Project Completion Report

PCR

Project Name: Land Management Program III

Country: Belize

Sector/Subsector: Agriculture and Rural Development – Land Administration and Management

Original Project Team: Michele Lemay (INE/RND) and Juan de Dios Mattos (RND/CGU), Co-Team leaders; Vanessa Lynch (CID/CBL), Bernadete Buchsbaum (LEG/SGO); Mario Castaneda (PDP/CES), Willy Bendix (PDP/CCR), Kevin Barthel (consultant); and Elizabeth Chavez (INE/RND)

Project Number: BL-L1008

Loan Number (s), TC(s): 2208/OC-BL

QRR Date: December 17th, 2014

Final Approval Date of PCR: June 29th, 2015

PCR Team: Principal Author and Members: Sybille Nuenninghoff (RND/CBL) with input of final evaluation report

Acronyms and Abbreviations

CEO	Chief Executive Officer
LSD	Land and Surveys Department
GOB	Government of Belize
IDB	Inter-American Development Bank
LAP	Land Administration Project
LAS	Land Administration System
LIS	Land Information System
LMP II	Land Management Program II
LMP III	Land Management Program III
LSD	Land and Survey Department
MNRE	Ministry of Natural Resources and Environment (before March 2012)
MNRA	Ministry of Natural Resources and Agriculture (after March 2012)
PCR	Project Completion Report
PMU	Project Monitoring Unit
RIMS	Registry Index Maps
RLA	Registered Land Act

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Annexes

I. Basic Information

BASIC DATA (AMOUNTS IN US$)	
PROJECT NO: BL-L1008	**TITLE: Land Management Program III**
Borrower: Government of Belize **Executing Agency (EA): Ministry of Natural Resources and Agriculture (MNRA)** **Loan(s): 2208/OC-BL** **Sector: Agriculture and Rural Development - Land Administration and Management** **Lending Instrument:** **Specific Investment Operation**	**Date of Board Approval: 21 October 2009** **Date of Loan Contract Effectiveness: 16 November 2009** **Date of Eligibility for First Disbursement: 02 July 2010** **Months in Execution** *** from Approval: 49 months** *** from Contract Effectiveness: 48 months** **Disbursement Periods** **Original Date of Final Disbursement: 16 May 2013** **Current Date of Final Disbursement: 16 November 2013** **Cumulative Extension (Months): 6 months** **Special Extensions (Months): 6 months** **Closing Date: 20 November 2013** **Loan Amount(s)** *** Original Amount: US$2,500,000** *** Current Amount: US$2,500,000** *** Pari Passu (if applicable): 91:9**
Poverty Targeted Investment (PTI): No **Social Equity (SEQ): No** **Environmental Classification: B**	**Disbursements** *** Amount to date: US$2,500,000** **Total Project Cost (Original Estimate): US$2,748,501 (US$2,729,000)** **Redirectioning** **Has this Project?** **Received funds from another Project NO** **Sent funds to another Project NO**
	On Alert Status **Is project currently designated "on alert" by PAIS: NO** **If yes then why is the project on alert (DO , IP Ratings and/or relevant PAIS indicators): N/A** **Comments on relevance of "on alert" status for this project (if applicable): N/A**

Summary Performance Classifications				
DO	[ ] Highly Probable (HP)	**[X] Probable (P)**	[ ] Low Probability (LP)	[ ] Improbable (I)
IP	[ ] Highly Satisfactory (HS)	**[X] Satisfactory (S)**	[ ] Unsatisfactory (US)	[ ] Very Unsatisfactory (VU)
SU	[ ] Highly Probable (HP)	**[X] Probable (P)**	[ ] Low Probability (LP)	[ ] Improbable (I)

II. The Project

a. Project Context

Belize encompasses a total land area of 22,960 km^2. Privately-owned land represents 54% of the total national territory, approximately 12,400 km^2. The vast majority of this land, approximately 10,000 km^2, is distributed in rural parcels. Small private urban parcels represent less than 0.1% of the total national territory and account for most of the land transactions. Public lands account for 46%, approximately 10,560 km^2, of the total land surface of Belize. These public lands are further divided into: i) protected areas and forest reserves which represent over 30% of the total national territory, and ii) other 'national lands', approximately 16% of the total national territory, which are either already allocated under a government lease or un-leased public land.

It is estimated that there are between 200,000 to 225,000 land parcels. About 100,000 of these parcels are in rural areas and can eventually form a part of the national cadaster and, consequently, contribute to a dynamic investment market.

The Ministry of Natural Resources and Agriculture[1] (MNRA) is responsible for the management of land. Within the MNRA, the Land and Survey Department (LSD) oversees the registration of land rights, land valuation for the purpose of determining rent and tax rates, the allocation of public lands by lease or sale for private ownership, mapping, and the management of land information. The LSD is organized into seven sections and six District Offices[2].

Land Management Challenges in Belize

The British Government established the Torreans title registration system as the first formal approach to land documentation before Belize's independence. However, since then, the Government had undertaken intermittent reforms to institute a modern parcel-based land registration system, with mixed results. While a parcel-based land registration system had begun to take hold in Belize, it had not yet totally replaced the old Torreans title system.

One peculiarity already noted is the existence of three separate land title systems – a common law registry of deeds, a Torrens certificate of title system[1] and the registered land system. An upshot of having several registration systems is that there are also, in effect, several systems of real property law as the RLA is more than a law governing registration of land; it is also a detailed law of property relationships, providing rules on conveyancing, leasing, mortgaging and other aspects of real property applicable only to those areas which have been declared as compulsory land registration areas under the RLA. Rights and transactions in such declared areas are subject to other real property laws and the common law only to the extent they do not contradict the RLA.

