



**NATIONAL IRRIGATION COMMISSION LIMITED**

## **MISSION STATEMENT**

*Our  
mission  
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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## NATIONAL IRRIGATION COMMISSION LIMITED

### CORPORATE DATA

#### The Company

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##### REGISTERED OFFICE

National Irrigation Commission Limited  
191 Old Hope Road  
Kingston 6, Jamaica  
Telephone: 977-6624, 977-6727, Fax: 927-2696  
E-Mail Address: [nic@cwjamaica.com](mailto:nic@cwjamaica.com)  
Web-Site: [www.nicjamaica.com](http://www.nicjamaica.com)

##### AUDITORS

KPMG  
6 Duke Street, Kingston  
Jamaica

##### The Operation Centre

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

##### Attorneys-at-Law

DunnCox  
48 Duke Street  
Kingston

#### District Offices

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##### St. Catherine Irrigation District

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

##### Mid-Clarendon Irrigation District

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

##### St. Elizabeth Irrigation & Drainage District

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

##### St. Dorothy Office

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

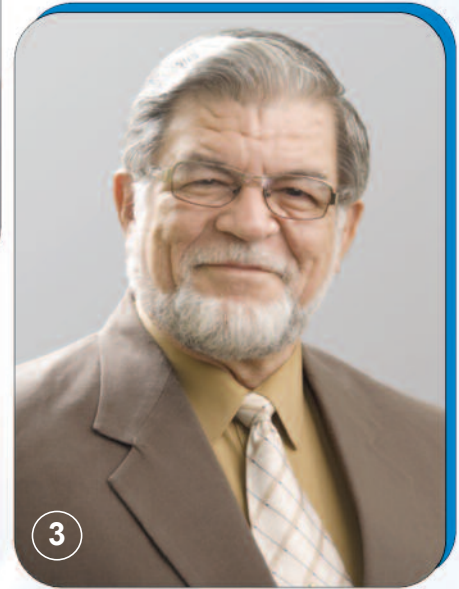
##### Yallahs Irrigation District

Yallahs, St. Thomas  
Tel: 706-3159

##### Braco Irrigation District

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

# BOARD MEMBERS



1. Mr. Oliver Nembhard – Chairman/Businessman
2. His Worship, Mayor Keith Hinds - Mayor of Portmore
3. Mr. Basil Fernandez - Managing Director, WRA

4. Mr. Robert Martin – Deputy Financial Secretary, Public Expenditure Policy, Co-ordination Division, Min. of Fin. & the Public Service
5. Dr. Horace Charoo – Medical Doctor/Farmer



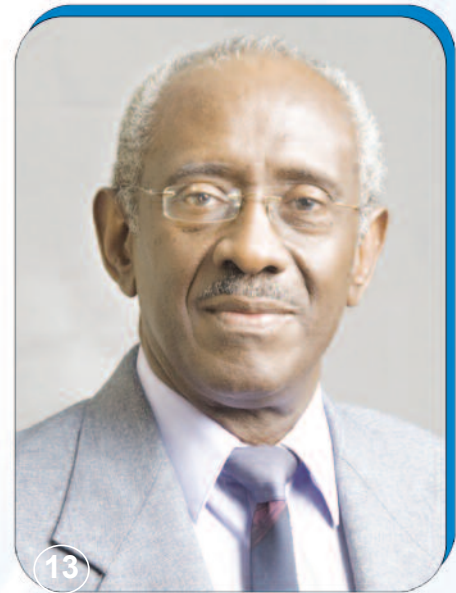
## BOARD MEMBERS



- 6. Mr. Dwight Clacken – Businessman
- 7. Mr. Winston Lewis - Businessman
- 8. Mr. Rudolph Brown – Farmer

- 9. Mr. Basil Perriel – Farmer
- 10. Mr. Ludgar George Parish – Farmer

## BOARD MEMBERS



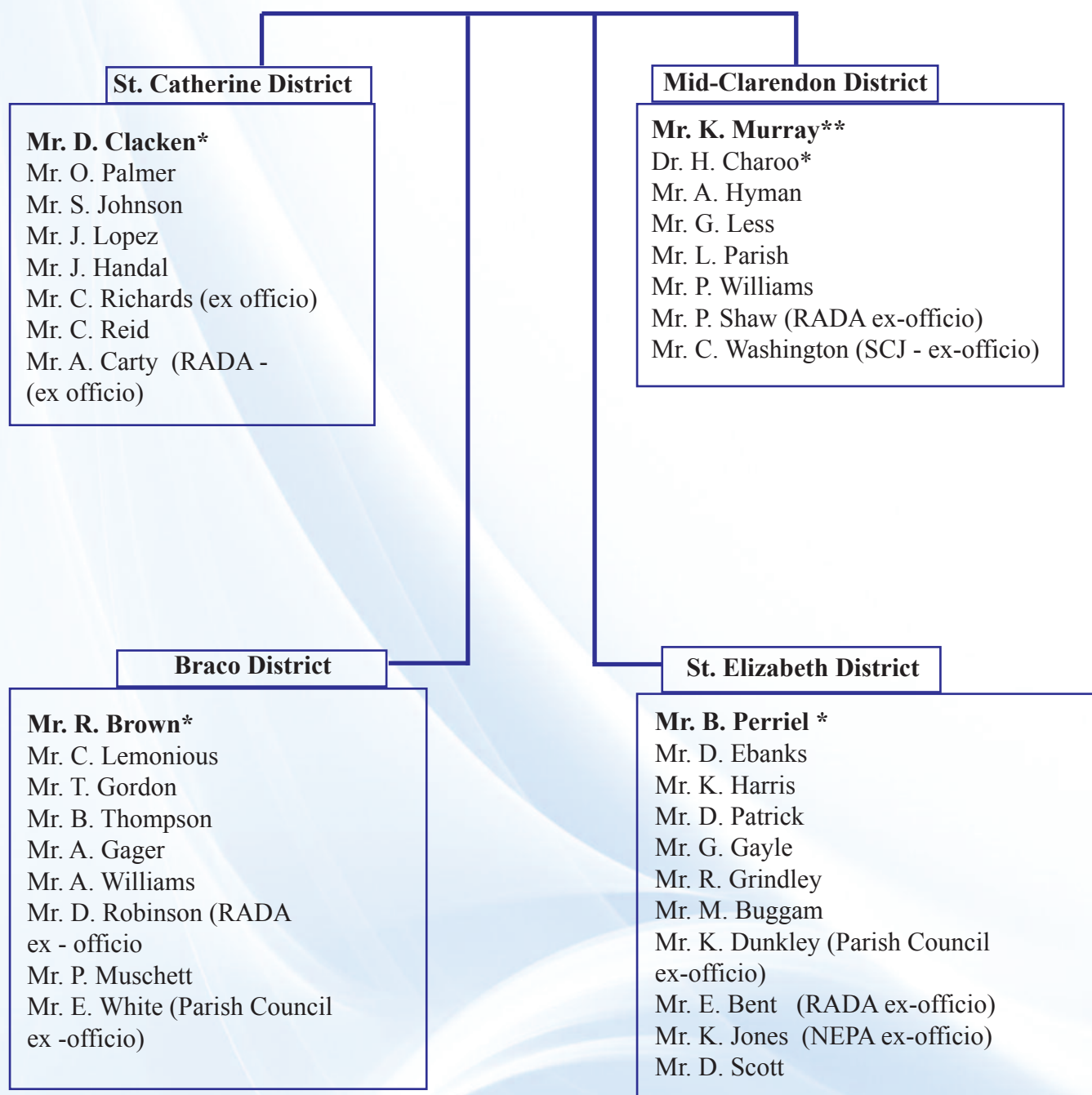
- 11. Mr. Rupert Williams – Farmer
- 12. Mr. George Thompson – Economist
- 13. Mr. Robert Evans – Consultant Engineer

- 14. Ms. Genielle Attalla – Business Woman/Farmer
- 15. Mr. Anthony Masters – Businessman



## NATIONAL IRRIGATION COMMISSION LIMITED

### DISTRICT ADVISORY AND MONITORING COMMITTEES



\* Denotes Chairman for each committee and member of the Board of Directors

\*\* Former Chairman, deceased



## Minister's Message



It is without hesitation that I extend congratulations to the management and staff of the National Irrigation Commission (NIC) for another year of great performance. Your commitment and dedication have undoubtedly contributed to the recent ranking of the Agricultural Sector as the lead performer in government business.

It is my hope that construction of at least two of the three Inter-American Development Bank's projects – Colbeck and New Forest/Duff House will be constructed and commissioned into operation in the new financial year.

The following are some of the NIC's achievements I would like to highlight:

- Improved production and productivity in the Beacon/Little Park and Hounslow areas of St. Elizabeth due to new and rehabilitated irrigation systems. In some instances, farmers have been enjoying yields of three to five-fold
- Rehabilitation of canals in St. Catherine which has led to improvements in the conveyance of irrigation water as well as reduction in transmission losses
- The establishment of the Black River Wetlands (Upper and Lower Morass) Planning, Monitoring and Conservation Committee to protect the marsh and implement measures to prevent flooding. I personally will use my office as Member of Parliament to give any support this Committee will need in fulfilling its mandate
- Publication of an Irrigation Water Use Efficiency Training Manual to be used by Extension Officers of the Rural Agricultural Development Agency (RADA), the aim of which is to improve on-farm water management and water use efficiency throughout the irrigation districts. Additionally, preparatory work was done on a demonstration plot to train farmers in best practices in irrigation technology. This proactive approach by the Commission, will no doubt, expose farmers to cutting edge irrigation technology and facilitate efficient use of farm water
- A Black Tank initiative to provide irrigation water to subsistent farmers outside the irrigation belt. This programme was launched in



St. Elizabeth and is expected to be replicated throughout the island

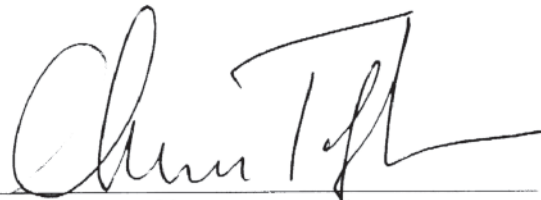
- The preparation of survey and designs for the rehabilitating of seventeen (17) fishing beaches across the island
- A cadastral study that identified 35,000 acres of unused and underutilized lands in the irrigation districts.

My gratitude is also extended to the Chairman and Board of Directors of the Commission for their invaluable contribution to Jamaica's agricultural development. Their direction and leadership have borne fruit and have placed the Commission in a strategic position to serve the needs of the nation's farmers

I must recognize the late Keith Murray and Horace Underhill, of the NIC's Board who passed away this year, for their invaluable

contribution to the Board and the Agricultural Sector

To our donor agencies, the Inter-American Development Bank, the Caribbean Development Bank, and other Government and non-Government organizations, thanks for your support. I encourage the Board, Management and Staff to continue this partnership as we work together to develop the agricultural sector as an engine of growth that drives the economic success of this country.



Dr. the Hon. Christopher Tufton, MP  
Minister of Agriculture & Fisheries

## Chairman's Message



Gratitude must also be extended to the Minister of Agriculture and Fisheries, Dr. the Honourable Christopher Tufton for his vision, stewardship and support this year – Dr. Tufton, thank you for your continued support as we look forward to greater synergies in the coming year.

As Chairman of the Board, I will continue to ensure that the necessary policies and programmes are implemented to not only maintain the gains achieved last year, but also to guarantee that the Commission remains relevant to our farmers.

Once again, I take the opportunity to thank all our partners and the staff of the NIC for making 2008 a successful one.

A handwritten signature in dark ink, reading "Oliver Nembhard".

Oliver Nembhard  
**Chairman**

**T**his year, the National Irrigation Commission (NIC) has remained dedicated to its mandate of providing adequate irrigation water to farmers across the island.

In carrying out our directives, a number of organizations have partnered with us to achieve our goals and objectives for 2008 –2009. These partners have worked diligently with us and in some instances have gone beyond the call of duty to assist the Commission in implementing the requisite programmes and policies to improve the livelihood of our nation's farmers. On behalf of the Commission and Board of Directors, I thank you for your support.

# Chief Executive Officer's Message



**T**he National Irrigation Commission Limited (NIC) experienced a challenging year with mixed fortunes. Notwithstanding, the following notable achievements were made:

- Commissioning of the third CDB Flagship-Project – the Hounslow Rehab. Irrigation System by Prime Minister Golding
- Signing of several contracts under the IDB-NIDP Projects; plans are far advance for the construction of three additional projects – New Forest/Duff House, Colbeck and Yallahs irrigation Systems
- Lining of 1,800 feet of canal in St. Catherine
- Development and launch of a Black Tank Initiative to provide irrigation water for subsistent farmers outside of the irrigation districts
- Increasing the customer base by 80 farmers in Clarendon by taking over the McGilchrist Pen Pressurized System from JAMALCO
- Designing of three fishing beaches and the re-launch of Rae Town Fishing Beach
- Preventing flooding in the Black River area during the last hurricane season as a result of NIC's drainage programme
- Establishing a Planning, Monitoring and Conservation Committee for the St. Elizabeth Wetlands
- Managing the Production and Productivity Programme in St. Elizabeth where yields were as much as five fold in crops such as hot peppers, tomatoes, onions and carrots
- Producing a comprehensive Assets Register for the Commission
- Broadening the Secondary School Scholarship programme to include the Tertiary Level. Six scholarships were offered during this period valued at \$280,000
- Acquiring 6 hectares of land in Hounslow, St. Elizabeth, to establish a Research Centre for training farmers in best irrigation practices. Training will be provided by RADA's extension officers in collaboration with the NIC. Additionally, an irrigation manual has been published and used as a trainers' handbook.



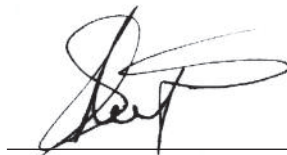
The Management and staff joined forces to realize these achievements. This however, would not have been possible without the support of the Minister, Dr. the Honourable Christopher Tufton and the Permanent Secretary, Mr. Donovan Stanberry along with the technocrats at the Ministry. I must recognize our sister agencies and other stakeholders who have all collaborated with us over the period.

I wish to use this opportunity to express heart felt gratitude to the National Irrigation Commission's dedicated management and staff members for working assiduously to meet the set objectives of the NIC, despite the challenges encountered this year. I express gratitude to all our customers and farmers for their support and commitment over the past year.

I look forward to continue to serve you with even greater distinction in the year ahead. The Commission remains committed to playing its part in supporting the Government's Agricultural

Development Plan to 2020 as we continue to develop irrigation systems and to provide the most efficient and effective service possible to the Agricultural Community.

May God bless you!



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Stanley Rampair  
Chief Executive Officer



# ADMINISTRATION AND HUMAN RESOURCES



**Mrs. Andrea Gyles, Manager, Human Resources & Industrial Relations (Acting)**

The year under review was a dynamic and challenging period for the Division. There was a change of guard, as a new Chairman, Mr. Oliver Nembhard and new Chief Executive Officer, Mr. Stanley Rampair were both appointed.

The Division was successful in achieving a number of its objectives throughout the year. In keeping with its strategic objective of improving staff awareness on benefits and policies, the Staff Manual was circulated to all members of staff in January 2009. This Manual comprehensively sets out the Commission's policies, procedures and rules. It also informs the employees of the obligations and benefits of employment.

