



ANNUAL REPORT | 2010-2011



# Our Vision is:

"To become a first class company with a committed cadre of qualified employees empowered to professionally facilitate the development, coordination and expansion of the irrigation sub-sector in Jamaica in a sustainable manner."

# Our Kission is:

"To use
the available resources
to develop irrigation systems
and to provide the most
efficient and effective
service possible to the
agricultural community."

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#### **The Company**

#### REGISTERED OFFICE

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Email Address: nic@cwjamaica.com Website:www.nicjamaica.com

#### **AUDITORS**

KPMG 6 Duke Street, Kingston Jamaica

#### The Operation Centre

15 Barrett Street Spanish Town St. Catherine Tet: 984-0625/5792 Fax: 984-0532

#### Attorneys-at-Law

DunnCox 48 Duke Street Kingston

#### DISTRICT OFFICES

#### St. Catherine Irrigation District

Rio Cobre Office 17 Barrett Street, Spanish Town Tel: 984-2334/4022 Fax: 984-8401

#### Mid-Clarendon Irrigation District St. Elizabeth Irrigation

Osbourne Store, May Pen Tel: 987-3259/3667 Fax: 987-3139

#### St. Elizabeth Irrigatio & Drainage District

Watchwell P. A. St. Elizabeth Tel: 965-0714 Fax: 965-0232

#### St. Dorothy Office

Bodles, Old Harbour Tel: 983-2712/2742 745-2640 Fax: 745-2759

#### **Yallahs District**

Yallahs, St. Thomas Tel: 706-3159

#### **Braco Irrigation District**

Duncans, Trelawny Tel: 954-2147 Fax: 954-2295

# CORPORATE DATA

# **Board**

# Members



L-R (Back Row): Mr. Basil Perriel – Farmer, Mr. Basil Fernandez – Managing Director, WRA,
Dr. Horace Charoo – Medical Doctor/Farmer, His Worship, Mayor Keith Hinds, Mr. Carlton Richards –
Retired Businessman, Mr. Ludgar George Parish – Farmer, and Mr. Rupert Williams – Farmer.

**L-R (Front Row):** Mr. Anthony Masters – *Businessman,* Mr. Oliver Nembhard – *Chairman/Businessman,* Ms. Genille Attalla – *Business Woman,* Mr. Rudolph Brown – *Farmer,* Mr. Joseph Handal – *Farmer,* and Mr. Robert Martin – *Representative of the Ministry of Finance and the Public Service.* 

Inset L: Mr. Winston Lewis – Businessman R: Mr. Hugh Sanford – Businessman

# District Advisory and Monitoring Committees

#### St. Catherine District

#### Mr. J. Handal\*

Mr. D. Clacken\*\*\*

Mr. O. Palmer

Mr. S. Johnson

Mr. J. Lopez

Mr. S. Dalling

Mr. C. Richards (SCJ) \*\*

Mr. M. Aris (RADA) \*\*

Mr. C. Powell (Parish Council) \*\*

Mrs. P. Sterling (Hill Run Fish Farmers)

#### **Braco District**

#### Mr. R. Brown\*

Ms. G. Attalla

Mr. C. Lemonious

Mr. T. Gordon

Mr. B. Thompson

Mr. A. Gager

Mr. K. Grant

Hon. P. Muschett

Mr. C. Clarke (RADA) \*\*

Mr. E. White (Parish Council) \*\*\*\*

Mr. D. White (Parish Council) \*\*

#### **Mid-Clarendon District**

#### Dr. H. Chargo \*

Mr. A. Hyman

Mr. G. Less

Mr. P. Williams

Mr. L. Parish

Mr. T. Burton

Mr. C. Peters (Parish Council) \*\*

Mr. P. Shaw (RADA) \*\*

Mr. C. Washington (SCJ) \*\*

Mr. G. Stephens (AIC) \*\*

#### St. Elizabeth District

#### Mr. B. Perriel \*

Mr. K. Harris

Mr. D. Patrick

Mr. G. Gayle

Mr. R. Grindley

Mr. D. Scott

Mr. M. James

Mr. D. Ebanks\*\*\*\*

Mr. K. Dunkley (Parish Council) \*\*

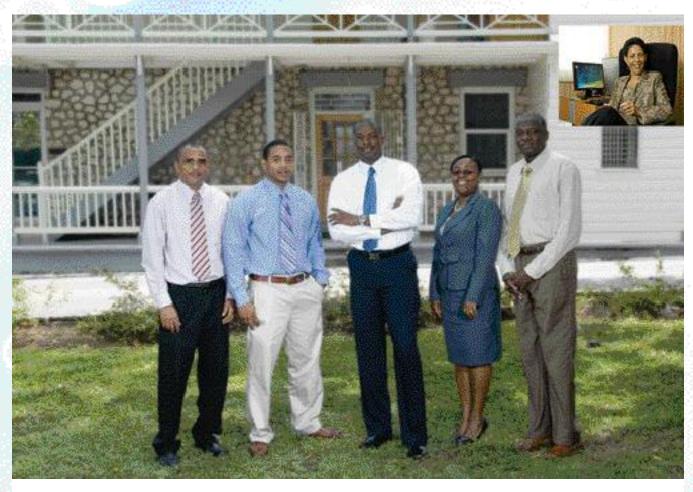
Mr. G. Gunning (RADA) \*\*

Ms. A. Pearce (NEPA) \*\*

- Denotes Chairman for each committee and member of the Board of Directors
- \*\* Ex-officio members
- \*\*\* Resigned April 30, 2011
  - \*\*\* Deceased

# **Executive**

# Directorate



L-R: Mr. Milton Henry - NIDP Programme Director (Acting); Mr. Tafari Burry - Director, Finance & Corporate Planning; Mr. Douglas Walker - Deputy Chief Executive Officer; Mrs. Deirdre English Gosse - Director of Corporate & Legal Services and Mr. Horace Reid - Director of Engineering & Technical Services (Acting).

Inset: Mrs. Vanica Cranston - Director of Commercial Operations

# Minister's

# Message



he Management and Staff of the National Irrigation Commission Limited (NIC) must be lauded for their efforts in contributing to growth in the Agricultural Sector. Despite the challenges of the current economic difficulties which extend to all Government sectors, the NIC has made remarkable progress in providing irrigation water to farmers island-wide.

I congratulate the NIC on the following achievements for the period under review:

- Since 2010, approximately 2,000 acres of land have been put into production in the Bernard Lodge Blocks A, B and C, Bushy Park and areas of Clarendon and Braco under the Arable Lands Irrigated and Growing for the Nation (ALIGN) initiative. Since implementation, a total of 7,153 acres of unutilized and underutilized lands have been successfully brought back into production, with approximately 27,500 acres of land remaining to be utilized.
- The installation of the Colbeck Irrigation Scheme which will serve 90 farmers on 110 hectares of land was completed at a cost of US\$747,945.00. It is expected to be commissioned into operation during the first quarter of the New Year.
- A Well Development Programme in New Forest/Duff House, Manchester has been completed while pipe delivery has commenced. This system should be completed by mid-2012 and will serve 375 farmers on 400 hectares of land.
- Additionally, cadastral mapping has been completed on over 1,000 parcels of land in New Forest/ Duff House and Yallahs.
- The National Irrigation Development Programme (NIDP) launched a Lead Farmers' Training Programme for 30 farmers. This programme will be a Training of Trainers Initiative that will cover a wide range of subjects, from Administration to Agronomy. Sessions have since featured Training Needs Analysis and Audit Training Manuals.
- Another six hundred and seventy-two (672) farmers have been trained under the NIDP in areas such as irrigation, agribusiness planning, agronomy, proper pesticide use and leadership.
- The Food and Agriculture Organization (FAO) has provided grant funding of JA\$20 million to establish a Rainwater Harvesting Project in Jamaica. Four million of this amount has been earmarked for training. This project consists of 11 pilot projects in South St. Elizabeth and Manchester along with the training component. To date, nine have been completed. They include providing rainwater harvesting equipment and services in guttering, micro-catchment and storage. A FAO consultant, Señor Fernando Chanduvi, assisted in the design and construction of the relevant infrastructure.
- In March 2011, a four-day workshop on Rainwater Harvesting and Small Scale Irrigation focusing on Pump and Drip Systems was successfully completed at the Farmers Training Centre in St. Catherine. Approximately 20 Extension and Field Officers from the Rural Agricultural Development Authority (RADA) and the NIC participated in this workshop.

The NIC is strategically placed to make a great impact on the Agricultural Sector. With the continued implementation of new irrigation projects through the NIDP as well as the ALIGN initiative, the agricultural revolution is expected to be even greater in the years ahead. I look forward to the renaissance of the Rice Industry and a boost in sugar production. These projects will assist in facilitating increased agricultural production in Jamaica thus making the country better able to provide food security especially, in the context of our growing population and the current economic and environmental challenges throughout the world.

I am very pleased with the exemplary work of the NIC, and I use this medium to thank the Management and Staff for another year of hard work and dedication towards building the Agricultural Sector. I also wish to commend the Board of Directors for their continued contribution in advising on the affairs of the NIC.

I urge all farmers who use the services of the NIC to 'get in the know' and take full advantage of all the advancements in technology as well as, to develop good business competencies as Agriculture takes its place in the business arena. The Sector continues to be a promising one with many opportunities for growth which will improve the Jamaican economy.

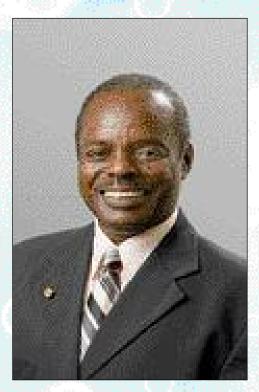
As we continue to work together for a better future for our country, let us pledge our commitment to be more vigilant in our efforts for more success.

Thank You!

Hon. Dr. Christopher Tufton, MP

# Chairman's

# Message



s we celebrate another challenging year, I am satisfied that the National Irrigation Commission Limited (NIC) has continued to make its mark in the Agricultural Sector. The Board prides itself with its achievements over the period, especially when measured against the current fiscal space. We have continued to serve our customers well and carry out the mandate of the Minister of Agriculture and Fisheries in executing the policies of the Ministry.

The Commission implemented a number of austerity programmes in keeping with the current economic difficulties and budgetary situation facing the country. We have begun to centralize most of our operations in order to function in a more economic and efficient way. During this period, we have also focused on Administration and Human Resources.

The specific achievements of the Board in the year under review are:

- Memorandum of Understanding (MOU) signed with the Natural Resources Conservation Authority/National Environmental and Planning Agency (NRCA/NEPA) on the use of a patrol boat— Ms. Ramsar. This MOU has been assisting the NIC to better monitor activities on the Black River.
- Close monitoing of the National Irrigation Development Programme (NIDP) as well as putting it back on schedule. The commissioning of the Colbeck Irrigation System in Old Harbour is now imminent.
- A Deputy Chief Executive Officer was contracted to develop policies and procedures to improve operating efficiencies and allow tighter control over the affairs of the NIC.
- Implemented cost control measures such as reduction of overtime costs in order to ensure greater financial governance.
- Continued energy conservation measures in an effort to manage the escalating energy costs.
- Implemented a number of procedures to effect improved corporate governance and internal controls such as restructuring the Audit Committee and increasing the internal audit scope.
- The Board strengthened management and control over the affairs of the NIC through its three working Committees which served to mitigate risks associated with the projects being undertaken. This controlled

environment has enhanced the reporting mechanism thereby improving internal controls, management efficiency and accountability.

The Board could not have met its goals and objectives had it not been for the dedicated, supportive and diligent Management and Staff of the NIC. Therefore, I use this opportunity to commend and thank them for their hard work, especially within the context of the economic difficulties which resulted in significant reduction in budetary allocations.

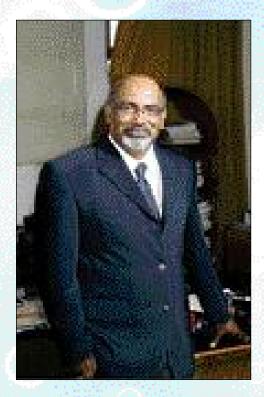
We must also extend our gratitude to the Minister of Agriculture and Fisheries, Honourable Dr. Christopher Tufton and his team at the Ministry for their guidance and support throughout the year.

I thank our stakeholders, our partners and all farmers and other users for their cooperation over this past year. I can assure you that we are committed to serving you to the best of our ability while supporting agricultural development for an even better Agricultural Sector.

Oliver Nembhard Chairman

# **Chief Executive Officer's**

# Message



or many years the National Irrigation Commission Limited (NIC) has had very challenging experiences from hurricanes to storms, to severe drought.

The period under review was incrementally better; the main concern was Tropical Storm Nicole. Although this weather system dumped a considerable amount of water on the island, we were able to assist farmers to recover in a reasonable time-frame

Besides environmental concerns, the greatest challenge was the fiscal space within which all Government entities had to operate. Notwithstanding, we were very creative in ensuring that we were able to satisfy the needs of our customers as well as support the development of the Agricultural Sector.

It is with pride that I highlight some notable achievements during the period:

- Completed the development and testing of a new Customer Relationship Management System (CRMS) software, which will facilitate a more precise and accurate billing system.
- Completed installation of the Jungle West pumping equipment in order to increase water to the Spring Plain lands.
- Augmented the river flow in the Main Canal in Clarendon with water from the St. Toolis Spring.
- Completed rehabilitation of the Old Milk River canal and the Main Canal in Clarendon at a cost of \$5,497,809.47 and \$2,209,310.00 respectively. An additional \$1,500,000.00 was expended to patch and repair the St. Dorothy canal while another \$950,000.00 was spent on canal repair in Innswood, St. Catherine.
- On August 1, 2010, the On-Farm Water Management Unit at the Rural Agricultural Development Authority was
  re-assigned to the NIC. This Unit along with a Consultant who has been engaged have been training farmers in
  best practices and promoting efficient use of irrigation water.
- Established a Research Centre with a demonstration plot in Hounslow, St. Elizabeth on approximately 6 acres
  of land which was assigned to the NIC by the Ministry of Agriculture & Fisheries. It was re-launched by the
  Hon. Prime Minister on October 23, 2010. The primary objective of this plot is to investigate and demonstrate the
  different methods of pressurized irrigation systems and the improved technology that will allow farmers to produce crops economically and efficiently. It currently contains a plant nursery and a storage room.



- Engaged the Petroleum Corporation of Jamaica in the Ministry of Energy and Mining to conduct an energy audit of the NIC, in order to strengthen its energy management programme which is on-going.
- Increased irrigation rates for users of previously established NIC's irrigation systems for the period 2010/11 to 2012/13.

The Scholarship Awards Programme continues to provide scholarships to children of employees. For the first time since its inception, a Minister's trophy was presented to the highest achiever.

Customers, I thank you for your continued support and understanding in times of difficulties. I encourage you to participate in as many training sessions as possible, because it will be to your benefit. Embrace new techniques and continue to share best practices; this practice is invaluable.

As we promote water use efficiency through the use of the Water Use Efficiency manuals which were prepared by the On-Farm Water Management Unit, make use of these documents and where possible, employ drip equipment. Farmers, you will not only enjoy better yields, but also utilize less water thus benefiting from a reduction in your water bills and a lower production cost.

To the Management and Staff, keep up the good work. I thank you for your dedication, passion and hard work. It continues to bear fruit.

I thank the Chairman and the Board for their guidance and assistance over the period.

To the Minister and the technocrats of the Ministry of Agriculture and Fisheries, your support is appreciated. Your enthusiasm is contagious and I am happy to be a part of this revolution in Agriculture.

May God bless you all and may the Agricultural Sector continue to grow from strength to strength.

Stanley Rampair Chief Executive Officer

#### **CORPORATE & LEGAL SERVICES**

#### **CORPORATE OBJECTIVES**

To develop a cadre of professionals through an appropriate and dynamic Human Resources programme and to enhance the sustainable delivery of service to our customers.