All land in areas which have not yet been declared under the RLA remains subject to the Law of Property and other real property laws, as well as the common law. However, there is no indication that these differences in the law *per se* have any material effect on the quality of property rights or tenure security. Since adoption of the Law of Property Act in the 1950s the main forms of land tenure throughout Belize are the same – essentially, the possessory rights of freehold ownership and lease together with the non-possessory rights of easement, mortgage, license, etc.[1] One of the effects of the multiple land titling systems, however, is that there are different names for the legal right held.

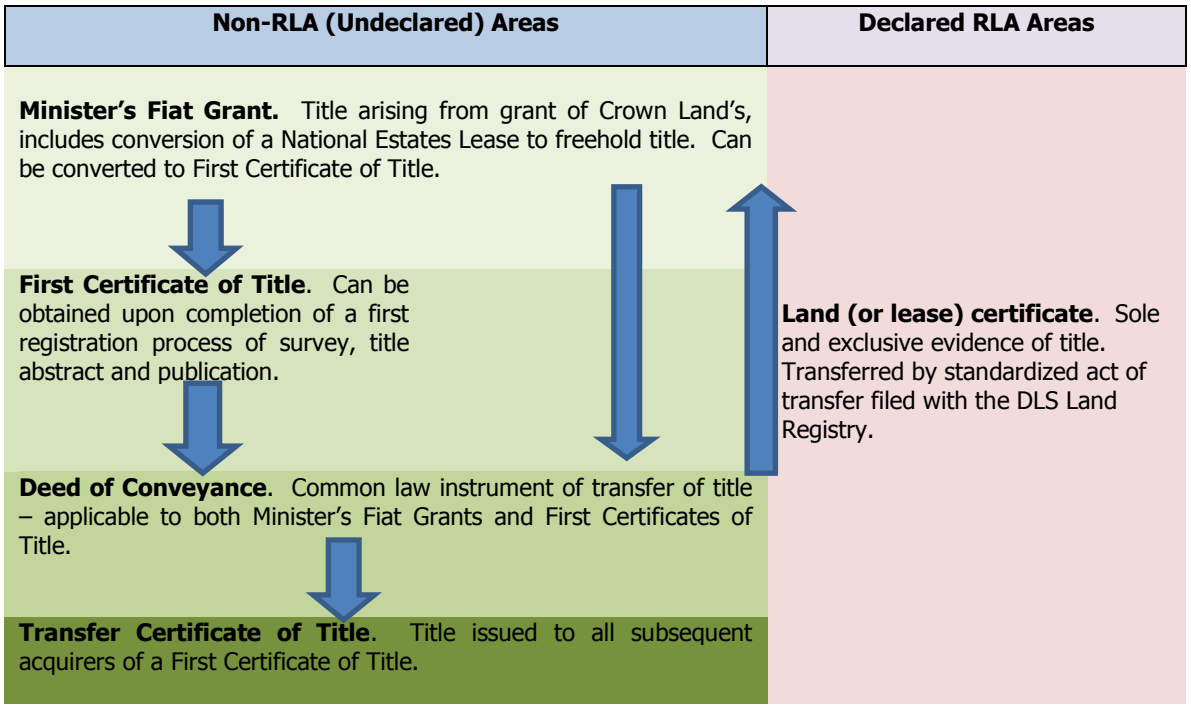
In areas that have been declared under the RLA the only two forms of possessory titles are land certificates, representing freehold title, and lease certificates. In areas that have not been declared under the RLA there are a number of different forms of titles including the Minister's Fiat Grant, which is a freehold interest in Crown or former national estates land. A Minister's Fiat Grant may be converted to a First Certificate of Title or transferred by a Deed of Conveyance, a common law instrument. Conversion of a Minister's Fiat Grant to a First Certificate of Title requires all of the steps presently required for first registration of title under the RLA, including land survey and publication of notice. Upon transfer of a First Certificate of Title, also done

[1] Former Ministry of Natural Resources and Environment (MNRE)
[2] IDB, Belize Land Management Program III Loan Proposal (BL-L1008), Nov. 5, 2009, pg. 3

by Deed of Conveyance, it is converted to a Transfer Certificate of Title, which it remains for all subsequent transfers. All of these instruments are still registered in DLS's registration department.[3]

These different types of interests imply no practical differences in the rights associated with them regarding use or alienation of the land. The title held under a Minister's Fiat Grant is as extensive as a matter of law as the title held under a First Certificate of Title, a Transfer Certificate of Title, or a Land Certificate issued in an area declared under the RLA. However, as a practical matter the security of the title may be affected by the complexity of the system under which it is registered, and it is believed that most problems with title fraud occur in the certificate of title and common law registration systems.

Figure 1: Types of Land Titles



The existence of two parallel systems complicated Belize's land management services and created significant opportunities for error. In fact, many issues within the land management system can be traced back to the lack of a cohesive national registry or documentation method. Due to the lack of a cohesive national system, the registration system struggled with complex title issues as parcels of land enter the market. The migration to the new system had been a complex undertaking which the government had begun to pursue deliberately.