The Staff Incentive Scheme was also impl-

## ***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 services.**

mented, and the first awardees – Employees of the Quarter were identified for the January to March 2009 quarter. The Incentive programme is designed to recognize employees for special achievement or outstanding performance. It also aims to motivate staff performance in achieving the Organization's goals.

## **TRAINING & DEVELOPMENT**

Despite budgetary constraints, the Commission remains committed to the development of the human capital of the Commission, in support of its mandate. The NIC recognizes that human resource is in fact its greatest resource and as such, facilitated training and development to staff through various administrative and technical programmes.

A need was identified to design and develop a specialized training programme for Systems Operators, which is geared primarily towards upgrading and enhancing their technical skills and competence.

Consequently, the NIC has formed an alliance with Human Employment and Resource Training/ National Centre for Technical and Vocational Education and Training (HEART/NCTVET) to

implement an accredited programme which would not only be limited to Systems Operators, but would also be offered under HEART's general curriculum for persons interested in the field of irrigation.

The Division wishes to extend congratulations to the following members of staff who completed their studies in the year under review:



**Tashley Baugh**

Bachelor of Technology in  
Environmental Science



**Sandra Rhone-Richardson**

Bachelor of Science in Management  
Studies (Accounting) with Second  
Class Honours (Lower Division)



**Percival Burrell**

320 CL SLR Hydraulic Excavator  
Operation and Maintenance –  
Certificate



**Collin Coke**

Supervisory Management  
– Certificate



**Marcia Reid**

Associate Science Degree in Computer  
Application and Business Studies



**Robert Kerr**

Associate Degree in Industrial  
Systems Operation and  
Maintenance (Credit)



**Horace Bartley**

Supervisory Management – Certificate



## SECONDARY/TERTIARY SCHOOL SCHOLARSHIP AWARDS

The Scholarship Awards programme is now in its tenth year. It is regarded as a partnership between the NIC and the Unions representing the workers. Its purpose is to assist employees in meeting the cost of education for their children and to encourage high standards of academic performance.

The Tertiary scholarships are valued at \$60,000.00 each and the Secondary scholarships at \$40,000.00 each. Six scholarships were awarded; five (5) at the Secondary level, and one (1) for the Tertiary level.

**The awardees were:**

### Secondary Awards

#### **Awardees**

Jessica Cox

Shanice Brown

Debra Ann Gordon

Kenyata Thomas

Michael Thomas

#### **Parents**

Richard Cox, Operation Centre

Tricia Bambury, Head Office

Huyghen Gordon, St. Catherine District

Michael Thomas, Mid-Clarendon District

Michael Thomas, Mid-Clarendon District

#### **Tertiary Award**

John Wright

#### **Parents**

Jodie-Ann Wright

Mid-Clarendon District



### **Scholarship Awardees**

**From left: Debra Ann Gordon, Michael Thomas, Jessica Cox, Shanice Brown and Kenyata Thomas**



### **Tertiary Student**

**Miss Jodie-Ann Wright receiving her award from CEO, Mr. Stanley Rampair**

# ADIEU

## BOARD MEMBERS



Mr. Horace Underhill

Mr. Keith Murray

### GO SOFTLY

Author: Unknown

*Go softly now,  
On the wings of wind,  
With steps that leave  
No trail in the morning dew.*

*Drift quietly away,  
And join the light  
That burns my heart  
And sears my soul.*

*Lift up and fly!  
And tarry now,  
But leave the pain  
And vanish from this heavy place.*

*Go softly now  
On wings of wind,  
Reach out and touch Eternal Light  
Awaiting your sweet soul.*

*Sadly missed by the Management and Staff of the  
National Irrigation Commission Limited*



# Obituary

The name Abraham, “father of many nations” was a very befitting description of the late Abraham Chambers who fathered and touched many lives.

He started working at the Mid-Clarendon Irrigation Authority (MCIA) in 1976 as a Storekeeper before being promoted to the post of District Accountant, a post he retained in 1990 when the National Irrigation Commission took over the MCIA and which he held until his passing on April 20, 2008.



**Abraham Chambers**

Mr. Chambers, affectionately called Chambie by his colleagues, loved his job and was seldom absent from work even during the most inclement weather; he would brave the rains and travel from Thompson Town to the Mid-Clarendon Office. He was an excellent worker, always displaying traits of commitment, dependability and hard work. He worked long hours, many times, way beyond that which was expected of him. Although quiet in nature, he was assertive and a stern Supervisor, never shouting but firm in his reprimands.

He had intimate knowledge of the Mid-Clarendon Irrigation District, both with respect to its physical layout and its customers. This Accountant could answer with ease any query relating to the field operations of the System.

He was never one to complain, and always displayed a pleasant, approachable disposition. Our late colleague was a peacemaker who was respected for his calm yet clear views on controversial issues.

Mr. Chambers was a philanthropist. He assisted many persons in the Osborne Store Community through his contact at the Ministry of Labour to enroll in the Farm Work Programme. He gave many children in the community financial assistance towards school through donations of schoolbooks,

lunch money and uniform. He was indeed a very extraordinary man who quietly contributed to the well being of many without ever seeking recognition. His colleagues at the Mid-Clarendon Office can also attest to his kindness. On his regular trips to the Head Office, he would either allow his coworkers to travel with him to transact personal business or he would do so on their behalf. On the other hand, the Head Office, staff could depend on him to make purchases for them in

Clarendon and take it into Kingston, whether it was a freshly slaughtered goat or a nice hand of banana. When approached, he would say with a smile “No problem man, I will take care of it”.

Chambie was an avid sports lover. His favourite sport was the sport of Kings – Horse Racing. When asked which horse would win a race, he would put down his pen, and give you a summary of all the horses in the race, their exercise routine and finally he would choose the winner.

He had an infectious laugh second to none. Whenever he was in any social gathering and jokes were ‘flying’ you bet, you would hear Mr. Chambers in his only loud moments, with some hearty laughter.

Our late colleague was an instructor, a friend, a confidant, a man of integrity, a gentleman, and a servant of the people. His life was one of service to others. NIC has lost a very faithful and exceptional employee. Mr. Chambers has made an indelible mark on our lives, and has left behind a great legacy.

Farewell Chambie, until we meet again!

*Sadly missed by the Management and Staff of  
the National Irrigation Commission Limited*

# OPERATIONS



**Mr. Horace Reid, Director of Engineering and Technical Services (Acting)**

## **CORPORATE OBJECTIVE**

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

The Operations Division focused on several areas of improvements to the conveyance efficiency in each region as follows:

- Desilting of the Dam Head was done to improve the canal flows.

### **Eastern Region**

- The Micro Dam situated in Yallahs was desilted
- One Thousand Eight Hundred (1800) feet of the Lower Main Canal from Salt Pond Road to the Spanish Town Bypass (800) feet on either side of the Seventeen Bridge (1000 feet) were lined
- Three Thousand (3000) feet of pipes were installed in Block A with the aim of rehabilitating this area





## Western Region

- The conveyance system in Hounslow, St. Elizabeth, was improved to provide additional water to farmers
- Twenty (20) acres of pipelines were installed to improve access to irrigation water supplied to farmers
- Forty (40) acres of pipes were installed in Seven Rivers, St. James, in an effort to expand the customer base.

## Central Region

- A new pump was installed at the Ebony Park Phase 1 Agricultural Support Services Project (ASSP) to serve 140 acres
- Negotiation is ongoing for the take over of the existing pump
- The Toll Gate Well was rehabilitated to serve approximately 80 farmers.

## Agricultural Land Use in Existing Schemes

Agricultural production in the irrigation districts as at March 2009 is shown in Table 1 below.

During the year, the agricultural sector suffered from the effects of several factors which contributed to a reduction in agricultural production, the main contributor being the divestment of the state run sugar factories, which is yet to be realized.

In addition, extensive development of non-agricultural activities in prime agricultural areas has significantly affected production.

Nevertheless, the Commission has been embarking on projects, such as, the Black Tank Initiative in St. Elizabeth to increase production and productivity.

During the reporting period, the water production and invoicing levels have been fairly satisfactory, especially during the latter part of the year. This resulted from work such as lining and desilting of the canals to improve the conveyance system.

**Table 1:** Estimated area under agricultural production in NIC irrigated areas

Location	Sugar	Cash Crop/Vg	Livestock	Fish	Fruit Trees	Total	% age
<b>Eastern Region</b>	6,936.00	1,103.00	582.00	335.00	35.00	8,991.00	54.70
<b>Central Region</b>	3,656.00	2,127.00	395.00	215.00	106.00	6499.00	39.60
<b>Western Region</b>	-	688.00	250.00	-	-	938.00	5.70
<b>Overall</b>	<b>10,592.00</b>	<b>3,918.00</b>	<b>1,227.00</b>	<b>550.00</b>	<b>141.00</b>	<b>16428.00</b>	<b>100.00</b>
<b>% age</b>	64.50	23.80	7.50	3.20	1.00		100.00

## 2.0 Water Production, Distribution and Energy Use

*Table 2: Water Production Distribution and Energy Use*

**Table 2: Water Production, Distribution and Energy Use**

	Hours Pumped	Water Prod. (m3)	Water Invoiced (m3)	% age Invoiced	Energy Used (kwh)	Energy Cost (\$J)	Unit Energy (kwh/m3)	Cost (\$)/m3
Yallahs	1,756.00	426,126.00	319,253.00	74.92	345,798.00	4,865,445.31	0.81	11.42
St. Dorothy	14,405.00	5,124,845.00	3,325,776.00	64.90	982,864.25	20,112,854.95	0.19	3.92
Block A	3,198.00	314,817.00	178,552.00	56.72	15,655.00	450,174.17	0.05	1.43
Blocks B and C	9,855.00	1,047,414.00	561,779.00	53.63	285,807.00	6,681,863.22	0.27	6.38
Block E	6,716.00	1,294,148.04	1,046,473.00	80.86	291,234.00	7,055,791.99	0.23	5.45
Spring Village	10,217.50	1,551,989.00	1,213,835.00	78.21	52,582.00	1,402,625.59	0.03	0.90
Blocks + Spring Village	29,986.50	4,208,368.04	3,000,639.00	71.30	645,278.00	15,590,454.97	0.15	3.70
Tot. (Esn. Region Pump)	76,134.00	13,967,707.08	9,646,307.00	69.06	2,619,218.25	56,159,210.20	0.19	4.02
Canal Flow (Esn. Region)		43,237,845.99	31,100,263.68	71.93				
<b>TOT. (EASTERN REGION)</b>	<b>76,134.00</b>	<b>57,205,553.07</b>	<b>40,746,570.68</b>	<b>71.23</b>	<b>2,619,218.25</b>	<b>56,159,210.20</b>	<b>0.05</b>	<b>0.98</b>
MID CLARENDON (DW) River	30,766.06	12,286,477.40 12,898,095.36	14,661,924.00		2,638,955.64	54,425,400.54	0.21	4.43
<b>TOT. MCID (DW +RIVER)</b>	<b>30,766.06</b>	<b>25,184,572.76</b>	<b>14,661,924.00</b>	<b>58.22</b>	<b>2,638,955.64</b>	<b>54,425,400.54</b>	<b>0.10</b>	<b>2.16</b>
Hounslow	4,471.00	2,512,270.00	2,172,326.00	86.47	594,004.00	13,752,819.91	0.24	5.47
Beacon/ Little Park	1,887.60	478,733.50	287,167.92	59.98	5,208.00	124,408.70	0.01	0.26
Braco	2,586.50	656,146.50	541,010.00	82.45	138,772.00	3,098,127.83	0.21	4.72
<b>TOT. (WESTERN REGION)</b>	<b>8,945.10</b>	<b>3,647,150.00</b>	<b>3,000,503.92</b>	<b>82.27</b>	<b>737,984.00</b>	<b>16,975,356.44</b>	<b>0.20</b>	<b>4.65</b>
<b>OVERALL (pumped)</b>	<b>115,845.16</b>	<b>86,037,275.83</b>	<b>58,408,998.60</b>	<b>67.89</b>	<b>5,996,157.89</b>	<b>127,559,967.18</b>	<b>0.07</b>	<b>1.48</b>



Overall, there has been a slight improvement in invoicing of 1% in the Eastern Region during the period under review to 68% in 2008-2009 as compared to 67% in 2007-2008. Invoicing percentages for Western Region fell significantly by 13% to 82% for the current year when compared to 95% for the period 2007 to 2008.

Further analysis has shown that the percentage of recovery for the Clarendon Region has been unsatisfactory. This is due mainly to the reduction in farmlands and sugar cane production.

The Division will focus on challenges related to the Central Region with a view to improving conveyance in the next financial year.

## **The NIC Energy Management Programme**

Managing pumping cost continues to be quite a challenging task for the NIC. For this reporting period, the NIC spent approximately \$140 Million on energy for water delivery.

The Information Systems (IS) Department continues to work on the Energy Management Information System (EMIS) which will allow better monitoring of the energy consumption versus water production.

## **Solar System**

Plans are in place to identify and install solar equipment in offices, where possible. This will allow the NIC to gain carbon credits and other benefits from energy saving projects.

## **Civil Works Maintenance and Improvement**

The Civil Works Unit continued to work on both the maintenance of the existing infrastructure as

well as the implementation of capital work programmes.

## **Lower Main – Phase 1 & 2**

The Rio Cobre East Main Canal is an earthen canal with width varying between 10 to 20 feet. It carries an average of 6000 cubic yd/hr on the periphery of Spanish Town due south across the bypass road adjacent to the Dela Vega City Community.

The Lower Main Canal functions as a storm drain during periods of heavy rainfall. Runoff from roadways, communities and smaller municipal drains finds its way into the canal. However, during these periods, the canal is regulated to prevent flooding by the transfer of storm water.

During the August 2008 rains, residents in proximity to the canal experienced flooding from storm water overflowing the canal banks. This occurred despite the NIC'S mitigation process.

The primary objective of the work is to improve the irrigation flow by regularizing the cross-sectional area and reducing resistance flow surfaces.

### **Phase 1**

Eight Hundred (800) feet of canal were lined, commencing at the bridge at the Salt Pond Road to the culvert at the Spanish Town Bypass.

### **Phase 2**

One thousand (1000) feet of canal were lined at Tawes Pen (Seventeen Bridge), 500 feet on either side.

Due to the improvement work done to the conveyance system along the Lower Main, it was necessary to construct a wash-out gate at the Town Gully and also to improve the Caymanas throwaway.

## Block A

Three Thousand (3000) feet of 8 inch pipes were installed in Block A with the aim of rehabilitating the pipe line network to increase supply to customers.

## Tawes Pen Area



Re-lining of canal at Tawes Pen

Canal reservation (at least fifteen feet on either side) is to be established in this area. It is also to be fenced to preserve the canal reservation and reduce squatting.

## Hounslow



Installation of bulk flow meter in Hounslow

One-third of the asbestos cement pipes were replaced to improve water supply to farmers. Additionally, defective main regulating valves were replaced to reduce the loss of water and the installation of bulk meter in pumping station; this will improve efficiency and accountability.

The acquisition of a backhoe has resulted in the improvement to access roads. This has further resulted in an improved roadway for system operators to traverse.

## Beacon /Little Park

Pipelines have been installed on twenty acres of farmland to improve access to irrigation water supply to farmers.

## Flood Mitigation Programme

This process has been ongoing in the following areas: Gayle River, Black River Main, Brumdec and Siloah. It consists of desilting the river to increase the flow of water and reduce the incidence of flooding.