To implement and monitor the administrative systems, procedures and policies of the Commission and to ensure the protection of its assets and legal rights and to provide an efficient support system through general office service.

The year was another challenging one for the Department as the Government's salary freeze for public sector employees continued into the 2010/2011 fiscal year. This meant that once again, employees did not receive the seven per cent (7%) increase which had been negotiated as part of the Memorandum of Understanding (MOU) 3.

There were a number of changes; namely, the appointment of a Deputy Chief Executive Officer, Mr. Douglas Walker, who was given responsibility over Administration and Finance. Additionally, three new board members were appointed with expertise in Engineering as well as Farming.

The current staff complement is one hundred and ninety-three (193) inclusive of permanent, contracted and temporary workers.

#### UNION

The continuing salary freeze over the period under review meant that there were no union negotiations. It is envisaged that there will be a change in the next financial year.

#### **TRAINING**

Despite budgetary constraints, the National Irrigation Commission Limited (NIC) continues to train its staff in an effort to improve productivity. During the period, some twenty (20) staff members attended technical and administrative courses.

Additionally, the Commission continues to give financial support to staff members pursuing professional courses. Congratulations to staff members (at right) who successfully completed their studies in the year under review:



Mrs. Leonie Walker Masters in Management Information Systems, Mona School of Business



Mrs. Corren Daley Certified Professional Secretary, Professional Training Institute



Mrs. Amiel Atkinson
Masters in Business Administration,
Florida International University

#### **SCHOLARSHIP AWARDS**

It has been more than a decade since the NIC implemented its Scholarship Awards Programme which is intended to assist employees to meet the cost of education for their children and to encourage academic excellence.

This year, two tertiary and four secondary scholarships were awarded. The award ceremony was held on January 7, 2011 and the Guest Speaker at the function, Mrs. Grace Baston, Principal of Campion College, delivered an inspiring and encouraging presentation. The Chief Executive Officer, Mr. Stanley Rampair and the Deputy Chief Executive Officer, Mr. Douglas Walker, presented the scholarships to the awardees.

For the first time since the inception of the programme, a Minister's (Ministry of Agriculture and Fisheries) trophy was presented to Ms. Gersandre Thompson, the highest overall achiever.

#### The awardees were:

#### **Secondary Award:**

#### Awardee

Marshalee Cain Gersandre Thompson Martina Taylor David Thomas

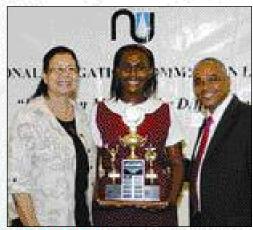
#### **Tertiary Award:**

Shannell Manning Monique Wilson

#### **Parent**

Mrs. Beverly Cain, Braco District Ms. Marcia Reid, Mid-Clarendon District Mrs. Paula Sterling-Taylor, Head Office Mr. Michael Thomas, Mid-Clarendon District

Ms. Carol Fuller, Head Office Mrs. Olive Wilson, Head Office



Highest achiever, Gersandre Thompson, recipient of the Minister's trophy poses with Mrs. Grace Miller, Educator on the Scholarship Selection Committee and Mr. Texal Christie, Vice-Principal of Glenmuir High School.

#### Scholarship awardees:

Front Row L-R: Monique Wilson, Shannell Manning, Martina Taylor, David Thomas, Marshalee Cain, and Gersandre Thompson

Back Row L-R: Mrs. Grace Baston, Guest Speaker and Principal of Campion College, Mr. David Wilson, Principal of Clarendon College and Mr. Texal Christie, Vice-Principal of Glenmuir High School



#### STAFF INCENTIVE AWARDS

The Commission implemented a Staff Incentive Awards Programme to encourage members of staff and increase productivity. The following category of award was presented:

### Employee of the Quarter for Quarters 1 & 2

A total of 20 employees were nominated for awards over the period under review. Unfortunately, awards were not made for the remaining quarters. We wish however, to congratulate all our hardworking staff, especially those who were selected for awards.

# Employees of the Quarter Quarter 1

Administration - Ms. Lurlene Leach

Mid-Clarendon

Operations - Mr. Keiffer Smith

Mid-Clarendon

Supervisory/

Managerial - Mr. Leslie Hanna

Mid-Clarendon

#### Quarter 2

Administration - Mrs. Gloria Howell

Rio Cobre

Operations - Mr. Keiffer Smith

Mid-Clarendon

Supervisory/

Managerial - Mr. Leslie Hanna

Mid-Clarendon

#### **MILESTONES**

We would like to extend our congratulations to the following staff members on the additions to their families:

Mrs. Amiel Atkinson, Head Office - baby girl Ms. Schmoi McLean, Head Office - baby boy Ms. Stephanie Foster, Head Office - baby girl

#### **SECURITY**

The Security Unit faced varied challenges during the period as it sought to protect the assets of the NIC. Notwithstanding, the Unit maintained its vigilance in dealing with breaches under the provisions of the Irrigation Act, implemented new security technologies to protect the NIC's irrigation systems and formed alliances with related Government Agencies in addressing issues of mutual concern.

The main security challenges dealt with during the period are outlined below:

#### 1. Vandalism of Pump Stations

Regrettably, the NIC experienced vandalism of four (4) of its pump stations, two in St. Catherine and two in Clarendon. The vandals ripped wires from the panel boxes, stole core cables, pump, battery and gas oil from one station. They damaged windows, doors and locks at these stations to gain entry forcibly.

These acts of vandalism resulted in temporary suspension of irrigation water supply to some of our customers, and the NIC had to expend valuable scarce resources to restore these pump stations to working condition.

We have had to face this challenge head-on with the implementation of new security approaches in the protection of these equipment. The NIC continues to explore more advanced security options, as we remain resolute in preserving the irrigation infrastructure to serve our nation's farmers.

It is felt that these locations were vandalized and the items pilfered for the scrap metal trade. The Government has sought to put in place more stringent regulation of the Scrap Metal Industry, in an effort to put a stop to the wave of destruction of public assets which is purportedly linked to this trade.

#### 2. Encroaching on Canal Reservation

Squatting on the canal reservation continues to be a challenge. The Security Unit in collaboration with field personnel conducted regular patrols and checks with the aim of preventing new squatters from encroaching on the reservations. With regards to the more established squatter settlements, primarily in the Spanish Town area, an inter-agency approach has been adopted to address this situation.

The NIC has joined forces with a number of organizations such as, the National Environmental and Planning Agency, Parish Council, Ministry of Health, Jamaica Constabulary Force, National Water Commission and National Works Agency, to combat this problem which has serious implications for all the Agencies involved.

The possible health implications are, however, of major concern at this time; these communities have little or no potable water and, the irrigation water which is untreated is often times used for domestic purposes. It is anticipated that through this collaborative effort at the highest level, an effective solution will be found and implemented to the benefit of all concerned.

#### 3. Pilfering/Blockages

During the period under review, there was a reduction in the number of the incidents reported on illegal extraction of irrigation

water from our system. Offenders were served verbal or written warnings and were required to pay a fine for the water illegally extracted, as well as for damage to the system.

Blockages in the canals were largely the result of illegal recreational activities such as "Canal Splash" which continue to be staged from time to time in certain communities. These pose a threat to NIC's operations. We continue, however, to partner with the Police and Member of Parliament in these areas to address this practice.

As the nation's crime statistics continue to be a source of concern, there is a corresponding increase in the threat level against the NIC's staff and property, especially in the parishes of St. Catherine and Clarendon. Nevertheless, we are committed to taking every possible precaution to preserve life and property, partnering with our customers, staff and other stakeholders to fulfill the NIC's mandate.

#### **OPERATIONS**

#### **CORPORATE OBJECTIVES**

To implement methods, which will improve efficiencies in procurement, conveyance and delivery of irrigation water to enhance the quality and reliability of service.

The worldwide recession and its global effect left many nations no recourse but to adjust their economies accordingly. The Jamaican economy was no different as financial constraints impacted the operations of all Government entities. Consequently, there was a reduction in the number of activities pursued by the NIC during this period. However, the services provided to the customers showed overall improvement.

#### The main areas of focus were:

- Continuation of the Energy Management Program across all districts
- Limited capital works programs
- Upgrading of data collection process for water production, distribution and energy use (on-going)
- On-Farm Water Management
- Rehabilitation of pumping equipment in Hounslow, St. Elizabeth

#### Challenges

- Rising energy costs
- Relatively low agricultural activities in areas served by the NIC
- Funding and implementation of projects
- Security of the NIC's staff and its infrastructure

#### **Achievements**

A reduction in energy usage in Clarendon

because of less pumping time resulting from the flow of the St. Toolis spring water into the Main Canal.

- Acquisition of 25 acres of land for a micro dam at Hill Run in St. Catherine, which guarantees adequate water supply during periods of drought. This will assist in increasing fish production in the Hill Run area.
- Improved conveyance efficiency resulting from repairs to the Main Canal including Line A, where 68 lengths of pipes totaling 1,292 feet were connected to take water from Jacobs Hut No.1 to Rhymesbury in Clarendon.
- Refurbishing of the Hounslow office in St. Elizabeth.
- Promotion of water use efficiency to farmers by the On-Farm Water Management Unit.
- The establishment of an energy data collection and monitoring team located at the Operations Centre to manage power consumption and billing errors by the Jamaica Public Service Company.
- Launch of a Rainwater Harvesting project in Trelawny in collaboration with the Member of Parliament, Mrs. Marisa Dalrymple Philibert, to provide irrigation water for farmers in the area.
- Installation of Closed Circuit Television (CCTV) cameras to increase security for the pump houses.

#### Water Production Information System (WPIS)

The NIC energy cost has shown an annual increase notwithstanding energy conservation methods. It presently amounts to One Hundred and Eighty-Two Million Dollars (\$182,000,000.00). There is a two per cent (2%) increase in invoicing over last year. To date, invoicing is seventy per cent (70%) of water produced (See Table 1 overleaf). The gap between water produced and invoiced has to be further closed. We are currently focusing on greater accuracy in the water measurement process in order to attain improved integrity in our data collection.

# WATER PRODUCTION AND DISTRIBUTION

The water production levels, invoicing and energy consumption in each irrigation network location are shown in Table 1 below.

Table 1: Water Production and Invoicing Summary (April 2010-March 2011)

	Hours	Water	Water	ades,	Energy	Energy	Unit	Energy
	Pumped	Prod.	Involced (m3)	Invoiced	Grafts	Cost	(lewh/m2)	Cost (\$)
Yalahs	1,799.50	171,029.20	214,268.00	125%	116,779.76	3,308,573.76	990	19.35
St. Dorethy	12,543,00	0,126,346.00	3,653,962,00	168 168 168 168 168 168 168 168 168 168	1,235,372.20	31,841,881.57	0.20	6.20
Block A	8.810.10	988,322.00	740,092,00	75%	191,651,50	6.852,728.41	0.10	6.93
Blocks B & C	6,655.02	709,339.00	480,378.00	1100	221,670.04	7,742,480.64	0.01	10.92
Block E	7,879.02	1,616,851.64	1,150,699.00	71%	623,007,81	14,943,846.30	0.39	9.24
Spring Village	10,379.00	2,352,495.90	1,383,108.00	50%	47,747.99	2,508,001.51	0.02	1.07
Blocks + Spring Village	33,723.14	8,655,978,54	3,764,277,00	14.00	1,084,377,34	32,047,065.34	9.19	6.86
Tot. (Esn. Region Pump)	48,085,84	11,984,353.74	7,532,527,00	80k	2,436,529.30	67,187,511,69	0.20	5.62
Canal flow (Esn. Region)	,	38,057,495.00	30,156,655.00	70%				
TOTAL (EAST REGION)	48,065.64	50,021,348.74	37,689,182.00	78%		62,116,511,59	٠	7
MID CLARENDON (DW) 23,167.59	23,167.59	8,924,263.27	10,754,429.13		2,343,936.66	68,418,006.44	0.26	7.67
River		9,414,137.94						
TOTAL MCID (DW+	23,147,59	18,338,401.21	10,754,429.13	X489		68,418,005.44		173
Hounslow	3,253,00	2,065,919.00	1,880,086.00	91%	710,285,36	23,288,075.36	0.35	11.27
F2+F3 & Beacon LiPark:	5,802.52	1,159,067.00			683,477.84	18,780,348.57	0.59	16.20
graco	2,347,50	593,050,50	625,924.00	160	182,586.00	4,957,217,78	100	8.36
TOTAL (WESTERN REGION)	11,403.02	3,618,036.50	2,400,010,00	459 459	1,562,349,20	17,028,820,71	641	12.33
OVERALL (pumped)	82,636,25	24,708,653.51			6,362,815,16	182,641,157,74	0.26	7.39
GRAND TOTAL	82,636,25	72,178,286.45	50,849,621.13	70%	6,362,815,16	6,362,815,16 182,641,157,74	60.0	2.63

#### **NIC Energy Management Programme**

With the implementation of cost saving projects as the number one priority, the Petroleum Corporation of Jamaica (PCJ) has included the NIC on the list of Government companies to receive an energy audit. The NIC has been asked to identify and submit an energy project, which can guarantee a 35% savings for funding by the PCJ. The proposal is to develop a wind farm project to supply 1.5 megawatts of power to supply NIC's Hounslow pumps with the cooperation of Wigton and the Ministry of Energy and Mining as an energy saving initiative.

The NIC has appointed an Energy Engineer with responsibility for the recommendation and preparation of supporting documentation for all energy saving projects, including continued retrofitting of NIC's offices and "greening" of the Research Centre in Hounslow. Ten inverter type air condition units have been installed in various offices.

#### **Civil Works**

Budgetary constraints have limited capital works projects. Nevertheless, the NIC was able to complete a reasonable amount of canal repairs in Clarendon. This work was undertaken in anticipation of an increase in sugar cane production due to the sale of the Government owned sugar estates to Chinabased COMPLANT International Sugar Company. These jobs were carried out by the Civil Works Department.

#### They were as follows:

- Rehabilitation and improvement of existing pipeline
- Canal works for the Eastern and Central Regions

#### **RIO COBRE**



Pre-fabrication of rectangular walls section



Pre-fabrication of rectangular walls section

#### **RIO COBRE**



Section of the Old Habour Main Canal in Innswood showing earth backfill to stabilize eroded bank



Upstream view of 700 feet of repaired canal



St. Dorothy Main Canal with damaged wall section removed



St. Dorothy Main Canal with damaged wall section repaired with concrete (approximately 600 ft of canal was repaired)

#### **CLARENDON**



Deteriorated section of Old Milk River Canal stone packed trapezoidal canal



Approximately 1 mile of repairs to Old Milk River Canal wall and invert

#### ST. JAMES



Seven Rivers pipeline repaired after being damaged by heavy rainfall and erosion

#### Salem Fishing Beach Project

The Salem Fishing Beach Project is part of the Fishing Beach Programme of assistance which falls under the patronage of the Ministry of Agriculture & Fisheries (MOA&F). Under this programme, a total of 30 fishing beaches have been earmarked for rehabilitation. The Government of Jamaica, the European Union and the Canadian International Development Agency will jointly fund these projects.

The MOA&F commissioned the NIC to improve 19 of the 30 fishing beaches in 11 parishes

across Jamaica. To date, the NIC has rehabilitated four projects, the Salem Fishing Beach being the most recent. It includes the construction of a fish vending and handling facility of approximately 70 square metres and consists of a concrete counter fitted with a double sink to facilitate the proper handling of seafood.

Under this refurbishing project, the gear shed was also renovated. Six doors were repaired, painted and fortified with grills. The intervention cost J\$4.6 million and will impact directly 103 fisher folks and their families.



Salem Fishing Beach vending facility under construction



Completed Salem Fishing Beach vending facility

#### **Pressurized System Adjustment**

The table below reflects high attrition rate among farmers in St. Catherine during the period under review. However, there was an improvement in the customer base in Clarendon.