Demographic, social, and economic changes had also exacerbated the demands for improved land management services from the government as Belizeans seeked greater access to natural resources to promote economic activity, private housing, tourism and conservation. Over the last two decades the government had encouraged increased private sector activity. The success of this effort has been predicated on improving land tenure security and land management efficiency. This had further increased the pressure to improve land management quickly.

History of Land Reform Efforts

Poor land management had long been recognized as an inhibitor to growth in Belize. In the late 1970's, a few years before Belize's formal independence, the Government introduced measures to address land management issues. The Registered Land Act (RLA) from in 1977 was intended to remedy the weaknesses

[3] In undeclared areas there are several other forms of title such as, for example, a Deed of Gift, a common law instrument which represents a transfer without consideration and which along with most other common law titles has been eliminated under the RLA.

in the Belizean land management system. However, only limited progress occurred in the implementation of the RLA over the fifteen years following Belize's formal independence in 1981.

Sustained progress in land management began with the first two phases of the Land Administration Project (LAP / LMPI), co-financed by the Bank. Between 1998 and 2008, LAP / LMP I and LMP II developed an automated land information system, a systematic survey process, adjudication, and a process for the systematic registration of land rights. As a result of these reforms, the number of land parcels brought under the registered land system increased significantly. The Box below describes shortly the objectives and achievements of the previous phases (Land Administration Project (LAP / LMP I) and the Land Management Program (LMP II):

In 1997, the GOB entered into a loan agreement for LAP / LMP I[4] with the Bank for a total of US$2.25 million. The objective of this project was to establish a reliable system of land records and initiate a land adjudication system for granting secure land tenure over a period of two years. LAP / LMP I had a significant impact on the low-income rural population by greatly increasing their access to secure land ownership documentation. LAP / LMP I improved land administration policy, record-keeping, and information management. It also computerized the national land information system and enabled easier public access to documentation.

In 2002, the GOB signed a loan contract with the Bank for LMP II[5] for a total of US$8.86 million. Building on the gains made from LAP / LMP I, the objective of LMP II was to improve the enabling environment for private and public sector development through enhanced land security, effective land markets, and the promotion of a coherent land policy framework. These objectives would contribute to sustainable development and the efficient use of land resources. Accordingly, the program focused on four priorities: i) expand land adjudication and registration activities country-wide to become a systematic land tenure clarification program accompanied by consolidation into a single Land Registry; ii) improve the efficiency and sustainability of land administration services provided by the public sector; iii) build capacity for land use planning at the local, regional and national levels; and iv) support national land policy and institutional reform.

The main accomplishments of LMP II included:

- Rural landholders received secure titles for over 16,000 parcels of land;
- Contractors surveyed an additional 7,000 rural parcels and clarified land tenure for over 3,000 km^2;
- The reach of the Registered Land Act was expanded to all rural land in the Corozal and Orange Walk Districts;
- The parcel-based land information system linked data in four of the seven sections in LSD and also standardized unique PIN numbers for parcels with key information; and
- The Ministry's digital cadaster was expanded to 50% of all land parcels.

In October 2009, the Government entered with the Bank into a loan agreement for the Land Management Program III (LMP III). The Project became operational in July 2010 (eligibility) and concluded in November 2013. LMP III was mainly designed to complete the shift from manually processing land transactions and record keeping to streamlining and automating procedures.

b. Project Description[6]

i. Development Objective(s)

The objective of the Program was to consolidate and expand land management services country-wide, thereby improving access to these services and their quality and efficiency. This in turn would contribute to

[4] LAP / LMP I. Land Administration Project (BL0007); US$902,000 (loan); US$2,254,000 (total); 1997 (approval); 2001 (completion).
[5] LMP II. Land Management Program (BL0017); US$7,000,000 (loan); US$8,860,000 (total); 2001 (approval); 2011 (completion)
[6] IDB, Belize Land Management Program III Loan Proposal (BL-L1008), Nov. 5, 2009.

the goal of improving land security and a dynamic land market. The Project consisted of three components: i) expansion of the parcel-based land information system; ii) improvement of urban land information; and iii) support for the provision of modern land management services.

ii. Components

Component I: Expansion of the parcel-based Land Information System

This component expanded the parcel-based information system, originally installed in three of the Sections of the Land and Survey Department (LSD), to all Sections of the Department and in all six District Offices and was designed to enhance country-wide access to the Land Information System as well as improve the quality and efficiency of land management services.

During the first phase of the modernization, the resources allocated to this component financed the hiring of consulting services to consolidate the Landfolio modules put in place under LMP II. (cadaster, registry, valuation, reporting, web services and administration) and to complete a thorough analysis of the document scanning, data digitization and information technology needs of the three new Sections of the DLS. Other activities to be financed in the first phase included (a) cross-module training of a core group of MNRA technicians to enable them to become certified users of the land information system, and (b) on-site technical support to customize the existing modules so as to better address the system needs of the MNRA and improve the efficiency of the daily workflow.

In the actual expansion phase, the activities of this component supported the design and installation of the parcel-based land information system in the remaining Sections of the Land and Surveys Department (National Estates, including the District Offices, Cashiers and Physical Planning). The activities included: (a) data capture and conversion of approximately 1.5 million land and property documents, maps and taxation rolls; (b) an analysis of the business processes for National Estates, Cashier and Physical Planning services; (c) customization of land information system software and programming of new modules; (d) installation of computer equipment and software; (e) loading of the scanned and digitized data, and (f) preparation of manuals and training. The resources allocated to this component also financed the development of an on-line (web-based) Public Access Module to permit public users to access selected property information and land management services from either kiosks located at MNRA or from off-site locations.

