

# United Nations-FIG Bathurst Declaration on Land Administration for Sustainable Development: Development and Impact

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## Abstract

The joint United Nations-FIG Bathurst Declaration on Land Administration for Sustainable Development was prepared at an International Workshop on Cadastral Infrastructures for Sustainable Development organized jointly by the FIG and the United Nations in Bathurst, New South Wales, Australia, on 18-22 October 1999. The Declaration was presented formally together with position papers prepared as background for the Workshop at an International Conference in Melbourne, Australia, on 25-27 October 1999. The Workshop and Conference, together with the resulting Declaration, were part of the Work Plan of Commission 7 (Cadastre and Land Management) and were three years in the planning.

The paper will review the activities leading up to the Workshop, Conference and development of the Declaration, and will discuss the impact of the Declaration.

Following on from the Workshop and Conference, presentations were made at various United Nations conferences as well as the FIG General Assembly. In addition there have been numerous workshops and conference spawned by the Declaration. The paper will also look to the future to consider how the Bathurst Declaration can be built upon to the benefit of all countries as well as professional surveyors. Importantly the paper will discuss the impact of the overriding outcome from this initiative in that it has stated a clear relationship between land administration and sustainable development.

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## 1. BACKGROUND.

Why was there the need for a Workshop addressing Land Administration for Sustainable Development and what were the factors leading up to the Workshop?

Land, and the interaction of human societies with it, has resulted in many economic, social, political and environmental outcomes and concerns. The dialogue between these competing and overlapping factors requires a land administration system that is able to support the ever changing relationship between humankind and land, to facilitate complex decision making and to support the implementation of those decisions. Therefore, appropriate and effective land administration is of crucial importance for sustainable development.

Current land administration systems are the product of the 19<sup>th</sup> century paradigms of land markets and have failed to properly support sustainable development. This failure is evident world-wide by the ever increasing pressure on water allocation and development rights, to high levels of poverty, restricted access to land, lack of security of tenure and continued environmental degradation. The need for urgent reform is accepted, but the way forward has been unclear. Initiatives to develop a clearer perception and identify the relevance of land administration to sustainable development have been explored and have included efforts by the International Federation of Surveyors (FIG), one of the key international supporting bodies of the Workshop, which has been concerned about land administration issues since its establishment in the 19<sup>th</sup> Century. Recent FIG developments include the Statement on the Cadastre 1995 ("the Statement") which set out the meaning and significance of cadastre. While the Statement recognised the breadth of cadastral systems and their important role in land administration systems, it is technical and descriptive and focuses primarily on land registration and cadastral surveying and mapping.

World opinion on aspects of sustainable development, as represented by the UN Global Summits and Declarations, has recognised the importance of land administration to support sustainable development, but has provided few practical implementation strategies. This *ad hoc* approach has resulted in a certain amount of rhetoric in developing land administration systems to accommodate sustainable development objectives. However, whilst governments have proved willing to reform land administration systems for sustainable objectives there are, or have been, no clear directions or models to adopt. In simple terms, a new land administration paradigm is required if sustainable development is to rise above mere rhetoric.

Fortunately, there has been a growing awareness of these issues and, as a result, world attitudes are changing. Nations are now generally more conscious of the fact that the actions of individuals can have global consequences. This awareness has arisen as a result of the greater availability of information. This in turn has re-ignited the debate about how land can best be administered for the good, not only of individual landowners and users, but also for the community as a whole. The

imperative to re-examine land administration systems in the context of sustainable development is now overwhelming.

The world's nations have committed themselves to a global agenda addressing a range of matters pertaining to sustainable development and these include many of the concerns outlined earlier. These and other problems have been addressed through major international conferences such as the Conference on Environment and Development held in Rio de Janeiro in 1992. Agenda 21, an outcome of that Conference, has been re-affirmed in the subsequent international fora such as the Social Conference in Copenhagen, the Population Conference in Cairo, the Women's Conference in Beijing, the HABITAT II Conference held in Istanbul in 1995 that resulted in the Habitat Agenda, and the World Food Summit in Rome in 1996 resulting in the Food for All Campaign.

