

Annual Report

# 2012/2013



**National Irrigation Commission**

*"Irrigation...Making the Difference in Agriculture"*



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# Overview

THE NATIONAL IRRIGATION COMMISSION (NIC) is a government company within the Ministry of Agriculture and Fisheries. The NIC was established in 1986 and became operational in May 1987. The objectives of the NIC are:

- To manage, operate, maintain and expand existing and future irrigation schemes and systems.
- To fix and collect the rates or charges and to be paid for the use of such water.

The NIC maintains an island wide presence through seven (7) District Offices located in key irrigation areas.



# Vision

To be the irrigation company most recognised  
for its people, partnerships and performance.









# Mission Statement

To achieve operational excellence in service to the agricultural community by utilising resources innovatively and efficiently, engaging cutting edge technology, empowering our employees and delivering sustainable solutions to our customers through partnerships whilst ensuring our economic viability.

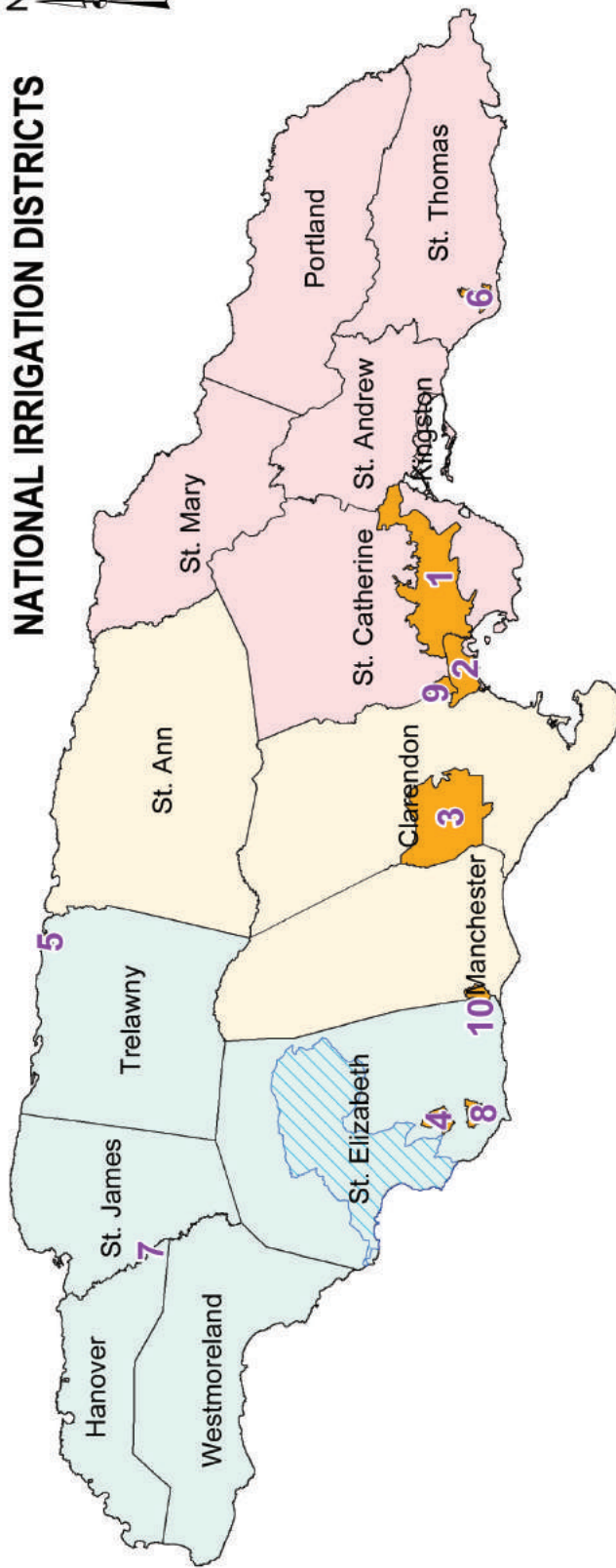
# Five Year Snapshot

## The National Irrigation Commission Limited: Five Year Statistics

SIGNIFICANT METRICS	\$'000 2013	\$'000 2012	\$'000 2011	\$'000 2010	\$'000 2009
Shareholders Equity	599,500	561,659	509,094	463,834	576,922
% Inc. /(decr.) compared to prior year	6.74%	11.42%	8.68%	-19.60%	-6.80%
PROFIT AND LOSS ACCOUNT					
Operating Revenue	1,005,853	999,961	718,673	634,806	635,076
(% Decr.)/%Inc. compared to prior year	0.59%	39.14%	13.21%	-0.04%	8.14%
Accumulated Surplus	191,370	153,529	95,964	55,704	168,791
(% Decr.)/%Inc. compared to prior year	25%	60%	72%	-67%	-20%
IMPORTANT RATIOS					
Admin. Exp. as a % of Total Costs	25.12%	24.74%	19.93%	26.32%	30.41%
Operating Exp. as a % of Total Costs	74.74%	74.33%	78.89%	73.67%	69.59%
Electricity Exp. as a % of Total Costs	27.01%	27.67%	25.38%	26.87%	20.02%
Electricity Exp. as a % of Oper. Costs	36.14%	37.22%	32.17%	36.48%	28.77%
Rates as a % of Total Costs	46.54%	35.42%	27.30%	23.59%	18.51%
Rates as a % of Operating Costs	62.27%	47.65%	34.60%	32.02%	26.60%
GOJ Subsidy as a % of Total Costs	51.79%	68.86%	65.67%	50.34%	61.82%
GOJ Subsidy as a % Operating Costs	69.29%	92.64%	83.25%	68.33%	88.84%



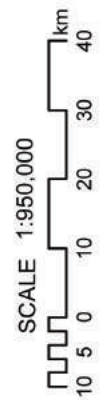
## NATIONAL IRRIGATION DISTRICTS



### Legend

#### Region

- Central Region
- Eastern Region
- Western Region
- PARISH BOUNDARY
- DISTRICT BOUNDARY
- DRAINAGE AREA