Component II: Improvement of urban land information

This component facilitated land registration and property valuation in the nine major urban areas of the country and was designed to accelerate the process of bringing within the Land Registry those parcels which account for the majority of transactions in the country, thereby increasing potential land revenues. The activities included: (a) the improvement of information on urban land parcels as the basis for creating Registry Index Maps (RIMS) and populating the Land Registry with records for parcels in the four urban areas covered by the LMP II (Orange Walk Town, Belize City, San Ignacio/Santa Elena, Dangriga). The aim was to improve the RIMS and facilitate the first registration of urban parcels (estimate of 25,000 parcels) on an incremental basis through property transactions; and (b) the acquisition of aerial photography and production of 1:1000 scale digital maps of San Pedro Town, Placencia, Corozal Town, Benque Viejo and Punta Gorda (estimate of 25,000 parcels). The digital maps of the urban areas improved the accuracy of property valuations by allowing MNRA staff responsible for land valuation to easily and cost-effectively identify parcel improvements without visiting the parcel. The digital maps are also available for physical planning, civil engineering (public works) and disaster risk management.

Component III: Support for the provision of modern land management services

This component consisted of two activities: (a) physical infrastructure improvements; and (b) strategic planning for national coverage of the Program and policy support for sustainability of land services. The first activity financed remodeling and physical improvements to the new MNRA building facilities that house the improved and expanded parcel-based information system and converted the buildings for use as government offices with areas specifically suited for archiving physical property records and providing services to the public. This included the purchase of furniture, air conditioning and electric generator and

the upgrading of information technology infrastructure, including electrical wiring, network cabling and network capacity.

c. Quality -At- Entry Review

Quality at Entry is considered **fully satisfactory**. The project design addressed relevant land management aspects in a suitably incremental manner. Moving forward with reform in a deliberate, incremental fashion ensures that capacity is present within the MNRA before moving to the next step. It further ensures that processes and procedures are assimilated by staff and that reform issues affecting the effectiveness of the system are appropriately addressed and resolved by the Government. The Project focus on consolidation of land management program achievements to date was well-targeted. The Project document adequately identified risks associated with the Program, and risk mitigation strategies were incorporated into the Program design.

Quality -At- Entry Review			
[ ] Highly Satisfactory (HS)	**[X] Fully Satisfactory (S)**	[ ] Less than Satisfactory (LS)	[ ] Unsatisfactory (U)

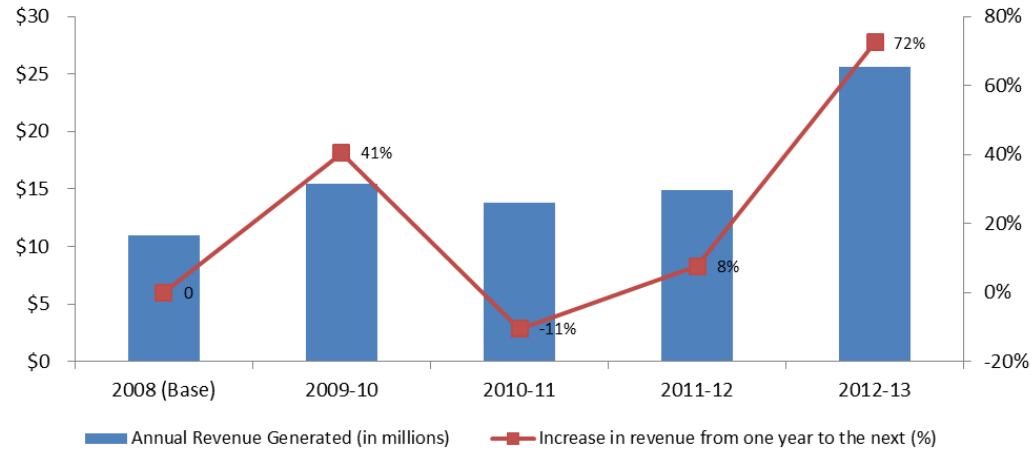
III. Results

On the basis of the information that has been assembled during the final evaluation, the assessment is that the project has met its objectives. However, at the time of the final evaluation some project impacts and outcomes permitted only a partial analysis.

a. Outcomes

Key Outcome Indicators	Baseline (2008)	EOP (2013) planned (p)	EOP achieved (a)[7]
1) Average time in days to register property transaction in Land Registry	39 working days	10 working days	10 working days
Comments (Final Evaluation Report (2013): "The introduction of Landfolio has reduced transaction time. Once data has been entered into Landfolio, the land registry unit is able to process the information quickly. However, a procedural bottleneck, in the way the department manipulates the information before entering into the system lengthens the time associated with each operation. There is evidence that the automated system allows for greater levels of accuracy and control." A training program for each of the specific sections, as well as training for the MNRA Information Technology Unit has been established, which concluded to train, at a minimum, five (5) of the technical staff and managers of the Physical Planning Section in the Physical Planning Module, five (5) of the technical staff and managers of the Land Revenue Section in the use of the Cashiering Module and five (5) of the technical staff and managers of the National Estate Section and two (2) persons from each of the District Lands Offices in the use of the National Estate module. The consultancy firm trained staff from each section on-site at the MNRA Headquarters in Belmopan and the District Land Offices. More than 130 MNRA staff have been trained during 61 man days of onsite training in the use of the different modules of the integrated landfolio® system			
2) Average time in days to add parcel or complete parcel mutation in the Survey & Mapping Section (improving upon an initial 28 work days	28 working days	10 working days	10 working days