Desilting of the Gayle River

## ELECTRICAL AND MECHANICAL

### Electrical

The preventive maintenance programme has reduced the amounts of unscheduled interruptions in supply to significant low levels. Efforts have been made to correct a number of the electrical problems with the two National



Irrigation Development Programme (NIDP) projects in St. Elizabeth-Beacon/Little Park Scheme and Hounslow Rehabilitation System. Improvements were also done to the following areas:

### **Half Way Tree #6**

- This pumping station was rehabilitated by the installation of a switchgear and motor with an aim to increase water supply to farmers in the blocks (St. Catherine, Bernard Lodge).

### **Ebony Park – Phase 2**

- A new pump was installed to serve the Agricultural Support Services Project (ASSP) in Clarendon.

### **McGilchrist Pen – Clarendon**

- The Toll Gate Well was rehabilitated by JAMALCO and was activated by the NIC to serve 80 farmers.

### **Stand-by Generators: Jamaica Broilers – St. Catherine**

- The Commission has constructed a generator bay to accommodate a stand-by generator to ensure continuity of service to Jamaica Broilers in St. Catherine during power outages and post hurricane.

### **St. Dorothy – Old Harbour**

- A change over switchgear has been installed for the stand-by plant.

## **MAINTENANCE - MECHANICAL**

### **Free Town Pump – Clarendon**

- The Free Town Pump was repaired and modified from an oil lube to a water lube and re-installed.

### **Pump Repairs**

- The pumps in Spring Village, Thetford and Sandy Bay were repaired during the period. Efforts have also been made to correct a number of mechanical problems being experienced with the systems in St. Elizabeth.

### **Workshop and Stores**

The workshop is the core of all maintenance activities for the Operations Division. Most items used to service the systems are either constructed and/or repaired there. These include canal gates, flumes, repair valves, pipes, water pumps, engines and heavy-duty equipment. Pumps, pipes, motor control centre and other equipment are all stored at this location.

## **IMPROVED SERVICE TO THE AGRICULTURAL SECTOR**

### **Extension Service**

A tractor with plowing implement was offered at a concessionary rate to farmers in Hounslow, St. Elizabeth to assist them in land preparation to boost production. Some farmers have received drip tapes at a reduced rate to boost production. The Black Tank programme was launched to encourage subsistence farming by those farmers who are located outside the normal irrigation belt.





**Launch of Black Tank Project in St. Elizabeth**

## Renovation of Building

- The St. Dorothy's building situated at Bodles, Old Harbour was renovated to provide a more comfortable environment to both the internal and external customers
- Improvement to the Watchwell Office situated in St. Elizabeth has started



**St. Dorothy's Office**

## Caribbean Broilers

The Commission is presently in dialogue with the Caribbean Broilers in the hope of providing 500,000 US Gallons of water per day to their new location in Longville Park, St. Catherine.

A Memorandum of Understanding has been established with the National Irrigation Commission and the building societies to supply 500,000 US Gallons of water per day from the Thetford Seed Farm.

## Asphalt – Rio Cobre

It was recommended that the Rio Cobre compound be resurfaced.

The canal situated at Patrick Street, Old Harbour was piped to prevent flooding in the area.

## LONG TERM PLANS

The following are long-term plans that the Operations Division intends to undertake:

1. Repair to parshall flumes to improve measurement of water supply
2. Canal lining programme for Rio Cobre
3. Continue the training of System Operators to improve the reading of measuring devices (wares, parshall flumes and meters) in an effort to account for water produced
4. Improve water audit capability, in an effort to increase the efficiency level
5. Improve the aesthetics of pump houses in all areas.

# NATIONAL IRRIGATION DEVELOPMENT PROGRAMME (NIDP)



**Mr. Milton Henry, Programme  
Director (Acting)**

## **CORPORATE OBJECTIVE**

**“To increase  
agricultural production  
and farmers’ income  
as a result of  
improved irrigation  
management  
practices in the  
irrigable areas  
prioritized in  
the NIDP.”**

## **MASTER PLAN**

In 1998 the Government of Jamaica (GOJ), through the National Irrigation Commission Limited (NIC) conducted a study to develop the National Irrigation Development Programme (NIDP). The goal of the NIDP was to develop a Master Plan for irrigation in Jamaica which would identify and prioritize irrigation projects for implementation, with long-term objectives to:

- increase farmers’ income
- increase rural employment

- increase irrigated agricultural areas by 40%

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

- an increase in crop production and productivity
- greater crop diversity
- farmer participation in irrigation management through the establishment of Water Users Associations (WUAs) to manage and operate the schemes, and
- self-sustainable irrigation systems.



**Table 1: Main Features and costs of project areas**

Funding Source	Cost (US\$)	Schemes	Parish	Land Area (ha)	No. of Farmers
CDB/GOJ	12,000,000	Seven Rivers	St. James	32	32
		Beacon/Little Park	St. Elizabeth	500	360
		Hounslow Rehab	St. Elizabeth	486	420
IDB/GOJ	21,000,000	Colbeck	St. Catherine	110	99
		New Forest	Manchester	368	242
		Yallahs	St. Thomas	374	265
		Essex Valley	St. Elizabeth	900	400
		St. Dorothy	St. Catherine	500	100
<b>TOTAL</b>	<b>33,000,000</b>			<b>3,270</b>	<b>1,918</b>

Under the NIDP programme, 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, resulting in significantly increased crop production levels in the project areas.

Additionally, agricultural support services such as marketing and extension will also be provided to farmers.

The NIDP is expected to complement the GOJ's long term agricultural development plan to the year 2015, and further the Government's effort to increase farmer participation in irrigation while making the NIC self sustainable.

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) for several projects under the NIDP.

The areas covered and expected numbers of beneficiaries are as shown in Table 1 above.

## Project Steering Committee

A Project Steering Committee (PSC) consisting of stakeholders, representatives from the relevant Government Ministries and the Planning Institute of Jamaica (PIOJ) 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; the major issues discussed at these meetings included:

- finalization of the WUA accounts during 2007 allowing for the holding of Annual General Meetings
- work programme for completing infrastructure works
- work programme executed through the Memorandum of Understandings (MOUs) with Agricultural Support Services Project (ASSP), Land Administration Management Project (LAMP) and National Land Agency (NLA).



## CDB FUNDED PILOT PROJECTS

The GOJ/CDB jointly funded 'Flagship' Projects amounted to US\$12,000,000 are as follows:

- Pedro Plains (Beacon & Little Park) – St. Elizabeth
- Seven Rivers – St. James
- Hounslow Rehabilitation – St. Elizabeth

To date, the infrastructure on these projects has been substantially completed. Additionally, WUAs have been established in all three schemes since 2007 and work is continuing to ensure their sustainability. The main crops being grown include peppers, thyme and watermelon.

Consultations were held with the farmers and the OUR on the rate to be charged for the water. The beneficiaries are currently paying the full Operation and Maintenance (O&M) costs for the scheme. This marks a major step in NIC's effort to ensure the sustainability of the project.

## Provision of on-farm equipment and services

One critical component of the project involves the provision of on-farm equipment for the beneficiaries, to ensure that the goal of improved irrigation efficiency can be achieved. Farmers are being provided with one (1) acre of drip system under a credit facility that forms part of the project funding arrangements. Currently, 44 systems have been distributed. The NIDP has placed a further order for 100 systems; these should become available early in the 2009-2010 financial year. Several farmers have procured and installed their own drip and sprinkler systems on their farms.

Besides equipment provided under the NIDP, some farmers have also benefited from incentives supplied by the Government's Production and Productivity Programme. It is hoped that by the next financial year, all farms in the CDB project areas would have received their on-farm equipment.



**Seated Left to Right: Mr. Stanley Rampair – NIC's, CEO, Mr. Shalom Hodara-Managing Director of Jamaica Drip, Mr. Wesley Blake - NIDP Procurement Specialist and Mrs. Lydia Snape-NIDP Planning Engineer – (Contract Signing for Drip Irrigation Equipment) - 100 Systems.**

## **Pedro Plains (Beacon/Little Park) – St. Elizabeth**

The scheme comprises 32 km of pipeline and three (3) deep wells providing 2.68 million cubic meters of water per year. A total of 150 farmers have signed contracts with NIC to receive irrigation service thus far. This number is expected to grow with the land regularization effort being undertaken by LAMP in the area. The WUA has been duly registered with members having regular meetings. Attendance levels at meetings have not been as high as expected. Consequently, the NIC will continue to work with the WUA to mobilize other beneficiaries.

## **Seven Rivers - St. James**

This gravity flow scheme consisting of 5.5 km of pipeline has been installed to provide 0.13 million cubic meters of surface water per year to benefit 32 hectares of land. During the year the NIC has extended the irrigation network in order to serve additional farmers in the project area. 8 farmers have established irrigation contracts with NIC. The Seven Rivers WUA has been registered and is formerly known as the Seven Rivers Specially Authorized Society. Farmers meet fortnightly.

## **Hounslow Rehabilitation – St. Elizabeth**

The Hounslow Irrigation system required extensive overhauling for improvements in irrigation distribution and efficiency. The rehabilitation work included the replacement of 17 km of pipeline, and complete rehabilitation of five (5) wells to supply 3.47M cubic meters of water per year. Approximately one-third of the old pipe network was replaced under the rehabilitation programme at a cost of US\$3.1 million. At the end of the financial year, rehabilitation work was 90% completed with the outstanding items being the completion of some connections from the existing sections to the new pipelines. The

project should be completed during the first quarter of the 2009-2010 financial year.

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



**Vegetable field showing on - farm drip equipment**

## **IDB FUNDING PROJECT**

### **BACKGROUND**

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 will contribute 80 % and the GOJ 20 %. Due to the delay in project start up and the need for the full 5-year execution period, the project disbursement period has been extended by 18 months; the current date for final disbursement will be November 27, 2011. The projects 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 of the successful completion of this programme are the incremental increase in irrigated area of high-valued crop production of approximately 1,700 hectares benefiting about 1,000 farmers along with the establishment of Water Users Associations to operate and maintain those schemes. The project will increase farm income as a result of the introduction of new crops, increases in yield and cropping intensity. The following are to be achieved with the project implementation:

- Irrigation systems will be operated and maintained by fully autonomous, self sustained and viable WUA
- Farmers will benefit from effective production and marketing information
- Improvements in environmental management in the designated schemes
- Majority of the farmers have registered land titles or leases that will grant them WUAs membership and also access to credit financing
- A redefined role for the NIC in planning, regulating and monitoring. This will include the development of estimated fees for services on the basis of marginal costs as well as a long-term business plan.

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 effective implementation of four (4) components namely Institutional Strengthening of the NIC, Promotion and Formation of Water Users Associations (WUAs), Farmer Technical Assistance and Training and the Provision of Irrigation Infrastructure on the

five (5) irrigation projects.

Unfortunately, setbacks in the Project Implementation Schedule since inception resulted in delays in the implementation of several components, notably the irrigation infrastructure, as well as farmer training. Subsequently, the project was subjected to severe risk as both spending and achievement were severely behind schedule. The NIC embarked on several key strategies during the year to improve project delivery including:

- **Establishment of a Management Committee to facilitate the overall monitoring of project activities**

This Committee chaired by the Chief Executive Officer (CEO) initially met on a weekly basis to resolve several bottlenecks being experienced. Members included representatives from the IDB, NLA and NIC project staff.

- **Engagement of a Project Implementation Consultant**

This consultant was responsible for reviewing all Memoranda of Understanding as well as redrafting a more detailed project implementation schedule and budget for project completion. Among the many recommendations were the request for a minimum 12 month project extension, engagement of a training consultant and the establishment of an MOU with Rural Agricultural Development Authority (RADA), replacing that of the ASSP.



## **Main Components of Proposed IDB Programme:**

### **Component 1**

#### **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 reorganization of NIC, to focus on planning and monitoring within the irrigation sub-sector.

- During the year, the Planning and Implementation Unit (PIU) shortlisted 5 firms to undertake the preparation of NIC's 5-year Business Plan. The Terms of Reference for this Business Plan was prepared and submitted to the Bank for 'non objection'
- A Contract worth US\$162,500 was awarded to Fujitsu Jamaica Limited, for the supply of computer hardware. The equipment is on order and should arrive during the first quarter of the 2009 financial year, significantly improving the Commission's hardware capabilities
- Contract valued at US\$149,000 was awarded to Infotech Caribbean for constructing an integrated Customer Relation Management System (CRMS). This project will enhance NIC's Information System (IS) capabilities and improve the service to the customers

### **Component 2**

#### **Promotion and Formation of Water Users Associations (WUAs)**

This component aims to establish WUAs for each NIDP system and will eventually transfer the infrastructure to the WUA Support and Regulations Unit for the association will also be established.

All six WUAs were registered independently with the Department of Cooperatives and Friendly Societies on July 6, 2007 under the Friendly Societies Act 1966, as Irrigation Specially Authorized Societies (ISAS). Management Committees have also been established within these WUAs to discuss and examine several policies including operation and maintenance, as well as financial affairs. A draft Memorandum of Understanding between the WUAs and NIC has also been prepared and is currently being discussed with the WUAs.

A Contract for the construction of Water Users Association buildings in Yallahs and Colbeck valued at JA\$7.5 million was awarded to Howard Construction Company Limited and signed on March 31, 2009. Construction is expected to begin by mid-April 2009 and to be completed by August of the same year. Additionally, draft bidding documents and invitation to tender for the construction of a Water Users Association building in New Forest / Duff House, Manchester has been forwarded to the IDB for non-objection.

**Table 2: Membership in the Water Users Association**

Location	Multilateral Funding	Current Membership	Date of Inaugural General Meeting
Colbeck	IDB	90	October 9, 2007
Yallahs	IDB	25	October 16, 2007
New Forest/Duff House	IDB	150	October 25, 2007
Beacon/Little Park	CDB	150	October 24, 2007
Hounslow	CDB	35	October 27, 2007
Seven Rivers	CDB	50	October 24, 2007

The full establishment of WUAs is a paradigm shift in the management of irrigation systems, and poses a major challenge to both the NIC and the farmers. During the next financial year, the NIDP will concentrate on the establishment of the Water Users Support Unit within the PIU, as well as in areas of Agribusiness Development and further capacity building within the WUAs.

### 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 the relevant agricultural extension service agency
- Training of 30 trainers in modern and effective extension methodology
- Development of annual training plans to

include training of 200 lead farmers and provide technical assistance to 1000 farmers

- Provision of Environmental Management Training to 1000 farmers.

To date, Ad Hoc Training Committees have been established and training has been conducted with the farmers in the following areas:

- Pesticide Use
- Basic Book-keeping
- Soil Fertility

The training programmes have not kept pace with the implementation schedule. In order to expedite this training program, the NIDP will be engaging a Training Specialist during the next financial year. It is envisaged that entities such as the Human Employment and Resource Training National Training, Agency (HEART NTA) and RADA will be engaged to ensure that the training needs are satisfied.

## 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 5 projects, including feasibility at Essex Valley & St. Dorothy
- Feasibility Studies on Mid Clarendon & Rio Cobre
- Execution of MOUs with NLA and LAMP for land regularization

During the financial year, the NIDP made progress on the construction works in Colbeck, New Forest/Duff House and Yallahs. Some of the major achievements are as follows:

#### Well Drilling Programme

During the year, a contract valued at J\$100,599,844.06 was awarded to Jamaica Wells and Services Limited for the drilling of 5 wells in New Forest/Duff House, Manchester. Drilling commenced in early February and despite earlier setback of the first well being unsuccessful, the Rowes Corner Well has so far yielded flows estimated by the Hydrogeologist at approximately 1000 gpm. This contract should be completed by August 2009.