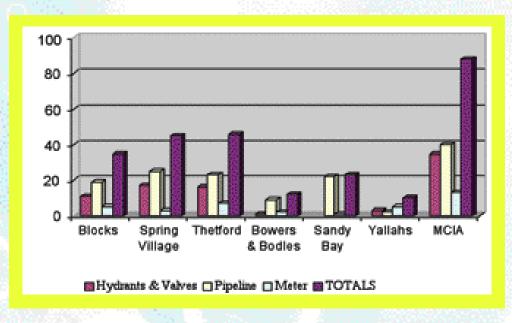
Table 2: Pressurized System Adjustment

		NEW			
LOCATION	PERIOD	INSTALLATION	DISCONNECTION	TERMINATED	RECONNECTION
Rio Cobre	April - June July - Sept. Oct Dec. Jan March	34	17	0	4
St. Dorothy	April - June July - Sept. Oct Dec. Jan March	29	51	0	11
Yallahs	April - June July - Sept. Oct Dec. Jan March	7	1	0	0
Totals		70	69	0	15

Table 3: Repairs and Replacement to Infrastructure Pressurized Systems

Location	Blocks	Spring Village	Thetford	Bowers & Bodles	Sandy Bay	Yallahs	MCIA
Infrastructure							
Hydrants & Valves	11	17	16	1		3	35
Pipeline	19	25	23	9	22	2	40
Meter	5	3	7	2	1	5	13
TOTAL	35	45	46	12	23	10	88

Figure 1: Repairs to Pressurized Infrastructure



#### **Electrical/Mechanical**

The NIDP project in St. Elizabeth has experienced electrical and mechanical challenges. The F3 submersible pump set became defective in July 2010. The NIC acquired a submersible motor from Jamaica Aluminum Company (JAMALCO). It was installed in March 2011. The Little Park F2 pump and Hounslow No.4 had also developed motor problems. The F2 pump has been repaired.

Unscheduled stoppages due to electrical/ mechanical faults in both St. Catherine and Clarendon remain low. However, with the increase in water demand due to increased production, the Operations Department is reviewing its preventative maintenance scheduling. Additionally, there is planned rehabilitation of dormant pumps in order to increase pumping capacity. The Jungle West Well was one such well; it serves the Spring Plains property. It has been equipped with new switchgear, pump and motor at a cost of Eleven Million Dollars (\$11,000,000.00).

#### **Workshop and Stores**

The workshop and stores continue to offer critical support to the Districts by constructing flumes, canal gates, repairing engines, building concrete fence poles, cutting and welding pipes. A variety of items are held in inventory for the Districts such as meters, valves, pipe fittings, lubricants, pumps and motors.

Table 4: Workshop Production

Items	Description	Quantity
1	Parshall Flumes	18
2	Sluice Gate	28
3	Saddles	20
4	Flange Adaptor, Risers	130
5	Metal Gate	4
6	Metal Door	3
7	Grill Works	65
8	Concrete Post	102

# NATIONAL IRRIGATION DEVELOPMENT PROGRAMME (NIDP)

#### **CORPORATE OBJECTIVES**

To increase agricultural production and farmers' income as a result of improved irrigation management practices in the irrigable areas prioritized in the NIDP

#### PROGRAMME BACKGROUND

The National Irrigation Development Plan (NIDP) was completed in 1998 by the National Irrigation Commission Limited (NIC). The purpose of this plan was to identify and prioritize irrigation projects for implementation with the long-term objectives to:

- Improve farmers' income and
- Increase rural employment.

A total of fifty-one (51) priority projects, valued at US\$106M, were identified. The implementation of these irrigation projects will result in more efficient use of agricultural lands and significantly increase crop production levels in the project areas. Several of these projects are currently being implemented under the NIDP. It is expected to complement the Government of Jamaica's (GOJ) long- term agricultural development plan to Year 2015, and further the Government's effort to increase farmer participation in irrigation while making the NIC self-sustaining.



Lead Farmers' Training Programme Workshop



The implementation of all the projects will result in the delivery of several benefits including:

- Increased productivity levels and greater crop diversity
- Farmer participation in irrigation management through the establishment of Water Users Association (WUA) to manage and operate the schemes

• Development of sustainable irrigation systems

#### **Funding Support and Proposed Beneficiaries**

In addition to GOJ funding, the NIDP has also received financial support from the Caribbean Development Bank (CDB) and the Inter-American Development Bank (IDB) to fund several projects under the NIDP.

CDB & IDB projects showing the areas covered and numbers of beneficiaries

Funding Source	Sum (USS) * millions	Scheme	Land Area (ha)	No. of Farmers	Status of Infrastructure Implementation
CDB/GOJ	12.0	Seven Rivers, St. James	32	36	Completed
		Beacon/Little Pk, St. Elizabeth	500	360	Completed
		Hounslow Rehab., St. Elizabeth	486	420	Completed
IDB/GOJ	21.0	Colbeck, St. Catherine	110	90	In progress
		New Forest, Manchester	400	400	In progress
		Yallahs, St. Thomas	301	435	In progress
		Essex Valley, St. Elizabeth	400	400	At feasibility
		St. Dorothy, St. Catherine	500	100	At feasibility
TOTAL	33.0		2729	2241	

#### **Project Organization**

This comprises both a Project Steering Committee (PSC) and a Project Implementation Unit (PIU). Led by the NIC's Chairman, the PSC comprises stakeholders such as farmers, representatives from the relevant Government Ministries and the Planning Institute of Jamaica (PIOJ). It has been established to oversee and monitor the progress of the implementation of the NIDP projects.

During the year under review, the PSC met twice and the major issues discussed included:

- Programme for completing infrastructure works
- Technical assistance and work being done through the Memoranda of Understanding (MOUs) with the Agricultural Support Services Project (ASSP), Land Administration and Management Programme (LAMP) and National Land Agency (NLA)
- Finalization of the WUA accounts allowing for the holding of Annual General Meetings (AGMs)

#### CDB FUNDED FLAGSHIP PROJECTS

As reported, the GOJ and the CDB funded three 'Flagship' Projects to the tune of US\$12,000,000.00 as follows:

- Hounslow (Rehab.) St. Elizabeth
- Pedro Plains (Beacon/Little Park) St. Elizabeth
- Seven Rivers St. James

#### Data on the CDB Schemes

As envisaged under the programme, infrastructure works on all three projects have been completed and the schemes are in operation. WUAs have been established in all three (3) schemes since 2007 and subsequent AGMs held. Through the Production and Productivity Programme, the NIC working with the Ministry of Agriculture & Fisheries (MOA&F) significantly expanded the areas under production in the Hounslow and Beacon/Little Park Schemes.

The main crops being grown in the project area include tomato, irish potatoes, peppers and watermelon. In addition to the infrastructure, the CDB Project included a Land Regularization programme established as a part of the MOU with the LAMP and NLA. So far, a total of 19 titles have been issued from the 63 requested by lot holders in Beacon/Little Park.

Scheme	Туре	Flow (mcm/yr)	Pipeline length	Water Sources	Remarks
			(km)		
Beacon/Little	Pressurized	2.68	32	3 wells	New
Park					
Hounslow	Pressurized	3.47	17	5 wells	Rehab.
Seven Rivers	Gravity	0.13	5.5	River	New
				flow	



#### **Provision of On-Farm Equipment**

The provision of on-farm equipment for the beneficiaries is a critical deliverable under the CDB Project. This is to ensure that the goal of improved irrigation efficiency and productivity can be achieved. To date, a total of 144 farmers have been provided with one (1) acre of drip irrigation equipment under a credit facility that forms part of the project funding arrangements.

Prior to accepting the drip equipment, farmers also received training in the proper installation, operation and maintenance of the systems. Additionally, these farmers were taught the proper methods to apply fertilizer and other inputs through these systems.

#### **Training and Technical Assistance**

One critical component of the CDB funded projects was the provision of Agricultural Technical Services (ATS). Consequently, the NIC hired a Consultant Agronomist on a one-year contract commencing in July 2010, to provide both farmer training and technical assistance.

To date, this consultant has undertaken several training courses in several areas including:

- Weed control
- Pesticide use
- Improvements in watermelon production

#### **Remaining Project Items**

Having completed the infrastructure work and established the WUAs, the remaining items under this project include:

- Completion of the ATS Component
- Procurement of spares for the pumping stations
- Processing of remaining land titles
- Taking flows from Hounslow 5 to augment supplies to the Beacon/Little Park project area



NIC Systems Superintendent, Carlos Williams explaining the fertigation process to farmers in Hounslow and Beacon/Little Park

#### **IDB FUNDED PROJECTS**

The IDB funded programme was signed on May 27, 2005 with the NIC being the Executing Agency. The full project cost is US\$21 million of which, the IDB contributes 80% while the remaining 20% is provided by the GOJ.

During the year, a total of five (5) training sessions were held involving 120 farmers. Due to the delay in project start-up and the need for the full five-year execution period, the project disbursement period has been extended by 18 months; the current date for final disbursement is now November 27, 2011.

The projects are located in five designated areas island-wide viz:

- Yallahs (St. Thomas)
- Colbeck (St. Catherine)
- New Forest/Duff House (Manchester)
- Essex Valley (St. Elizabeth)
- St. Dorothy (St. Catherine)

#### **Overview of IDB Programme**

The main outcome indicators for the successful completion of this programme are the incremen-

tal increase in irrigated areas of high-valued crop production of approximately 1,700 hectares, benefiting about 1,000 farmers, along with the establishment of WUAs to operate and maintain those schemes. The project will increase farming income as a result of the introduction of new crops, increases in yields and cropping intensity.

The following are to be achieved with the project implementation:

- Irrigation systems to be operated and maintained by fully autonomous, self-sustained and viable WUAs
- Improvements in environmental management in the designated schemes
- Majority farmers have registered land titles or leases that will grant them WUAs membership and also access to credit financing
- NIC's role redefined to one of planning, regulation and monitoring

This project has employed a highly integrated approach to project development in an attempt to achieve sustainability. Its full and successful delivery is dependent on implementing effectively, four (4) components; namely, Institutional Strengthening of the NIC, Promotion and Formation of WUAs, Farmers' Technical Assistance and Training and the Provision of Irrigation Infrastructure on the five (5) irrigation projects.

	Component I	Component II	Component III	Component IV
Title	Institutional Strengthening of NIC	Formation of Water Users Associations (WUAs)	Farmers' Technical Assistance & Training	Provision of Irrigation Infrastructure
Objective	Strengthening of NIC's capacity & facilitate re- organization	Establish WUAs in each system and eventually facilitate transfer of O&M	Provide training to 1000 farmers as well as develop 30 lead farmers	Install irrigation infrastructure and complete land regularization in 2 schemes
Status on Main activities to date	Billing     system     strengthened     Business     Strategy     tenders     completed	3 WUAs     established     Several training     exercises     completed	Lead farmers selected and training programme launched     Over 300 farmers trained	Colbeck: 100% New Forest: 35% Yallahs: 20%
Amount spent to date (JS)	50,841,503.17	27,245,987.73	13,145,557.55	320,533,481.71

## Component I: Institutional Strengthening of the NIC

The objective of this component is to strengthen NIC's capacity for Irrigation Management, as well as to facilitate the re-organization of the NIC to focus on planning and monitoring within the irrigation sub-sector.

The following were achieved during the year:

- Work was completed on the Customer Relationship Management System (CRMS); this software is now being 'rolled out' to the relevant departments within the NIC. This contract valued at US\$149,000 was awarded to Infotech Caribbean. It will enhance NIC's Information Systems (IS) capabilities and improve the service to our customers.
- The NIDP is in the process of contracting a consultant to develop NIC's 5-year Business Plan.
- Computer hardware and software were procured. These include GPS equipment and software licences which were purchased from Microsoft through the Central Information Technology Office (CITO).

#### Component 2: Promotion and Formation of WUAs

Outputs from this Component aim to establish WUAs for each NIDP Scheme, with capacity to share in the operation and maintenance of the irrigation systems.

The membership as at March 30, 2011 in each WUA is as outlined in the table below.

Since October 2007, Water Users Associations in Colbeck, New Forest/Duff House and Yallahs have been registered under the Friendly Societies Act as Irrigation Specially Authorized Societies (ISAS). In June 2009, a Memorandum of Understanding (MOU) was signed between the NIC and the Colbeck WUA. During the year, this MOU was enhanced by the preparation of an addendum to further clarify the roles of both parties.

The development and sustainability of WUAs pose challenges for the NIC. This fact was discovered at Colbeck where several financial weaknesses were identified in the audit conducted by the Department of Co-operative & Friendly Societies (DCFS).

During the year, the DCFS developed an action plan to address the weaknesses identified in the operation of the WUAs.

Both the NIC and DCFS undertook training of the WUAs in several areas including:

- Leadership Development
- Recordkeeping
- Conflict Resolution

Location	Multilateral Funding	Current Membership	Status of 2010 Financial Audit
Colbeck	IDB	102	DCFS completing audit
Yallahs	IDB	95	Audit reports completed
New Forest/Duff House	IDB	112	Financial documents submitted to DCFS
Beacon/Little Park	CDB	90	Financial documents submitted to DCFS
Hounslow	CDB	35	DCFS awaiting financial data
Seven Rivers	CDB	50	DCFS awaiting financial data

Having completed the Water Users office buildings in Yallahs and Colbeck, the NIDP has now purchased the requisite furniture and these are being handed over to the respective WUAs. So far, the Yallahs WUA have been operating from their office building. Plans to construct the New Forest/Duff House WUA building were revised with the Government's assurance of adequate fiscal space. Construction is expected to commence in early July and be completed by October 2011.

The development of WUAs in Jamaica is quite new, having commenced in 2007. However, WUAs have been in existence in the Dominican Republic (DR) since 1987 with varying degrees of success. During the year, the IDB facilitated a visit to the DR for NIDP and WUA representatives to observe the performance and operations of WUAs. Two representatives from the NIDP along with executive members from three (3) local WUAs were present.

Some differences between WUAs in Jamaica and the DR are shown in the table overleaf. WUAs in the DR generally operate surface systems with low energy demand. They are established as non-profit organizations and set their own tariff. Currently, they are developing their agribusiness capacity in order to ensure sustainability. While local WUAs are regulated by DCFS, the WUAs in the DR are regulated by Instituto Nacional de Recursos Hidráulicos (INDRHI), the Jamaican equivalent to the NIC.



NIDP Programme Director (Acting), Milton Henry and WUA members making a presentation in the Dominican Republic

#### Difference between WUAs in Jamaica and the Dominican Republic

Factor	NIC	INDRHI/DR	Remarks
Organization Present Purpose	Manage & operate public irrigation schemes	Regulate WUAs and deliver several services including Hydraulic, Hydrologic	
WUAs Start up year	2007	1987	
Types of Irrigation Systems in WUA	Pressurized	Surface	Higher costs for Sprinkler operation
Tariff Set By	NIC/OUR	Farmer	
Current Tariff		\$21.92 - \$43.84/ha	
WUA Establishment Law	Friendly Society	Non-Profit	INDRHI responsible for regulating WUAs
WUA Inst. Capacity	Low	High	
Soil & Water Analysis Capacity	Low	High	Capacity exists in MOA&F
Agribusiness Capacity	Low	Medium	Capacity exists in MOA&F

# Component 3: Farmers' Technical Assistance and Training

The aim of this component is to support farmers' economic activities through training in the correct use of agricultural and marketing techniques.

The main outcomes under this Component include:

- Management of the MOU between NIC and ASSP to provide Agribusiness Services, training of 30 trainers in modern and effective extension methodology
- Development of annual training plans to include training of 30 lead farmers and provide Technical Assistance to 1,000 farmers
- Provide Environmental Management Training to 1,000 farmers

With the closure of the ASSP Programme, the NIC during the year, established an MOU with the Rural Agricultural Development Authority (RADA) to provide Technical Assistance to farmers under the NIDP. This was operationalized through the provision of technical assistance at Colbeck along with farmer training on several topics. With infrastructure now complete at Colbeck, RADA has been requested to provide further technical assistance in areas such as land preparation, crop husbandry and identification of markets.