[7] Data delivered by MNRA; to be verified during ex-post evaluation. It was agreed in the exit-work shop that an ex-post evaluation will be carried out in 2015/2016.

in 2008)			
Comments (Final Evaluation Report (2013): There is evidence that improvement in the average time to register property transactions in Land Registry has been already achieved. In addition, there appears to be some progress in the average time in days to add parcel or complete parcel mutation in the survey and mapping section. The results for these two outputs appear to be lagging about a year behind what had been anticipated. This is consistent with the narrative of Project execution, which experienced a delay of about five months in completing many of the activities required for Component 1.			
3) Percentage of out-of-district customer transactions for National Estates conducted at District Offices	0%	80%	70%[8]
4) Increase (percentage) in annual revenue generated from MNRA land fees and taxes	(improving upon an initial BZ$10,986,909 in 2008)	20%	72%[9]
Final Evaluation Report (2013): There is evidence of a significant increase in revenue generation as a result of the introduction of Landfolio in general and the latest deployment of the system. Revenue Generation during Landfolio implementation period (see below):			
			
Conclusions – Final Evaluation Report (2013): "The full implementation of the various Landfolio modules faced some delays and therefore was not totally completed at the time of the final evaluation. In some cases District Offices reported only beginning to use the system in March 2013, after they received additional training on system operation. This means that the system has been operating for only a few months, which doesn't allow determining fully the impact of the Project. The transition to the new expanded Landfolio system still faced several challenges, including poor connectivity, which precludes users from efficiently using Landfolio." The delay to implement fully the system in the district offices – and therefore to demonstrate the efficiency of the daily workflow at the time of the final evaluation – relates, among others, to setbacks during a) the consolidation of the Landfolio modules (cadaster, registry, valuation, reporting, web services and administration); b) the process of the document scanning, data digitization and information technology; c) the cross-module training of a core group of MNRA technicians to enable them to become certified users of the land information system, and (d) on-site technical support to customize the existing modules.			

[8] Comments (Final Evaluation Report (2013): "Evidence indicates that here has been progress in increasing the percentage of out-of-district customer transactions for National Estates conducted at District Offices. Nevertheless, based on interviews with National Estates Representatives it appears that the majority of transactions are still being undertaken from headquarters in Belmopan. This is due to the fact that the District Offices have been seriously hampered by slow connectivity, hardware problems and software glitches."

[9] Needs to be confirmed during ex-post evaluation, proposed in 2015/2016

b. Externalities

A system crash, due to insufficient data risk management measures, did not only delay the deployment of the system to new sections and District Offices, but also led to the loss of valuable land management information, which needed to recovered. This delayed the deployment of the landfolio system to the remaining MNRA section and District Offices, which eventually affected a timely project implementation and, hence the timeline for achievement of the project impact / outcomes at the end of the project (see recommendation of ex-post evaluation). Due to this incidence the Ministry installed a data backup system for landfolio. A full-fledged Disaster Recovery Plan (DRP) for landfolio has been discussed during the exit workshop and has been proposed during the final evaluation exercise.

c. Output Indicators[10]

IMPLEMENTATION PROCESS (IP)

Output Indicators for Component I: Planned vs. Actual

[10] Based on some initial constraints to monitor some indicators initially established in the project baseline, the Bank and GOB agreed at project start to slightly modify some indicators to facilitate data collection while maintaining the respective project outcome indicators.

Expansion of the parcel-based Land Information System (LIS)

Outputs	Flags*	Unit of Measure		2010	2011	2012	2013	EOP
Parcel-based Land Information System (LIS) installed in all sections of the Central Office of the Department of Land and Surveys and District Offices		Sections/Districts	P	0.00	4.00	6.00		10.00
			P(a)	0.00	4.00	6.00		10.00
			A	0.00	1.00	9.00		10.00
Milestone								
1) Bridge contract with firm "Stewart" (document scanning, IT system analysis, users' certification training)		contract	P	1.00				1.00
			P(a)	1.00				1.00
			A	1.00				1.00
2) Business process and data analysis completed		data analysis	P		1.00			1.00
			P(a)		1.00			1.00
			A		1.00			1.00
3) IT equipment for Land Information System installed		equipment	P		1.00			1.00
			P(a)		1.00	1.00		1.00
			A		0.00	1.00		1.00
4) New Software modules installation and data loaded completed		data loaded	P		1.00			1.00
			P(a)		1.00	1.00		1.00
			A		0.00	1.00		1.00
5) System finalized and accepted by the Client		system	P			1.00		1.00
			P(a)			1.00		1.00
			A			1.00		1.00

Component I: An analysis of these indicators reveals the following:

- Landfolio system modules have been installed in all sections in MNRA;
- Landfolio systems have been installed in the District Offices and are operational;
- Business process reengineering, data loading and module installation has been performed.

Final Evaluation Report (2013): "The introduction of the system does not per se allow the achievement of the outcome, namely the reduction of the average time in days to register property transactions in the land registry. That will occur when all workflows (whether manual or automated) are improved.