CODE	District	AREA (Ha)
1	RIO COBRE	15,711.07
2	ST. DOROTHY	3,411.12
3	MID CLARENDON	13,257.52
4	HOUNSLOW	1,038.39
5	BRACO	127.68
6	YALLAHS	873.65
7	SEVEN RIVER	50.42
8	BEACON	805.73
9	COLBECK	136.22
10	NEW FOREST	654.42
TOTAL		36,066.20







# Minister's Address



DEAR SHAREHOLDERS,

I am pleased that the National Irrigation Commission, in furtherance of the National Irrigation Development Plan formulated in 1998, commissioned the New Forest/Duff House Irrigation Project in March 2013. Our gratitude to the Inter-American Development Bank for their invaluable support to the irrigation sector. This new irrigation system will support the efforts of some 497 farmers and bring another 398 hectares of land under irrigation. The Yallahs Irrigation Scheme is slated to be completed in the next financial year, bringing an additional 245 hectares under irrigation at a cost of J\$137.4 million and is slated to serve 311 farmers.

Irrigation is not an end; it is a means to increase production and productivity. Therefore, concomitant with the construction of these schemes, we have begun initiatives to train our farmers in water management and production techniques so that

they can maximise the use of these schemes. It is our responsibility to mainstream climate change adaptation in our programmes, policies and production processes. In order to support this increased production thrust, it is critical that a significant amount of our idle lands be brought under production. These initiatives will require strong strategic alliances between Governmental bodies, private sector and international donors.

The National Irrigation Commission focused this financial year on Institutional Strengthening, Promotion of the Water Users Association with the provision of technical services to farmers, and as stated before the development and expansion of the irrigation infrastructure. Notable achievements include the development of a 5 year strategic plan, the implementation of a Customer Relationship Management System and the completion of a tariff study which is under review by the Office of the Utilities Regulations.

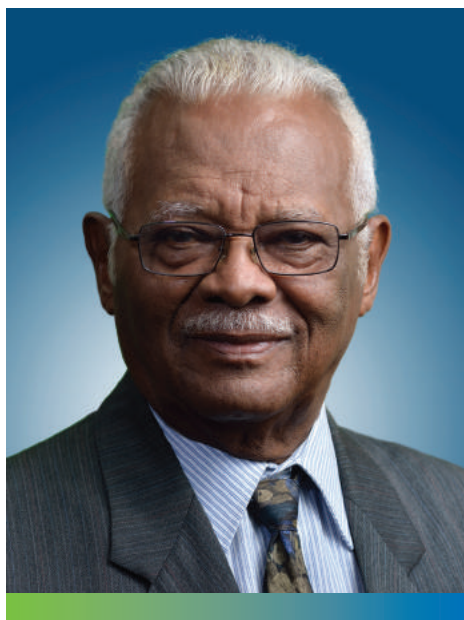
As the National Irrigation Commission redefines its strategic direction to take on the challenges in its 25th year, it is an exciting time for the Management and Staff of the NIC to make their contribution to nation building and support our mantra for sustainable development.

I would like to thank the Board of Directors for their service during this year and encourage the Management and staff to continue their commitment to supporting the Ministry of Agriculture and Fisheries' thrust to boost agricultural performance and increase Jamaica's foreign exchange earnings through increased exports of local produce. This call is being echoed for all Jamaicans to become active participants in pursuing the development goals of food security, re-double the efforts in the Eat Jamaican campaign and by extension play their part in advancing local food production.

A handwritten signature in black ink, reading 'Roger Clarke', written over a horizontal line.

**The Honourable Roger Clarke, MP**  
Minister of Agriculture & Fisheries

# Chairman's Message



## DEAR SHAREHOLDERS,

I am honoured to serve as Chairman for a second time around especially as the National Irrigation Commission celebrated its 25th anniversary in November of last year. The NIC has become a premier national institution which plays a major role in Jamaica's economic and social development and is poised to play an even greater transformational role in supporting the development of agriculture.

The current focus is to encourage an environment where stakeholders' interaction with the NIC are positive and add value to our focus of irrigation making a difference in agriculture.

There are a number of challenges which the current environment presents, however with all challenges

come opportunities for innovation. We have adopted a multi-faceted approach in our advocacy role to seek ways of safeguarding our water quality and protect the arable lands for agricultural production. We continue to grapple with water losses as a result of erosion of canal infrastructure and diminishing ability to arrest acts of illegal abstraction from our open canal systems. This, coupled with the effects of climate change and exponential losses as a result of increased evaporation rates due to increasing temperature, are significant factors in crafting appropriate response strategies.

Amidst these challenges that face the organisation, we will continue our partnership with customers as we strive for greater efficiency in water delivery, infrastructure development, improved business management and customer service. To all the employees of the NIC, a special thank you for your dedication in this period of change and transition.

To Deputy Chairman, Linford Cooper and fellow directors, thank you for your tremendous support throughout the year.

I look forward to the continuation of our efforts as we focus our attention on the core business of the NIC to ensure that the next twenty-five years can be as productive and fruitful as the last.

A handwritten signature in black ink, reading "Hopeton Fraser".

**Hopeton Fraser**  
Chairman, NIC

# CEO's Message



Douglas Walker

The year 2012/2013 brought a significant milestone in the history of our organisation with the adoption of a new vision to be the irrigation Company most recognised for its people, partnerships and performance.

This statement conveys, very succinctly, our most important aspirations for the future. We intend to be an active participant in the transformation of irrigation service delivery, rather than simply watching it unfold from the sidelines. In line with expanding our role as a national thought leader in supporting agriculture, the NIC has commissioned the New Forest/Duff House irrigation scheme through a collaborative effort between the IDB and the NIDP in St Elizabeth in March of this year.

