
SECTION VI MPLIS PROJECT DESIGN

General agreement exists in both the public and private sectors that a major reform of the Guyanese land registry is needed. Interested groups holding this view include the Registry of Deeds, the Ministry of Agriculture and various external funding sources such as USAID.

There is also considerable interest by these groups in improving the land database for a variety of land issues for several land resource areas. These include data needed for improved land markets, the environment, resettlement of disadvantaged groups and returning refugees from Venezuela, and land taxation.

Many of these land issues are related to one another, at least as to the data requirements that must be met to develop solutions. Consequently, a broadly-based MPLIS should be designed that can serve the needs of a variety of land information users.

This does not mean the entire system be developed and carried out presently. Rather, the system should be done in phases over a period of years. The project design should therefore provide for two things: (1) the inclusion of the major land files and decision processes in Guyana, and (2) the phased development of the system logically and consistently over a period of years.

The "layer" (sometimes called a "module") of the MPLIS that incorporates land title record improvement should be a first target for the revised system. This report and earlier efforts clearly document the need to deal with the reform of the land title system expeditiously. Further, simply straightening out the current records before entering any data will be a tremendous task.

A. SPECIFICITY OF THE MPLIS PLAN

The MPLIS plan should include sufficient detail to support both development and evaluation of the system over time. Therefore, a set of goals for the system should be developed at the outset. Further, specific objectives should be developed for each goal to ease monitoring of progress in system development and operation. These objectives may include certain expected payoffs that can be measured without undue difficulty. Goals and objectives should include a temporal dimension as well—what is expected in the short term, what is expected in the longer term, and how are these short-term and long-term periods defined in terms of months or years.

It is difficult to overemphasize the importance of a plan that is both sufficiently specific and includes the basis for ongoing evaluation as the project proceeds. These attributes will help ensure that the MPLIS plan is comprehensive and complete. The capability to monitor

progress through an ongoing evaluation program will also help ensure the support that is necessary to sustain the development and operation of the MPLIS over the long run.

Some goals in the MPLIS plan will likely be of a general nature, such as providing backup copies of documents in the title registry. Detailed goals and objectives should also be included. For instance, what type of document backup system will be developed? Both microfilm and computer-stored document imaging have been suggested in the past. Ultimately, the needs of all users and how these needs can best be met through an integrated information system should be used to determine specific document storage system attributes.

Finally, while specificity is a desirable virtue of an MPLIS plan, there is also a need for flexibility as the project develops. Needs will change: new needs will be determined; technology will improve, both as to capability and speed of carrying out a task. Therefore, the system design should be specific enough so that goals and objectives are easily identified, but simultaneously flexible enough to permit these goals and objectives to be reached using the most current, most effective means possible.

B. PROJECT DESIGN TEAM NEEDED

A project design team is needed to develop a design for the Guyana MPLIS. The complexity of such systems requires that a variety of people with a variety of skills be included in the design effort. This approach is supported by experience in other countries, including Costa Rica, Saint Lucia, and Trinidad and Tobago, Jamaica and Venezuela, and countries with a Dutch/Roman legal system, overlaid with British law.

It is also important that individuals from the governmental and private sectors in Guyana be included in the initial MPLIS design efforts. Although the expertise of individuals from outside the country is important, it should be leavened with the inclusion of nationals with an interest and knowledge of land information system improvement.

1. Makeup of Project Design Team

Several areas of experience and expertise are needed for a well-rounded MPLIS project design team. A design team will need about four to five advisors, beyond a similar number of in-country members. The team should include, but not be limited to, the following experts:

a. General Design of MPLIS Systems

The MPLIS design team should include one or more members who have experience in the design, carrying out, and operation of land information systems. Experience in determining what MPLIS systems can and cannot do, what functions to include, and how to integrate a diverse team of land information system users to ensure achievement are all critical skills.

b. Attorneys

Team members with knowledge of the legal system, including Guyanese law are necessary. Familiarity with the current land title system will be helpful, and the ability to analyze the constitution, current statutes, and other legal regulations that affect land titles and land title registry activities. Similar skills will be needed as to land taxation, land use, surveying and mapping, and natural resources. Legal skills are needed not only to evaluate the current situation, but also to develop possible changes for the legal system. This could include various aspects of drafting, passage, and setting up of statutory and constitutional provisions.

In the legal area, especially as related to the land registry reform aspects of the MPLIS system, it is important that the team include both Guyanese nationals and foreign advisors. Members of the Guyana Bar Association should provide a good pool of expertise within the country from which to draw.

c. Hardware, Software, and Programming

Although not absolutely imperative, it is likely that an MPLIS capable of providing the support needed for land records and issues in Guyana will be an automated one. Therefore, knowledge and experience of hardware, vendor programs (software), and custom programming are important. For instance, although it is not expected that members of this team would prepare any custom computer programs, an understanding of the programs needed, the skills necessary to prepare such programs, and knowledge of where such programming skills might be obtained (especially within Guyana) would all be useful.