In order to review the contribution of land administration and land tenure to these international issues, the UN and the FIG agreed to cooperate on a number of initiatives. As a result of a resolution at the United Nations Regional Cartographic Conference for Asia and the Pacific in Beijing in 1994, a joint UN-FIG meeting of experts on cadastral reform was held in Bogor, Indonesia in 1996. The resultant 1996 Bogor Declaration on Cadastral Reform widened the focus to concentrate on cadastral issues and land markets and recognised that although each country has different needs and is at a different state in the development of the relationship between its people and their land, there is much benefit in exchanging ideas and experiences. By examining solutions in other countries one can achieve a better understanding of the problems in one's own region.

Arising from the *Bogor Declaration*, a resolution was passed at the 14th United Nations Regional Cartographic Conference for Asia and the Pacific, held in Bangkok in 1997. It urged the United Nations, in collaboration with the International Federation of Surveyors (FIG), to hold a Global Workshop on Land Tenure and Cadastral Infrastructures in support of Sustainable Development ("the Bathurst Workshop"). The proposed workshop was also referred to in Resolutions of the United Nations Regional Cartographic Conference for the Americas held in New York in 1997.

These Resolutions were given life from energies within the FIG, in particular Commission 7, and resulted in the Workshop on Land Tenure and Cadastral Infrastructures for Sustainable Development being held in Bathurst, Australia from 18-22 October 1999. It was followed by an open International Conference in Melbourne at which the *Bathurst Declaration* was presented. The United Nations Department for Economic and Social Affairs together with the FIG participated in both events. These joint United Nations - International Federation of Surveyors International Workshop and Conference were planned to clarify the relationship between land administration and sustainable development.

## **2. THE "BATHURST WORKSHOP".**

The Bathurst Workshop was an invitation only event drawing together 40 world experts from 25 developed and developing countries, representing all continents, with expertise in various areas including: surveying, law, economics, valuing, anthropology, geography, planning, information technology, government administration, academia, and the private sector. These included experts from six UN agencies and the World Bank. The objective was to develop the Declaration through a series of workshops and plenary sessions. Firstly, they addressed the changing relationship of humankind to land. The Workshop then considered the relationship of land with sustainable development, and the consequent relationship of land tenure to land administration. The changing nature of land and its critical role in sustainable development was confirmed by a strong recognition of the inter-dependency of land, water and food. As background for discussion, 25 position papers were commissioned from these experts and were circulated in adequate time for consideration before the Workshop.

After considering the changing nature of humankind to land, the Workshop then explored the relationship between land markets, land registration, spatial planning and valuation. Recognising that new land administration and cadastral arrangements would be required in the future to support these changes, the Workshop investigated the re-engineering of land administration systems and concluded with a discussion of recommendations and an implementation strategy.

Several topics were identified for discussion in working groups at the Bathurst Workshop which reflect the issues considered significant for future land administration systems and sustainable development. They were:

- The Dynamic Humankind-Land Relationship
- The Role of Land in Sustainable Development
- Food, Water and Land
- Land Tenure and Land Administration
- The Interface between Markets, Land Registration, Spatial Planning and Valuation
- Re-engineering Land Administration Systems

The following brief record of the discussion from the Workshop should be read in conjunction with the position papers in order to appreciate and understand the development of the Declaration and the Recommendations. This rational and comprehensive approach should assuage some recent minor criticism of the Workshop outcomes which were taken out of context. This criticism coming, as it did, from a most specific quarter, demonstrated the limitations of any one discipline in grappling with the complex issue of land administration and accordingly does more to confirm than refute the workshop findings.

The current, narrow focus of many land administration systems is insufficient to meet the challenges posed. To ensure that land administration and management decisions are made in an informed way and consistent with sustainable development, land

information systems must integrate a wider range of data, information and knowledge. Continued development and change in public land related systems will be progressively more populated with data sets that arise from public pressure, rather than the fiscal imperatives which exploit existing government repositories. Considerable informed debate would determine whether these new data sets (eg road traffic, pollution levels and cultural rights) should be recorded in a cadastre or integrated with the cadastre using appropriate information technologies.