The NIC has envisioned specific projects aimed at increasing the resilience and adaptive capacity of rural communities that are vulnerable to risks from climate

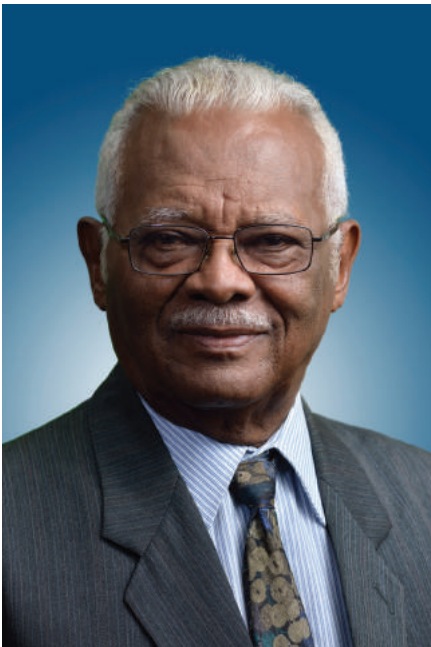
change and natural hazards and is slated to support the establishment of nine Agro Parks to stabilise the agricultural supply chain, deepen inter-industry linkages, increase competitive import substitution and activate under-utilised rural land. The parks, funded partly by the European Union, are to be complemented by improved inputs, including irrigation infrastructure, and technical services.

Propelled by this new vision, we will continue to seek new and more effective ways to provide our services. Even in the best of times, it is a challenge for any organisation to maintain a consistency in its response to customer demands. This is an even greater challenge, in periods of rapid and unpredictable change when it becomes all the more important to strategise effectively and communicate clearly the distinguishing characteristics that make us worthy of our clients' loyalty.

In achieving this goal we aspire to build a model that improves access to our major stakeholders. We aspire to introduce new ways to serve while keeping our input costs such as electricity within manageable parameters. We aspire to foster new relationships with our customers, employers and shareholders that result in a stronger agricultural sector that can ably serve the needs of Jamaica.

I am tremendously grateful for the achievements of our 200 employees. Through their commitment, they have sustained delivery during natural disasters and created the platform for future developments. This report includes a sampling of a number of initiatives we have undertaken to improve access, encourage innovation and fulfil a passionate commitment to serve the community and bolster our future thrusts to enhance our service quality.

# Board of Directors



**Hopeton Fraser**  
Chairman



**Linford Cooper**  
Deputy Chairman



**Micheal Donegan**





Howard Hill



Miranda Wellington



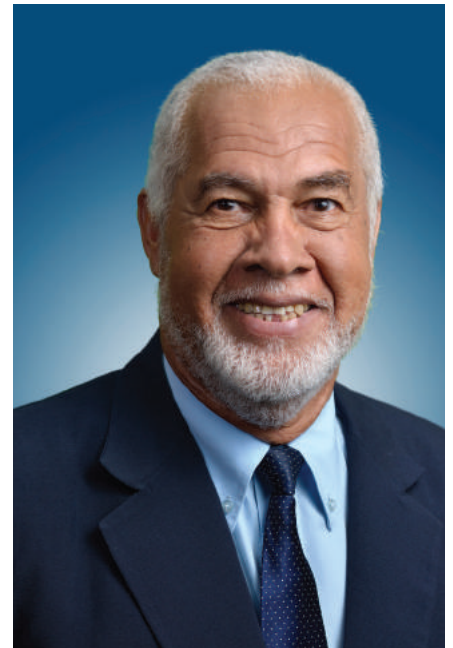
Edith Chedda



Basil Fernandez



Rankin Watson



Hughlet Dyght



Ludgar George Parish



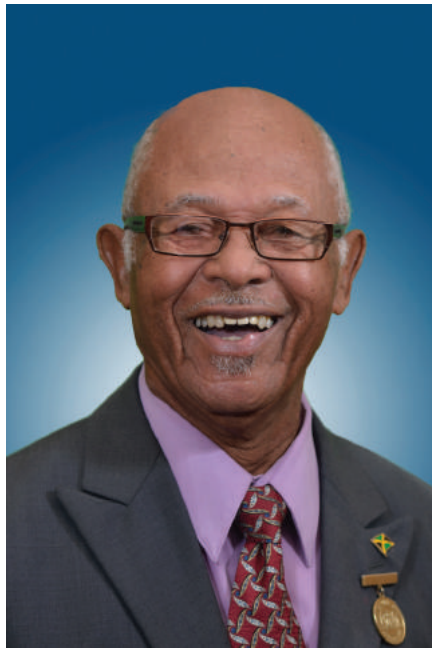
Balfour Hewitt



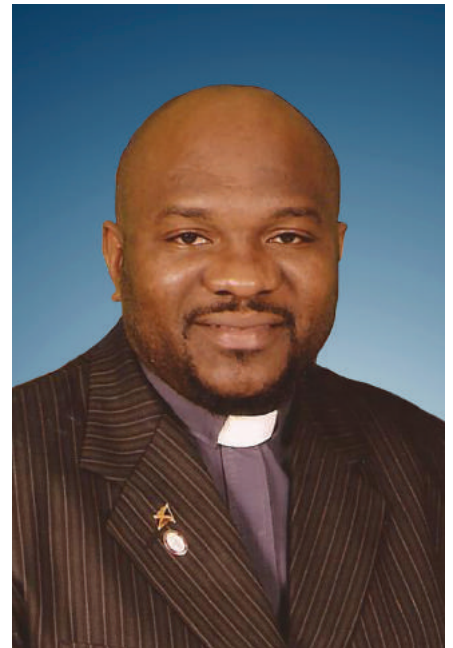
Carolyn Campbell



Mayor Everton Fisher



Noel Lowe



Rev. Glenroy Clarke





# Governance Statement

The actions of the Board demonstrate an organisation-wide commitment to conducting the business in accordance with best practice principles of corporate governance beyond mere legislative compliance and underpin and direct the ethical behaviour of the Directors.