The NIDP Training Unit was very active, offering training in several areas:

- Eighty (80) farmers trained in Loan Financing, Costing, Business Planning & Loan Application Procedures
- Fifty-two (52) farmers twenty-seven (27) from Colbeck and twenty-five (25) from Yallahs were hosted for a day at the farms run by key members of the previously established WUAs in Pedro Plains

One important deliverable from the NIDP is the development of the Lead Farmer Training Programme. This programme was launched on October 26, 2010 and to date the following has been achieved:

- Selection of 30 lead farmers from all six (6)
   WUAs for Training and HEART certification
- Training of 30 lead farmers in areas of Training Needs Analysis, Adult Training Methods and Presentation Skills.



Mr. Donovan Stanberry, giving the keynote address at the launch of the Lead Farmers' Training Programme



Colbeck Farmers' Presentation at the Lead Farmers' Training Programme Workshop

#### Component 4: Provision of Irrigation Infrastructure

The objective of this Component is to construct and/or rehabilitate five (5) irrigation projects and complete required Pre-investment Studies.

The major components are:

- Construction of five (5) projects, including Feasibility Studies for Essex Valley and St. Dorothy
- Pre-feasibility Studies on Mid-Clarendon and Rio Cobre Irrigation Systems
- Execution of MOUs with NLA and LAMP for Land Regularization

During the year, the NIDP had to overcome challenges but achieved some key targets in the implementation of the irrigation infrastructure, as mentioned below:

#### **COLBECK, ST. CATHERINE**



Vandalism to portions of the Motor Control Centre at Colbeck

At Colbeck, the pumping station was vandalized on three (3) different occasions resulting in significant damage to the motor control panel. These were subsequently replaced with the inclusion of additional security measures to reduce the risk of future vandalism. Notwithstanding, the following were achieved:

- The Contractors Y.P. Seaton & Associates completed commissioning of the pipe network
- The land clearing is 70% complete, allowing farmers at Colbeck to commence land preparation

Overall, the infrastructure work at Colbeck can support agricultural development and, the NIC expects full commissioning of the system early in the new financial year.



Pump testing activity at Colbeck

#### **NEW FOREST/DUFF HOUSE, MANCHESTER**

During the year, the well drilling programme was successfully completed and the requisite operating licences obtained from the WRA. With the completion of the drilling programme, the PIU commenced procurement of several contracts including pumps, pipes and a replacement well.

The status is as follows:

## Replacement Well (J\$32.5 million)

Cabinet Office has given approval for the contract to drill a replacement well. This work will be completed during the upcoming financial year - tenders have been received.

## Supply and Installation of 3 pumps (J\$77.3 million)

The NIC has signed a contract with Y.P. Seaton and Associates for the supply of 3 pumps to serve the New Forest area. This contract will be completed during 2011.

### Supply of Pipes (J\$100.01 million)

This contract has been awarded to Jamaica Drip Irrigation Ltd. and to date, 60% of the pipes have been supplied.

### Installation of Pipes

This contract has been tendered and a contract is expected to be signed later this year. The estimated total contract value is J\$150 million.

#### YALLAHS, ST. THOMAS

### Well Drilling Programme

The well drilling programme for Lot 1 was completed with the drilling of two of the three wells. The overall cost was J\$25.98 million.

## Supply of Pipes

The contract has been tendered for Phase 1 of the Yallahs area. This is expected to benefit 311 farmers on 254 hectares of land. Installation is expected to commence during the upcoming financial year. The designs for Phase 1 of the Yallahs System are now being finalized for tender during the first Quarter of 2011.

## Supply and Installation of Pumps

Designs have been completed for two pumping stations under Phase 1. These tenders along with the pump installation should be completed during the upcoming financial year.



Well testing in Yallahs

# Pre-Investment Studies, Essex Valley & St. Dorothy (US\$249,000)

During the year, the recommended bidder, Hydroplan was selected to undertake this contract. Work is expected to commence during June 2011. Completion of this project is critical for the finalization of future irrigation infrastructure in Essex Valley.

## **Irrigation Area Land Regularization**

The cadastral mapping work undertaken by contractor, Llewelyn Allen & Associates, was completed in both the Yallahs and New Forest/Duff House project areas. Cadastral Map Sheets have been submitted to the NLA for checking and approval.

Map Sheets have been submitted as follows:

- **Yallahs:** Eleven (11) map sheets comprising 498 parcels
- **New Forest:** Eleven (11) map sheets comprising 562 parcels have been submitted. Additionally, NLA has commenced work on 38 easement surveys required to facilitate the pipeline installation; this work is 80% complete.
- Colbeck: Facilitating the submission of transfer documents, payments for and receipt of titles to aid with the land regularization process is ongoing. LAMP has completed the release of 62 titles to beneficiaries in the Colbeck Irrigation Scheme. They have now requested that the St. Catherine Parish Council release all remaining titles for the Colbeck Subdivision. There has been some delay in the transfer of the remainder of the lots in this project area due to necessary changes in the deposited plan used to obtain individual titles for landowners.

## **INFORMATION SYSTEMS**

## **CORPORATE OBJECTIVES**

To use Information and Communication Technology (ICT) to enable improvements in NIC's business processes and provide support services to achieve corporate goals.

The objectives of the Department for the year under review were to:

- Continue the transition from the use of manual systems to Computer Based Information (CBI) Systems
- Deliver timely, efficient and cost effective CBI Systems to reduce operational costs through improved efficiencies
- Ensure the co-ordination of NIC's business activities through the integration of the CBI Systems
- Enhance customer service through the provision and availability of relevant information
- Ensure the continuity of business at the NIC by implementing a disaster recovery plan for the security and recovery of mission critical data.

The priorities for the period were:

- Finalization and data migration of the new Customer Relationship Management System (CRMS)
- Strengthening of computer systems infrastructure
- Acquisition of new and more secure Server Room
- Continuation of the development of the Geographic Information System (GIS)
- Maintaining high corporate collaboration through electronic communication
- Reduction in real value IT operational cost

#### ACCOMPLISHMENTS FOR THE PERIOD

The Information Systems (IS) Department focused on aligning value operational cost to the NIC's cost reduction policy, while maintaining the highest quality service possible.

# Finalization and data migration of the new Customer Relationship Management System (CRMS)

Infotech Caribbean (Jamaica) Limited, Cogsdale Corporation along with the National Irrigation Commission's Information Systems team developed a Customer Relationship Management System (CRMS).

Development work on the NIC-CRMS which was funded by the IDB under the National Irrigation Development Programme (NIDP), was completed in December 2010. This project is to replace NIC's current Customer Information System (CIS) with a new, completely integrated (open-system) solution.

The major objectives are to:

- Provide the best possible level of customer service
- Validate and centralize customer data from all district locations
- Improve timeliness in reporting and bill generation
- Improve NIC's ability to monitor water flows distributed along each canal/line or pipeline.

The delivery of new system has resulted in the following activities to finalize deployment:

- (i) Identification and review of NIC data sources
- (ii) Data preparation including resolution of errors
- (iii) Data test and import into CRMS
- (iv) Functional System Testing of all three modules.



## **NIC-CRMS BENEFITS & INDICATORS**

18 Function	IS Function Outputs	18 Functional Performance
Information	Information Usefulness	Defining problems in process flow
		Identifying problems in data analysis
	Information Reliability	Reliable - improve information security, accurate, traocable
	Information Flexibility	Easily updated to new technology
		Easily integrated into existing Financial System used by the NIC
		Easily changed to new requirement, requests by stakeholders
		Easy to generate reports
	Information Quality	Important - WPIS & CIS information 60% more accessible
		Relevant - WPIS & CIS information 40% more accessible to special groups - including pending transactions
	Information Accessibility	Available - 90% up time
		Up to date - ability to view up to date information after input
Systems	Systems Quality	Accessible in all District Offices
		Reliable - 90% up time - fault tolerance system
		Response time = 30% improvement in processing response
	Job Impact	Increase productivity of Billing, WPIS & Customer
		Application Tracking process management by 40%
		Decision participation by stakeholders
	Internal Process Impact	Reduce process cost by 30% of man-hours
		Reduce cycle time - Customer billing process by 3 days, WPIS process by 4 days, Customer Application process by 2 weeks (under normal conditions)
		Process management clearly defined
	External Impacts	Customer satisfaction - Bills available at earlier date - preliminary within 2 days
		Information sharing - instant communication through e- mail, texting and reminders.

## **NIC-CRMS BENEFITS & INDICATORS**

IS Function	IS Function Outputs	IS Functional Performance
Information	Information Usefulness	Defining problems in process flow
		Identifying problems in data analysis
	Information Reliability	Reliable - improve information security, accurate, traceable
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		Easily changed to new requirement, requests by stakeholders
		Easy to generate reports
	Information Quality	Important - WPIS & CIS information 60% more accessible
		Relevant - WPIS & CIS information 49% more accessible to special groups - including pending transactions
	Information Accessibility	Available - 90% up time
		Up to date - ability to view up to date information after input
Systems	Systems Quality	Accessible in all District Offices
		Reliable - 90% up time - fault tolerance system
		Response time - 30% improvement in processing response
	Job Impact	Increase productivity of Billing, WPIS & Customer Application Tracking process management by 40%
		Decision participation by stakeholders
	Internal Process Impact	Reduce process cost by 30% of man-hours
		Reduce cycle time - Customer billing process by 3 days, WPIS process by 4 days, Customer Application process by 2 weeks (under normal conditions)
		Process management clearly defined
	External Impacts	Customer satisfaction -Bills available at earlier date- preliminary within 2 days
		Information sharing - instant communication through e- mail, texting and reminders.

#### **NIC-CRMS FUNCTIONALITY**

NIC's CRMS is built on Microsoft technology by Cosgdale which offers users easy access to accurate, real time data. Each organization has specific system requirements that must be addressed if maximum return on investment is to be realized. This technology offers easy customization features; NIC no longer has to be concerned with costly source code changes and programmer intervention. Cogsdale CRMS leverages tools from Microsoft Business Solutions - Great Plains, that allow staff members (with proper security rights) to easily change screen functionality.

#### **CUSTOMERS AND SERVICE ACCOUNTS**

- Customers and service accounts are separate entities: a customer can be set up as the "bill to" customer at multiple accounts, without making double entries for customer properties. Also, the system allows a transfer process whereby customers and service accounts can be tracked as separate entities.
- Accounts Location/Customer Classes properties will extend to all members of the class. This will speed up the process of setting up new customers and locations.
- Unlimited user defined fields for the customer and location level. These fields accommodate unique requirements specific to NIC. They increase the system's flexibility.
- Most important aspects of account activities can be easily observed as they are tracked or referenced on the account window. Multiple tabs are available on this window such as: Transactions, Consumption Analysis, Statements, Services and others. Also, a maximum of four account windows can be opened at the same time.

#### **EQUIPMENT**

- Equipment inventory maintenance the system can track very detailed information for every piece of equipment in inventory, such as: serial number, user defined status, model, description, installation address, removal, acquisition, test due dates, etc.
- Unlimited user defined field these fields accommodate unique requirements specific to NIC. They increase the system's flexibility.
- Equipment testing maintenance schedules can be set up. This facilitates testing routines.

#### CONNECTIONS

- Configurable connection status can be set up to accurately reflect NIC's operations.
- Metered connections are assigned a meter and a rate; these are linked to a route thus facilitating consumption reporting at the route level.
- Flat rate connections are applied manually. These are used to accommodate drainage billing.

#### BILLING

- A Flexible Rate Setup can accommodate NIC's multiple rate structure and any potential updates. It keeps record of any rate changes inclusive of multiple details, based on consumption or fixed charges.
- An Aged Trial Balance reporting by Service Types, as each rate is based on a service type.
- Pre-defined billing cycles which speed up the billing process and eliminate any potential user errors. Cycles are defined for each district separately.
- Pre-defined excluded due dates. The system is so configured that due dates are automatically adjusted to reflect business days only.

## INTEGRATION WITH MICROSOFT DYNAMICS GP

- CRMS can be considered a sub-ledger of the Microsoft Dynamics General Ledger. All financial transactions emanating from the CRMS can be verified/adjusted and posted to the general ledger. This integration can be considered highly valuable because it eliminates any possible error and every general ledger journal entry originating from the CRMS can be easily linked to a document number.
- Drill down functionality is available on the journal entry inquiry window.
- The CRMS can be looked at as a separate module of the Great Plains system with respect to the transaction flow.

# STRENGTHENING OF COMPUTER SYSTEMS INFRASTRUCTURE

#### **New Hardware**

With just over J\$1.5 million expenditure on Computer Hardware for the period, the targets were compulsory acquisition or replacements. These include: 11 desktops, 5 laptops and 3 printers. Replacements amounted to approximately 36% of acquisitions.

# Acquisition of new and more secure Server Room

Acquisition of a new and more secure Server Room was another milestone accomplishment. This new base forms the hub of the IT infrastructure, enhances disaster preparedness and mitigation for the NIC. The room is also equipped with a temperature monitoring system that alerts the Information Systems team via e-mail.

#### **New Software**

Funded under the NIDP at a cost of over US\$107,000, the NIC Computer Systems infrastructure was strengthened with delivery

of a Microsoft package that includes:

- Microsoft Office 2010 Office productivity tools
- MS Exchange Server 2010 e-mail and collaboration tool
- Microsoft Front End Server Internet security tool

These software acquisitions set the framework for added benefits which include:

- Improved efficiency, present training and development opportunities and boost employee morale
- Greater compatibility with other government entities

## Maintain high corporate collaboration through electronic communication

The most widely used application within the NIC for the period, the Microsoft Exchange Outlook, continues to be the backbone of NIC's Communication while reducing cost.

The acquisition of Exchange 2010 added even more value to users:

- More protection for inboxes against cyber attacks/spam
- Greater control over email and calendar

## Reduce real value IT operational cost

A policy established by the NIC for the year under review was one of cost reduction.

The IT Department undertook the following cost reduction activities:

- Standardization and increase Hardware Life Cycle
- Standardization to make assets and processes look similar by distributing standard desktop and laptops
- With a projected Computer Hardware need of J\$2.5 million for the period, savings of approximately J\$1 million was realized through the increase life cycle of hardware strategy
- Predictive and preventative maintenance for reliable performance and extension of equipment life
- Increased remote technical support through the Wide Area Network to reduce man-hours lost to staff movements and travel costs



## **COMMERCIAL**

## **CORPORATE OBJECTIVES**

To expand the customer base, maximize the collection of revenue and to ensure continued customer satisfaction.

#### WATER SALES AND DRAINAGE

Water Sales and Drainage Charges for the year under review increased by approximately six per cent (6%) or \$11.8M from \$199.3M to \$211.1M.

This increase can be attributed to:

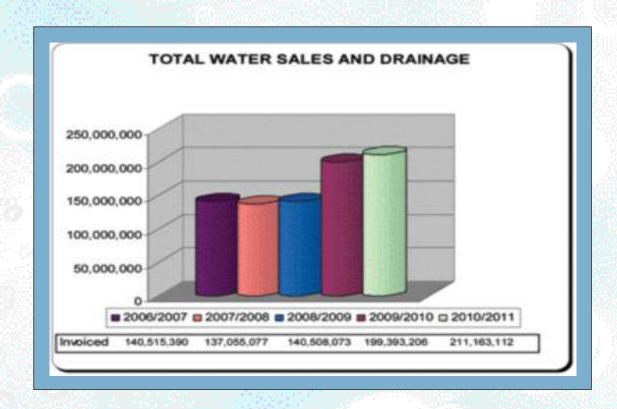
a) A fifty per cent (50%) increase in irrigation rates for agricultural users and a one hundred per cent (100%) rate increase for non-agricultural users that became effective August 1, 2010

b) Increased agricultural activities as a result of the reengaging of un-utilized and underutilized lands.

During the period, the percentage rate of collection remained in the high eighties.