This begs the question of how to ensure the decentralisation and de-concentrations of information, systems and resources. In response to these dynamic changes there will be differing roles for individuals, government bodies and agencies at all levels as well as governmental systems. On the one hand, governments will have to take on the role of an “umpire” in resolving competing land, water and natural resource use demands. On the other hand, public participation in the debate on land and natural resource access and allocation is vital in resolving such important issues in a democratic manner. This process should be the basis for the policies that set the rules for the umpire and players.

In this sense, governmental information systems will have to continue their present trend to become increasingly open and public – to the point that they emerge as the societal knowledge bank upon which public decisions are made. It will be important that these systems, though public and open, are community based and implemented. They must become participatory from the highest level of government to the closest-knit community level. This will be an imperative because of the complexity of decision making required. Local foci will re-emerge so systems can be implemented locally. Imposed or centrally generated policies which are irrelevant at the local level will be ignored. Experience has shown that once real needs are understood, and this consultative process can be lengthy, communities can adopt sustainable resource management faster and more efficiently than governments can bring it about through force and regulation. Notwithstanding the fact that local groups can be a vital force in achieving sustainable development, as was noted above, governments have an important role as “umpire”, moderator, and a purveyor of constitutionally and legislatively ensured process as well as vital corporate knowledge. By using the information available to them, governments need to anticipate economic, social, environmental, demographic and other trends and regulate land use in coordinated ways that support security of tenure and sustainable development.

The assembled experts noted that the challenge to this ideal democratic model is the risk that nothing may happen due to the participatory and often circular nature of the democratic process. Instead of results it can lead to endless cycles of discussion with no substantive decisions being made. These public decisions impact on private lives and people’s dealings and uses of land and hence encourage delaying tactics. Arising out of the discussion on this vision of social process is the conclusion that the search for a sustainable use of resources may be neither so obvious nor so easily realised.

The discussion finished on the observation that current land information and land administration systems need to be re-engineered or must continually evolve to cope with the increasing complexity of the humankind-land relationship. This will be a necessary, but not sufficient, factor in promoting sustainable development.

The principal findings resulting from the discussions and which led to the recommendations in the *Bathurst Declaration* are summarised as follows:

Any action agenda will first need to address the **policy issues** associated with building and sustaining effective land administration. Core principles must be articulated that promote equal access to property for all people while respecting the sensitivity to local needs and requirements. Policies must be formulated to ensure that the processes for formalising and subsequently transferring property rights are as simple and efficient as possible. From the outset, the policy agenda must ensure that there is a balanced and integrated approach to addressing the requirements of both urban and rural society, to dealing both with land and other resources (including water, forests and soils). Every effort should be made to encourage the full and active participation of local communities in formulating and implementing the policy agenda.

Of special importance will be the need to construct **land administration institutions** that effectively address the constantly evolving requirements of the community. Land administration institutions, in this context, mean the “rules of the game”. These include the laws and regulations necessary for creating property rights (and the associated restrictions and requirements imposed by the state or the community), for registering and subsequently transferring them, for resolving disputes, for taxation purposes, and the equitable resumption of these rights. They must be responsive to local requirements and conditions, and be capable of evolving over time to deal with different needs and priorities. As well, these institutions must be open and transparent.

These ambitious goals will not be achieved unless there is a commitment to designing and implementing effective **land administration infrastructures**. These may be described as the organisations, standards, processes, information and dissemination systems and technologies required to support the allocation, transfer, dealing and use of land. One of the major challenges will be to build an infrastructure that is sufficiently robust to, amongst other things, effectively support the goal of enhancing security and access to credit, while at the same time being sufficiently simple and efficient so as to promote and sustain widespread participation. The processes for formalising property rights will necessarily involve significant community participation whilst the subsequent registration and transfer process will have to be capable of an evolving response to changing community requirements. Information technology will play an increasingly important role both in constructing the necessary infrastructure and in providing effective citizen access to information. Finally, there must be total commitment to the maintenance and upgrading of the land administration infrastructure.