Cabinet has also approved a contract valued at J\$37,423,822.23 to drill 3 wells in Yallahs, St. Thomas. This award to Jamaica Wells will be signed during the first quarter of the 2009-2010 financial year.

### Irrigation Network Installation

Procurement of materials for the Colbeck Irrigation System commenced with the signing of a contract valued at J\$21,449,899.00 for the supply of pipes to the project. The supplier, Jamaica Drip Irrigation Ltd has suggested that all the materials will become available during the first quarter of 2009, allowing for the installation later in the year.

Irrigation designs have been drafted for both New Forest/Duff House and Yallahs. However finalization of these designs can only be completed whenever the licensed yields have been determined from the well drilling exercise.

#### Land Regularization Programme

Work on the land regularization programme continued in earnest in Colbeck where LAMP has issued 47 titles to date. The NIDP is working assiduously to ensure the finalization of the remaining titles and the St. Catherine Parish Council recently agreed to release an additional 15 lots in the sub-division. The land titling exercise executed by LAMP continues in the New Forest/Duff House and Yallahs project areas.

Cadastral Mapping in New Forest/Duff House will be addressed early in 2009-2010 as a contract valued at J\$8,369,600 was awarded to Llewelyn Allen and Associates to provide land cadastre for 211 parcels of land.



# PROPOSED NIDP WELL SITE

## NEW FOREST/DUFF HOUSE



1.00 2.00 0 5.00 1.000



# INFORMATION SYSTEMS



**Mr. Bryan Hastings, Manager  
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 primary objective for the Information Systems Department is to provide the highest level of quality service to the NIC.

The Department’s objectives:

- Continue the transition from the use of manual systems to Computer Based Information (CBI) Systems
- Deliver timely, efficient and cost effective Computer Based Information Systems to reduce operational costs through improved efficiencies
- Ensure the coordination of NIC’s business activities through the integration of Computer Based Information (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.

## **Plans for the period were:**

- Start the development of the new Customer Relationship Management System (CRMS)



- Manage and improve the network infrastructure
- Manage and make available corporate e-mail
- Strengthen NIC's computer hardware infrastructure under the NIDP
- Continue GIS data collection for the development of the NIC.
- Maintain high quality user support
- Ensure staff development through training.
- A completely new procurement procedure – May to November 2008
- Contract approval process – December 2008 to March 2009
- Contract Award – March 2009.

The next step will be project mobilization for the development and deployment of the CRMS.

## Network Infrastructure

Over the last three years, the Commission has enjoyed a stable network infrastructure at its Offices with over 95% availability. For the period, this high level of up-time was maintained through the management and replacement of network connection equipment.

Interruption in public electrical supply resulted in down time of network infrastructure during operating hours. Consequently, it is a constant challenge facing the Division to protect the network equipment from those power outages.

Works done on network infrastructure included improvement to the St. Dorothy District Office and the Head Office. Both were part of the NIC's rehabilitation activities.

The upgraded network at the St. Dorothy Office with a self powered switch was expanded to include the workshop.

There are concerns relating to the availability of High Speed Internet connection at the Hounslow Office. They are still using dial-up for connectivity.

The NIC continues to try to source high speed wireless service for the area.

## ACCOMPLISHMENTS

### Development of Customer Relationship Management System (CRMS)

Under the NIDP, the new CRMS is a customized software that is going to replace the existing old Billing / Customer Information System.

The planned CRMS contains the following modules:

- Customer Billing System
- Customer Information System
- Water Production Information System
- Customer Application Tracking System
- Drainage System.

After a long delay, caused by procurement concerns, the process was brought back on track. Progress made included:





**Mrs. Leonie Walker, Information Systems Administrator  
configuring one of the new Blackberry devices**

## Corporate E-mail System

The Corporate e-mail system continues to be the hub of all electronic communication throughout the NIC.

The reliable Microsoft Exchange Server, Microsoft Outlook and internet technologies remain the preferred options.

The challenge for the period as always, was keeping the infrastructure secure and available all the time.

In February 2009, e-mail communication got a

boost with the expansion of a Blackberry Server mobile group with the additional 12 new users .

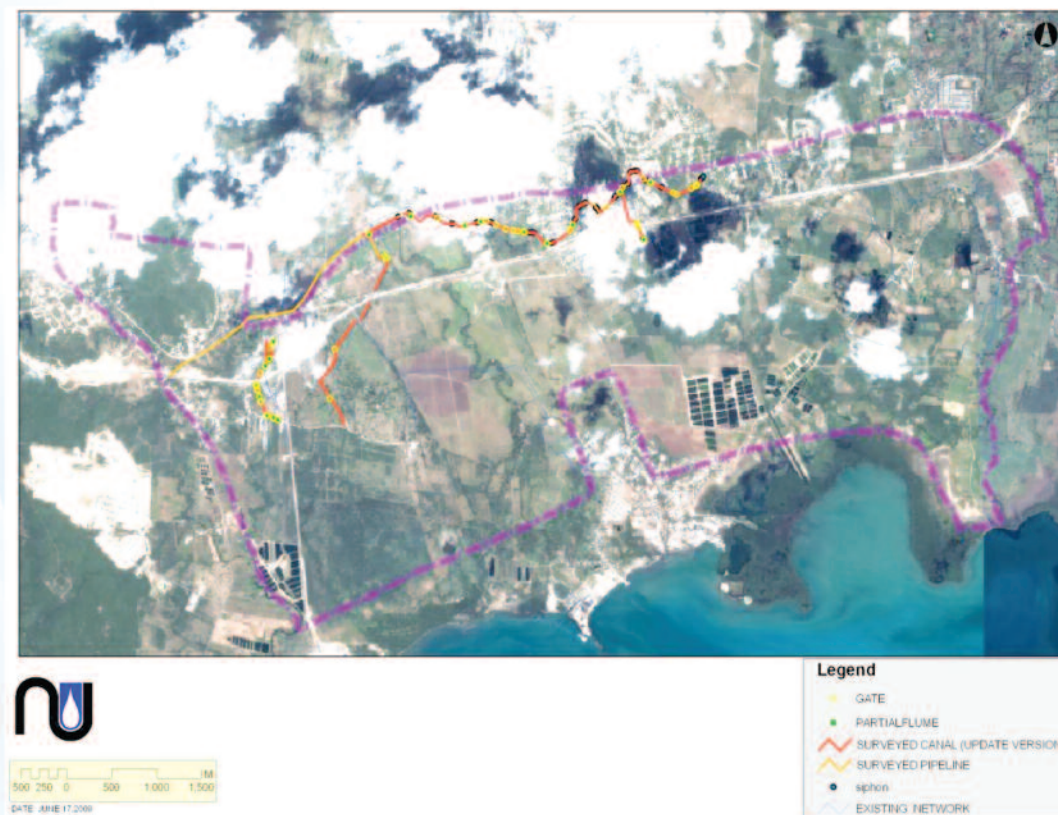
## Geographic Information System

NIC continues to expand its GIS application across the districts by collecting field data pertaining to the existing status. GIS application has made landuse and networking available throughout the districts of Clarendon and St. Dorothy. It is important to note that GIS field exercise is currently on-going in the St. Dorothy district. Other GIS activities involve the well survey with the Global Position System (GPS), to determine their location and general condition. The table below shows achievement to date.

**Table 1.0: Current Survey Status Result for St. Dorothy**

Structure	Quantity	Data Format	Estimated Amount	Balance
Gate	63	Point		
Weir	1	Point		
Air valve	2	Point		
Bridge	20	Point		
Chamber	26	Point		
Fall	14	Point		
Parshall Flume	15	Point		
Siphon	15	Point		
Valve	6	Point		
Canal	8.4 km	Line	28 km	19.6 km
Pipeline	3.3 km	Line		

## ST. DOROTHY IRRIGATION SYSTEM



### Strengthening of NIC's computer hardware infrastructure

Under the NIDP, the Institutional Strengthening component is intended to improve the computer hardware. During the period major steps were taken to achieve this objective.

These include:

- The procurement process – June to December 2008
- Contract approval process – January to February 2009
- Contract award and signing – March 2009.

The computer hardware includes servers, desktop and notebook computers to strengthen depart-

ments' hardware requirements. Delivery is expected early in the next fiscal period.

### User Support

Providing reliable, prompt and professional computing support continues as a top priority for Information Systems. The Help Desk is critical in providing quality technical support to staff.

There were 11 critical incidents for the period, five of which were total computer failure. These were repaired or replaced.

To ensure users were equipped with the necessary tools, there were replacements of six (6) notebooks, five (5) desktops, four (4) printers, twelve (12) UPSs and one (1) server.

Two (2) new notebook computers were acquired.



Applications support included:

- Microsoft Great Plains Support renewal
- Infotech/ Microsoft Great Plains Helpdesk renewal
- McAfee anti-virus renewal.
- AutoCad
- New product technologies
- ESRI International User Conference in San Diego, California.

## Staff Development

For the period, two members of the Information Systems team commenced Masters (MSc.) and First Degree (BSc.) programmes in Information Systems at the University of the West Indies and University of Technology respectively.

To keep informed with technology and industry standards, the I.S. staff participated in five (5) Information Technology seminars and training sessions.

These included:

- Enterprise IT Management

## ESRI INTERNATIONAL USER CONFERENCE

Two members of staff participated in the Environment Systems Research Institute (ESRI) Conference between August 4 to 8, 2008 at the San Diego Convention Center in San Diego, California, USA.

This Conference is the largest annual GIS event in the world. The theme of the conference was “GIS – Geography in Action”.

More than 14,500 GIS professionals and other stakeholders from 114 countries around the world attended in the true spirit of community, to share their experiences and knowledge. Of this number, 21 participants were Jamaicans.



Conference participants viewing contents in one of the ESRI Conference



The conference proceedings covered three (3) categories:

- **User presentations**

Hundreds of GIS professionals shared their work at the 2008 ESRI International User Conference. These presentations comprised a fundamental part of the conference by providing examples of how GIS is used in diverse ways

- **Technical workshops**

Technical workshops provided an excellent opportunity to learn detailed information about ArcGIS software. Workshops were led by the programmers and project managers who work on the particular software or extension featured

- **GIS & Industry Concept sessions**

Participants learned about GIS concepts and industry trends in a series of sessions geared toward people who are new to GIS, interested in learning about new trends, or who wanted to review the core elements of GIS. These sessions provided the context behind GIS concepts and solutions to help leverage GIS investment.

## COMMERCIAL



**Mrs. Vanica Cranston, Director of  
Commercial Operations**

### **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 2½% or \$3.5M from \$137M to \$140.5M.

This boost in sales can be attributed to increased agricultural activities that resulted from the ongoing efforts by the Commission to reengage lands that have been out of agricultural production.

The percentage rate of collection fluctuated between high eighties and low nineties.

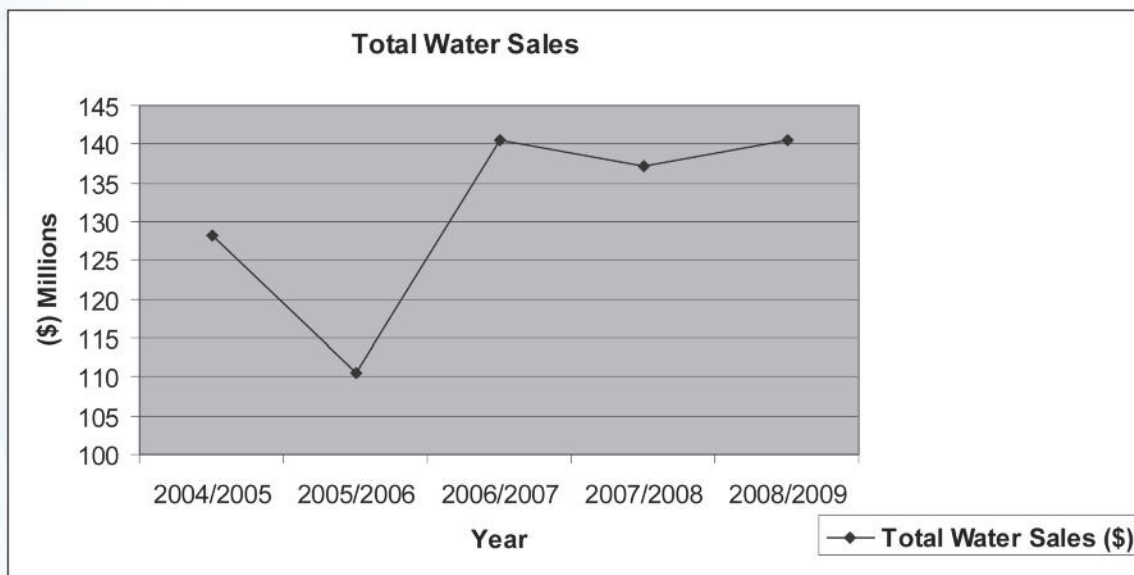
The Commission continues to accommodate its

credit challenged customers through its payment arrangement facility, as well as other collection strategies aimed at increased revenue collection which have been implemented.

The Commission's levels of invoicing for the financial years 2004/2005 to 2008/2009 are outlined overleaf.

### **Customer Service**

A priority of the Commission is to constantly enhance the efficiency with which services are delivered to valued customers. Consequently, during this reporting period, appropriate training of all frontline personnel was conducted.



Year	Total Water Sales (\$)
2004/2005	128,286,820
2005/2006	110,564,307
2006/2007	140,514,930
2007/2008	137,055,071
2008/2009	140,508,074

Improved Customer Service training is slated for all other members of staff, considering that we are all responsible for providing good Customer Service. Training in Customer Service will be an on-going exercise.

On February 19, 2009, a Customer Appreciation Day was held at the Phillipsfield Sports Complex, Yallahs, St. Thomas. The customers got the opportunity to interact with the management and staff of the Commission, as well as to have their questions, concerns and suggestions addressed. This interaction with our customers will assist us in having a better understanding of our strengths and weaknesses, which will help us in improving our service to our customers.

The customers were advised by the Chief Executive Officer, of the Commission's plans for Yallahs. The Manager, Water Management Unit, Rural Agricultural Development Authority (RADA) gave an enlightening presentation on

'Good Irrigation Practices', thus affirming the NIC's commitment towards the enhancement of Jamaica's agricultural development.

While some of our current and prospective customers were presented with agricultural items, gate prize winners were awarded with backyard garden kits and other agricultural items. The customers' knowledge of the Commission was also tested in a quiz session and the winners were rewarded with agricultural items. The Principal of the Yallahs Primary School which provided entertainment for the event was also presented with, among other things, a backyard garden kit, irrigation items, and a donation towards the purchase of a black tank.

These prizes consisting of agricultural and irrigation items were donated by Food For The Poor, Jamaica Drip Irrigation Limited, Agro Grace Limited, Rural Agricultural Development Authority and St. Thomas Farm Store.



The customers expressed satisfaction and indicated that it was a very informative and fun filled day. Customer Appreciation Day is an annual event for the Commission.

The Commission remains fully committed to implementing more measures aimed at further improvements in customer satisfaction and an enhanced corporate image.

## 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 2,137, occupying 11,446.28 hectares of land, 63.5% or 1,358 on 8,106.21 hectares were active, 5.6% or 119 on 401.29 hectares were suspended and 30.9% or 660 on 2,938.79 hectares were terminated.

The number of active customers increased from 1,301 in the previous year to 1,358, reflecting a 4% increase.