In its quest to optimize revenue collection, the NIC continues to accommodate its credit challenged customers through its payment arrangement facility as well as other collection strategies that have been implemented, aimed at optimizing revenue collections.

The NIC's levels of invoicing for the financial year 2006/2007 to 2010/2011 are outlined below:



#### **CUSTOMER SERVICE**

The NIC's commitment is to provide a game changing experience for its customers through quality service. To this end, a new Customer Relationship Management System (CRMS) has been developed, which is set to replace the current Customer Information System (CIS) with a new and completely integrated opensystem solution. This will have the effect of providing optimal customer service delivery.

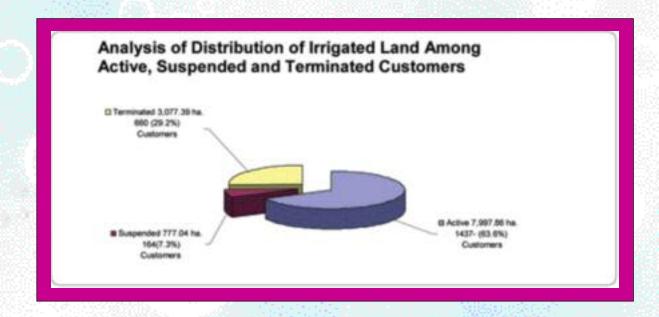
Features of this new CRMS include: increased timeliness and efficiency for billing, improved application process with an application tracking system, expanded communication options and improvement in revenue management with expanded payment options, all geared towards enhancing the customer service experience and improving management reporting.

#### **CUSTOMER STATUS**

The pie chart below depicts the distribution of irrigated lands among customers classified as active, suspended and terminated. With a total customer base of 2,261, occupying 11,852.29 hectares of land, 63.6% or 1,437 customers on 7,997.86 hectares of land were active, 7.3% or 164 customers on 777.04 hectares were suspended and 29.2% or 660 customers on 3,077.39 hectares were terminated.

#### **INITIATIVES**

The partnership with the Ministry of Agriculture and Fisheries (MOA&F) through the Production and Productivity Programme and the Arable Lands Irrigated and Growing for the Nation (ALIGN) initiative, continues to result in the re-engaging of more underutilized lands into production. Increased usage is being realized in Mid-Clarendon as well as St. Catherine (including Bushy Park and Blocks A, B, C and E).



Irrigation infrastructure is now being outfitted in areas of Spring Plains, Ebony Park and Rhymesbury in Clarendon. This project will see another 160 hectares returning to production. Other strategies being pursued are geared towards increasing the demand for irrigation services.

#### **COMPLAINTS**

Efforts to improve service delivery and improve customer satisfaction are ongoing. During the year under review, nine (9) major complaints were received in the Eastern Region; all were resolved in a timely manner. Seven (7) major complaints were received in the Western Region, two (2) of which are pending due to ongoing investigations.

#### **IRRIGATION WATER APPLICATIONS**

#### **New Project Areas**

The new project areas, Beacon/Little Park in St. Elizabeth and Seven Rivers in St. James, continue to experience growth in number of customers as well as hectares (acreage) under production. At the end of March 2011, Beacon/Little Park Irrigation System had 242 customers with 334.68 hectares of land, an overall increase of 28.72% and 27.2% respectively. The Seven Rivers Irrigation System now has 16 customers with 14.87 hectares of land, an increase of 23% and 24.5% respectively.

#### **Hounslow Rehabilitated Irrigation System**

The Hounslow Irrigation System is now fully rehabilitated. This included the replacement of thirty per cent (30%) of existing pipelines. Distribution efficiency will be greatly improved resulting in better service delivery to customers in these areas.

#### Colbeck

The Colbeck Irrigation System is now being completed and twenty-seven (27) applications for service have so far been received. The NIC is expected to provide irrigation services to approximately one hundred and ten (110) hectares of land in this area, with ninety (90) potential users.

### **Eastern Region**

Applications received for the year under review were eightyfive (85) and have been categorized as follows:

- 1) Fifty-three (53) were approved
- 2) Thirty-two (32) are awaiting approval

The applications received during the period accounted for 156.34 hectares of land.

## **Western Region**

One hundred and forty-six (146) applications were received for the Western Region. They are broken down as follows:

- (1) Ninety-five (95) were approved
- (2) Fifty-one (51) are awaiting approval

The applications received during this period accounted for 290.12 hectares of land.

## FINANCIAL AND CORPORATE PLANNING

## **CORPORATE OBJECTIVES**

To continue development of financial management systems to provide accurate, reliable, timely and relevant information for decision-making to ensure that financial resources are optimally developed to drive service delivery.

## **Financial Summary**

The Commission earned a surplus of approximately \$40M in the 2010/2011 financial year. This surplus represents a \$153M or 136% reduction on the deficit of \$113M incurred in the prior year. Revenue from our core business (water sales and drainage charges) increased marginally by \$11M or 5% when compared to the prior year.

Increased revenue was driven primarily by higher irrigation rates that were effected at the end of the first quarter of the 2010/2011 financial year; the demand for water normalized in 2010/2011 following higher than average demand resulting from drought in the prior year.

The Government of Jamaica (GOJ) increased its subvention to the Commission by 19% or \$80.6M when compared to the prior year. This increase in the GOJ subvention, combined with a marginal decrease in operating costs resulted in a \$99M increase in gross operating income, from \$10M in 2009/2010 to \$109M in 2010/2011.

On the one hand, operating costs decreased marginally by 2% or \$15M, driven primarily by a \$31M or 14% decrease in pump electricity costs during the period. In addition, total costs decreased by 9% or \$76M and reflect management's efforts to ensure that all areas of operations were driven by a least-cost approach. This reduction was also driven by a \$54M surplus on the NIC's Defined Benefit Pension Plan that has served to reduce administrative costs by \$39M.

On the other hand, total assets increased by \$100M or 3%. This increase was mainly due to a \$21M increase in accounts receivable, that is reflecting the higher irrigation rates effected during the financial year, a \$54M surplus on the NIC's pension plan and a \$31M increase in the deferred tax asset.

The prior year's build up in accounts payables that was due primarily to amounts payable to the Jamaica Public Service Company Limited (JPSCo), mainly for pump electricity charges incurred during the prior period was defrayed by a \$120M loan from Financial Sector Adjustment Company (FINSAC), which is reflected as a long-term debt on the NIC's 2010/2011 Balance Sheet. However, although payables have declined by 17% or \$34M when compared to the 2009/2010 financial year, the NIC is faced with the enduring problem of significant build up in payables to the JPSCo.

This situation has continued from the previous financial year as the GOJ, for two successive years has not provided the required budgetary support to meet the NIC's energy costs annually.

Of note, is that the Commission's current assets ratio has improved from 0.87:1 in the prior year to 1.12:1 in the current financial year.

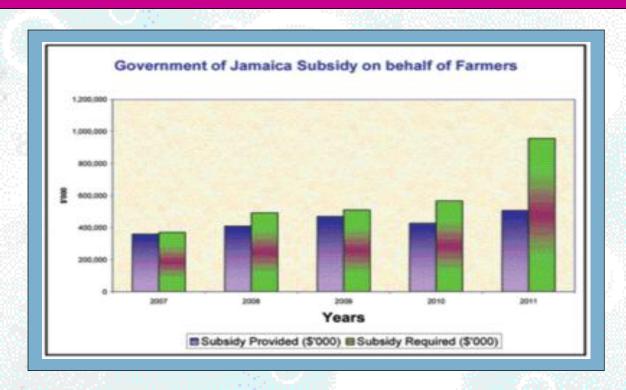
The surplus earned during the financial year resulted in a 72% and a 9% increase in the accumulated surplus and shareholders' equity respectively.

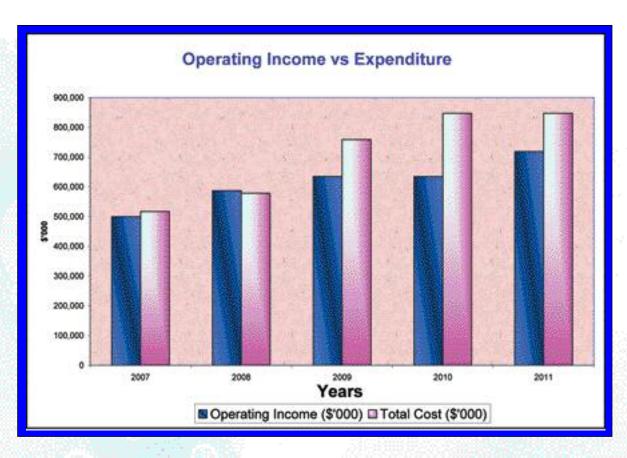
# Highlights of International Financial Reporting Standards (IFRS)

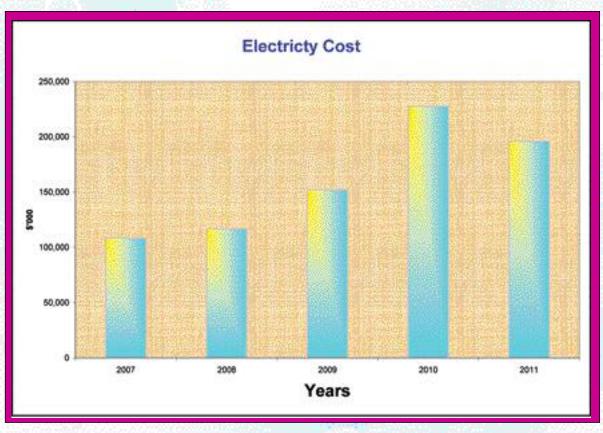
For the year ended March 31, 2011, certain new IFRS and interpretations of and amendments to existing standards were in issue but are not yet effective and have not been early-adopted by the Commission.

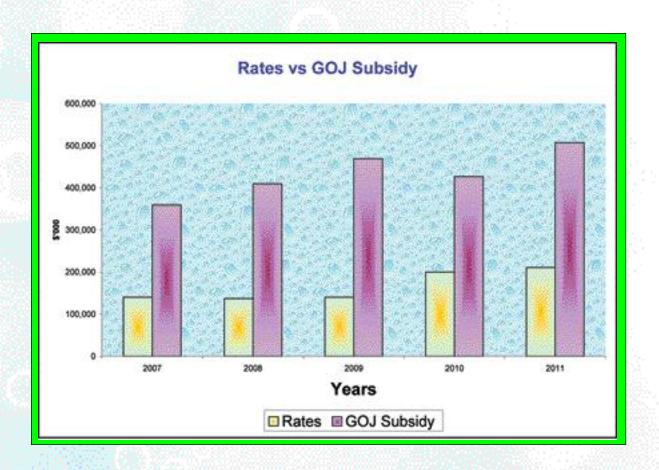
Consequently, these new standards had no effect on the Company's financial position or operating results for the 2010/2011 financial year.

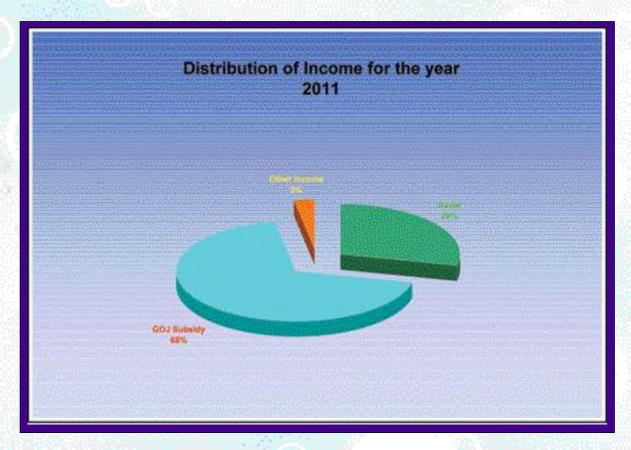
National Irrigation Commission Limited Five Year Statistics					
SIGNIFICANT METRICS	\$'000	\$'000	\$'000	\$1000	\$'000
	2011	2010	2009	2008	2007
Shareholders Equity % Inc./(decr.) compared to prior year	504,094 8.68%	463,834 -19.60%	576,922 -6.80%	618,993 <b>11.00%</b>	557,662 6.62%
PROFIT AND LOSS ACCOUNT					
Operating Revenue (% Dec)/% Inc. compared to prior year	718,673 <b>13.21%</b>	634,806 -0.04%	635,076 <b>8.14%</b>	587,265 <b>17.48%</b>	499,885 <b>13.80%</b>
Accumulated Surplus (% Decr.)/% Inc. compared to prior year	95,964 <b>72%</b>	55,704 <b>-67</b> %	168,791 - <b>20</b> %	210,863 <b>41%</b>	149,531 <b>30%</b>
IMPORTANT RATIOS					
Admin. Exp. as a % of Total Costs	20.05%	26.32%	30.41%	26.87%	24.27%
Operating Exp. as a % of Total Costs	79.36%	73.67%	69.59%	73.15%	75.73%
Electricty Exp. as a % of Total Costs	25.54%	26.87%	20.02%	20.51%	21.54%
Electricty Exp. as a % of Operating Costs	32.17%	36.48%	28.77%	28.04%	28.45%
Rates as a % of Total Costs Rates as a % of Operating Costs	27.46% 34.60%	23.59% 32.02%	18.51% 26.60%	24.07% 32.90%	27.94% 36.90%
GOJ Subsidy as a % of Total Costs	66.07%	50.34%	61.82%	71.98%	71.46%
GOJ Subsidy as a % of Operating Costs	83.25%	68.33%	88.84%	98.40%	94.37%















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#### INDEPENDENT AUDITORS' REPORT

To the Members of NATIONAL IRRIGATION COMMISSION LIMITED

#### Report on the Financial Statements

We have audited the financial statements of National Irrigation Commission Limited (company), set out on pages 50 to 77 which comprise the statement of financial position as at March 31, 2011, the statements of comprehensive income, changes in equity and cash flows for the year thou ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards and the Jamaican Companies Act, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on the financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance as to whether or not the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence relating to the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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#### To the Members of NATIONAL IRRIGATION COMMISSION LIMITED

#### Report on the Financial Statements, continued

#### Opinion

In our opinion, the financial statements give a true and fair view of the financial position of the company as at March 31, 2011, and of its financial performance, changes in equity and cash flows for the year then ended, in accordance with International Financial Reporting Standards and the Jamaican Companies Act.

#### Report on additional matters as required by the Jamaican Companies Act

We have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of our audit. In our opinion, proper accounting records have been maintained and the financial statements, which are in agreement therewith, give the information required by the Jamaican Companies Act in the manner required.

Chartered Accountants Kingston, Jamaica

IMMC

July 27, 2011

Statement of Financial Position March 31, 2011

	Notes	2011	2010
CURRENT ASSETS			
Cash and cash equivalents	- 4	88,988,190	86,181,297
Resale agreements	.5	35,808,649	33,104,868
Accounts receivable	6 7	96,530,534	75,264,088
Inventories	7	50,994,610	50,516,765
Current portion of long-term receivables	9	10,872,594	9,798,631
Income tax recoverable		7,174,023	6,200,705
Total current assets		290,368,600	_261,266,354
NON-CURRENT ASSETS			
Employee benefit asset	3	54,406,000	
Long-term receivables	9	17,365,942	18,785,352
Property, plant and equipment	10	796,613,959	809,772,824
Deferred tax asset	11	95,556,416	64,114,865
Total non-current assets		963,942,317	892,673,041
Total assets		\$1,254,310,917	1,153,939,395
CURRENT LIABILITIES			
Accounts payable and accrued charges	12	162,923,895	196,503,236
Government of Jamaica project advances	13	95,526,386	103,742,826
Total current liabilities		258,450,201	300,246,062
NON-CURRENT LIABILITIES			
Long-term debt	14	120,000,000	
Deferred credit, being total non-current			
Biabilities	15	371,766,335	389,859,044
Total liabilities		750,216,536	690,105,106
EQUITY			
Share capital	16	100	100
Capital reserve	17	408,130,161	408,130,161
Accumulated surplus		95,964,120	55,704,028
Total equity		504,094,381	463,834,289
Total liabilities and equity		\$1,254,310,917	1,153,939,395

The financial statements on pages 50 to 77 were approved for issue by the Board of Directops on July 27, 2011 and signed on its behalf by:

Oliver Nembhard

Marilla Attalla Director

The accompanying notes form an integral part of the financial statements.