The design team should also include persons with a knowledge of currently available computer hardware suitable for supporting the proposed MPLIS system. Evaluation and recommendations of hardware should include such factors as reliability of the software, ease of repair, access to personnel and parts to make repairs, and ease of shifting to other platforms in the future. The latter point is critical since changes in hardware (and starting of new versions or different software) can be expected to occur periodically. Therefore, the design should include plans to make such changes, and do so with the least amount of disruption for managers and users of the system.

d. Knowledge and Experience with a Variety of Land-Related Issues

Land title registry reform is the central focus of this report. However, this report has also noted many other issues related to land titles and ownership which need attention. Many land issues in Guyana are so closely related and intertwined that the only way to address them is to integrate them. Therefore, the design team must include members who are familiar with land issues and the relationships among them.

It is not expected that the design team will be equally knowledgeable about all land-related issues, however, team members should be familiar with many of the following:

- **Natural Resources Management.** Improved natural resource management is critical to Guyana as it struggles to improve its internal economy, expand foreign trade, and increase the efficiency of agricultural production. An MPLIS will provide resource inventories to simplify development and use of these resources. Improved accuracy and security of land boundaries will also help protect and improve many natural resources.
- **Agricultural Production.** Increased production can improve the internal economy and provide needed foreign exchange. Ways to realize such improvements and still protect fragile areas are possible using MPLIS technology.
- **Security of Tenure.** Security of tenure is important to all land owners in Guyana. Such security will lead to increased agricultural production, increased investment in land improvements, and better, less expensive land transfers.
- **More Efficient Land Markets.** Land registry reform will help. However, ways need to be found to provide land market access to family and communal lands.
- **Taxation.** Property taxation policies and procedures are in need of reform. Such reforms would lead to a broader base for taxation, and help ensure the equitable treatment of all property taxpayers.
- **Reduced Cost of Land Record Processes.** Costs related to land transfer, figuring out taxes owed, and so forth are now high. These costs can be reduced with the use of an MPLIS. Lower costs will in turn lead to greater access and use of the land record system generally.

e. Geographic Informations Systems (GIS) Expert.

GIS technology is rapidly changing. Use of such technologies could potentially reduce costs of carrying out of any MPLIS design.

2. Level of Effort

The design team will need to spend four to eight weeks in Guyana, meeting with individuals and groups who will build, operate, and use the proposed MPLIS system. Additional data will be collected as to the current system and scope of challenges. Task lists will be developed and attempts made to reach consensus on the priority order in which these tasks will be addressed. In all these steps, the Guyanese members of the design team will play an integral role.

Following the in-country phase, an additional three to four months (at half time for team members) will be required to finish the project design. At the end of that time a project design document, suitable for use in developing financial support for system implementation, will be delivered to the agencies that funded the system design.

3. Costs for System Design

Costs will be affected by the level and quality of cooperation by in-country participants. These participants will include personnel from the Government of Guyana, aid agencies (such as IDB, The World Bank and other donors), and private groups. A budget will have to include costs for a team of five to come to Guyana, travel, and administrative support.

4. Financial Support for Systems Design and Subsequent Implementation

The Government of Guyana could initiate an MPLIS design, possibly with donor assistance. Once the design is complete, the Government would be in an excellent position to approach other donors for implementation funding.

An MPLIS will provide substantial benefits to a variety of land information users. Therefore, it is logical for the system itself to be funded by a consortium. Potential contributors include the Government of Guyana (both with general purpose funds and with funds collected for land registry reform, i.e., a small per transfer tax.) Use of funds from a registry reform tax is logical since it is assumed that registry reform will be a top priority item in the MPLIS design and development. Other contributors could include the United Nations Development Program (UNDP), the Inter-American Development Bank (IDB), and the World Bank. These agencies all have an interest in improved land information in Guyana and would likely be involved in subsequent funding of actual system implementation.

As noted at the outset of this section, it may be necessary to address short-term, more modest objectives in early stages of land information system improvement in Guyana. However, it is critical that a comprehensive plan for an MPLIS be prepared before modernization efforts begin. This comprehensive plan will help ensure that early stage efforts will be compatible with and lead to the more complex steps in the process as resources permit and needs require.