Deployment of the system to the new sections and the District Offices occurred in early November 2012, but was originally planned for May 2012. As indicated above (see section III results / outcomes), the delay of the deployment of the system has been related to the system crash causing setbacks in a) the consolidation of the Landfolio modules (cadaster, registry, valuation, reporting, web services and administration); b) the process of the document scanning, data digitization and information technology; c) the cross-module training of a core group of MNRA technicians to enable them to become certified users of the land information system, and (d) on-site technical support to customize the existing modules.Yet Land Titling, that had not been part of the design, was included to facilitate the project's workflow.[11]"

CLASSIFICATION: SATISFACTORY

Briefly explain differences between planned and actual outputs (if applicable). N/A
Restructuring: Indicate if this component was restructured (date of approval by Manager). Briefly discuss the consequences of these changes: **N/A**

[11] The transition between the old system and the new system was defined by some participants as "difficult." These difficulties included a system crash and inadequate preparation for the transition. These problems are progressively being addressed.

Output Indicators for Component II: Planned vs. Actual

Improvement of urban land information

Outputs	Flags*	Unit of Measure		2010	2011	2012	2013	EOP
Parcels for Land Management Program II towns entered into cadastre module		parcels	P	0.00	0.00	25,000.00		25,000.00
			P(a)	0.00	0.00	25,000.00		25,000.00
			A	0.00		25,000.00		25,000.00
OrthoPhotoPlans (OPPs) and Compilation Plans (CPs) in 5 urban areas and Registry Index Maps (RIMs) in Placencia urban area created (Carto Data)		OPPs/CPs/RIMs	P	0.00	5.00	35.00		40.00
			P(a)	0.00	5.00	15.00		35.00
			A	0.00	15.00	20.00		35.00

CLASSIFICATION: SATISFACTORY

Briefly explain differences between planned and actual outputs (if applicable). Activities for component II were carried out successfully.

Restructuring: Indicate if this component was restructured (date of approval by Manager). Briefly discuss the consequences of these changes: **N/A**

Output Indicators for Component III: Planned vs. Actual

Support for the provision of modern land management services

Outputs	Flags*	Unit of Measure		2010	2011	2012	2013	EOP	Means of verification
Ministry of Natural Resources and Environment facilities fully refurbished		Facilities	P	0.00	1.00			1.00	
			P(a)	1.00	1.00			1.00	
			A	0.00	1.00			1.00	
Strategic and Multi-Year Investment Plan for improving land tenure and modernizing land management services country-wide ready		plan	P	0.00	0.00	1.00		1.00	
			P(a)	0.00	0.00	2.00	2.00	0.00	
			A	0.00		0.00	0.00	0.00	

Component III: The refurbishing of the MNRA building did take place. Improvements in the new building, its connectivity and wiring are significant. Because of time reasons (end of Project) the Bank and GOB agreed that the strategic planning exercise (including the investment plan) will be deferred. This decision was also based on the fact that a Strategic and Multi-Year Investment Plan, once elaborated, should be followed by an investment component in order to ensure its implementation.[12]

CLASSIFICATION: SATISFACTORY

Briefly explain differences between planned and actual outputs (if applicable). The main output of this component has been the physical infrastructure improvements (approx. 90% of the planned financial resources) providing adequate facilities for the improved and expanded parcel-based information system, such as areas specifically suited for archiving physical property records and providing services to the public, upgrading of information technology infrastructure, including electrical wiring and network cabling and upgrading of network capacity. Therefore, and also the Strategic plan has not been delivered, based on the clarification above, the achievement of Component III can be considered as satisfactory

[12] The Country Strategy (2013 – 2017) for Belize didn't include Land Management as a priority pillar.

Restructuring: Indicate if this component was restructured (date of approval by Manager). Briefly discuss the consequences of these changes: **N/A**

SUMMARY OF IMPLEMENTATION CLASSIFICATION: SATISFACTORY

"The case of Belize offers solid balance and progress in terms of both regularization and LAS strengthening. The Land Management Program succeeded in regularizing most of the northern part of the country in a spatially continuous manner (i.e. without leaving non-regularized areas), as well as a number of the main urban areas. It also managed to implement an information system that integrates all areas of the LAS in an efficient and secure way (the only one of the four cases analyzed to achieve this). The existence of this system, added to the fact that the entire LAS is concentrated within a single government agency, indicates that Belize has high potential for developing efficient, accessible, comprehensive, and reliable LAS. The achievement and sustainability of such a system depend on the technical capacity of the staff in charge of the LAS and the resources that are dedicated to its maintenance." (Comparative Evaluation: Land Regularization and Administration Projects; OVE – February, 2014)

d. Project Costs (Planned vs. Actual)

Category	IDB (US$) planned	Local (US$) planned	Total (US$) Planned	(%) planned	IDB (US$) actual	Local (US$) actual[13]	Total (US$) actual	(%) actual
1. Administration and Supervision	**155,000**	**0**	**155,000**	**5.7**	**155,338**	**2,379**	**157,717**	**5.7**
2. Direct Costs	**2,280,000**	**229,000**	**2,509,000**	**91.9**	**2,293.623**	**246,122**	**2,539,745**	**92.4**
2.1 Consolidation and expansion of the parcel-based land information system	1,417,000	29,000	1,446,000	53.0	1,542.499	3,897	1,546,396	56.3
2.2 Improving urban land information to facilitate land registration and property valuation	370,000	0	370,000	13.5	356,609	993	357,602	13.0
2.3 Support in the provision of land management services and strategic planning	493,000	200,000	693,000	25,4	394,515	241,232	635,748	23.0
3. Audit / Evaluation	**65,000**	**0**	**65,000**	**2.4**	**51,038**	**0**	**52,038**	**1.9**
TOTAL	**2,500,000**	**229,000**	**2,729,000**	**100**	**2,500,000**	**248,501**	**2,748,501**	**100**
Percentage (%)	92	8	100		91	9	100	

Briefly explain differences between planned and actual project costs (if applicable): The difference between planned and actual project costs is minimal and can be considered as general budget adjustments that occur during project implementation. The savings in the investment categories 2.2, 2.3 and 3.0 have been used for an add-on contract with Stewart for the landfolio system.