Statement of Comprehensive Income Year ended March 31, 2011

	Notes.	2011	2010
Operating revenue: Water sales and drainage charges Government of Jamaica subsidy		210,860,229	199,933,806
on behalf of farmers Other funding for non-capital expenditure	18	507,264,171 549,317	426,616,417 8,255,824
Cost of producing water and distributing it to farm gates		718,673,717 (609,356,633)	634,806,047 (624,357,827)
Gross operating surplus		109,317,084	10,448,220
Amortisation of deferred credit	15	42,761,575	39,335,337
Other income	19	19,777,547	16,483,417
Administration expenses		(153.964.423)	(223,969,477)
Profit (loss) before finance costs and taxation		17,891,783	(156,802,503)
Finance costs	20	(-9.073,242)	(81,619)
Prefit*(loss) before taxation		8,818,541	(156,884,122)
Taxation credit	21	31,441,551	43,796,788
Profit*(loss) being total comprehensive income*(loss) for the year	22	\$_40,260,092	(113,087,334)

Statement of Changes in Equity Year ended March 31, 2011

	Share capital (Note 16)	Capital reserve (Note 17)	Accumulated surplus	Total
Balances at March 31, 2009	100	408,130,161	168,791,362	576,921,623
Loss, being total comprehensive loss for the year			(113,087,334)	(113,087,334)
Balances at March 31, 2010	100	408,130,161	55,704,028	463,834,289
Profit, being total comprehensive income for the year	-		40,260,092	40,260,092
Balances at March 31, 2011	\$100	408,130,161	95,964,120	504,094,381

The accompanying notes form an integral part of the financial statements.



Statement of Cash Flows Year ended March 31, 2011.

	2011	2010
Cash flows from operating activities:  Profit/(loss) for the year  Adjustments to reconcile loss for the year	40,260,092	(113,087,334)
to net cash provided by operating activities:  Depreciation (Gain)/loss on disposal of property, plant and equipment.  Amertisation of deferred credit Property, plant and equipment written-off Employee benefit asset Taxation credit Interest income Foreign exchange loss/gain Interest expense	44,947,713 ( 4,187,433) ( 42,761,575) 549,317 ( 54,406,000) ( 31,441,551) ( 1,811,020) 865,347 9,008,219 ( 38,976,891)	45,956,591 266,596 (39,335,337) 32,304,000 (43,796,788) (5,913,277) (268,374)
Decrease/(increase) in current assets: Resale agreements Accounts receivable Inventories Income tax recoverable	( 2,703,780) ( 21,482,808) ( 477,845) ( 973,318)	25,447,301 2,017,618 ( 40,093,402) ( 1,637,292)
(Decrease)/increase in current liabilities: Accounts payable and accrued charges Government of Jamaica project advances. Interest paid	( 35,519,067) ( 8,216,520) ( 7,068,493)	94,545,924 22,138,942
Net cash used by operating activities	(115,418,722)	(_13,199,008)
Cash flows from investing activities:  Purchase of property, plant and equipment  Proceeds from disposal of property, plant and equipment Interest received  Long-term receivables	( 35,325,582) 7,177,950 2,024,281 345,447	( 41,131,224) 527,000 4,922,504 (_3,099,425)
Net cash used by investing activities	(_25,777,904)	(_38,781,145)
Cash flows from financing activities: Capital grants Proceeds from long-term borrowings	24,668,866 129,090,000	70,728,352
Net cash provided by financing activities	144,668,866	70,728,352
Net increase in cash and cash equivalents	3,472,240	18,748,199
Cash and eash equivalents at beginning of the year	86,381,297	67,364,724
Effect of exchange rate fluctuations on cash held	(865,347)	268,374
Cash and cash equivalents at end of the year	5_88,988,190	_86,381,297

The accompanying notes form an integral part of the financial statements.



Notes to the Financial Statements March 31, 2011

#### Identification

National Irrigation Commission Limited (company) is incorporated and domiciled in Jamaica, and is wholly-owned by the Government of Jamaica through the Accountant General. The company's registered office is located at 191 Old Hope Road, Kingston 6.

The principal activities of the company are:

- (a) The management, operation, maintenance and expansion of existing and future irrigation schemes established by the Government. The principal schemes currently in operation are Black River, Braco, Hounslow, Mid-Clarendon, Rio Cobre, Yallahs, Beacon/Little Park, Seven Rivers and St. Dorothy.
- (b) The identification and designation of the persons who shall be entitled to use the water generated by the irrigation schemes and the fixing and collection of rates or charges for such services rendered.

#### Statement of compliance, basis of preparation and accounting estimates and judgements.

#### (a) Statement of compliance:

The financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") and their interpretation, issued by the International Accounting Standards Board ("IASB"), and comply with the provisions of the Jamaican Companies Act.

#### Standards which became effective during the year:

Certain new standards and interpretations of, and amendments to, existing standards, which were in issue, came into effect for the current financial year. Those which management considers to be relevant to the company are as follows:

- L4S.24, Related Party Disclosure, revised (effective January 1, 2011) introduces changes
  to the related party disclosure requirements for government-related entities and amends
  the definition of a related party. The standard also expands the list of transactions that
  require disclosure. The company is assessing the impact, if any, the amendment will have
  on the 2011 financial statements.
- Disclosures Transfer of Financial Assets (Amendments to IFRS 7) is effective for accounting periods beginning on or after July 1, 2011. The amendment requires disclosure of information that enable users of financial statements to understand the relationship between transferred financial assets that are not derecognized in their entirety and the associated liabilities and to evaluate the nature of and risks associated with, the entity's continuing involvement in these derecognized assets. The company is assessing the impact, if any, the amendment will have on the 2012 financial statements.
- IFRS 9. Financial Instruments (2010). The revised IFRS supersedes the previous version
  of IFRS 9 issued in 2009 and is effective for accounting periods beginning on or after
  January 1, 2013. The revised standard now includes guidance on classification and
  measurement of financial liabilities designated as fair value through profit or loss and
  incorporates certain existing requirements of IAS 39 Financial Instruments: Recognition
  and Measurement on the recognition and de-recognition of financial assets and financial
  liabilities. The company is assessing the impact, that if any, the standard will have on
  the 2013 financial statements.

Notes to the Financial Statements (Cont'd) March 31, 2011

#### Statement of compliance, basis of preparation and accounting estimates and judgements (cont'd):

#### (a) Statement of compliance (cont'd):

- IFRS 1 Financial Instruments: Disclosures The standard is amended to add an explicit statement that the interaction between qualitative and quantitative disclosures better enables users to evaluate an entity's exposure to risks arising from financial statements. Existing disclosures relating to maximum exposure to credit risk, financial effect of collateral held as security and other enhancements in respect of a financial instrument have been amended. Certain disclosures relating to carrying amount of financial assets that are not past due or are not impaired as a result of their terms having been renegotiated and description of collateral held as security for financial assets that are past due have been removed. The amendment is effective for accounting periods beginning on or after January 1, 2011. The company is assessing the impact, if any, that the standard will have on the 2012 financial statements.
- IAS I Presentation of Financial Statements IAS 1 is amended to state that for each
  component of equity a reconciliation from opening to closing balances is required to be
  presented in the statement of changes in equity, showing separately changes arising from
  items recognized in profit or loss, in other comprehensive income and from transactions
  with owners acting in their capacity as owners. The amendment is effective for
  accounting periods beginning on or after January 1, 2011. The company is assessing the
  impact, if any, that the standard will have on the 2012 financial statements.

#### (b) Basis of preparation:

The financial statements are prepared on the historical cost basis, except for the inclusion of certain items of inventory at valuation, and are presented in Jamaica Dollars which is the functional currency of the company.

#### (c) Accounting estimates and judgements:

The preparation of the financial statements in conformity with IPRS requires management to make estimates and assumptions that affect the reported amounts of, and disclosures relating to, assets, liabilities, contingent assets and contingent liabilities at the reporting date and the income and expenses for the year then ended. Actual amounts could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the year in which the estimate is revised, if the revision affects only that year, or in the year of the revision and future years, if the revision affects both current and future years.

Key sources of estimation uncertainty

Judgements made by management in the application of IFRS that have a significant effect on the financial statements and estimates with a significant risk of material adjustment in the next financial year are presented below:

Notes to the Financial Statements (Cont'd) March 31, 2011

#### Statement of compliance, basis of preparation and accounting estimates and judgements (cont'd)

- (c) Accounting estimates and judgements (cont'd):
  - Pension and other post-employment benefits:

The amounts recognised in the statement of financial position and comprehensive income statement for pension and other post-employment benefits are determined actuarially using several assumptions. The primary assumptions used in determining the amounts recognised include expected long-term return on plan assets, and the discount rate used to determine the present value of estimated future each flows required to settle the pension obligations.

The expected return on plan assets assumed considers the long-term historical returns, asset allocation and future estimates of long-term investment returns. The discount rate is determined based on the estimate of yield on long-term Government securities that have maturity dates approximating the terms of the company's obligation; in the absence of such instruments in Jamaica, it has been necessary to estimate the rate by extrapolating from the longest-tenor security on the market. Any changes in these assumptions would impact the amounts recorded in the financial statements for these obligations.

#### Provision for bad debts:

In determining amounts recorded for impairment of accounts receivable in the financial statements, management makes judgements regarding indicators of impairment, that is, whether there are indicators that suggest there may be a measurable decrease in the estimated future cash flows from accounts receivable, for example, repayment default and adverse economic conditions. Management also makes estimates of the likely estimated future cash flows from impaired accounts receivable, as well as the timing of such cash flows. Historical loss experience is applied where indicators of impairment are not observable on individual significant accounts receivable and total trade accounts receivable with similar characteristics, such as credit risks.

It is reasonably probable, based on existing knowledge, that outcomes within the next financial year that are different from these assumptions could require a material adjustment to the carrying amounts reflected in the financial statements.

#### Significant accounting policies

#### (a) Cash and cash equivalents:

Cash comprises eash in hand and demand and call deposits with banks. Cash equivalents are short-term, highly fiquid investments that are readily convertible to known amounts of eash, are subject to an insignificant risk of changes in value, and are held for the purpose of meeting short-term eash commitments, rather than for investment or other purposes.

Notes to the Financial Statements (Cont'd) March 31, 2011

#### Significant accounting policies (cont'd)

#### (b) Resale agreements:

The company purchases Government securities and agrees to resell them on a specified date and at a specified price ('resale agreements' or 'reverse repos'). The company, on paying cash to the counterparty, sometimes, takes possession of the underlying securities, although title is not formally transferred, unless that counterparty fails to repurchase the securities on the date specified or to honour other conditions.

Resale agreements are accounted for as short-term collateralised lending. Resale agreements are classified as loans and receivables and are carried at amortised cost. Interest carned on resale agreements is recognised as interest income over the life of each agreement using the effective interest rate method.

#### (c) Property, plant and equipment and depreciation:

#### (i) Owned assets

Property, plant and equipment are stated at cost, less accumulated depreciation and impairment losses [see note 3(h)].

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied in the part will flow to the company and its cost can be reliably measured.

#### (ii) Depreciation

Property, plant and equipment are depreciated on the straight-line method at annual rates estimated to write down the assets to their residual values over their expected useful lives. The depreciation rates are as follows:

Building and leasehold improvements	255%
Utility plant	2-3%
Furniture, fixtures and equipment	10% and 20%
Computer equipment	20%
Motor vehicles	20%

The depreciation rates, useful lives and residual values are reassessed at each reporting date.

#### (d) Capital grants:

Grants for acquisition of property, plant and equipment and an amount equivalent to the value of property, plant and equipment received as gifts, (including an amount equivalent to the values ascribed to utility plant at the districts, which were taken over by way of gift in 1990), are included in the Deferred Credit account. Annually, an amount equivalent to the depreciation charge for the year on these assets is transferred to the statement of comprehensive income.

Notes to the Financial Statements (Conf'd) March 31, 2011

#### Significant accounting policies (contd)

#### (e) Inventories:

Inventories are carried at the lower of cost or net realisable value determined on the first-infirst-out basis, and valuation, being substantially salvage values determined by professional valuators.

#### (f) Projects managed:

Project receipts are deferred as advances. When utilised, they are allocated to Deferred Credit, if expenditure is for property plant and equipment or to revenue, if expenditure is for period expenses. Costs accumulated in the project expenditure account are likewise appropriately allocated.

#### (g) Employee benefits:

Employee benefits comprise all forms of consideration given by the company in exchange for service rendered by employees. These include current or short-term benefits such as salaries, bonuses, NIS contributions, annual leave; post-employments benefits such as pensions; and other long-term employee benefits such as termination benefits.

Employee benefits that are earned as a result of past or current service are recognised in the following manner: Short-term employee benefits are recognised as a liability, not of payments made, and charged as expense. The expected cost of vacation leave that accumulates is recognised when the employee becomes entitled to the leave. Post-employment benefits are accounted for as described below.

Post-employment employee benefits, comprising pension obligations included in the financial statements, are actuarially determined by a qualified independent actuary, appointed by management. The appointed actuary's report outlines the scope of the valuation and the actuary's opinion. The actuarial valuations are conducted in accordance with IAS 19, and the financial statements reflect the company's post-employment benefit obligations as computed by the actuary. In carrying out their audit, the auditors rely on the work of the actuary and the actuary's report.

The company's net obligation in respect of defined benefit pension plan is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that value is discounted to determine the present value, and the fair value of any plan assets is deducted. The discount rate is the yield at reporting date on long-term Government bonds that have maturity dates approximating the terms of the company's obligation. The calculation is performed by a qualified actuary, using the projected unit credit method.

When the benefits of the plan are improved, the portion of the increased benefit relating to past service by employees is recognised as an expense in the statement of comprehensive income on the straight-line basis over the average period until the benefits become vested. To the extent that the benefits are vested immediately, the expense is recognised immediately in profit or loss.

Notes to the Financial Statements (Cont'd) March 31, 2011

#### Significant accounting policies (cont'd):

#### (g) Employee benefits (cont'd):

In calculating the company's obligation in respect of the plan, to the extent that any cumulative unrecognised actuarial gain or loss exceeds ten percent (10%) of the greater of the present value of the defined benefit obligation and the fair value of plan assets, that portion is recognised in profit or loss over the expected average remaining working lives of the employees participating in the plan. Otherwise, the actuarial gain or loss is not recognised.

Where the calculation results in a benefit to the company, the recognised asset is limited to the net total of any unrecognised actuarial losses and past service costs and the present value of any future refunds from the plan or reductions in future contributions to the plan.

#### (h) Impairment:

The carrying amounts of the company's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated at each reporting date. An impairment loss is recognised whenever the carrying amount of an asset or its eash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss.

#### Calculation of recoverable amount:

The recoverable amount of the company's originated securities and receivables is calculated as the present value of expected future cash flows, discounted at the original effective interest rate inherent in the asset. Receivables with a short duration are not discounted.

The recoverable amount of other assets is the greater of their net selling price and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

#### (ii) Reversals of impairment:

An impairment loss in respect of an originated security and receivable is reversed, if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised.

In respect of other assets, an impairment loss is reversed, if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the assets carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.



Notes to the Financial Statements (Cont'd) March 31, 2011

#### Significant accounting policies (confd)

#### (i) Taxation:

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in profit or loss, except to the extent that it relates to items recognised directly in equity, in which case it is recognised in other comprehensive income.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted at the reporting date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

#### Accounts receivable:

Accounts receivable are stated at their cost, less impairment losses.

(k) Accounts payable and accrued charges:

Accounts payable and accrued charges are stated at their cost.