The Commission continues to develop strategies geared towards increasing the demand for irrigation services to those lands that have fallen out

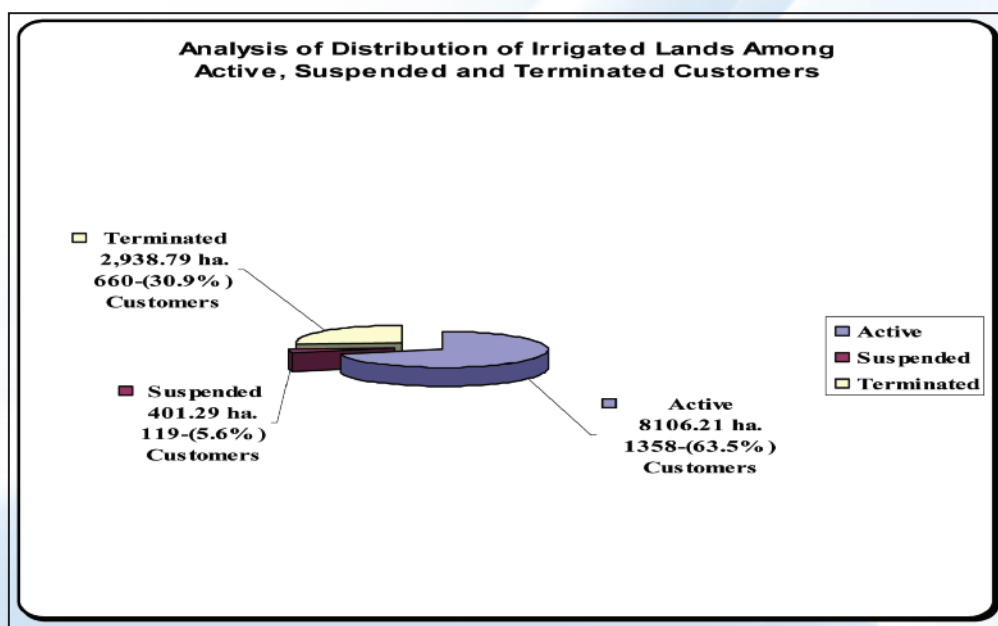
of agricultural production, especially those in the Mid-Clarendon area.

The in-depth survey of terminated customers that started in March 2007 in the Mid-Clarendon area was extended to other areas, notably the Eastern Region, Rio Cobre, St. Dorothy and Yallahs. This survey was completed in January of this year.

The objective of this survey was to ascertain the reasons for the decline in the usage of irrigation services by customers whose contracts have been terminated.

We continue to take an inter-agency approach, collaborating with other stakeholders such as the Ministry of Agriculture and Fisheries, Rural Agricultural Development Authority, All Island Cane Farmers' Association among others with a view to resolve some of the issues being faced by farmers since feedback garnered from the survey has indicated that these issues were mostly external.

The in-house interventions developed by the Commercial Department are ongoing. Areas such as, Belle Plain in Mid-Clarendon and Thetford in St. Catherine are especially targeted, since the Commission's infrastructure in these areas



are heavily under-utilized. The Prepayment Policy is being used to assist customers where necessary.

Collaborative efforts with the Agricultural Support Service Project (ASSP) and JAMALCO have resulted in increased demand for irrigation services to lands that were under-utilized in Ebony Park and McGilchrist Pen situated in Clarendon.

## **Complaints**

Over the period, seven (7) major complaints were received in the Western Region, all of which were dealt with at the District Office. Four (4) major complaints were received in the Eastern Region. Three were dealt with at the District Office, while one was dealt with at the Head Office. All customers' complaints were dealt with satisfactorily and within the specified time frame in accordance with our Citizen's Charter. It is an internal organizational tool, outlining the service standards the Commission commits to observe.

The Commission is being monitored externally by the Office of Utilities Regulation (OUR) in regard to the level of service it delivers to the New Project areas - Beacon Little Park & Seven Rivers.

Bi-annual reports on the performance against the guaranteed standards submitted to the OUR are used to judge the Commission's performance.

## **IRRIGATION WATER APPLICATIONS**

### **New Project Areas**

The new project areas, Beacon/Little Park in St. Elizabeth and Seven Rivers in St. James have continued to experience growth in the number of

customers, as well as acres under production. At the end of March 2009, Beacon/Little Park Irrigation System had 139 customers with 208.69 hectares of land. An additional 6 applications are being processed. The Seven Rivers Irrigation System now has 8 customers with 6.99 hectares of land. An additional 14 applications are being processed.

Training was conducted for customers in both areas on NIC's policies that impact them. Customers in Beacon/Little Park have also benefited from training in reading the flow meter used to record the monthly consumption.

### **Eastern Region**

Applications for the year under review increased by 27% from 46 to 63 and were categorized as follows:

- (1) Forty-three (43) approved.
- (2) Twenty (20) are awaiting approval.

The sixty-three (63) applications received during the period accounted for 326.03 hectares of land.

### **Western Region**

Applications received increased by 40% from 76 to 128 and were categorized as follows:

- (1) One hundred and fifteen (115) were approved
- (2) Thirteen (13) are awaiting approval.

The 128 applications received during the period, accounted for 340.83 hectares of land.

## Finance & Corporate Planning



**Mr. Andrew Robinson**  
**Director, Finance & 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.”**

The Commission incurred a loss of \$42M for the 2009 financial year. This loss represented a \$103.4M or 169% reduction from the operating surplus of \$61.3M recorded in the previous year. Faced with a challenging economic environment, revenue from our core business (water sales) increased marginally by 2.5% or \$3.5M, over the prior year.

The Government of Jamaica increased its subvention by 15% or \$59M when compared to the previous year. This increase in the GOJ subvention resulted in operating income increasing by 7.5% or \$48M, over the prior year.

Buoyed by high oil prices during the first half of the financial year, electricity costs increased by

30% or \$35M over the prior year. In addition, the Commission finalized a staff restructuring exercise during the financial year that resulted in salaries and wages increasing by \$119M or 40% compared to the previous year. The growth in these expenses resulted in a sharp increase in total expenses of \$190M or 33% over the prior period.

Other key financial highlights of the company for 2009 included:

- Accumulated surplus decreased by 20% compared to the previous year to \$169M (2008: \$210.8M) resulting in a decrease in Shareholder Equity of \$62M (2009: increase of \$61.36M).



## National Irrigation Commission Limited Five Year Statistics

	\$'000	\$'000	\$'000	\$'000	\$'000
	2009	2008	2007	2006	2005
Shareholders Equity	576,922	618,993	557,662	523,039	501,096
% inc./ (decr.) compared to prior year	-6.80%	11.00%	6.62%	4.38%	4.39%
<b>PROFIT AND LOSS ACCOUNT</b>					
Operating Revenue	635,076	587,265	499,885	439,265	411,877
% inc. over prior year	8.14%	17.48%	13.80%	6.65%	18.20%
Accumulated Surplus (Deficit)	168,791	210,863	149,531	114,909	92,966
% inc./ (decr.) compared to prior year	-20%	41%	30%	24%	29%
<b>IMPORTANT RATIOS</b>					
Admin. exp. as a % of total costs	30.42%	26.87%	24.27%	21.93%	23.86%
Operating exp. as a % of total costs	69.58%	73.15%	75.73%	78.05%	76.13%
Electricity exp. as a % of total costs	20.02%	20.51%	21.54%	18.68%	21.61%
Electricity exp. as a % of operating costs	28.78%	28.04%	28.45%	23.93%	28.38%
Rates as a % of total costs	18.51%	24.07%	27.94%	23.42%	30.53%
Rates as a % of operating costs	26.60%	32.90%	36.90%	30.01%	40.10%
GOJ subsidy as a % of total costs	61.82%	71.98%	71.46%	59.13%	62.25%
GOJ subsidy as a % of operating costs	88.85%	98.40%	94.37%	75.76%	81.77%

- Cost of producing water and distribution to farm gates increased by 26.81% over 2008 to \$528M, an increase of \$111.6M. This increase was due to higher electricity costs as well as, to costs associated with extensive rehabilitation work carried out on the conveyance systems. This exercise was to facilitate serving our customers more efficiently.
- The Commission maintains a current assets ratio of 1.23:1 (2008: 1.28:1).

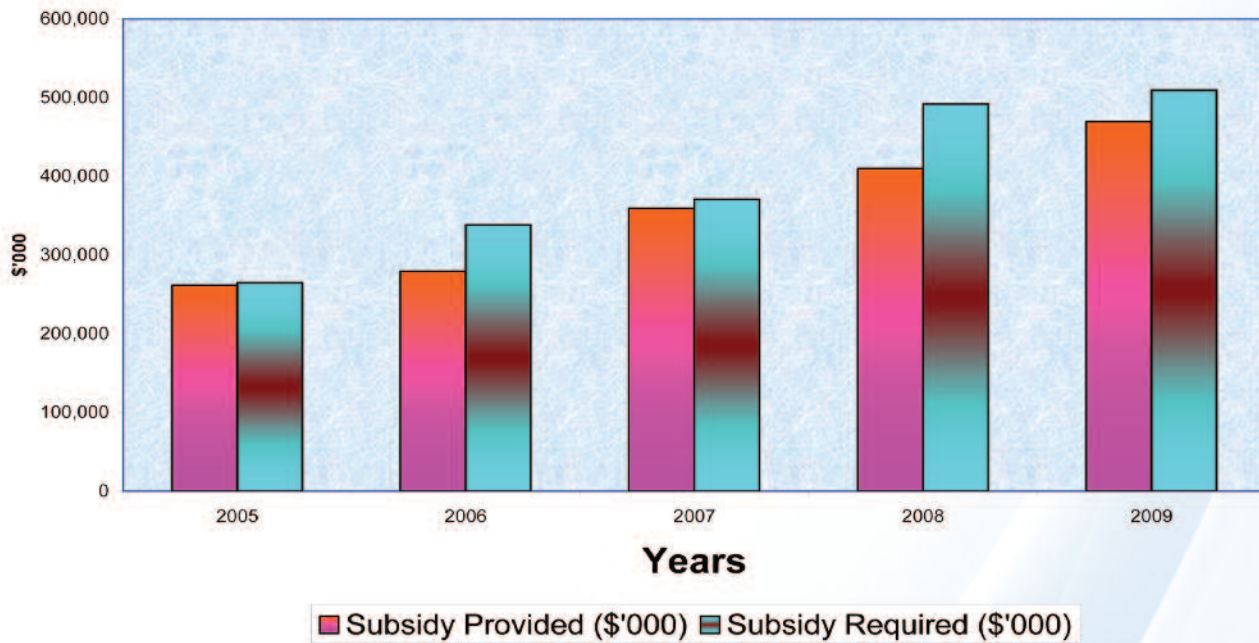
### Highlights of International Financial Reporting Standards (IFRS)

For the year ended March 2009, 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.

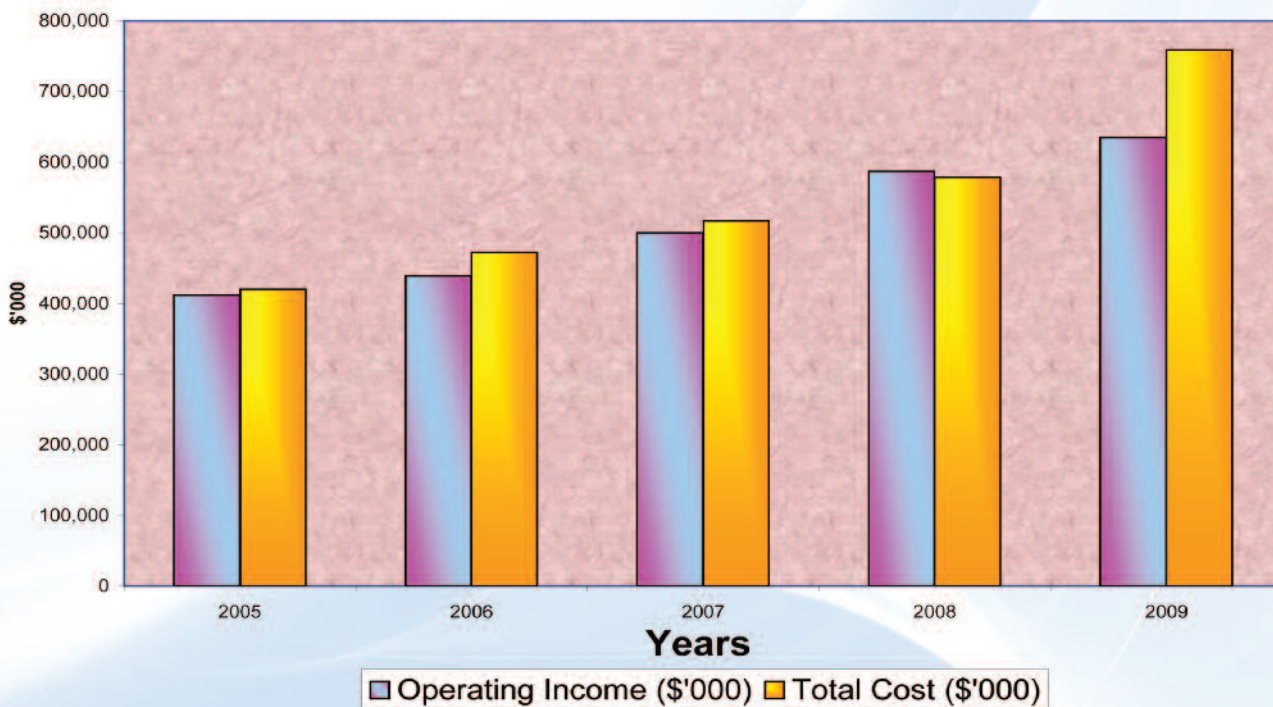
Consequently, these new standards had no effect on the Company's financial position or operating results.