ENDNOTES

1. "Guyana: With Improved Rice Production," Caribbean Update (March 1992).
2. Jameson, Kenneth P. 1977. *Income and Land Distribution in Guyana: A Summary of Existing Information*. Washington: AID. (manuscript, at 3).
3. "Guyana: Big British Aid Package Hailed," Inter Press Service (April 6, 1993).
4. See, for example, "Guyana: Uproar Over Terms of Contract with Foreign Group," Inter Press Service (March 2, 1993).
5. "Guyana: Squatters Try to Clean Up Their Act," Inter-Press Service (May 25, 1992).
6. For a discussion of the conflicts between Guyana's forestry sector and indigenous populations, see "Guyana: National Park Plan Creates Fears for Indians' Lifestyle," Inter-Press Service (April 7, 1992).
7. Art 3, State Lands Act, Ch. 62:01.
8. Art's 5-9, State Lands Act, Ch. 62:01.
9. Art 10, State Lands Act, Ch. 62:01.
10. Art 11, State Lands Act, Ch. 62:01.
11. Art's 2-5, State Lands Regulations, Ch. 62:01.
12. The World Bank, Guyana: Agriculture Sector Review (1992) at 30.
13. Art 3 (a) and (b) of the State Lands Regulations, Ch. 62:01.
14. Art's 8-9, State Lands Regulations, Ch. 62:01.
15. Art's 8-11, State Lands Regulations, Ch. 62:01.
16. Art. 37(a), State Lands Regulations, Ch. 62:01.
17. The World Bank, Guyana: Agriculture Sector Review (1992) at 30.
18. Art. 41, State Lands Regulations, Ch. 62:01.
19. State Lands (Amerindians) Regulations, Ch. 62:01.
20. Art's 36 and 41, Amerindian Act, Ch. 29:01.
21. "Sugar Sell-Off to Take Place This Year," Lat. Am. Week. Rep. (July 9, 1992).

22. Jameson, Kenneth P. 1978. *Income and Land Distribution in Guyana: A summary of Existing Information*. Washington: AID. (manuscript, at 3).
23. "Guyana: Caribbean Development Bank Loan for Repairing Sea Defenses," BBC, Summary of World Broadcasts (December 31, 1991).
24. Comments by Martín Stabile at a meeting with Hugo Cohan, Martín Stabile, Edward Costello and Kevin Barthel, all officials of the IDB, Washington, DC (May 13, 1993).
25. Comments by Martín Stabile at a meeting with Hugo Cohan, Martín Stabile, Edward Costello and Kevin Barthel, all officials of the IDB, Washington, DC (May 13, 1993).
26. Art. 18, Constitution of 1980 (Guyana).
27. A major agricultural policy/land divestiture initiative by AID in Mozambique was carried out very successfully by the Land Tenure Center in coordination with the Ministry of Agriculture's Center for Agricultural Training. Much of the language for this proposal for Guyana closely follows this successful model. See John W. Bruce, Donald R. Jackson and Antonio A.S. Francisco, A Research Proposal: Land Policy and Divestiture in Mozambique (1991, Land Tenure Center).

ANNEX A
SELECT LIST OF PERSONS INTERVIEWED

The following is a partial list of the persons interviewed, along with their affiliation. All meetings were held in Georgetown, Guyana unless otherwise noted.

William C. Thiesenhusen	Agricultural Economics Department, Land Tenure Center, University of Wisconsin. (2/23/93, by phone in Madison, Wisconsin).
Dermott Joyce	Caribbean Manager, Jefferson Smurfit Group (4/26/93, by phone in Caracas, Venezuela).
John Panzer	Team Leader, Agriculture Sector Review, World Bank (5/12/93, Washington).
Hugo E. Cohan	Mission Leader for Agricultural Mission to Guyana for the Inter-American Development Bank (5/13/93, Washington).
Kevin Barthel	GIS expert, Member of the Guyana Mission of the Inter-American Development Bank. (5/13/93, Washington).
Martín Stabile	Tenure and Agricultural expert, Member of the Guyana Mission of the Inter-American Development Bank. (5/13/93, Washington).
Edward Costello	Operations Department, Member of the Guyana Mission of the Inter-American Development Bank. (5/13/93, Washington); (6/7/93 in Georgetown).
Amb. George F. Jones	U.S. Embassy, Georgetown. (6/2/93, 6/9/93).
Don Smith	Chief, Trade Development Office, AID office in Barbados (6/2/93).
Daniel Wallace	PL 480 Representative, U.S. Embassy in Guyana (6/2/93).