Directors are committed to observing the highest standards of corporate governance. They recognise that they are responsible to shareholders for our short and longer term performance, and seek to balance sometimes competing objectives in the best interests of the company as a whole and strive to align the commercial and governance imperatives facing the Board. The Chairman is responsible for leading the Board, ensuring proper briefing of Directors, facilitating Board discussions and managing the relationships between Board Members and staff.

Day-to-day management of the company and implementation of approved strategy and policy initiatives are a separate function and are formally delegated to the Chief Executive Officer.

## **Board Composition**

The Board comprises fifteen directors with skills sets spanning the farming communities and business.

Company secretary, Mrs. Deirdre English Gosse, demitted office of Company Secretary on July 31, 2012. The current role was expanded to include corporate governance responsibilities.

## **Board Remuneration**

In accordance with fees that applied from April 1, 2012 are shown on Page 21.

## Committees

Board committees oversee and advise the Board on specialist issues which require particular focus. The standing committees at March 31, 2013 are:

- **Audit Committee**
- **Finance & General Purpose Committee**
- **Projects & Energy Conservation Committee**

## Advisory & Monitoring Committees

In addition, four (4) Advisory and Monitoring committees have been established to provide monitoring and advisory functions which will support effective operations in the irrigation districts of Mid-Clarendon, St. Catherine, Braco and St. Elizabeth. Their roles include work programmes development, expenditure statement, budget allocations, disconnections and other enforcement measures, billing and collections data.

## Continuing Review of Committee Structure & Performance

The Board continually reviews the activities and composition of its committees and is in the process of developing formal risk and compliance management systems, while addressing the further development of policies and procedures. Significant areas such as legislative compliance, workplace health and safety, and management of environmental risks, will receive substantial focus during the next fiscal year.

## Code of Conduct

The NIC has continued to promote growth in its internal culture, including leadership development initiatives, which reflect our accountability to shareholders and the wider stakeholder community. This recognises that to support ethical codes, it is necessary to demonstrate and continually practice behaviour that reinforces its values. The Code of Conduct provides guidance for both directors and employees.

## Training

Directors are encouraged to participate in training initiatives as offered by the Ministry of Finance and the Public Service in January 2013 and in-house exposures which add to the value, capability and competency directors bring to the company.

## Independent Professional Advice

Directors have the right, in connection with their duties and responsibilities as directors of the company, at the company's expense and with the permission of the Chairman, to seek independent professional advice on matters of concern.

## Risk Management Compliance

The Company has met its operating and statutory requirements during the course of the year 2012/2013.

## Loss Mitigation Strategies

Of concern are the business risks arising from customers' ability to pay and the NIC's rising input costs. The strategies to mitigate this are to be finalised in the next fiscal year. The NIC's losses could be attributable to several factors such as poor infrastructure as a result of lack of funding, increase in theft, lack of investment, canal erosion, water losses, uncovered or piped systems, increasing evapo-transpiration rates as a result of climate change and the illegal extraction from open canal systems. The Inter-Agency Committee on contamination of irrigation water is concluding the findings of the study which will inform operational responses in the future.

## Auditor's Independence

Company auditors have no representation on the Board or on Board committees, nor is there any relationship between company officers and auditors, other than the normal business relationship between auditor and client.

The Auditor's Independence Declaration is included with the financial statements. Fees paid to the external auditors are fully disclosed in the notes to the financials.

# Senior Executives' Compensation

POSITION OF SENIOR EXECUTIVE	FISCAL YEAR	SALARY	GRATUITY OR PERFORMANCE INCENTIVE (\$)	TRAVELLING ALLOWANCE OR VALUE OF ASSIGNMENT OF MOTOR VEHICLE (\$)	PENSION OR OTHER RETIREMENT BENEFIT (\$)	OTHER ALLOWANCE (\$)	NON-CASH BENEFITS (\$)	TOTAL (\$)
Internal Director 1	2012/2013	4,846,293		945,850		29,670		5,822,013
Internal Director 2	2012/2013	2,123,280		295,370		41,754		2,460,404
Internal Director 3	2012/2013	1,473,388		338,797		108,165		1,920,345
Internal Director 4	2012/2013	5,602,725		945,850		104,765		6,653,340
Internal Director 5	2012/2013	5,277,987		945,850		89,945		6,313,782
Internal Director 6	2012/2013	3,728,775		945,850		81,350		4,755,975
<b>TOTAL</b>		23,052,448		4,417,562		455,849		27,925,859



# Executive Team



## **TAFARI BURRY**

Tafari Burry is the Director of Finance and Corporate Planning. He holds an ACCA Level III designation, and a Bachelor of Science (Hons) in Accounting. He is a member of the Institute of the Chartered Accountants of Jamaica (ICAJ) and the Association of the Chartered Certified Accountants (ACCA). Mr. Burry joined the National Irrigation Commission Limited (NIC) with over six (6) years experience in Finance. He has had several acting experiences as Chief Executive Officer for the NIC.



## **MILTON HENRY**

Milton Henry commenced with the NIC in May 1990 and held various posts including Manager, Distribution; Drainage and Water Management (April 1993); Assistant Resident Engineer, (April 1994); Regional Systems Director, (January 1995); and presently holds the post of Director of Engineering and Technical Services. His qualifications include a Master of Engineering Services, from the University of Melbourne and a postgraduate Diploma, International Course in Hydraulic Engineering, the Netherlands.



## **WAYNE BARRETT**

Wayne Barrett was appointed Director of Commercial Operations in February 2012. His qualifications includes a MBA in Finance from Howard University, (USA), Bachelor of Science Degree in Mechanical Engineering (Magna Cum Laude) from Howard University (USA), as well as Certificates in Project Management and Real Estate Sales. Mr. Barrett has over 17 years managerial experience, with general management exposures with specialisations in commercial, operations and business management.



