture
Vilnius, Lithuania

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Federal Ministry of Works and Housing
Lagos, Nigeria

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