From the discussions which took place in each of the working sessions and the findings mentioned above, 20 recommendations were made – the full text is available in the FIG Declaration Booklet and a list is provided as Appendix A to this paper. The main principles of the recommendations can be summarised as:

- confirming the imperative for land administration to play a role in facilitating and supporting the complex decision making that is integral to sustainable development;
- recognising the necessity for land administration to evolve beyond traditional cadastral paradigms to embrace fresh understanding of the relationship between land, property and rights and the need for initiatives like decision-support systems, spatial data infrastructures etc;
- acknowledging the imperative to respond creatively to differing needs and desires for tenure systems that could deliver equity, whether to specific groups of disadvantage within or between nations;
- embracing the inter-relationship between good governance, civil society and land administration for sustainable development, and the need for accountability and benchmarking/performance indicators;
- re-iterating the need for legal, institutional and technological reforms to fulfil the call for inclusive decision-making and a holistic approach to land, water and other resource allocation/preservation issues;
- urging the importance of an inter-disciplinary approach to land administration and therefore the responsibility of nations to address the need for appropriate human resource development.

This process resulted in the *Bathurst Declaration* that built upon, updated and broadened the previous *Bogor Declaration*.

### **3.THE IMPACT OF THE WORKSHOP.**

In purely information distribution terms, major presentations on the Bathurst Declaration and its recommendations for action were made in 2000 to the UN's Regional Cartographic Conference for Asia and the Pacific in Malaysia, at the UN's Commission for Sustainable Development (UNCSD8) in New York, to the General Assembly of the FIG in Prague and in early 2001 to the 7<sup>th</sup> Regional Cartographic Conference of the Americas in New York.

Also, within weeks of the launch of the Declaration in Melbourne, it had been widely circulated in many countries and a number of key United Nations agencies had started to act on its recommendations. There has been wide circulation through the FIG Booklet and many members of Commission 7 and other Commission colleagues have made presentations in their regional and local areas. The Declaration has also been translated into a number of languages including Spanish and Finnish.

The group which contributed to the Workshop is aware that the result of the Bathurst Declaration is a start only, albeit an important one, on the road to understanding the relevance of land administration in the path to sustainable development. It is at least an ideas list which can assist in the creation of the infrastructures and the institutions necessary to meet and serve the policy issues relevant to each society, recognising these issues are contentious, debatable and politically sensitive.

Societies around the world continue to march into a future that is dogged by changes and pressures reflecting the complexity of challenges on economic, social, political and environmental fronts. The current global drivers of environmental crises, rapid urbanization, radical economic reforms and the information technology revolution, add to the kaleidoscope of forces that both assist and obstruct the process of understanding and overcoming the challenge of sustainable development.

Importantly however, from a professional perspective, The Bathurst Declaration has confirmed the powerful link between appropriate land administration and sustainable development. In doing so, it has further confirmed the gradual evolution of land administration from its cadastral, market focus to an additional facilitative role for multi-purpose spatial information infrastructures that better address the complex demands for sustainable decision-making over development of land and related resources.

Throughout the workshop discussions, it was agreed that the most significant influences on the development of land administration systems is the dynamic humankind-land relationship and existing global and local drivers such as sustainable development, urbanization, globalization, economic reform and the information revolution, all of which demand land administration responses and are forcing a new land administration vision or paradigm. Perhaps the conclusion of the Workshop can be summarized in simple terms:

***A new land administration paradigm is required if sustainable development is to rise above mere rhetoric.***

Finally, the momentum of the thinking and commitment of the Bathurst Workshop's experts will lead to lasting progress only if governments, civil societies and a spectrum of professions work together to capitalise on and maintain the momentum from the Declaration with creative thinking and systematic action.