# Finance & Corporate Planning

**Government of Jamaica Subsidy on behalf of Farmers**



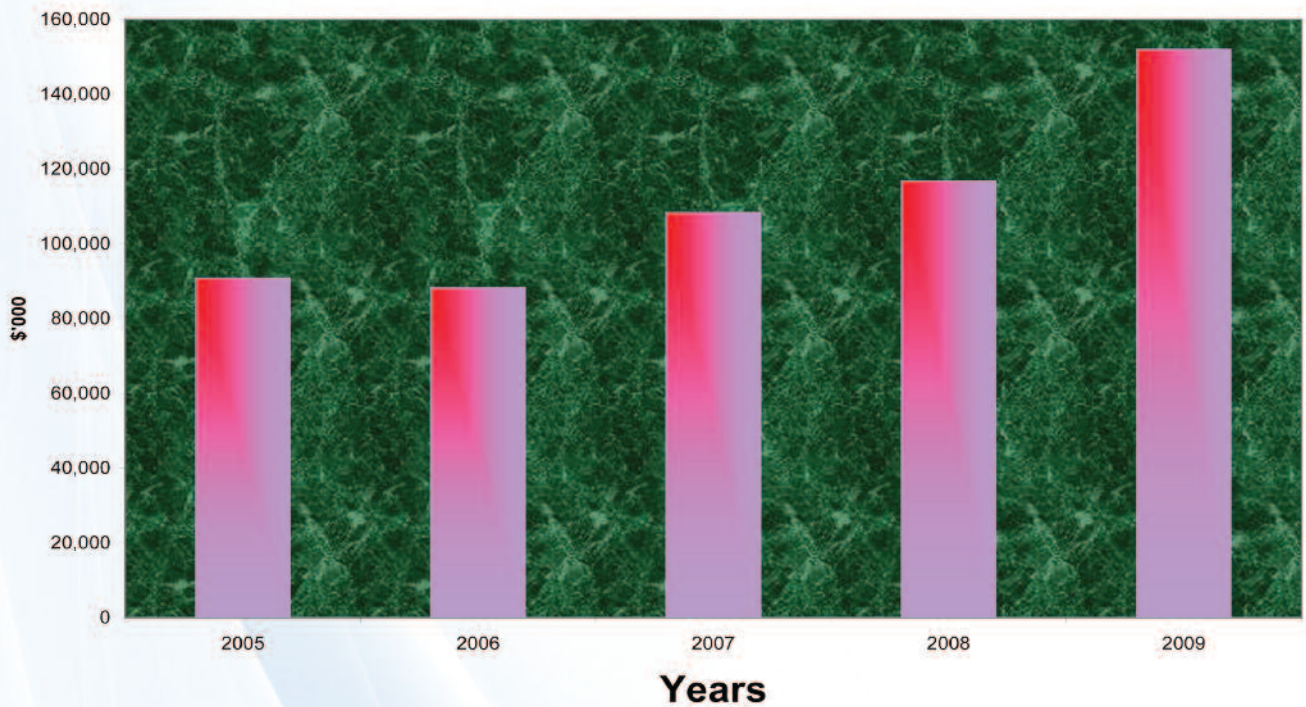
**Operating Income vs Expenditure**



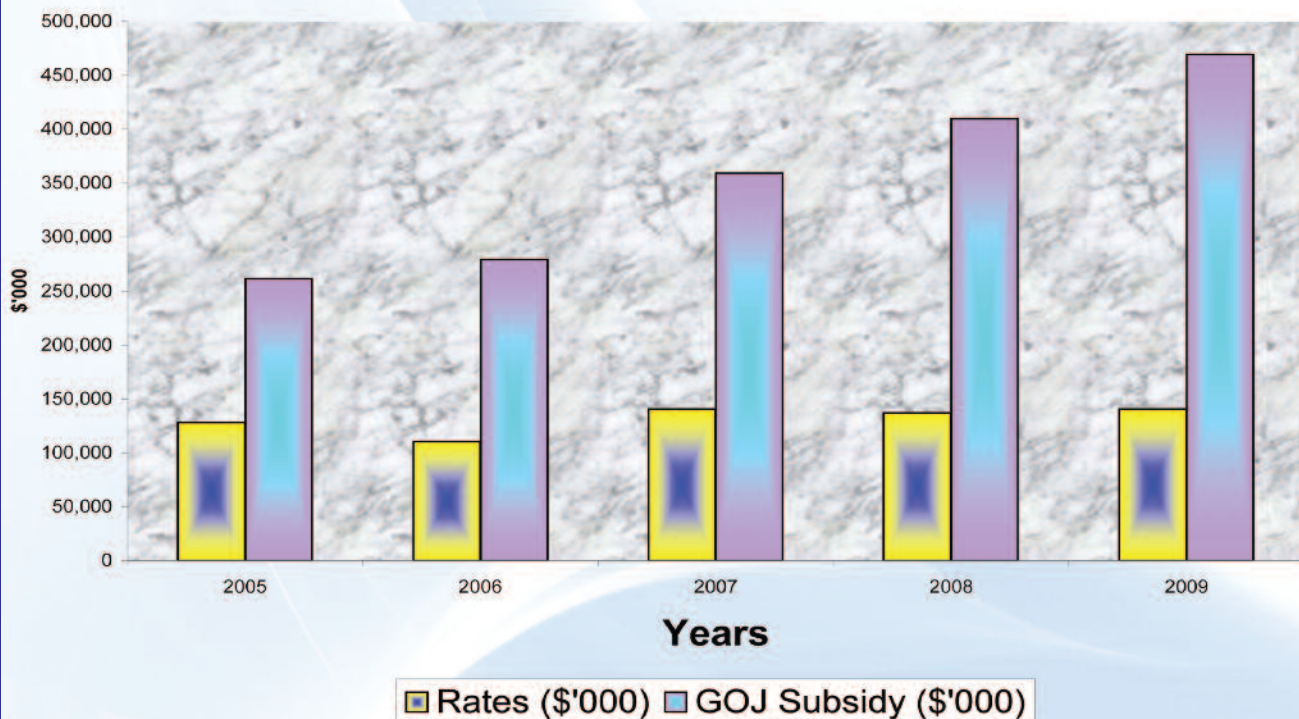


# Finance & Corporate Planning

## Electricity Cost



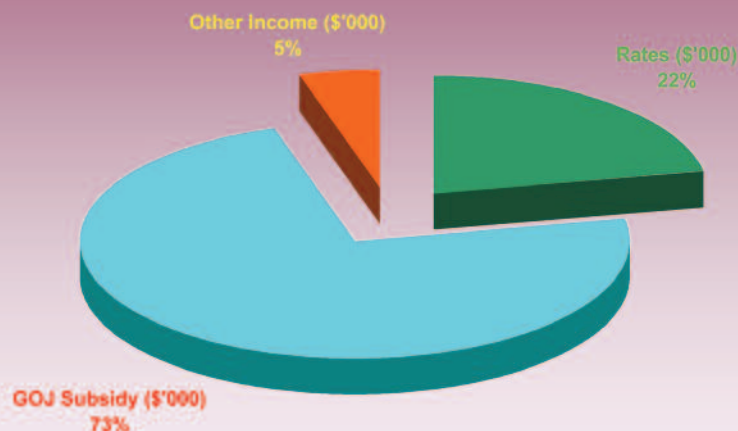
## Rates vs GOJ Subsidy





# Finance & Corporate Planning

Distribution of Income for the year  
2009



## GOVERNMENT OF JAMAICA SUBSIDY ON BEHALF OF FARMERS

Year	Subsidy Provided (\$'000)	Subsidy Required (\$'000)	Rates (\$'000)
2005	261,599	264,763	128,287
2006	279,176	338,127	110,564
2007	359,370	370,550	140,564
2008	409,863	491,900	137,055
2009	469,307	509,500	140,508

Year	Operating Income (\$'000)	Total Cost (\$'000)	Electricity Cost (\$'000)
2005	411,877	420,231	90,798
2006	439,265	472,132	88,190
2007	499,885	516,460	108,337
2008	587,265	578,523	116,780
2009	635,076	759,112	152,000

Year	Rates (\$'000)	GOJ Subsidy (\$'000)	Other Income (\$'000)
2005	128,287	261,599	28,909
2006	110,564	279,176	13,946
2007	140,564	359,370	19,608
2008	137,055	409,863	17,288
2009	140,508	469,307	31,094





# Financial Statements

**MARCH 31, 2009**





**KPMG**  
**Chartered Accountants**  
The Victoria Mutual Building  
6 Duke Street  
Kingston  
Jamaica, W.I.

P.O. Box 76  
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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 53 to 80, which comprise the balance sheet as at March 31, 2009, statements of revenue and expenses, changes in equity and cash flows for the year then ended, a summary of significant accounting policies and other explanatory notes.

#### *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. This responsibility includes designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and consistently applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

#### *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 the auditors' 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, the auditors consider internal controls 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 controls. 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.

KPMG, a Jamaican partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International, a Swiss cooperative.

Elizabeth A. Jones  
Caryl A. Fenton  
R. Tarun Handa  
Patrick A. Chin  
Patricia O. Dailey-Smith

Linroy J. Marshall  
Cynthia L. Lawrence  
Rajan Trehan  
Norman O. Rainford  
Nigel R. Chambers



To the Members of  
NATIONAL IRRIGATION COMMISSION LIMITED

**Report on the Financial Statements, (cont'd)**

*Opinion*

In our opinion, the financial statements give a true and fair view of the financial position of the company as at March 31, 2009, 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.

**Additional reporting requirements of 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 so required.

KPMG


October 28, 2009

# NATIONAL IRRIGATION COMMISSION LIMITED

Balance Sheet  
March 31, 2009

	Notes	2009	2008
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	4	67,364,724	143,384,420
Resale agreements	5	58,552,169	78,157,840
Accounts receivable	6	76,290,933	71,428,276
Inventories	7	10,423,363	9,638,138
Current portion of long-term receivables	9	8,470,249	9,615,534
Income tax recoverable		<u>4,563,413</u>	<u>3,277,620</u>
<b>Total current assets</b>		<u>225,664,851</u>	<u>315,501,828</u>
<b>NON-CURRENT ASSETS</b>			
Employee benefit asset	8	32,304,000	59,057,000
Long-term receivables	9	17,014,309	20,323,385
Property, plant and equipment	10	823,647,611	817,935,088
Deferred tax asset	11	<u>20,318,077</u>	<u>3,095,015</u>
<b>Total non-current assets</b>		<u>893,283,997</u>	<u>900,410,488</u>
<b>Total assets</b>		<b><u>\$1,118,948,848</u></b>	<b><u>1,215,912,316</u></b>
<b>CURRENT LIABILITIES</b>			
Accounts payable and accrued charges	12	101,957,312	71,138,818
Income tax payable		-	26,219,654
Government of Jamaica project advances	13	<u>81,603,884</u>	<u>148,961,337</u>
<b>Total current liabilities</b>		<u>183,561,196</u>	<u>246,319,809</u>
<b>NON-CURRENT LIABILITIES</b>			
Deferred credit, being total non-current liabilities	14	<u>358,466,029</u>	<u>350,599,247</u>
<b>Total liabilities</b>		<u>542,027,225</u>	<u>596,919,056</u>
<b>EQUITY</b>			
Share capital	15	100	100
Capital reserve	16	408,130,161	408,130,161
Accumulated surplus		<u>168,791,362</u>	<u>210,862,999</u>
<b>Total equity</b>		<u>576,921,623</u>	<u>618,993,260</u>
<b>Total liabilities and equity</b>		<b><u>\$1,118,948,848</u></b>	<b><u>1,215,912,316</u></b>

The financial statements on pages 53 to 80 were approved for issue by the Board of Directors on October 28, 2009 and signed on its behalf by:

 Chairman  
Oliver Nembhard

 Director  
Robert Martin

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



# NATIONAL IRRIGATION COMMISSION LIMITED

## Statement of Revenue and Expenses Year ended March 31, 2009

	<u>Notes</u>	<u>2009</u>	<u>2008</u>
Operating revenue:			
Water sales and drainage charges		140,508,074	137,055,071
Government of Jamaica subsidy on behalf of farmers	17	469,307,035	409,863,174
Other funding for non-capital expenditure		<u>25,261,514</u>	<u>40,346,941</u>
		635,076,623	587,265,186
Cost of producing water and distributing it to farm gates		<u>(528,193,969)</u>	<u>(416,538,437)*</u>
Gross operating surplus		106,882,654	170,726,749
Amortisation of deferred credit	14	36,261,773	35,300,960
Other income	18	31,094,547	17,288,224
Administration expenses		<u>(230,904,086)</u>	<u>(152,910,259)*</u>
(Loss)/surplus before finance costs and taxation		( 56,665,112)	70,405,674
Finance costs	19	<u>( 13,992)</u>	<u>-</u>
(Loss)/surplus before taxation		( 56,679,104)	70,405,674
Taxation credit/(charge)	20	<u>14,607,467</u>	<u>( 9,074,041)</u>
(Loss)/surplus for the year	21	<u>\$ ( 42,071,637)</u>	<u>61,331,633</u>

\*After reclassification to conform to 2009 presentation.

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

## NATIONAL IRRIGATION COMMISSION LIMITED

### Statement of Changes in Equity Year ended March 31, 2009

	Share capital (Note 15)	Capital reserve (Note 16)	Accumulated surplus	Total
Balances at March 31, 2007	100	408,130,161	149,531,366	557,661,627
Surplus, being total gains recognised, for the year	-	-	<u>61,331,633</u>	<u>61,331,633</u>
Balances at March 31, 2008	100	408,130,161	210,862,999	618,993,260
Loss, being total losses recognised, for the year	-	-	( 42,071,637)	( 42,071,637)
Balances at March 31, 2009	<u>\$100</u>	<u>408,130,161</u>	<u>168,791,362</u>	<u>576,921,623</u>

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

# NATIONAL IRRIGATION COMMISSION LIMITED

## Statement of Cash Flows Year ended March 31, 2009

	<u>2009</u>	<u>2008</u>
Cash flows from operating activities:		
(Loss)/surplus for the year	( 42,071,637)	61,331,633
Adjustments to reconcile surplus for the year to net cash provided by operating activities:		
Items not involving cash:		
Depreciation	41,164,055	40,809,065
(Gain)/loss on disposal of property, plant and equipment	( 139,163)	254,417
Amortisation of deferred credit	( 36,261,773)	( 35,300,960)
Employee benefit asset	26,753,000	( 5,844,000)
Taxation expense	( 14,607,467)	9,074,041
Interest income	( 9,067,629)	( 10,005,928)
Foreign exchange gain	( 4,797,364)	( 665,954)
	( 39,027,978)	59,652,314
Decrease/(increase) in current assets:		
Resale agreements	19,605,671	( 11,395,908)
Accounts receivable	( 4,964,543)	( 7,532,377)
Inventories	( 785,225)	1,171,861
Income tax recoverable	( 2,392,471)	( 2,521,633)
(Decrease)/increase in current liabilities:		
Accounts payable and accrued charges	30,818,494	( 980,167)
Government of Jamaica project advances	( 67,357,453)	( 16,482,008)
Income taxes paid	( 27,728,571)	-
Net cash (used)/provided by operating activities	( 91,832,076)	21,912,082
Cash flows from investing activities:		
Purchase of property, plant and equipment	( 46,923,415)	( 22,695,376)
Proceeds from disposal of property, plant and equipment	186,000	1,102,573
Interest received	9,169,515	9,775,437
Long-term receivables	4,454,361	( 2,684,632)
Net cash used by investing activities	( 33,113,539)	( 14,501,998)
Cash flows from financing activity:		
Capital grants, being net cash provided by financing activity	44,128,555	19,720,109
Net (decrease)/increase in cash and cash equivalents	( 80,817,060)	27,130,193
Cash and cash equivalents at beginning of the year	143,384,420	115,588,273
Effect of exchange rate fluctuations on cash held	4,797,364	665,954
Cash and cash equivalents at end of the year	\$ 67,364,724	143,384,420

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



1. 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.

2. 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 complies with the provisions of the Jamaican Companies Act.

Certain new IFRS and interpretations of, and amendments to, existing standards, which were in issue, came into effect for the current financial year. None of these standards had any significant impact on the company’s financial results or position or gave rise to any additional disclosures.

**New standards, and interpretations of and amendments to existing standards that are not yet effective:**

At the date of approval of the financial statements, certain new standards, and amendments to and interpretations of existing standards, were in issue but are not yet effective and have not been early-adopted. The company has assessed the relevance of all such new standards, amendments and interpretations with respect to its operations and has concluded as follows:

- *IAS 1 (Revised 2007) Presentation of Financial Statements* requires the presentation of all non-owners changes in equity in one or two statements: either in a single statement of comprehensive income, or in an income statement and a statement of comprehensive income. The standard, which becomes effective for accounting periods beginning on or after January 1, 2009, will result in a change in the presentation of the statements of revenue and expenses and changes in equity.
- *IAS 23 (Revised) – Borrowing Costs*, which becomes effective for financial periods beginning on or after January 1, 2009, removes the option of either capitalising borrowing costs relating to qualifying assets or expensing the borrowing costs and requires management to capitalise borrowing costs attributable to qualifying assets. Qualifying assets are assets that take a substantial time to get ready for their intended use or sale. An example is self-constructed assets such as buildings, machinery and internally developed software (intangible assets). The standard is not expected to have a significant impact on the financial statements.