#### (l) Foreign currencies:

Foreign currency balances at the reporting date are translated at the rates of exchange ruling, on that date.

Transactions in foreign currencies are converted at the rates of exchange ruling at the dates of those transactions.

Gains and losses arising from fluctuations in exchange rates are included in profit or loss.

#### (m) Related parties:

A party is related to an entity if:

- directly, or indirectly through one or more intermediaries, the party:
  - (a) controls, is controlled by, or is under common control with, the entity (this
    includes parents, subsidiaries and fellow subsidiaries);
  - (b) has an interest in the entity that gives it significant influence over the entity; or
  - (c) has joint control over the entity;
- (ii) the party is an associate (as defined in IAS 28, Investments in Associates) of the entity;



Notes to the Financial Statements (Confd) March 31, 2011

#### Significant accounting policies (confd)

- (m) Related parties (cont\*d):
  - (iii) the party is a joint venture in which the entity is a venturer (see IAS 31, Interests in Joint Ventures);
  - (iv) the party is a member of the key management personnel of the entity or its parent;
  - (v) the party is a close member of the family of any individual referred to in (i) or (iv);
  - (vi) the party is an entity that is controlled, jointly controlled or significantly influenced by, or for which significant voting power in such entity resides with, directly or indirectly, any individual referred to in (iv) or (v); or
  - (viii) the party is a post-employment benefit plan for the benefit of employees of the entity, or of any entity that is a related party of the entity.

A related party transaction is a transfer of resources, services or obligations between related parties, regardless of whether a price is charged.

#### 4. Cash and cash equivalents

	2011	2010
Cash Bank balances	278,304 88,709,886	432,124 85,949,173
	\$88,988,190	86,381,297

#### 5. Resale agreements

At the reporting date, the fair value of underlying securities used as collateral for resale agreements was \$36,759,267 (2010: \$34,898,298).

#### Accounts receivable.

		2011	2019
	Trade receivables for water sales and drainage charges [note 25(b)(iii)] Provision for probable losses	82,417,330 (_22,014,295)	53,398,027 (17,270,000)
	Other receivables	60,403,035 36,127,499	36,128,027 39,136,061
		\$_96,530,534	75,264,088
7.	haventories	2911	2010
	At cost At valuation	46,620,554 4,374,056	46,142,709 4,374,056
		\$50,994,610	50,516,765

Notes to the Financial Statements (Confd) March 31, 2011

#### Inventories (cont'd)

In the previous year, the company received pipes costing \$41,993,367 as a grant from the Chinese Government. Inventories also consist of pipe fittings and machinery spares which have, in the main, been left over from previous capital projects. The directors are of the view that these items have future usefulness, in some cases, with appropriate modifications and/or enhancements. Inventories at all locations were, therefore, revalued as at March 31, 1995 by Fisher Pryce & Associates, Consulting Engineers, and, at St. Dorothy, as at March 31, 1999 by Express Traders & Contractors Limited. The surplus arising on revaluation was credited to the Deferred Credit account (note 15).

To the extent that revalued inventories are consumed (and charged to profit or loss), an equivalent amount is transferred from Deferred Credit to income.

#### 8. Employee benefit asset

The company sponsors a defined-benefit contributory pension scheme for all employees who have satisfied certain minimum service requirements. The benefits are computed at 2% of pensionable salary for each year of membership in the plan and on other increments as determined by the pension plan.

Amounts recognised in the financial statements in respect of this benefit are as follows:

#### (a) Asset recognised in the statement of financial position:

	2011	2010
Present value of funded obligations Fair value of plan assets	(583,307,000) 640,989,000	(642,335,000) 551,868,000
Net asset Unrecognised actuarial losses/(gains) Unrecognised asset due to Section 58	57,682,000 ( 3,276,000)	( 90,467,000) 180,773,000 ( 90,306,000)
Asset recognised in the statement of financial position	\$_54,406,000	
Movement in the net asset recognised in the statement of fin	nancial position:	
	2011	2010
Balance at beginning of year Contributions paid Benefit expense	15,203,000 39,203,000	32,304,000 15,253,000 (47,557,000)

Notes to the Financial Statements (Confd) March 31, 2011

## Employee benefit asset (cont'd)

## (b) (i) Movements in the liability for defined-benefit obligation:

	2011	2010
Present value of obligation as at April 1, 2010 Benefits paid Service and interest costs Contributions Value of purchased annuities Actuarial loss (gain)	642,335,000 ( 36,739,000) 93,107,000 15,071,000 40,469,000 (170,936,000)	386,301,000 ( 4,950,000) 73,240,000 10,895,000 176,849,000
Present value of obligation at March 31, 2011	\$583,307,000	642,335,000
(ii) Movement in plan assets:	2911	2010
Fair value of plan assets as April 1, 2010 Contributions paid Actual return on plan assets Benefits paid	551,868,000 30,274,000 65,770,000 ( 47,392,000)	418,605,000 26,429,000 119,706,000 (_12,872,000)
Value of purchase annuities	40,469,000	
Fair value of plan assets at March 31, 2011	\$640,989,000	551,868,000
Plan assets consist of the following:	2011	2010
Equity Fund Money Market Fund Mortgage and Real Estate Fund Fixed Income Fund Foreign Currency Fund Annuity not yet deducted from fund Uninvested contributions Value of purchased annuities CPI fund	154,657,000 45,060,000 57,334,000 120,547,000 163,040,000 	142,850,000 81,033,000 56,629,000 117,983,000 153,103,000 ( 2,170,000) 2,440,000
Total assets	\$640,989,000	551,868,000
(c) Expense recognised in profit or loss:	2011	2010
Current service costs Interest on obligation Expected return on plan assets Recognised actuarial gain Change in unrecognised asset	30,773,000 62,334,000 (49,288,000) 7,284,000 (90,306,000)	17,573,000 55,667,000 (56,029,000) 1,207,000 29,139,000
Recognised in profit or loss (see note 23)	\$(39,203,000)	47,557,000
Actual return on plan assets	10%	2656

Notes to the Financial Statements (Confd) March 31, 2011

### Employee benefit asset (cont'd)

## (d) Principal actuarial assumptions at the reporting date (expressed as weighted averages):

					2011	2010
	Discount rate Expected return on plan Future salary increases Future pension increases	10.5% 8.5% 6.5% 5.0%	9.0% 9.0% 7.5% _7.5%			
(c)	Historical information:					
		2011 S	2010 S	2009 S	2008 S	2007 \$
	Present value of defined benefit obligation Fair value of plan assets Deficit/surplus in plan	640,989,000		(386,301,000) 418,695,000 32,304,000	(303,589,000) 421,234,000 117,645,000	(289,236,000) 342,449,000 _53,213,000
	Experience adjustments arising on plan liabilities			31,103,000	32,562,000	(_44,324,000)
	Experience adjustments arising on plan assets	5,829,000	(_56,036,000)	(_79,700,000)	19,427,000	8,426,000

The company expects to pay \$15,639,000 in contributions to the plan in 2011/2012 (2009/2010: \$16,396,000).

#### Long-term receivables

	2011	2010
Refundable utility deposits Employee leans	2,575,379 25,663,157	2,575,379 26,908,604
Less: Current portion	28,238,536 (10,872,594)	28,583,983 (_9,798,631)
	\$17,365,942	18,785,352

Employee loans are for the purchase of motor vehicles. The loans are repayable over 4-8 years. The loans are interest-free and are secured by the respective motor vehicles on which the loan are outstanding.

Notes to the Financial Statements (Confd) March 31, 2011

#### Property, plant and equipment.

	Building & leasehold improvements	Utility plant	Furniture, fixtures & equipment	Motor yehicles	Cupital work-in- progress	Total
Cost: March 31, 2009 Additions Disposals Reclassification Written-off	14,740,647	1,641,853,532 260,960 49,576,181	53,094,905 18,425,692 ( 31,562) 418,606		69,023,771 22,444,572 (64,735,434) (8,255,824)	1,852,359,820 41,131,224 ( 1,013,848) ( 8,255,824)
March 31, 2010	56,484,423	1,691,690,673	71,907,641	45,661,550	18,477,085	1,884,221,372
Additions Disposals		-	7,118,675 ( 45,900)	3,270,000 ( 4,458,594)	24,936,907	35,325,582 ( 4,502,294)
Reclassification Written-off	4,198,397		3,101		( 4,198,397) ( 549,317)	(546,216)
March 31, 2011	60,682,820	1,691,690,673	78,983,517	44,473,156	28,666,278	1.914.496.444
Depreciation: March 31, 2009 Charge for the yea Eliminated on	10,972,866 r 1,123,441	970,995,908 33,497,968	34,795,565 7,281,597	11,947,870 4,053,185	:	1,028,712,209 45,956,591
disposals			(23,795)	(196,457)		(220,252)
March 31, 2010	12,096,307	1,004,493,876	42,053,767	15,804,598		1,074,448,548
Charge for the yea Eliminated on	r 1,471,695	32,614,493	7,253,959	3,607,566		44,947,713
Disposals		-	(382)	(.1.513.394)		(1,513,776)
March 31, 2011	13,568,602	1,037,108,369	49,307,344	17,898,770		1.117.882.485
Net book values: March 31, 2011	547,114,818	654,582,304	29.676.173	26,574,386	38,666,278	796,613,959
March 31, 2010	\$44,388,116	687,196,797	29,853,875	29,856,951	18,477,085	809,772,824
March 31, 2009	\$30,770,919	670,857,624	18,299,341	34,695,963	69,023,771	_823,617,611

Included in building and leasehold improvements is leasehold improvements of \$43,417,225 (2010: \$39,218,828).

Capital work-in-progress represents internal projects, relating to lining of canals, construction of building and other construction works, funded by the Government of Jamaica, which are undertaken and managed by the company. The cost to complete the projects have not been quantified to date. There are currently no contractual commitments related to completion of these projects, as they are being carried out by the Commission as, and when, funds become available.

Notes to the Financial Statements (Confd) March 31, 2011

### Deferred tax (asset)/liability

Deferred tax (asset)/liability is attributable to	the following:		
	-	2011	2010
Property, plant and equipment		(24,787,036)	(22,909,866)
Accounts receivable		31,021	330,258
Accounts payable and accrued charges:		646,575	(11,609,951)
Unrealised exchange gains		288,449	89,458
Tax losses		(76,709,952)	(30,014,764)
Employee benefit asset		4,974,527	-
		\$(95,556,416)	(64,114,865)
Movement in temporary differences during to	he year:		
	Balance at March 31, 2010	Recognised in income [Note 21 (a) (ii)]	Balance at March 31, 201
Property, plant and equipment	(22,909,866)	(1,877,170)	(24,787,036)
Accounts receivable	330,258	( 299,237)	31,021
Accounts payable and accrued charges	(11,609,951)	12,256,526	646,575
11			

## 12. Accounts payable and accrued charges

Employee benefit asset.

Unrealised foreign exchange gain

Tax losses

	2011	2010
Trade payables	96,738,464	135,362,796
Accrued vacation leave	39,481,952	34,829,854
Other accreals	2,948,014	3,243,935
Other payables	23,755,465	23,066,651
	\$162,923,895	196,503,236

89,458

(30,014,764)

\$(64,114,865)

198,991

(46,695,188)

4,974,527

(31.441.551)

288,449

(76,709,952)

4,974,527

(95,556,416)

#### Government of Jamaica project advances

This balance represents the net unspent portion of funds received from the Government of Jamaica and its agencies for the following projects:

Project	2011	2010
National Irrigation Development Plan (NIDP)		
<ul> <li>Implementation [see below]</li> </ul>	86,283,505	75,186,290
Miscellaneous capital projects	2,295,182	8,850,579
Lining of canals		1,863,418
FAO rain water harvesting project	410,911	
Fishing beach project	6,536,708	17,842,539
	\$95,526,306	103,742,826

Notes to the Financial Statements (Confd) March 31, 2011

### Government of Jamaica project advances (cent'd)

The NIDP involves the implementation of an irrigation plan for Jamaica and is being jointly funded by the Caribbean Development Bank (CDB), Inter-American Development Bank (IDB) and the Government of Jamaica. The project is being administered by the company; however, disbursement of funds is made directly to contractors by the CDB, while the National Irrigation Commission Limited makes direct payments to contractors from the IDB funds.

#### Long-term.debt

In June 2010 the company received a loan from Financial Sector Adjustment Company (FINSAC) of \$120,000,000. The loan is unsecured and is to be repaid in two equal instalment on June 30, 2011 and June 30, 2012. Interest is charged on the loan on the reducing balance at a rate of 10% per annum.

#### Deferred\_credit

	Balance 2009	Movement during the year	Bulance 2010	Movement during the year	Balance 2011
Grant for acquisition of fixed arsets					
(not of disposals)	107,234,522	64,735,434	171,969,956	4,198,397	176,168,383
Fined assets gifted by Agro 21 Corp.,					
net, in 1991	1,198,152	-	1,198,152	+	1,198,132
Fixed assets gifted by Ministry of Agriculture	1,203,061		1,209,061		1,203,061
Fined assets transferred from NIDP Project.	1,896,725	-	1,896,725	+	1,896,725
Fixed assets, other than utility plant,					
gifted by district irrigation authorities	3,520,295	-	3,520,295	+	3,520,295
Utility plant acquired under CD/I project					
and utility plant of previously					
unrecorded irrigation authorities					
capitalised during 1991	141,941,917	-	141,941,917	-	141,941,917
Utility plant acquired out of project funds	391,096,098		591,096,098		591,096,098
Revaluation surplus on investories (note 7)	1,233,211		1,233,211		1,233,211
Inrigation pipes gifted by Chinese Government	=	41,993,367	41,993,367		41,993,367
Computers funded by the NIDP Project		14,546,237	14,586,237		14,546,237
GPS units funded by the NIDP project.	-	-		854,367	854,367
MV acquired out of NIDP project funds				2,945,000	2,945,000
Expenditure on contracts-in-progress					
(net of amounts exponsed) (note 10)					
out of GOI project advances	69,023,771	(50,546,686)	18,477,685	16,671,192	35,148,187
	918,347,752	70,728,352	989,076,104	24,663,866	1,013,744,970
Amortisation transferred to statement of					
comprehensive income	(5.59,88)1,723)	(39,335,337)	(599,217,060)	(42,761,575)(	641,978,635)
	358,466,029	31,353,015	389,859,046	(18,092,399)	371,766,335

The net book value of property, plant and equipment, with the cost of which the Deferred Credit account was increased at the date of acquisition, is eliminated from the Deferred Credit account on the disposal of the assets.

Notes to the Financial Statements (Cont'd) March 31, 2011

### Share capital

	2011	2010
Authorised, issued and fully-paid:		
100 ordinary shares at no par value	\$_100	100

### Capital reserve

This represents previously determined revaluation surplus on property, plant and equipment which, on first-time adoption of IFRS, was deemed part of the cost of the utility plant.

### Government of Jamaica subsidy on behalf of farmers

The purpose of this subsidy is to significantly reduce the portion of the cost of providing irrigation water to farmers which would normally be recovered from them as rates. By this means, Government subsidises irrigated agriculture.

In light of the last review conducted by the Office of Utilities Regulation, the company estimated that the subsidy would need to be \$956.6 million (2010: \$567 million) in order for the company to deliver irrigation water as required by farmers, in the context of the schemes mentioned in note I(a). Of this amount, \$507.2 million (2010: \$426.6 million) was approved by Parliament and paid to the company.