## **Appendix A**

### **RECOMMENDATIONS**

Given that more than half the people in most developing countries currently do not have access to secure property rights in land and given the concerns about the sustainability of development around the globe and the growing urban crisis, the Bathurst Workshop ***recommends*** a global commitment to:



1. **Providing** effective legal security of tenure and access to property for all men and women, including indigenous peoples, those living in poverty and other disadvantaged groups;
2. **Promoting** the land administration reforms essential for sustainable development and facilitating full and equal access for men and women to land-related economic opportunities, such as credit and natural resources;
3. **Investing** in the necessary land administration infrastructure and in the dissemination of land information required to achieve these reforms;
4. **Halving** the number of people around the world who do not have effective access to secure property rights in land by the Year 2010.

The Workshop in confirming the *Bogor Declaration*, extending the professional debate on desirable land administration and recognising that the community of nations have committed themselves to the various United Nations Global Plans of Action arising out of the UN Summits over the last decade, recommends the following:

5. **Encourage** nations, international organisations, Non-Government Organisations (NGO)s, policy makers, administrators and other interested parties to adopt and promote the *Bathurst Declaration* in support of sustainable development.
6. **Encourage** all those involved in land administration to recognise the relationships and inter-dependence between different aspects of land and property. In particular there is need for functional cooperation and coordination between surveying and mapping, the cadastre, valuation, physical planning, land reform, land consolidation and land registration institutions.
7. **Encourage** the flow of information relating to land and property between different government agencies and between these agencies and the public. Whilst access to data, its collection, custody and updating should be facilitated at a local level, the overall land information infrastructure should be recognised as belonging to a national uniform service to promote sharing within and between nations.
8. **Improve** security of tenure, access to land and to land administration systems through policy, institutional reforms and appropriate tools with special attention paid to gender, indigenous populations, the poor and other disadvantaged groups. In many nations, this will entail particular efforts in areas under customary or informal tenure and in urban areas where population growth is fast and deficiencies are most prevalent.

9. **Recognise** that good land administration can be achieved incrementally using relatively simple, inexpensive, user-driven systems that deliver what is most needed for sustainable development.
10. **Recognise** that the unacceptable rise in the incidents of violent dispute over property rights can be reduced through good land tenure institutions that are founded on quality land information data. Good land information underpins good governance. Where conflict arises, there must be inexpensive land dispute resolution mechanisms in place that are readily accessible to all parties concerned.
11. **Encourage** national and local government bodies to document and manage their own land and property assets.
12. **Recognise** that land markets operate within a range of land tenures of which freehold is but one. It is important to facilitate the efficient operation of land markets through appropriate regulatory frameworks that address environmental and social concerns.
13. In order to increase knowledge of the global situation of land administration and land tenure, the United Nations **undertake** a study of global land administration issues such as the range of tenure issues, gender, urban agglomeration, land disputes, problems and indicators with a view to producing a global atlas and related documentation. Much of the needed data are already available in different UN databases.
14. Recognising the difficulties in interpretation of the many land administration related terms, **develop** a readily accessible thesaurus, translated into appropriate languages, to facilitate a better understanding of the terminology used. Further, on the basis of selected criteria, use this to *prepare* examples of best practice in the field of land administration. This can be done using work already completed by FIG and FAO.
15. In view of the crucial importance of human resources in the management of land, **ensure** that there is sustained education and training in land administration. In particular, international agencies should seek to develop multi-disciplinary, multi-national training courses in land administration and make these available at the local level through the use of modern information technology.
16. International and national agencies, NGOs and other interested parties **to arrange** workshops and conduct studies with regard to such matters as the quality of access to land and information, gender issues, customary law and indigenous rights, land tenure systems, interaction between land and water rights, maritime cadastres, and the management of land administration systems.

17. In order to *coordinate* foreign assistance, countries seeking help should play a more active role in the coordination of aid and prepare a country profile analysis, describing the status of land administration and the need for improvements. Based on this the countries should then prepare a master plan to which all land administration, initiatives and projects should adhere.
18. In order to ensure sustainable development of territorial oceans claimed under UNCLOS (United Nations Convention on the Law of the Sea), the United Nations *emphasise* the need for claimant countries to develop their capability to support effective marine resource administration through the national spatial data infrastructure.
19. *Undertake* analyses and *develop* performance indicators that can monitor the effectiveness of land administration and land tenure systems in relation to sustainable development and poverty alleviation.
20. That the Workshop and FIG strongly *support* the “Global Campaign for Secure Tenure” undertaken within the implementation of the Habitat Agenda, presently launched by the UNCHS (Habitat), and *commit* to promoting activities in terms of this campaign in future FIG programs.