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

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

**New standards, and interpretations of and amendments to existing standards that are not yet effective (cont'd):**

- Amendments to *IAS 32 Financial instruments: Presentation* and *IAS 1, Presentation of Financial Statements* are effective for annual periods beginning on or after January 1, 2009. The amendments allow certain instruments that would normally be classified as liabilities to be classified as equity if certain conditions are met. Where such instruments are reclassified, the entity is required to disclose the amount, the timing and the reason for the reclassification. The standard is not expected to have any significant impact on the financial statements.
- Amendment to *IFRS 2 Share-based payment – Vesting Conditions and Cancellations* is effective for annual periods beginning on or after January 1, 2009. Under the amendment, non-vesting conditions are taken into account in measuring the grant date fair value of the share-based payment and there is no adjustment for differences between expected and actual outcomes. The standard is not expected to have any impact on the financial statements.
- Amendments to *IFRS 7 Financial Instruments: Disclosures* requires enhanced disclosures in respect of two aspects: disclosures over fair value measurement relating to financial instruments specifically in relation to disclosures over the inputs used in valuation techniques and the uncertainty associated with such valuations; and improving disclosures over liquidity risk to address current diversity in practice. The amendments will become mandatory for the 2010 financial statements. The company is assessing the impact that the revised standard will have on the 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 IFRS 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 balance sheet 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.

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

(c) Accounting estimates and judgements (cont'd):

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:

- Pension and other post-employment benefits:

The amounts recognised in the balance sheet and 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 cash 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.



3. Significant accounting policies

(a) Cash and cash equivalents:

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

(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 in the balance sheet at amortised cost. Interest earned 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	2½%
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.

3. Significant accounting policies (cont'd)

(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 income (shown in the statement of revenue and expenses).

(e) Inventories:

Inventories are carried at cost, or valuation, being substantially salvage values determined by professional valuers.

(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, net 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 balance sheet 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.

3. Significant accounting policies (cont'd)

(g) Employee benefits (cont'd):

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 revenue and expenses 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 the statement of revenue and expenses.

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 the statement of revenue and expenses 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 balance sheet date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated at each balance sheet date. An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in the statement of revenue and expenses.

(i) 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.



3. Significant accounting policies (cont'd)

(h) Impairment (cont'd):

(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.

(i) Taxation:

Income tax on the surplus or loss for the year comprises current and deferred tax. Income tax is recognised in the statement of revenue and expense except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

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

Deferred tax is provided using the balance sheet liability method, providing 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 balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable surpluses 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.

(j) 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.

3. Significant accounting policies (cont'd)

(l) Related parties:

A party is related to an the company if:

- (i) directly, or indirectly through one or more intermediaries, the party:
  - (a) controls, is controlled by, or is under common control with, the company (this includes parents, subsidiaries and fellow subsidiaries);
  - (b) has an interest in the company that gives it significant influence over the company; or
  - (c) has joint control over the company;
- (ii) the party is an associate (as defined in IAS 28, *Investments in Associates*) of the company;
- (iii) the party is a joint venture in which the company is a venturer (see IAS 31, *Interests in Joint Ventures*);
- (iv) the party is a member of the key management personnel of the company 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
- (vii) the party is a post-employment benefit plan for the benefit of employees of the company, or of any company that is a related party of the company.

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

	<u>2009</u>	<u>2008</u>
Cash	263,143	290,966
Bank balances	<u>67,101,581</u>	<u>143,093,454</u>
	<u>\$67,364,724</u>	<u>143,384,420</u>

5. Resale agreements

At the balance sheet date, the fair value of underlying securities used as collateral for resale agreements was \$54,753,899 (2008: \$79,348,727).

# NATIONAL IRRIGATION COMMISSION LIMITED

## Notes to the Financial Statements (Cont'd)

March 31, 2009

### 6. Accounts receivable

	<u>2009</u>	<u>2008</u>
Trade receivables for water sales and drainage charges	55,874,065	63,768,056
Provision for probable losses	(22,596,127)	(15,318,759)
	33,277,938	48,449,297
Other receivables	43,012,995	22,978,979
	<u>\$76,290,933</u>	<u>71,428,276</u>

### 7. Inventories

	<u>2009</u>	<u>2008</u>
At cost	6,049,307	5,264,082
At valuation	<u>4,374,056</u>	<u>4,374,056</u>
	<u>\$10,423,363</u>	<u>9,638,138</u>

Inventories consist principally 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 14).

To the extent that revalued inventories are consumed (and charged to expense), 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 balance sheet:

	<u>2009</u>	<u>2008</u>
Present value of funded obligations	(386,301,000)	(303,589,000)
Fair value of plan assets	<u>418,605,000</u>	<u>421,234,000</u>
Net asset	32,304,000	117,645,000
Unrecognised actuarial losses/(gains)	61,167,000	( 50,106,000)
Unrecognised asset due to section 58	( 61,167,000)	( 8,482,000)
Asset recognised in balance sheet	<u>\$ 32,304,000</u>	<u>59,057,000</u>



Notes to the Financial Statements (Cont'd)  
March 31, 20098. Employee benefit asset (cont'd)

## (a) Asset recognised in balance sheet (cont'd):

Movement in the net asset recognised in the balance sheet:

	<u>2009</u>	<u>2008</u>
Balance at beginning of year	59,057,000	53,213,000
Contributions paid	17,687,000	17,460,000
Benefit expense	(44,440,000)	(11,616,000)
Balance at end of year	<u>\$32,304,000</u>	<u>59,057,000</u>

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

	<u>2009</u>	<u>2008</u>
Present value of obligation as at April 1, 2008	303,589,000	289,236,000
Benefits paid	( 11,300,000)	( 11,777,000)
Service and interest costs	48,308,000	47,117,000
Contributions	14,601,000	11,575,000
Actuarial loss/(gain)	<u>31,103,000</u>	<u>( 32,562,000)</u>
Present value of obligation at March 31, 2009	<u>\$386,301,000</u>	<u>303,589,000</u>

## (ii) Movement in plan assets:

	<u>2009</u>	<u>2008</u>
Fair value of plan assets as April 1, 2008	421,234,000	342,449,000
Contributions paid	32,288,000	29,035,000
Actual return on plan assets	( 18,127,000)	67,598,000
Benefits paid	( 16,790,000)	( 17,848,000)
Fair value of plan assets at March 31, 2009	<u>\$418,605,000</u>	<u>421,234,000</u>

Plan assets consist of the following:

	<u>2009</u>	<u>2008</u>
Equity Fund	106,178,000	142,381,000
Money Market Fund	41,703,000	30,011,000
Mortgage and Real Estate Fund	67,254,000	40,176,000
Fixed Income Fund	88,898,000	90,148,000
Foreign Currency Fund	111,857,000	116,230,000
Uninvested contributions	<u>2,715,000</u>	<u>2,288,000</u>
Total assets	<u>\$418,605,000</u>	<u>421,234,000</u>

# NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statements (Cont'd)

March 31, 2009

## 8. Employee benefit asset (cont'd)

(c) Income recognised in the statement of revenue and expenses:

	<u>2009</u>	<u>2008</u>
Current service costs	14,027,000	15,932,000
Interest on obligation	34,281,000	31,185,000
Expected return on plan assets	(56,083,000)	(42,100,000)
Recognised actuarial gain	( 470,000)	-
Change in unrecognised asset	<u>52,685,000</u>	<u>6,599,000</u>
Recognised in the statement of revenue and expenses (see note 22)	<u>\$44,440,000</u>	<u>11,616,000</u>
Actual return on plan assets	( 5%)	18%

(d) Principal actuarial assumptions at the balance sheet date (expressed as weighted averages):

	<u>2009</u>	<u>2008</u>
Discount rate	16.0%	13.0%
Expected return on plan assets	13.0%	13.0%
Future salary increases	13.0%	10.0%
Future pension increases	<u>6.5%</u>	<u>3.5%</u>

(e) Historical information:

	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>
	\$	\$	\$	\$	\$
Present value of defined benefit obligation	(386,301,000)	(303,589,000)	(289,236,000)	(205,697,000)	(193,168,000)
Fair value of plan assets	<u>418,605,000</u>	<u>421,234,000</u>	<u>342,449,000</u>	<u>278,796,000</u>	<u>271,802,000</u>
Surplus in plan	<u>32,304,000</u>	<u>117,645,000</u>	<u>53,213,000</u>	<u>73,099,000</u>	<u>78,634,000</u>
Experience adjustments arising on plan liabilities	<u>31,103,000</u>	<u>32,562,000</u>	( 44,324,000)	<u>23,515,000</u>	( 6,433,000)
Experience adjustments arising on plan assets	( 79,700,000)	<u>19,427,000</u>	<u>8,426,000</u>	( 41,517,000)	( 36,660,000)

The company expects to pay \$19,986,000 in contributions to the plan in 2009/2010.

## 9. Long-term receivables

	<u>2009</u>	<u>2008</u>
Refundable utility deposits	2,575,379	2,575,379
Employee loans	<u>22,909,179</u>	<u>27,363,540</u>
	25,484,558	29,938,919
Less: Current portion	( 8,470,249)	( 9,615,534)
	<u>\$17,014,309</u>	<u>20,323,385</u>

Employee loans are for the purchase of motor vehicles. The loans are repayable over 7-10 years.

# NATIONAL IRRIGATION COMMISSION LIMITED

## Notes to the Financial Statements (Cont'd) March 31, 2009

### 10. Property, plant and equipment

	<u>Building &amp; leasehold improvements</u>	<u>Utility plant</u>	<u>Furniture, fixtures &amp; equipment</u>	<u>Motor vehicles</u>	<u>Capital work-in- progress</u>	<u>Total</u>
Cost:						
March 31, 2007	41,743,776	1,615,306,465	43,340,346	29,874,181	56,595,230	1,786,859,998
Additions	-	7,037,654	3,777,513	10,269,937	1,610,272	22,695,376
Disposals	-	-	( 150,932)	( 2,984,102)	-	( 3,135,034)
March 31, 2008	41,743,776	1,622,344,119	46,966,927	37,160,016	58,205,502	1,806,420,340
Additions	-	12,984,185	6,273,913	10,321,820	17,343,497	46,923,415
Disposals	-	-	( 145,935)	( 838,000)	-	( 983,935)
Reclassification	-	6,525,228	-	-	( 6,525,228)	-
March 31, 2009	<u>41,743,776</u>	<u>1,641,853,532</u>	<u>53,094,905</u>	<u>46,643,836</u>	<u>69,023,771</u>	<u>1,852,359,820</u>
Depreciation:						
March 31, 2007	8,725,984	907,237,304	25,458,617	8,032,325	-	949,454,230
Charge for the year	1,123,441	31,916,671	4,764,704	3,004,249	-	40,809,065
Eliminated on disposals	-	-	( 86,318)	( 1,691,725)	-	( 1,778,043)
March 31, 2008	9,849,425	939,153,975	30,137,003	9,344,849	-	988,485,252
Charge for the year	1,123,441	31,841,933	4,757,659	3,441,022	-	41,164,055
Eliminated on disposals	-	-	( 99,098)	( 838,000)	-	( 937,098)
March 31, 2009	<u>10,972,866</u>	<u>970,995,908</u>	<u>34,795,564</u>	<u>11,947,871</u>	<u>-</u>	<u>1,028,712,209</u>
Net book values:						
March 31, 2009	<u>\$30,770,910</u>	<u>670,857,624</u>	<u>18,299,341</u>	<u>34,695,965</u>	<u>69,023,771</u>	<u>823,647,611</u>
March 31, 2008	<u>\$31,894,351</u>	<u>683,190,144</u>	<u>16,829,924</u>	<u>27,815,167</u>	<u>58,205,502</u>	<u>817,935,088</u>
March 31, 2007	<u>\$33,017,792</u>	<u>708,069,161</u>	<u>17,881,729</u>	<u>21,841,856</u>	<u>56,595,230</u>	<u>837,405,768</u>

Included in building and leasehold improvements is leasehold improvement of \$24,478,181 (2008: \$24,478,181).

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 estimated costs to complete these projects have not been quantified. 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.



# NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statements (Cont'd)

March 31, 2009

## 11. Deferred tax (asset)/liability

Deferred tax (asset)/liability is attributable to the following:

	<u>2009</u>	<u>2008</u>
Property, plant and equipment	( 9,770,112)	(14,605,002)
Accounts receivable	407,200	441,162
Accounts payable and accrued charges	(11,715,561)	( 8,838,826)
Unrealised exchange gains	1,599,121	221,985
Tax losses	(11,606,677)	-
Employee benefit asset	<u>10,767,952</u>	<u>19,685,666</u>
	<u>\$(20,318,077)</u>	<u>( 3,095,015)</u>

Movement in temporary differences during the year:

	<u>Balance at March 31, 2008</u>	<u>Recognised in income [note 20 (a) (ii)]</u>	<u>Balance at March 31, 2009</u>
Property, plant and equipment	(14,605,002)	4,834,890	( 9,770,112)
Accounts receivable	441,162	( 33,962)	407,200
Accounts payable and accrued charges	( 8,838,826)	( 2,876,735)	(11,715,561)
Unrealised foreign exchange gain	221,985	1,377,136	1,599,121
Tax losses	-	(11,606,677)	(11,606,677)
Employee benefit asset	<u>19,685,666</u>	<u>( 8,917,714)</u>	<u>10,767,952</u>
	<u>\$ ( 3,095,015)</u>	<u>(17,223,062)</u>	<u>(20,318,077)</u>

## 12. Accounts payable and accrued charges

	<u>2009</u>	<u>2008</u>
Trade payables	38,584,901	16,633,485
Accrued expenses	12,033,193	9,696,921
Accrued vacation leave	33,150,253	25,134,102
Other payables	<u>18,188,965</u>	<u>19,674,310</u>
	<u>\$101,957,312</u>	<u>71,138,818</u>

## 13. 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:

<u>Project</u>	<u>2009</u>	<u>2008</u>
Yallahs Delta Irrigation	-	( 1,122,550)
National Irrigation Development Plan (NIDP)		
- Implementation [see below]	46,241,091	118,565,245
Miscellaneous capital projects	4,701,790	10,028,300
Lining of canals	6,304,922	21,490,342
Fishing beach project	<u>24,356,081</u>	<u>-</u>
	<u>\$81,603,884</u>	<u>148,961,337</u>

Notes to the Financial Statements (Cont'd)  
March 31, 200913. Government of Jamaica project advances (cont'd)

The NIDP involves the implementation of an irrigation plan for Jamaica and is being jointly funded by the Caribbean Development Bank ("the CDB"), Inter-American Development Bank ("the 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.