### Other income.

17.	S/SIRGLERSONE:	2011	2010
	Investments and cash and cash equivalents Other Amortisation of concessionary leans Exchange (loss)/gain Service fees Gain/(loss) on disposal of property, plant and equipment Insurance settlements Compensation for damaged assets Miscellaneous	1,126,539 681,380 4,428,413 ( 865,347) 1,173,512 4,187,433 3,215,518 2,828,825 _3,001,274	5,091,546 821,731 4,680,776 268,374 3,087,704 ( 266,596) 541,018 _2,258,864
20.	Figure	\$19,777,547	16,483,417
20.	Finance costs		
		2011	2010
	Bank overdraft Long-term loan	65,023 9,008,219	\$1,619
		\$9,073,242	81,619

Notes to the Financial Statements (Confd) March 31, 2011

### Taxation

(a) The provision for income tax is computed at 33½% of the results for the year, as adjusted for tax purposes, and is made up as follows:

		2011	2010
(i)	Current tax charge: Provision for charge on current year's profits		+
(ii)	Deferred tax: Origination and reversal of temporary differences (note 11)	(31,441,551)	(43,796,788)
	Actual tax credit recognised	\$(31,441,551)	(43,796,788)

(b) Reconciliation of expected tax charge to actual tax charge

The actual taxation credit differs from the "expected" tax charge/(credit) for the year as follows:

AND DETERMINE	2011	2010
Profit/(loss) before taxation	8,818,541	(156,884,122)
Computed "expected" tax charge/(credit) Tax effect of treating items differently for financial statements and tax reporting purposes -	2,939,514	( 52,289,478)
Depreciation charge and capital allowances Accrued vacation leave Unrealized (loss)gain on foreign exchange Amortisation of deferred credits Expenses not allowed for tax purposes (Gain) loss on disposal of property, plant and	9,951,063 13,807,070 487,411 (14,252,433) 776,509	( 7,131,531) ( 454,265) ( 1,599,112) ( 13,110,468) 20,831
equipment Employee benefit asset Interest on concessionary loans Tax losses off	( 1,395,671) (13,158,837) ( 1,546,405) (29,049,772)	86,268 ( 1,029) ( 1,146,562) _31,828,558
Actual tax credit recognised	\$(31,441,551)	(.43,796,788)

### (Profit)/(loss) for the year

The following are among the items charged in arriving at profit/(loss) for the year:

	2011 5	2010 \$
Directors' emoluments [note 24(c)]:		
Fees	2,094,375	2,029,500
Travel	1,895,090	1,561,112
Management remuneration	2.259,908	1,401,933
Auditors' remuneration	1,900,000	1,900,000
Depreciation	44,947,713	45,956,591

Notes to the Financial Statements (Confd) March 31, 2011

### 23. Employee numbers and costs

The average number of persons employed by the company during the year was as follows:

	2011	2010
Full-time	147	144
Part-time	18	10
Other	_47	_40
	212	194

The aggregate payroll costs for these persons were as follows:

	2011	2010
Salaries Statutory payroll contributions	266,389,079 13,418,363	257,324,125 9,375,358
Pension benefit cost (net of contribution) [note 8(c)] Travel and subsistence	( 39,203,000) 69,688,082	47,557,000 62,191,992
Gratuities	4,271,235	2,403,917
Training Accrued vacation leave	2,565,407 2,736,457	3,214,064
Insurance scheme	22,942,377	22,146,933
Staff welfare	4,082,119	4,450,580
	\$346,890,482	410,343,570

### 24. Related party balances and transactions

Identity of related parties:

- (a) The company has a related party relationship with its associates and key management personnel, comprising directors and certain senior executives.
- (b) In addition these stated thereon, the statement of financial position includes balances, arising in the ordinary course of business, with related parties as follows:

	2011 S	2010 S
Accounts receivable: Directors	90,460	212,830
Long-term receivables: Employee loans - key management personnel	3,219,107	2,272,633

Notes to the Financial Statements (Confd) March 31, 2011

### 24. Related party balances and transactions (cont'd)

(c) The statement of comprehensive income includes transactions with key management personnel in the ordinary course of business, as follows:

	2011	2010
Compensation paid to key management personnel: Directors' emoluments (note 22) Salaries to other key management personnel Post-employment benefits	6,249,373 30,986,839 (_1,492,000)	4,992,545 24,034,096 4,904,000
	\$35,744,232	33,930,641
Interest income from Directors	5(134,494)	(258,111)

### Financial risk management

### (a) Overview

A financial instrument is any contract that gives rise to a financial asset of one enterprise and a financial liability or equity instrument of another enterprise. The company does not use derivative instruments as a risk management strategy at this time.

The company's financial instruments comprise cash and cash equivalents, resale agreements accounts receivable, long-term receivables, accounts payable, Government of Jamaica project advances, and long-term debt. Information relating to fair values and risks is summarised below.

The company has exposure to the following risks from its use of financial instruments and its operations:

- Credit risk
- Liquidity risk:
- Market risk
- Operational risk

This note presents information about the company's exposure to each of the above risks, the company's objectives, policies and processes for measuring and managing risk and the company's management of capital. Further quantitative disclosures are included throughout these financial statements.

The Board of Directors has overall responsibility for the establishment and oversight of the company's risk management framework. The Board has established the Finance, Audit and General Purposes Committee, which is responsible for developing and monitoring the company's risk management policies. The committee reports regularly to the Board of Directors on its activities.

Notes to the Financial Statements (Cont'd) March 31, 2011.

### Financial risk management (cont'd)

### (a) Overview (cont'd)

The company's risk management policies are established to identify and analyse the risks faced by the company, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the company's activities. The company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Finance, Audit and General Purposes Committee oversees management's monitoring of compliance with the company's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the company. The Finance, Audit and General Purposes Committee is assisted in its oversight role by Internal Audit. Internal Audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Finance, Audit and General Purposes Committee.

### (b) Credit risk

Credit risk is the risk of financial loss to the company, if a customer or counterparty cash and cash equivalents, to a financial instrument fails to meet its contractual obligations, and arises principally from trade receivables, resale agreements and long-term motor vehicle loans to employees.

### (i) Cash and cash equivalents and resale agreements

Cash and cash equivalents are held with financial institutions which the company regards as strong.

The company limits its exposure to credit risk by investing only in liquid securities that are backed by the Government of Jamaica through established counterparties that are licensed under the Financial Institutions Act and registered with the Financial Services Commission. Consequently, management does not expect any counterparties to fail to meet their obligations. Collateral is held for resale agreements.

### (ii) Long-term receivables

The company grants loans to its employees to facilitate the purchase of motor vehicles. Loans granted are secured by the registration of a lien on the motor vehicles acquired as well as a Bill of Sale. Loans are repayable over a period of 4-8 years; however, the repayment period may not exceed the expected remaining years to retirement of individual employees. Management does not expect any counterparty to fail to meet their obligations.

Notes to the Financial Statements (Confd) March 31, 2911

### Financial risk management (cont'd)

### (b) Credit risk (cont'd)

### (iii) Trade receivables

The company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The company has a policy under which each customer is analysed before being contracted for the supply of services. Contracted customers are required to make a refundable security deposit that is based on three months projected consumption with regard to the customer's holdings. Customers that fail to meet the company's benchmark for the supply of services may transact with the company on a prepayment basis.

Credit risk is concentrated in the ten largest customers who hold more than 50 percent of the company's trade receivables.

The Director of Commercial Operations has overall responsibility for ensuring the timely collection of outstanding receivables. The Commercial Department reports on the status of collections and receivables to the Finance, Audit and General Purposes Committee monthly.

### Allowances for impairment

The company establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade receivables based on pre-determined criteria. The main component of this allowance is a specific loss component that relates to individual exposures.

### Impairment losses

The aging of trade receivables (note 6) at the reporting date was:

	Carrying amount	
	2011	2010
Not Past Due	34,986,976	17,494,059
Past Due 1-30 Days	21,297,024	8,988,183
Past Due 31-60 Days	9,315,269	4,518,564
Past Due 61-90 Days	1,527,264	3,243,450
More Than 90 Days	15,290,797	19,153,771
	\$82,417,330	53,398,027

The allowance account in respect of trade receivables is used to record impairment losses, unless the company is satisfied that no recovery of the amount owing is possible; at that point, management obtains permission from the Minister of Agriculture and Fisheries to write off the amounts against the receivable balance directly.

Notes to the Financial Statements (Confd) March 31, 2011

### Financial risk management (cont'd)

### (b) Credit risk (cont'd)

### (iii) Trade receivables (cont'd)

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	Carrying amount	
	2011	2010
Balance as at April 1, 2010	17,270,000	22,596,127
Written of Erecovered	( 3,626,437)	(7,640,261)
Provision Recognised	8.370,732	2,314,134
Balance as at March 31, 2011	\$22,014,295	17.270,000

### (iv) Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was:

	Carrying amount	
	2011	2010
Cash and cash equivalents	88,988,190	86,381,297
Resale agreements	35,808,649	33,104,868
Accounts receivable	96,530,534	75,264,088
Long-term receivables:		
Current portion.	10,872,594	9,798,631
Long-term portion	17,365,942	18,785,352
	\$249,565,909	223,334,236

The maximum exposure to credit risk for trade receivables at the reporting date by geographic region was:

	Carrying amount	
	2011	2019
St. Thomas	267,933	143,679
St. Catherine	41,583,683	26,374,600
Clarendon	16,719,494	13,230,299
St. Elizabeth	24,163,843	12,653,807
Trelawny	1,471,033	846,083
St. James	211,344	149,559
	84,417,330	53,398,027

There has been no change to the company's exposure to credit risk or the manner in which it measures and manages the risk during the year.

Notes to the Financial Statements (Confd) March 31, 2011

### Financial risk management (cont'd)

### (c) Liquidity risk

Liquidity risk is the risk that the company will not be able to meet its financial obligations as they fall due. The company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the company's reputation.

Typically, the company ensures that it has sufficient cash on demand to meet expected operational expenses.

The contractual outflow for accounts payable and accrued charges is represented by its carrying amount and may require settlement within 12 months of the reporting date. Government of Jamaica project advances represents the amounts remaining from Government grants and multilateral financing received to finance the company's capital budget as well as to undertake specific NIDP projects. Funds are received from the Government and multilateral agencies based on an approved budget.

There has been no change to the company's exposure to liquidity risk or the manner in which it measures and manages the risk during the year.

### (d) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

### Currency risk

The company is exposed to currency risk on purchases and borrowings that are denominated in a currency other than the functional currency of the company, primarily, the United States Dollar (USS). The company's net exposure at reporting date was:

	2011 USS	2010 USS
Cash and cash equivalents	259,670	242,212
Net Exposure	259,670	242,212

The average exchange rate for the US dollar in terms of Jamaica dollars, at March 31, 2011 was: US\$1.00 = J\$85.5727 (2010: J\$89.2324).

### Sensitivity Analysis

A 5% (2010: 5%) strengthening/weakening of the Jamaica dollar against the United States dollar at March 31, 2011 would have increased/decreased equity and profit or loss by \$1,156,718 (2010: \$1,080,658). This analysis assumes that all other variables, in particular, interest rates, remain constant. The analysis is performed on the same basis as for 2010.

Notes to the Financial Statements (Confd) March 31, 2011

### Einancial risk management (cont'd)

### (d) Market risk (cont'd)

### (iii) Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates.

### Profile

At the reporting date, the interest rate profile of the company's interest-bearing financial instruments was:

Carrying amount 2011 2010 2010 33.104.868

Resale agreements

A change of 100 basis points in interest rates would have increased or decreased profit or loss by approximately \$89,000 (2010; \$457,000).

There has been no change to the company's exposure to market risk or the manner in which it measures and manages the risk during the year.

### (e) Fair values

Fair value amounts represent estimates of the arm's length consideration that would be currently agreed between knowledgeable, willing parties who are under no compulsion to act and is best evidenced by a quoted market price, if one exists. Some of the company's financial instruments lack an available trading market.

The fair values of cash and cash equivalents, resale agreements accounts receivable, accounts payable and long-term debt balances are assumed to approximate to their carrying values, due to their short-term nature.

Long-term receivables are carried at their estimated fair values.

### (f) Operational risk:

Operational risk is the risk of direct or indirect loss arising from a wide variety of causes associated with the company's processes, personnel, technology and infrastructure, and from external factors other than credit, market and liquidity risks such as those arising from legal and regulatory requirements and generally accepted standards of corporate behaviour. Operational risks arise from all of the company's operations.

The company's objective is to manage operational risk so as to balance the avoidance of financial losses and damage to the company's reputation with overall cost effectiveness and to avoid control procedures that restrict initiative and creativity.

Notes to the Financial Statements (Cont'd) March 31, 2011

### Financial risk management (cont'd)

(f) Operational risk (cont'd):

The primary responsibility for the development and implementation of controls to address operational risk is assigned to senior management. This responsibility is supported by the development of overall company standards for the management of operational risk, including the following:

- requirements for appropriate segregation of duties, including the independent authorisation of transactions;
- requirements for the reconciliation and monitoring of transactions;
- compliance with regulatory and other legal requirements;
- training and professional development;
- ethical and business standards;
- risk mitigation, including insurance where this is effective.

Compliance with the company's standards is supported by a programme of periodic reviews undertaken by the internal audit unit. The results of internal audit reviews are discussed with management, with summaries submitted to the Board of Directors, the Audit Committee and senior management of the company, and action is taken to deal with the matters reported.

(g) Capital management

The company is not subject to any externally imposed capital requirements.

It is the Board's policy to maintain a strong capital base so as to sustain the future operation of the company. The Board of Directors monitors the return on capital, which the company defines as total equity.

### Contingent liabilities

(i) A claim was made against the company in August 2000 for damages in the amount of \$2,254,630 arising from alleged damage to the crops of the plaintiff as a result of alleged disconnection of water supply.

The NIC made an appeal against the claim which was heard on 26th January 2010. The appeal was allowed with cost. A determination of the cost is currently being made to bring closure to the above matter.

## APPENDIX 1

# STATE OF THE PROPERTY OF STATE OF STATE

Position of Senior Executive	Year	Salary	Gratuity or Performance Incentive (\$)	Travelling Allowance or Value of Assignment of Motor Vehicle (\$)	Pension or Other Retinement Benefits (\$)	Other Allowances (\$)	Non- cash Benefits (5)	Total (\$)
Internal Director 1	2010/2011	5,633,294	2,409,349.00	398,250			60,000	8,590,893
Internal Director 2	2010/2011	5,184,906		796,500	238,745	622,046		6,742,197
Internal Director 3	2010/2011	4,445,441		796,500	207.313	630,078	1	5,979,332
Internal Director 4	2010/2011	3,915,362		796,500	81,570			4,793,432
Internal Director 6	2010/2011	3,280,988		796,500	174,585	210,312		4,462,365
Internal Director 6	-	2.289.839		496,883				2.798.622
		24.759.930	2.409.349	4,063,133	702,193	1,282,438	, 00000	33 367,041

## APPENDIX 2

		CONTRACTOR PER	MATERIAL SECTION		
Position of Director	Fees (5)	Motor Vehicle UpkeepiTravelling or Value of Assignment of Motor Vehicle (5)	Hanoraria (\$)	All Other Compensation including non-Cash Benefits as applicable (5)	Total (\$)
Stantory Director 1	213,627.00	453,084,00		2,259,908.00	2,926,619,80
Standory Director 2	125,664.00	60,646,09			235,134,06
Statutory Director 3	96,210,00		٠		96,210,00
Statisticsy Director 4	118,452.60	157,000,00			275,452,00
Statutory Director 5	108,634.00	206,950,00		***	315,574,00
Statutory Director 6	130,866.00	128,368.00			259,626,00
Standory Director 7	16,035.00				16,035.00
Statutory Director 8	201,730.00	212,010.00			413,740.00
Statutiony Director 9	40,863.00	17,550.00			58,413,00
Statisticsy Director 10	00'500'99	8,550,00			74,759,00
Standary Director 11	79,658.00	50,196,00	*	*	129,154,00
Statutory Director 12	99,313.00	23,190.00			122,503,00
Standory Director 13	170,685.00	129,878,00			300,565,00
Statutiony Director 14	189,833.00				189,833,00
Statutory Director 15	103,969.00	97,749,00			201,709.00
Statistics; Director 16	136,556.00	63,899.00			200,444,00
Statutory Director 17	196,041,00	246,660,00			442,701,00
Tend	2.094.375.00	1.895.090.00			6346375.60

## **NOTES**