## REFERENCES

Information and references on the Bathurst and Bogor Declarations can be accessed through the FIG www site at [www.fig.net](http://www.fig.net) (and more particularly through the Commission 7 www site accessed through the FIG www site) or through the personal www site <http://www.geom.unimelb.edu.au/people/ipw.html>

## BIOGRAPHICAL NOTES

### Professor Ian Williamson

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Ian Williamson is Professor of Surveying and Land Information, Head of the Department of Geomatics and Director, Centre for Spatial Data Infrastructures and Land Administration at the University of Melbourne. His teaching and research is concerned with designing, building and managing land administration, cadastral, and land and geographic information systems in both developed and developing countries. He is a Licensed Land Surveyor and Chartered Professional Engineer.

He has undertaken research and consultancies worldwide including for several Australian governments, AusAID, the United Nations and the World Bank. He was Chairperson of Commission 7 (Cadastre and Land Management) of the International

Federation of Surveyors 1994-98, and is currently Director, FIG/UN Liaison 1998-2000. he is an Honorary Member of the FIG. At the University of Melbourne he has been President of the Academic Board and Pro-Vice-Chancellor. He is currently Chairperson of the Victorian Government's Geospatial Information Reference Group and Chairperson of Working Group 3 (Cadastre) of the United Nations sponsored Permanent Committee for GIS Infrastructure for Asia and the Pacific (2001-2004).

### **Professor Don Grant**

AM, RFD, MEnvSt *Adel*, Hon.DAppSc *CSturt*, Hon.DSc *UNSW*, FISAust, FIEAust, CPEng, FRICS, Chartered Surveyor (UK), FAICD Dip.

Professor Grant was the Surveyor-General of New South Wales, chief executive officer of the Surveyor-Generals Department (formerly the Land Information Centre), President of the Board of Surveyors and Chairman of the Geographical Names Board for the past fourteen years. He is a Registered Surveyor and holds a Masters of Environmental Studies. In 1993 he was made a Professorial Associate in the Faculty of Science and Agriculture at Charles Sturt University and in May 1997 was made a Doctor of Applied Science, *honoris causa* at Charles Sturt University and a Doctor of Science, *honoris causa* at the University of New South Wales. Recently he was made a Professorial Associate in the Department of Geomatics at Melbourne University; and an Adjunct Professor in the Department of Linguistics at Macquarie University.

He was appointed as a Member of the Order of Australia in the 1994 Queen's Honours List. In 1998 Don was awarded the Mapping Sciences Institute, Australia, Gold Medal and the AURISA Eminent Individual Award. Don is a Fellow of the Institution of Surveyors, Australia, a Fellow of the Royal Institution of Chartered Surveyors, United Kingdom, a Fellow of the Institution of Engineers Australia and a Fellow of the Australian Institute of Company Directors. He was also the Australian representative of Commission VII of the International Federation of Surveyors.

He has worked in most States of Australia, in the public and private sectors and the defence forces, serving in Australia and abroad. He has consulted or advised in the Sultanate of Brunei, the Maritime Provinces of Canada, Greece, Sri Lanka, Hong Kong, Indonesia, Thailand, Malaysia, Zimbabwe, Pakistan and the Peoples Republic of China. As an Electoral Boundaries Commissioner he has been involved in both State and Federal Redistributions Through his role as Chairman of the Public Sector Mapping Agencies (PSMA), he has joined with all other jurisdictions in Australia to meet the national census mapping needs of the Australian Bureau of Statistics - a precursor to the creation of a National Spatial Data Infrastructure. He is currently the Chief Technical Adviser to the Hellenic Cadastre.



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