[13] It is very like that the total project costs are significantly higher than the planned total project costs (between 10 and 25% higher as actually reported counterpart). This is namely due to the fact that the MNRA (former MNRE) supported the project with important in-kind contributions that have not been presented and "monetized" and therefore is not reflected in the financial statements.

IV. Project Implementation

a. Analysis of Critical Factors

The majority of the activities outlined in the Loan Proposal document have been executed, with minor delays. In addition, the total amount of the loan funds has been disbursed. It is not unusual to face implementation setbacks similar to those experienced in the context of the LMP III.

b. Borrower/Executing Agency Performance

Borrower/Executing Agency			
[ ] Highly Satisfactory (HS)	**[X] Satisfactory (S)**	[ ] Unsatisfactory (U)	[ ] Very Unsatisfactory (VU)

The Project Management Unit (PMU) was composed of a Project Coordinator, a Deputy Project Coordinator and Fiduciary Advisor, and an Administrator. A Technical Advisor worked on the Project part-time and focused mainly on issues of data capture and mapping.

The majority of vendors delivered generally acceptable products. The relationship between the Land folio vendor and the Government has been productive over the past seven years. The Stewart contract has presented some challenges for the MNRA and PMU in general. Some of the misunderstandings may have been originated from some ambiguity relating to the role of the Project Management Unit (PMU) with regards to the vendor.

The final evaluation report states: "The loan has had relatively few procurement activities and with assistance and input from the Bank team, the PMU has carried out its procurement activities adequately and generally on schedule. The PMU's contract management has been adequate. Most contracts have been carried out on schedule. There is no evidence of delays in paying consultants once the reports have been accepted by management.

The performance of Project participants has been generally positive. The management of the Land and Surveys Department (LSD) recognizes the potential benefits of a functional land management system in Belize and appears to have embraced Landfolio. Resistance to Landfolio, when present, appears to be the result of individual employees' lack of familiarity with the software rather than a systemic problem. Some of that resistance appears to have been borne out of a difficult Landfolio deployment to the remaining LSD and Landfolio expansion to the District Offices."

c. Bank Performance

Bank Performance			
[ ] Highly Satisfactory (HS)	**[x] Satisfactory (S)**	[ ] Unsatisfactory (U)	[ ] Very Unsatisfactory (VU)

The Project supervision team was stable and constructively involved. There were only two task team leaders over the life of the Project, one that followed the preparation of the Project and the very early part of the implementation, while the second led the Project during implementation and Project closure. There was consistency within the Project team as members of the Project team remained the same over the life of the Project. This allowed the advice that was provided to the Project to be uniform.

The final evaluation report states: "The project documentation reveals that the IDB project team was proactive in its supervision of the Project and provided frequent, timely and constructive feedback to the project team. The project team was also able to involve additional expertise during Project supervision

(individual Land Management expert has been contracted by the Bank) and provided the MNRA and the PMU additional expert advice on policy matters related to Land Resource Management."

V. Sustainability

The achievements of LMP III are potentially sustainable, provided the deployment will be completed effectively and remaining implementation deficits will be solved (see below analysis of critical factors).

The final evaluation report states: "The system is beginning to be entrenched in the organizational fiber of the LDS and there is some evidence that the public is demanding improved services and expecting Landfolio to deliver them."

a. Analysis of Critical Factors

Sustainability is dependent upon the resolution of current implementation and deployment challenges, including the need to:

- Improve system hardware so that it is able to sustain current software requirements. Users complain of system slowdowns and occasional system crashes;
- Develop a functioning off-site Landfolio backup to ensure that information contained in the system is recoverable in the event of system malfunction;
- Improve connectivity speed to improve the communication between Headquarters in Belmopan and the District Offices;
- Address the software glitches by refining Landfolio software capability;
- Expand the use of Landfolio into current operations by appointing an advisor to the Land Commissioner or the Ministry of Natural Resources and Agriculture (MNRA) Chief Executive Officer (CEO) to support them in overseeing Landfolio implementation.

b. Potential Risks

There is a potential risk of erosion in the benefits of the land folio system if the actions above are not implemented. The potential risks and actions to be undertaken are indicated in a) "Analysis of Critical Factors" and c) "Institutional Capacity" have been discussed during the exit workshop. Their respective implementation will be analyzed during the ex-post evaluation foreseen to be carried out in 2015/2016.

c. Institutional Capacity

It is especially important to develop key planning tools to ensure the proper use of Landfolio in the context of a still evolving Land Management Reform Program. Sustainability of the Landfolio will also depend on developing appropriate, forward-looking practices, including:

- A Human Resource Management strategy that is capable of predicting the human resource requirements of the system as the volume of work increases;
- An IT strategy capable of predicting and accommodating the system's IT and connectivity needs over the next several years;
- Improved intra-agency and inter-agency communication regarding the Landfolio software and developments in land management policies and procedures;
- A public information policy that enables the deployment of the public access module which in turn will increase the ability of the department to collect revenues and permit quicker access of land related documentation by the user;
- An in-service training strategy to ensure the consistent application of Landfolio procedures.