#### **DOUGLAS WALKER**

Douglas Walker is the Chief Executive Officer with over eight (8) years management experience including exposures with an international Fortune 500 company. His qualifications include a Bachelor of Business Administration in Finance (Upper Second Class Honours), Diploma in Financial Management and Accounting and Certificate in Project Management Principles and Practice.



#### **EARL GREEN**

Dr. Earl Green joined the NIC in November 2011 as Senior Irrigation Engineer and assumed responsibility as Project Director for the National Irrigation Development Programme (NIDP) shortly after. His qualifications include a PhD (Energy Management Systems: A Sustainable Development Perspective), a M.Sc. Electrical and Electronics Engineering and he was a Research Fellow, University of Surrey, England.



#### **PAOLA S. ARSCOTT**

Paola Arscott was appointed Director of Corporate & Legal Services/Corporate Secretary in 2012. Mrs. Arscott is an Attorney-At-Law with areas of emphasis being company and commercial law. With an EMBA in Finance and Advanced Marketing her responsibilities span the NIC's Legal Services, Property and Transportation, Occupational Health and Safety, Human Resources Management and Industrial Relations, Public Relations, and Administration and Office Services Units. She has over fifteen years senior management experience and is a member of the Jamaica Bar Association.

# Directors' Compensation

POSITION OF DIRECTOR	FEES (\$)	MOTOR VEHICLE UPKEEP / TRAVELING OR VALUE OF ASSIGNMENT OF MOTOR VEHICLE (\$)	HONORARIA	ALL OTHER COMPENSATION INCLUDING NON-CASH BENEFITS AS APPLICABLE (\$)	TOTAL (\$)
Statutory Director 1	93,500.00	161,088.00			254,588.00
Statutory Director 2	89,000.00				89,000.00
Statutory Director 3	141,000.00				141,000.00
Statutory Director 4	154,000.00	244,594.00			398,594.00
Statutory Director 5	71,500.00	114,469.00			185,969.00
Statutory Director 6	58,000.00	116,670.00			174,670.00
Statutory Director 7	320,000.00	67,661.00			387,661.00
Statutory Director 8	159,500.00	48,602.00			208,102.00
Statutory Director 9	157,500.00	320,628.00			478,128.00
Statutory Director 10	165,000.00	502,494.00			667,494.00
Statutory Director 11	149,000.00	115,506.00			264,506.00
Statutory Director 12	185,500.00	153,261.00			338,761.00
Statutory Director 13	109,000.00	127,962.00			236,962.00
Statutory Director 14	150,500.00	107,294.00			257,794.00
Statutory Director 15	171,500.00	234,644.00			406,144.00
<b>TOTAL</b>	<b>2,174,500.00</b>	<b>2,314,873.00</b>			<b>4,489,373.00</b>

# District Advisory & Monitoring Committees

Appointed by the Honourable Minister of Agriculture and Fisheries on January 21, 2013 to serve for period December 2012 – November 2015.

ST. CATHERINE DISTRICT	MID-CLARENDON DISTRICT
Mr. Howard Hill (Chairman)	Mr. Linford Cooper (Chairman)
Ms. Juliet Taylor	Mr. Godfrey Knight
Mrs. Monica Sang-Binns	Mr. Pershad Williams
Mr. Ralston Fray	Mr. Ludgar Parish
Mr. Vivian Kildare	Mr. Thomas Burton
Mr. Derrick Dunn	Mr. Noel Lowe
Mr. Alfred Guyah	Mr. Leslie Farquharson
Mr. Yorkwin Walters	Ms. Barbara Gardner (AIC)
Mr. Victor Edwards (RADA)	Mr. Courtney Peters (Parish Council)
Mr. Claude Richards (Pan Carib Sugar)	Mr. Percival Shaw (RADA)
Mr. Michael Morris (Parish Council)	
BRACO DISTRICT	ST. ELIZABETH DISTRICT
Mr. Balfour Hewitt (Chairman)	Ms. Miranda Wellington (Chairman)
Mr. Winston Kellyghan	Rev. Milton Russell
Mr. Norman Simpson	Mr. Donovan Williamson
Mr. Griffin Gray	Mr. Layton Smith
Mr. Fernando Henlon	Mr. Hubert Khanni
Mr. Mervyn Green (RADA)	Mr. Frazer Griffiths
Mr. Collin Henry (RADA)	Mr. Sylburn Blake
	Mr. Kingsley Palmer (RADA)
	Mr. Vivian Blake (NEPA)
	Mr. Kevin Dunkley (Parish Council)

# District Advisory & Monitoring Committees' Reports



**Linford Cooper**  
Deputy Chairman

Tasked with the core responsibility of performing a planning, advisory and monitoring function to the National Irrigation Commission Limited (NIC) through regular monthly meetings, the members of the local Monitoring and Advisory Committees have been specially appointed by the Minister of Agriculture and Fisheries. These Committees assist the NIC in carrying out its functions within each Irrigation District, as well as participate in the planning of initiatives being undertaken to ensure effective operations in the field.

During the current Financial Year, the St. Catherine Advisory and Monitoring Committee achieved the following:

1. Formation of an inter-agency committee to develop, for submission to the Government of Jamaica, a proposal which is to be used as an approach to the challenge of the contamination of the Main Canal in the Rio Cobre District.
2. Installation of a more efficient pump in Colbeck which is complemented by the implementation of a rotation system. This should result in a boost in production in the farming district.
3. Transfer of the Amity Hall farmlands to be operated by the NIC should also result in increased levels of production. To date, the Black River drains in the area have been cleaned.

The achievements of the Mid-Clarendon Advisory and Monitoring Committee are as follows:

1. Preparations for pump testing to determine yield and draw down for the Spring Plain Well has commenced.
2. A fully operational Jungle West Well is currently in place.
3. Site preparations have commenced for the Vernamfield Project, an initiative which was taken in an effort to expand sugar production in the area.
4. Completion of the design and other specifications for the Ebony Park initiative is in an advanced state.