Thomas Poindexter	USAID consultant for Guyana. (6/2/93).
Patricia Smith	Democratic Initiatives Advisor, AID. (6/2/93).
Fazel Ali	Member of Parliament; Acting General Secretary of the Rice Producers Association (6/2/93).
Mr. Bashir	Chief of the National Congress of Local Government Authorities and Vice President, Rice Producers Association. (6/2/93).
Mr. Sing	Research Officer, Rice Producer Association (6/2/93).
Mr. Ruplal	Grievance Officer, Rice Producer Association (6/2/93).
Ms. Ramroop	Deputy Registrar, Deeds Registry of the Victoria Law Courts in Georgetown (6/2/93).
Roberta Van Haeften	U.S. Department of Agriculture, Food Security Advisor to AID.
Prabhu Sookraj	Permanent Secretary, Ministry of Agriculture (6/3/93).
Sarah Parnell	Advisor to the Permanent Secretary, Ministry of Agriculture (from the World Bank)(6/3/93, 6/7/93, 6/9/93).
Elsie Croal	Chief, Crops and Livestock Officer, Ministry of Agriculture. (6/3/93).
George Howard	Chief Hydraulics Officer, Ministry of Agriculture (6/3/93).
Kumar Datadin	Commissioner of Lands and Survey, Ministry of Agriculture (6/3/93, 6/7/93, 6/9/93).
Jean Sankies	Nutritionist, Ministry of Agriculture (6/3/93).
Nigel Durant	Economist, Ministry of Agriculture (6/3/93, 6/7/93).

Dhanmattie Sahai	Economist and Coordinator of Programs with the IDB, Ministry of Agriculture (6/3/93).
Ben Carter	Agriculture Sector Program Advisor, Ministry of Agriculture (6/3/93, 6/7/93).
Cecilia McAlmont	Head, Department of International Economic Cooperation, Ministry of Foreign Affairs (6/3/93).
Oscar Dolphin	Desk Officer, Department of International Economic Cooperation, Ministry of Foreign Affairs (6/3/93).
Mark Byude	Desk Officer, Department of International Economic Cooperation, Ministry of Foreign Affairs (6/3/93).
Mr. Ally	Regional Chairman, Essequibo Region (Region No. 2) (6/4/93, Anna Regina).
R. Jagernauth	Former Commissioner of Lands and Survey (6/7/93).
Leon Rutherford	Assistant to the Commission of Lands and Surveys, Survey Office (6/7/93).
Edward A. Anderson	Assistant Commissioner--Lands; Lands and Survey Commission (6/7/93).
Charles P. Kennard	Agriculture Rehabilitation Program, Ministry of Agriculture (6/7/93).
Bernard de Santos	Attorney General (6/7/93).
Mrs. Bender	Chief Agricultural Officer, Office of Planning, Ministry of Agriculture (6/7/93).
Santiago Rueda	Agriculture Policy Advisor, IFAD (6/7/93).
George Greenwood	Representative, Inter-American Development Bank (6/8/93).

R. Mark Kirton	Head, Department of Political Science and Law; University of Guyana (6/8/93).
B. Stewart	Head, Department of Sociology, University of Guyana (6/8/93).
Ashton Chase	Attorney at Law, Queen's Council, Senior Counsel to the President; Chairman of the Council for Legal Education; former President of the Guyana Bar Association; former Presidential candidate; Former member of the National Assembly (6/8/93).
Gloria Dowri	Assistant Supervisor, Registry of Deeds, New Amsterdam. (6/9/93, New Amsterdam).
Floretta Hamilton	Supervisor, Registry of Deeds, New Amsterdam. (6/9/93, New Amsterdam).
Mike Heath	Economics Officer, U.S. Embassy in Georgetown (6/9/93).
Manuel Barrera	Deputy Chief of Mission--Guyana, at U.S. Embassy in Georgetown (6/9/93).
Harry Marwitz	Guyana Liaison Officer of the RDO/C, USAID/Barbados (6/10/93).
David Carrol	Latin American Program, Carter Presidential Center (by phone in Atlanta, 6/17/93).
Debby Davenport	Hewlette Fellow, Global 2000 Environmental Program, Carter Presidential Center (by phone in Atlanta, 6/17/93).

I also attended a meeting to discuss tenure constraints to development and food security in Region No.2 on June 5, 1993. In attendance were about 40 farmers, producers and individuals from grassroots organizations, along with government officials from the Lands and Survey Office, Sea Defense, Health, Environment and Regional Government offices.

ANNEX B
SELECT REFERENCES

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- Amerindian Act, Ch. 29:01 (Act 22 of 1951, as amended).
- Drainage and Irrigation Act, Ch. 64:03 (Act 25 of 1940, as amended).
- Lands Department Act, Ch. 59:01 (Act 30 of 1903, as amended).
- Landlord and Tenant Act, Ch. 61:01 (Act 26 of 1947, as amended).
- Land Surveyors Act, Ch. 97:01 (Act 20 of 1891, as amended).
- Rice Farmers (Security of Tenure) Act, Ch. 69:02 (Act 31 of 1956, as amended)
- Sea Defence Act, Ch. 64:02 (Act 11 of 1933, as amended).
- State Lands Act, Ch. 62:01 (Act 32 of 1903, as amended).

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