14. Deferred credit

	Balance 2007	Movement during the year	Balance 2008	Movement during the year	Balance 2009
Grant for acquisition of fixed assets (net of disposals)	59,293,451	18,109,837	77,403,288	29,831,234	107,234,522
Fixed assets gifted by Agro 21 Corp., net, in 1991	1,198,152	-	1,198,152	-	1,198,152
Fixed assets gifted by Ministry of Agriculture	1,203,061	-	1,203,061	-	1,203,061
Fixed 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	591,096,098	-	591,096,098	-	591,096,098
Revaluation surplus on inventories (note 7)	1,233,211	-	1,233,211	-	1,233,211
Expenditure on contracts-in-progress (net of amounts expensed) (note 10) out of GOJ project advances	<u>53,116,178</u>	<u>1,610,272</u>	<u>54,726,450</u>	<u>14,297,321</u>	<u>69,023,771</u>
	854,499,088	19,720,109	874,219,197	44,128,555	918,347,752
Amortisation transferred to statement of revenue and expenses	<u>(488,318,990)</u>	<u>(35,300,960)</u>	<u>(523,619,950)</u>	<u>(36,261,773)</u>	<u>(559,881,723)</u>
	<u>\$366,180,098</u>	<u>(15,580,851)</u>	<u>350,599,247</u>	<u>7,866,782</u>	<u>358,466,029</u>

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.

## NATIONAL IRRIGATION COMMISSION LIMITED

### Notes to the Financial Statements (Cont'd)

March 31, 2009

#### 15. Share capital

	<u>2009</u>	<u>2008</u>
Authorised, issued and fully-paid: 100 ordinary shares at no par value	<u>\$100</u>	<u>100</u>

#### 16. 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.

#### 17. Government of Jamaica subsidy on behalf of farmers

The purpose of granting this subsidy to the farmers 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, it is the view of the company's directors that the subsidy would need to be \$509.5 million (2008: \$491.9 million) in order for the company to deliver irrigation water as required by farmers, in the context of the schemes mentioned in note 1(a). However, \$469.3 million (2008: \$409.9 million) was approved by Parliament and paid to the company.

#### 18. Other income

	<u>2009</u>	<u>2008</u>
	<u>\$</u>	<u>\$</u>
Interest:		
From investments and cash & cash equivalents	8,461,533	9,791,767
Other	606,096	214,161
Amortisation of concessionary loans	3,411,507	4,421,404
Exchange gain	4,797,364	665,954
Service fees	1,783,012	720,728
Gain/(loss) on disposal of property, plant and equipment	139,163	( 254,417)
Insurance settlements	379,471	573,500
Litigation settlements	9,650,000	179,056
Miscellaneous	<u>1,819,401</u>	<u>976,071</u>
	<u>\$31,094,547</u>	<u>17,288,224</u>

#### 19. Finance costs

This comprises interest on bank overdraft.



Notes to the Financial Statements (Cont'd)  
March 31, 200920. Taxation

- (a) The provision for income tax is computed at 33 $\frac{1}{3}$ % of the surplus for the year, as adjusted for tax purposes, and is made up as follows:

	<u>2009</u>	<u>2008</u>
(i) Current tax charge:		
Provision for charge on current year's profits	-	22,233,943
Underprovision/(overprovision) of prior year tax charge	<u>2,615,595</u>	<u>( 2,081,758)</u>
	2,615,595	20,152,185
(ii) Deferred tax:		
Origination and reversal of temporary differences (note 13)	<u>(17,223,062)</u>	<u>(11,078,144)</u>
Actual tax (credit)/charge recognised	\$ <u>(14,607,467)</u>	<u>9,074,041</u>

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

The effective tax rate for 2009 was (26%) (2008: 13%) of \$(56,679,247) (2008: \$70,405,674) pre-tax (loss)/surplus, compared to the statutory tax rate of 33 $\frac{1}{3}$ % (2008: 33 $\frac{1}{3}$ %). The actual charge differs from the "expected" tax charge for the year as follows:

	<u>2009</u>	<u>2008</u>
(Loss)/surplus before taxation	\$( <u>56,679,247</u> )	<u>70,405,674</u>
Computed "expected" tax (credit)/expense	(18,891,193)	23,468,558
Tax effect of treating items differently for financial statements and tax reporting purposes -		
Depreciation charge and capital allowances	14,634,332	( 814,683)
Accrued vacation leave	( 288)	-
Unrealized gain on foreign exchange	( 221,825)	( 153,581)
Amortisation of deferred credits	(12,086,049)	(11,766,987)
Expenses not allowed for tax purposes	96,820	128,686
(Gain)/loss on disposal of property, plant and equipment	( 46,384)	417
Employee benefit asset	( 891)	158
Interest on concessionary loans	( 706,424)	293,230
Prior year underprovision/(overprovision)	2,615,595	( 2,081,757)
Tax losses c/f	<u>( 1,160)</u>	<u>-</u>
Actual tax (credit)/charge	\$( <u>14,607,467</u> )	<u>9,074,041</u>

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statements (Cont'd)  
March 31, 2009

### 21. Surplus for the year

The following are among the items charged in arriving at surplus for the year:

	<u>2009</u>	<u>2008</u>
	\$	\$
Directors' emoluments [note 23(c)]:		
Fees	1,546,125	1,326,750*
Travel	1,199,971	350,465*
Management remuneration	1,265,031	4,685,676
Compensation to former managing director for loss of office	5,378,979	2,537,907
Auditors' remuneration	1,512,500	1,512,500
Depreciation	<u>41,164,055</u>	<u>40,809,065</u>

\*After reclassification to conform to 2009 presentation.

### 22. Employee numbers and costs

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

	<u>2009</u>	<u>2008</u>
Full-time	140	144
Part-time	11	6
Other	<u>36</u>	<u>27</u>
	<u>187</u>	<u>177</u>

The aggregate payroll costs for these persons were as follows:

	<u>2009</u>	<u>2008</u>
Salaries	261,060,449	204,061,661
Statutory payroll contributions	10,699,365	8,084,344
Labour	32,628,302	21,258,672
Pension benefit cost (net of contribution) [note 8(c)]	44,440,000	11,616,000
Travel and subsistence	59,770,408	40,563,950
Gratuities	426,853	2,188,374
Training	7,526,190	2,233,347
Accrued vacation leave	8,016,152	4,746,271
Insurance scheme	<u>18,903,320</u>	<u>16,400,885</u>
	<u>\$443,471,039</u>	<u>311,153,504</u>

23. Related party 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) The balance sheet includes balances, arising in the ordinary course of business, with related parties as follows:

	<u>2009</u>	<u>2008</u>
	\$	\$
Accounts receivable:		
Directors	109,936	-
Long-term receivables:		
Employee loans - key management personnel	<u>2,417,232</u>	<u>4,297,779</u>

- (c) The statement of revenue and expenses includes transactions with key management personnel in the ordinary course of business, as follows:

	<u>2009</u>	<u>2008</u>
Compensation paid to key management personnel:		
Directors' emoluments (note 21)	9,390,106	6,362,891*
Salaries to other key management personnel	26,458,421	18,077,778
Post-employment benefits	<u>4,358,000</u>	<u>1,110,000</u>
	<u>\$40,206,527</u>	<u>25,550,669</u>
Interest income	\$( <u>275,659</u> )	( <u>734,534</u> )

\*After reclassification to conform to 2009 presentation.

24. 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. Accordingly, exposure to credit, market and liquidity risks arise in the ordinary course of the company's business.

The company's financial instruments comprise cash and cash equivalents, resale agreements accounts receivable, long-term receivables, accounts payable and Government of Jamaica project advances. The items arise or are acquired mainly in connection with the company's operations. Information relating to fair values and risks is summarised below.



24. Financial risk management (cont'd)

(a) Overview (cont'd)

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

- Credit risk
- Liquidity risk
- Market 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 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.

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 to a financial instrument fails to meet its contractual obligations, and arises principally from trade receivables, investment securities and long-term motor vehicle loans to employees.

(i) Cash and cash equivalents and agreements

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.

24. Financial risk management (cont'd)

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

## (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 7-10 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.

## (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.

The ten largest customers 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:

	<u>Carrying amount</u>	
	<u>2009</u>	<u>2008</u>
Not Past Due	12,040,772	16,580,882
Past Due 1-30 Days	12,865,337	14,294,921
Past Due 31-60 Days	3,518,533	9,616,828
Past Due 61-90 Days	1,209,982	1,073,229
More Than 90 Days	<u>26,239,441</u>	<u>22,202,196</u>
	<u>\$55,874,065</u>	<u>63,768,056</u>

24. Financial risk management (cont'd)

(b) Credit risk (cont'd)

(iii) Trade receivables (cont'd)

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 to write off the amounts against the receivable balance directly.

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

	<u>Carrying amount</u>	
	<u>2009</u>	<u>2008</u>
Balance as at April 1, 2008	15,318,759	14,493,798
Written off/(recovered)	( 1,110,746)	( 1,418,021)
Provision Recognised	<u>8,388,114</u>	<u>2,242,982</u>
Balance as at March 31, 2009	<u>\$22,596,127</u>	<u>15,318,759</u>

(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:

	<u>Carrying amount</u>	
	<u>2009</u>	<u>2008</u>
Cash and cash equivalents	67,364,724	143,384,420
Resale agreements	58,552,169	78,157,840
Trade accounts receivable	76,290,933	71,428,276
Long-term receivables:		
Current portion	8,470,249	9,615,534
Long-term portion	<u>17,014,309</u>	<u>20,323,385</u>
	<u>\$227,692,384</u>	<u>322,909,455</u>

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

	<u>Carrying amount</u>	
	<u>2009</u>	<u>2008</u>
St. Thomas	106,146	92,041
St. Catherine	32,903,912	39,117,358
Clarendon	11,271,022	13,083,114
St. Elizabeth	10,773,707	10,108,823
Trelawny	785,030	1,361,936
St. James	<u>34,248</u>	<u>4,784</u>
	<u>\$55,874,065</u>	<u>63,768,056</u>

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



24. 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 balance sheet 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 manages and measures 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.

(i) Currency risk

Exposure to 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 (US\$). The company's net exposure at balance sheet date was:

	<u>2009</u> US\$	<u>2008</u> US\$
Cash and cash equivalents	327,417	905,968
Government of Jamaica project advances	( 64,322)	(697,601)
Net Exposure	<u>263,095</u>	<u>208,367</u>

24. Financial risk management (cont'd)

(d) Market risk (cont'd)

(i) Currency risk (cont'd)

The average exchange rate for the US dollar in terms of Jamaica dollars, at March 31, 2009 was: J\$88.3850 = US\$1.00 (2008: J\$70.9413).

Sensitivity Analysis:

A 5% strengthening/weakening of the Jamaica dollar against the United States dollar at March 31, 2009 would have increased/decreased equity and surplus or loss by \$1,162,683 (2008: \$740,011). This analysis assumes that all other variables, in particular interest rates, remain constant. The analysis is performed on the same basis as for 2008.

(ii) 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	
	2009	2008
Resale agreements	\$58,552,169	78,157,840

A change of 100 basis points in interest rates would have increased or decreased equity and profit or loss by \$1.4M (2008: \$1.11M).

There has been no change to the company's exposure to market risk or the manner in which it manages and measures 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, accounts receivable, and accounts payable, balances are assumed to approximate to their carrying value, due to their short-term nature.

Long-term receivables are carried at their fair values. The fair value for resale agreements are \$54,753,899 (2008: \$79,348,727).

24. Financial risk management (cont'd)

(f) Capital management

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

25. Contingent liabilities

- (i) A claim has been made against the company for wrongful dismissal arising from the termination of an employee in December 1991. The company's attorneys are of the opinion that in the unlikely event that the claim succeeds, damage and costs should not exceed \$200,000.
- (ii) A claim has been made against the company for negligence, costs and interest arising out of an accident on the Sir Alexander Bustamante Highway on the 18<sup>th</sup> December 1999. The company's attorneys are of the opinion that in the unlikely event that the suit is pursued, the liability is not expected to exceed \$300,000.
- (iii) A claim alleging negligence was filed against the company in the amount of approximately \$1,400,000. The case was adjourned *sine die* on October 8, 2001. The Claimant's Attorneys-at-law applied for a Case Management Conference pursuant to the new Civil Procedure Rules. The conference was held on the 25<sup>th</sup> May 2005 and trial is set for the 12<sup>th</sup> -14<sup>th</sup> March 2008. The company's attorneys are of the opinion that the probable ultimate liability including court cost, legal fees and an award to the claimant should not exceed the sum of \$1,400,000.
- (iv) A claim has been made against the company for damages in the amount of \$2,254,630 arising from alleged damages to the crops of the plaintiff as a result of alleged disconnection of water supply. The company's attorneys are of the opinion that in the very unlikely event that the claim succeeds, damages and costs should not exceed \$2,500,000.

Management considers that the company is adequately insured in respect of the above claims and no provision in the financial statements in these regards is considered necessary.



# EXECUTIVE COMPENSATION

## APPENDIX I

### BOARD OF DIRECTORS' COMPENSATION

Position of Director	Fees (\$)	Motor Vehicle Upkeep/Travelling or Value of Assignment of Motor Vehicle (\$)	Honoraria (\$)	All Other Compensation including non-Cash Benefits as applicable (\$)	Total (\$)
Statutory Director 1	200,500.00	509,910.00	-	1,265,031.00	1,975,441.00
Statutory Director 2	102,000.00	14,706.00	-	-	116,706.00
Statutory Director 3	93,500.00	152,875.00	-	-	246,375.00
Statutory Director 4	51,000.00	28,425.00	-	-	79,425.00
Statutory Director 5	8,500.00	10,080.00	-	-	18,580.00
Statutory Director 6	102,000.00	133,606.00	-	-	235,606.00
Statutory Director 7	102,000.00	28,320.00	-	-	130,320.00
Statutory Director 8	102,000.00	83,510.00	-	-	185,510.00
Statutory Director 9	102,000.00	58,130.00	-	-	160,130.00
Statutory Director 10	51,000.00	26,800.00	-	-	77,800.00
Statutory Director 11	110,500.00	-	-	-	110,500.00
Statutory Director 12	102,000.00	30,774.00	-	-	132,774.00
Statutory Director 13	102,000.00	5,484.00	-	-	107,484.00
Statutory Director 14	102,000.00	46,964.00	-	-	148,964.00
Statutory Director 15	84,125.00	26,773.67	-	-	110,898.67
Statutory Director 16	42,500.00	30,840.00	-	-	73,340.00
Statutory Director 17	46,000.00	3,840.00	-	-	49,840.00
Statutory Director 18	42,500.00	8,933.33	-	-	51,433.33
Statutory Director 19	-	-	-	5,378,979.00	5,378,979.00
Total	1,546,125.00	1,199,971.00	-	6,644,010.00	9,390,106.00

# EXECUTIVE COMPENSATION

## SENIOR EXECUTIVES' COMPENSATION

Position of Senior Executive	Year	Salary (\$)	Gratuity or Performance Incentive (\$)	Travelling Allowance or Value of Assignment of Motor Vehicle (\$)	Pension or Other Retirement Benefits (\$)	Other Allowances (\$)	Non-Cash Benefits (\$)	Total (\$)
Senior Executive 1	2008/2009	5,143,862	-	442,809	-	3,500.00	48,167	5,638,338
Senior Executive 2	2008/2009	4,448,164	-	880,351	1,194,996	380,507	-	6,904,017
Senior Executive 3	2008/2009	4,339,425	-	796,500	1,163,801	424,062	-	6,723,788
Senior Executive 4	2008/2009	4,241,702	27,281	541,706	1,300,617	1,402,933	-	7,514,239
Senior Executive 5	2008/2009	2,574,910	-	479,835	698,586	282,708	-	4,036,039
		<u>20,748,062</u>	<u>27,281</u>	<u>3,141,201</u>	<u>4,358,000</u>	<u>2,493,710</u>	<u>48,167</u>	<u>30,816,421</u>