# Year in Review



## Corporate, Legal Services & Human Resources

### Corporate Objectives:

- To develop a cadre of professionals through a 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; to ensure the protection of its assets and legal rights and to provide an efficient support system through general office services.





### **CORPORATE & LEGAL SERVICES**

The Corporate and Legal Services Division embarked on a number of projects to strengthen the NIC's management of its assets and allow for effective utilisation of its Human Resources. A brief outline of the activities is provided below.

During the period April 2012 to March 2013, the Legal Services Unit had oversight for:

- Implementation of strategies to secure reservations and easements to protect the infrastructure of the organisation.
- Managing legal action taken against the company.
- Managing through external counsel, legal matters instituted by the NIC.
- Acquire proprietary interest in Well sites and conclude conveyances for the acquisition of property.
- Ensure adequate insurance values maintained.
- Facilitating effective corporate governance mechanisms.

### **HUMAN RESOURCES UNIT**

The Human Resources Unit seeks to function as a catalyst to create a positive work environment that attracts, develops, and fosters a workforce committed to the achievement of the National Irrigation Commission Limited's goals.

We seek to provide a comprehensive plan of benefits to employees and to educate staff on these benefits. We will undertake to develop risk reduction strategies in collaboration with the Training and Occupational Health and Safety Units (OHS).

Working with the OHS Unit we strive to support organisational development by promoting wellness among our workforce by offering wellness programmes and providing education on various health topics as well as minimising accidents through well documented mechanisms of reports. The HR Unit seeks to enable employees to expand their knowledge, skills and abilities in order to enhance the work environment and prepare for work related opportunities. Our recruitment policies also serve to ensure that we recruit a qualified workforce.

### **TERTIARY TRAINING AWARDS**

The staff continues to qualify themselves through the pursuit of higher studies both locally and internationally in an effort to execute their duties effectively to face the challenges of a competitive global market.

- Tricia Bambury, Administrative Assistant was awarded an Associate of Science degree in Paralegal Studies.
- Yvette Constable Hylton, Administrative Assistant was awarded a Bachelor's degree in Business Administration.
- Raymond Austin, Superintendent, Electrical

Maintenance (Acting) was awarded a Bachelor of Science degree in Engineering.

- Richard Cox, Technical Officer was awarded a Bachelor of Science degree in Construction Management.
- Andrea Gyles, Manager, Operation Support was awarded the Executive Master in Business Administration.

## NIC SCHOLARSHIP AWARDS

The National Irrigation Commission Limited started its first scholarship award in 1998. This was an initiative between the Commission and the Unions representing the workers and offered to children of permanent employees. It is intended to assist employees in meeting expenses for education at the secondary and tertiary level as well as to encourage students display consistency in standards of excellence.

### Criteria

A selection committee comprising of internal and external members, that is, the NIC's management, supervisory and line staff, an educator and representatives of the Unions, choose the awardees. Awards are predominantly based on academic performance; however, consideration is given to involvement in extra-curricular activities and deportment.

### Awardees

Secondary school scholarships each valued at \$40,000.00 as well as tertiary scholarships each valued at \$60,000.00 are awarded annually. The Scholarship Awards Ceremony was held on March 27, 2013. The following students were the recipients of 2012/13 Scholarship Awards:

### Secondary School

David Thomas – Clarendon College, 9th Grade  
Shamel Ferguson – Old Harbour High, 12th Grade  
Britney Burrell – Dunoon Technical High, 7th Grade  
Alison Gordon – Old Harbour High, 7th Grade  
Gersandre Thompson – Glenmuir High, 9th Grade

### Tertiary Institution

Kimberly Cain – University of the West Indies, Mona Campus, 3<sup>rd</sup> year (final)



Members of the Scholarship Selection Committee Maxine Brown (left) and Rubena Powell (second right), the NIC's Chairman Hopeton Fraser (second left), the NIC's CEO Douglas Walker (right) and scholarship awardees: Front Row (L-R): Britney Burrell, David Thomas, Alison Gordon, Shamel Ferguson. Back Row (L-R): Gersandre Thompson and Kimberly Cain.



Top student Gersandre Thompson (L) receives award from the NIC's Chairman, Mr. Hopeton Fraser.



Scholarship Awardee Kimberly Cain (L) receives award from the NIC's CEO, Mr. Douglas Walker.



## TRAINING & DEVELOPMENT

We continue to pursue training and development initiatives that focus on building the NIC's capacity to improve its performance, to maximise efficiency in our business processes, to deliver a high level of customer service, and ultimately to realise our goals and strategic objectives. Capacity building is being pursued through a variety of approaches, including employee participation in programmes and short courses implemented by reputable local institutions such as MIND, UWI, UTECH; awards of scholarships and study leave to employees that allow them to pursue academic degrees from local universities; leadership and professional development programmes implemented by professional institutions and certifying bodies locally and abroad. Some of these include URISA - the Association for GIS Professionals; The Irrigation Association, Virginia, USA; Jamaica Employers Federation; Jamaica Occupational Health Professionals Association (JOHPA); Jamaica Customer Service Association; HRMAJ; the Jamaica Association of Administrative Professionals, JAAP; Chamber of Commerce; Jamaican Bar Association, etc.

From time to time we also benefit from international scholarships and grants which allow our technical and engineering staff to access training locally and overseas. During November 26 – December 7, 2012, the Government of Israel through their Ministry of Agriculture provided training in Irrigation Water for Agriculture to 52 employees of the NIC, as well as staff members of relevant external stakeholder companies. Training was delivered in two batches for five days in each instance.

We continue also to utilise in-house training as a cost-effective approach to training entire groups of staff. A Level 2 Certificate course in Irrigation and Distribution Systems was developed and implemented through a partnership between NCTVET and the Caribbean Maritime Institute, who will be responsible for implementation. The first batch of 17 systems operators began the course which is being conducted in-house on July 2, 2013, and which should be completed by February 2014.