VI. Monitoring and Evaluation

a. Information on Results

The final evaluation report states: "The quality of project reporting has improved over the life of the project, yet information on outcomes is insufficient."

The final evaluation report (2013) comes to the following conclusion: "The full implementation of the various Landfolio modules faced some delays and therefore was not totally completed at the time of the final evaluation. In some cases District Offices reported only beginning to use the system in March 2013, after they received additional training on system operation. This means that the system has been operating for only a few months, which doesn't allow determining fully the impact of the Project. The transition to the new expanded Landfolio system still faced several challenges, including poor connectivity, which precludes users from efficiently using Landfolio."

"The delay to implement fully the system in the district offices – and therefore to demonstrate the efficiency of the daily workflow at the time of the final evaluation – relates, among others, to setbacks during a) the consolidation of the Landfolio modules (cadaster, registry, valuation, reporting, web services and administration); b) the process of the document scanning, data digitization and information technology; c) the cross-module training of a core group of MNRA technicians to enable them to become certified users of the land information system, and (d) on-site technical support to customize the existing modules."

b. Future Monitoring and Ex-Post Evaluation

Post-project evaluation investment should be made to verify that systematic monitoring of progress on the achievement of project targets becomes a priority at the LSD.

VII. Lessons Learned[14]

"Plan big, build incrementally"

The implementation of large information management solutions to address public sector reform challenges is a complex endeavor. It involves large investments of public money, overhaul of processes and procedures and an extensive amount of upfront planning. Implementation is rarely smooth and adjustments are usually required. In many instances government agencies prefer dealing with these large modernizations in steps, depending on their financial or organizational situation.

While it is clear that carrying out full automation is sometimes financially and logistically challenging and that a phased approach has merits, it is equally clear that planning for the comprehensive solution is essential in order to reduce the likelihood of cost overruns, and ensuring a smooth implementation.

For example, by planning for the implementation of the full system, it is possible to better define hardware, connectivity and memory requirements for the system. A clear definition of space requirements and location of equipment and the development of adequate training programs would enable staff to be trained for an eventual expansion of the system at the same time as the system is deployed.

By planning big, and proceeding in a phased fashion, it is possible to reduce design adjustments, which cause delays, and can lead to increased project costs.

Separate business process reengineering from software process design

Business process reengineering involves rethinking and redesigning of business processes to obtain sustained improvements in quality, cost, service, lead time, flexibility and innovation. Business process reengineering provides the opportunity to review the existing process towards simplifying it, making it more transparent and efficient. It can lead to a considerable reduction in the number of activities or steps that are required to carry out a process. It can entail reviewing the process inter-dependencies and system dependencies, and evaluates the merits of eventual integration of different business processes to achieve process improvements and can create opportunities to deliver better, improved services to the citizen.

This is, often times, a very distinct process from what occurs in the context of designing the IT management solution. During software design, when there is no framework, the system engineers will try to map out the processes as they currently stand. Once they understand them, they will set to translate them into an IT

[14] Based on final evaluation report (2013) – relates to "Analysis of Critical Factors - Section V "Sustainability"

solution. While there are opportunities to remove some wasted steps when they are obvious, mapping for system design is not focused on improving processes. As a result opportunities are lost for additional system improvements.

Additionally, when business process mapping and reengineering has not taken place in advance of IT system design, this could create the need to redesign the system after it's been laid out, because the client has either not properly defined or understood his own processes, and would like to have them changed to better reflect the reality of its activity. This is a time consuming and ultimately costly activity for both the vendor and the client.

Consider the deployment a large IT solution as a self-standing activity that needs to be planned

Deployment of an IT solution is not only the responsibility of the vendor. While the vendor should assist in this process, it is important for government agencies to consider deployments of large IT solutions a multi-disciplinary activity of primary importance.

Managing the transition is a multi-dimensional endeavor. It entails managing multiple simultaneous processes and activities which need to come together at the same time. For example, it involves:

- Ensuring that the technical aspects relating to the system are well planned.
- Ensuring that the location has been suitably prepared to receive the new technology
- Establishing a human resource action plan to ensure that employees with suitable expertise carry out the expected duties and functions
- Developing adequate training plans to ensure that each employee knows exactly what it is expected to do.

Managing the transition requires also suitable financial, human and spatial resources. It also involves having someone with the appropriate level of authority to oversee this activity and make sure that all tasks are carried out on time.

In addition, the OVE evaluation in 2013 concluded for the Land Management System (LAS) in Belize the following lessons learnt:

DESIGN:

- A modern integrated LAS requires an adequate legal framework and institutional organization with clearly delimitated function. Where the projects were able to support permanent institutions, such as in the case of Belize, progress towards establishing modern LASs is greater and seems more likely to be sustainable.
- It is important to ensure that the legal framework permits planned regularization activities. In the case of Belize, the LAS has been approached through a pilot program through which potential problems, including legal ones, could be identified.
- Insufficient diagnostic can create difficulties during execution, affecting efficiency and effectiveness. As a result, the regularization works faced more difficult conditions than originally anticipated, thus making the projects more expensive and long In Belize this resulted after LMPII in an additional operation LMPIII which aimed to consolidate the results of the former program.

IMPLEMENTATION:

- The information system that would process and control the regularization process has to be developed before regularization takes place. In the case of Belize an efficient, robust and comprehensive information system was established to support all the functions of the LAS.
- There is a need to increase human resource capacity (especially on district level) to operate and feed the new information with high-quality data.