In readiness for the implementation of the Performance Management & Appraisal System (PMAS), relevant in-

house training courses in Supervisory Management, Labour Relations and Conflict Resolution, etc., are also being implemented with a focus on developing supervisory staff capacity to lead, develop, and to facilitate a more harmonious and productive work environment.

## Occupational Health & Safety

The safety of our people is of paramount importance to us. January 2012 saw the introduction of the new nationally harmonized Work Health and Safety model. The Unit has taken the opportunity presented by the twelve-month implementation period to review our OSH management systems in an effort to ensure the highest safety standards are adopted while meeting our compliance obligations in all facets of our operations.

The company is committed to providing a safety conscious and competent workforce, and maintaining a safe place of work, safe systems of work and safe equipment as required by best practice.

The aims of the OHS programme are to:

- Promote continuous improvement of the management and standard of Occupational Safety and Health (OSH) systems in the workplace for all employees - permanent, temporary, contractors, and visitors and clients of the NIC.
- Increase employee awareness and understanding of their personal responsibility and accountability in regards to OSH.
- Reinforce a culture of safe working practices in the workplace.
- Reduce or eliminate workplace incidents and injuries.
- Reduce or elimination of loss time and loss of productivity.
- Reduce loss and damage to property, equipment and the environment, resulting from unsafe work practices and conditions.

To date, the Unit has implemented an incident reporting system and reviewed the fire protection and prevention responses. The aim and future focus is to make safety everybody's business.

## **Property and Transport**

The role of the Property & Transport Unit of the NIC is to ensure the protection of the Commission's real property (land and buildings) and is tasked with conducting research to establish boundaries of land reservations and prevent encroachments and other breaches related to the Commission's property.

The Unit also manages the process of acquisition and divestment of the Commission's lands and manages the Commission's fleet of vehicles.

## **Administration & Office Services Unit**

The Administration & Office Services Unit is charged with the responsibility for the document centre, outgoing and incoming mail, the maintenance of the office supplies and organising meeting facilities at our Head Offices and oversees the beautification of the work environment including the grounds.

The establishment of a document registry is one of the primary objectives of the Office Services Unit. A team is currently engaged to prepare an inventory of the documents. It is envisaged that within the next year, the registry will be fully operational.

The coming year will see the restoration of our 'water feature' at the Head Office with a mini-demonstration plot to showcase our wider services to the farming community.

## **PUBLIC RELATIONS**

### **25th Anniversary Celebrations**

Several events marked the National Irrigation Commission's 25th anniversary since its incorporation on May 26, 1988. The celebration started with a church service held at the Cathedral of St. Jago de la Vega on May 27th, 2012. A commemorative newspaper supplement was developed and published in the Jamaica Gleaner on August 21, 2012 which showcased the Commission's achievements over the years.

A series of Customer Appreciation Days were planned and executed at the Mid-Clarendon office on October 17, 2012, the St. Dorothy office on October 30, 2012 and the Hounslow office on November 6, 2012.

The celebrations culminated with a Long Service Awards Ceremony at the Pegasus Hotel where members of staff were recognised.

## **Execution of Special Functions:**

### **Closing Ceremony for Workshop on Irrigation**

On December 7, 2012 the Unit organized and executed the Closing Ceremony event for the State of Israel Ministry of Agriculture & Rural Development and the NIC Sponsored Workshop on Irrigation Water for Agriculture, held at the Farmers' Training Centre. The training was conducted on Irrigation Water for Agriculture: Management, Design, Storage and Treatment for Fresh Water and Treated Effluent.

### **End of Year Get Together**

As is customary, the annual End of Year Get Together was planned and executed on December 20, 2012.

### **Commissioning of New Forest/Duff House Irrigation System**

The commissioning ceremony for the New Forest/Duff House Irrigation System was organised and executed on March 20, 2013, a project which was funded by the Inter-American Development Bank (IDB).

### **Scholarship Awards Ceremony**

At the fourteenth annual Scholarship Awards Ceremony on March 27, 2013, six scholarships totalling \$260,000 were awarded to staff members' children based on academic performance, deportment and involvement in extra-curricular activities at school, church or in their communities.

Additionally, five students at the secondary level received scholarships valued at \$40,000 and one student at the tertiary level received a scholarship valued at \$60,000. Special recognition was given to four (4) additional students who were awarded book vouchers.

### **Farmer Field School Graduation**

On June 5, 2012, twenty-eight farmers received certificates as Certified Lead Facilitators for Farmers Field School (FFS).



## Participation in Exhibitions

As a part of efforts to increase the visibility of NIC in the public domain, the PR Unit planned and executed the NIC's participation in the following:

- Denbigh Agricultural Show – August 4-6, 2012
- World Food Day Exhibition – October 12th, 2012
- World Wetlands Day Exposition – February 1, 2013

- Hague Agricultural Show – February 13, 2013
- World Water Day/World Met Day Exposition March 22-23, 2013

## NIC's Video Profile

A video profile of the NIC was produced by the Public Relations Unit during the year.



A Drip Irrigation System in a demonstration plot.



# National Irrigation Development Programme (NIDP)

## Corporate Objective:

To increase agricultural production and farmers' income by improving irrigation management practices in the irrigable areas prioritised in the NIDP.

### Master Plan

In 1998 the Government of Jamaica (GOJ), through the National Irrigation Commission Limited (NIC), prepared a National Irrigation Development Plan (NIDP). The objective of the study was to develop a Master Plan, which would identify and prioritise projects for implementation. The Plan is expected to complement the GOJ's long term agricultural development plan to 2015, and further the Government's proposed plan to increase farmer participation in irrigation and make the NIC self-sustainable.

### Main Features of NIDP

The specific outputs of the study were:

- The preparation of a Master Plan.
- Feasibility Studies on selected priority projects from the Master Plan.
- The preparation of a Land and Water Atlas for Jamaica (GIS).

The Master Plan in accordance with the terms of reference contains the following:

- Review of the state of agricultural production with irrigation developments.
- Recommendations on irrigation policy and strategies to successfully implement the NIDP.
- Proposals for institutional strengthening.
- Generic environmental assessment on the irrigation sector.

- Identification of projects and ranking them in order of priority.
- A training programme in irrigation management.

The NIDP was designed with the intention of recovering the Operation and Maintenance (O&M) costs of new and rehabilitated irrigation systems. The NIDP evaluated over 125 projects island wide and recommended 51 of these projects at a construction cost of US \$106.3 million. The NIDP had aimed to:

- Increase the presently irrigated area of 25,000 hectares by some 60 per cent (15,000 ha) and directly benefit over 6,900 farm families.
- Generate an average increase of US \$55 million in annual income, consisting of US \$32 million income to farm families, and US \$23 million in wages to farm labour.
- Increase total annual agricultural production by US \$132.5 million.

### Farmer Participation

The involvement in the planning process, of farmers and government officials at the regional, national and local levels was considered essential; hence, special emphasis was placed on Stakeholder Consultation. Continued development in this sector was based on the need for farmer participation - a process that will assure a greater rate of cost recovery, lessen

the burden on the central government, and promote the sustainability of irrigated agriculture through decentralised local self-governance.

The Government will continue to encourage the formation and functioning of Water User Associations (WUAs) as legal entities (e.g. co-operatives or limited liability companies). Farmers will be members and shareholders who will have the power to govern these organisations. Responsibility for local management of water distribution, monitoring and system maintenance will be assumed by the WUAs.

### NIDP Funding Support and Proposed Beneficiaries

In addition to GOJ funding, the NIDP has also received financial support to the tune of 80 per cent of total cost from the Inter-American Development Bank (IDB) to fund several projects under the NIDP.

The areas covered and numbers of beneficiaries are shown in the table below:

### Project Organisation

This comprises both a Project Steering Committee (PSC) and a Project Implementation Unit (PIU). Led by the NIC Chairman, the PSC comprises stakeholders such as farmers, representatives from the relevant Government Ministries, the Planning Institute of Jamaica (PIOJ) and the Department of Co-operative & Friendly Societies (DCFS), etc. It has been established to oversee and monitor the progress of the implementation of the NIDP projects. During the year under review, the PSC met four times. The major issues discussed included:

- Programme for the implementation of the Consolidated Action Plan.
- Programme for completing infrastructure and other works.
- Execution of the RADA/NIC contract.
- Land Administration and Management Programme (LAMP) and National Land Agency (NLA).
- Completion of the Strategic Plan by Deloitte and subsequent implementation within NIC.
- Close-out report for the CDB Projects.

Table 1: IDB projects showing the areas covered and number of beneficiaries.

FUNDING SOURCE	SUM (US\$) *MILLIONS	SCHEME	LAND AREA (ha)	NO. OF FARMERS	STATUS OF INFRASTRUCTURE IMPLEMENTATION
IBJ / GOJ	21.0	Colbeck, St. Catherine	110	99	Completed
		New Forest, Manchester	398	497	Completed
		Yallahs, St. Thomas	374	265	Completed
		Essex Valley, St. Elizabeth	400	400	Feasibility Done
		St. Dorothy, St. Catherine	500	100	Abandoned
<b>TOTAL</b>	<b>21.0</b>		<b>1782</b>	<b>1361</b>	

## IDB Funded Projects

The IDB funded programme was signed on May 27, 2005 with the NIC being the Executing Agency. The full project cost was US \$21 million, of which the IDB contributed 80 per cent and the remaining 20 per cent provided by the GOJ. Due to the delay in project start-up and other challenges, the project disbursement period was extended to October 31, 2012. Challenges with the implementation of CAP and timely completion of the infrastructure build-out, resulted in a delay in the overall completion of the project. This resulted in additional challenges as the IDB is yet to disburse the final payments for the contractors. The projects are located in five (5) designated areas island wide:

- 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 indicators of the successful completion of this programme are the incremental increase in irrigated area of high-valued crop production of approximately 1,782 hectares benefiting about 1,361 farmers, along with the establishment of WUAs to operate and maintain those schemes. The project will increase farming income as a result of the introduction of new crops, increases in yields and cropping intensity. The following are to be achieved with the project implementation:

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

This project has employed a highly integrated approach to project development, in an attempt to achieve sustainability. Its full and successful delivery is dependent on the effective implementation of four (4) components, namely: Institutional Strengthening of the NIC, Promotion and Formation of WUAs, Farmer Technical Assistance and Training, and the Provision of Irrigation Infrastructure on the three (3) irrigation projects.

The remainder of the report details the achievements at the end of the Financial Year under the respective project components.

### Component I: Institutional Strengthening of the NIC

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

#### During the year:

- Work was completed on the Customer Relationship Management System (CRMS) and this software was fully 'rolled out' to the relevant departments within the NIC. During the period the NIC completed the requisite training which further enhanced the understanding of the use of the Information System (IS) capabilities and how this will improve the delivery of real time data to our customers.
- Deloitte and Touche completed an internal and an external assessment of our business processes which fed the development of the NIC's five year Strategic Plan.
- The procurement of computer hardware and software was completed. These included GPS equipment, printers and 83 software licences purchased from Central Information Technology Office (CITO).



	COMPONENT 1	COMPONENT 2	COMPONENT 3	COMPONENT 4
<b>TITLE</b>	Institutional Strengthening of NIC	Formation of Water Users Associations (WUAs)	Farmer Technical Assistance & Training	Provision of Irrigation Infrastructure
<b>OBJECTIVES</b>	Strengthening of NIC Capacity & facilitate reorganisation	Establish WUAs in each system and eventually facilitate transfer of O&M	Provide training to 1000 farmers, to include the development of 30 lead farmers	Install irrigation infrastructure and complete land regularisation in 5 schemes
<b>STATUS ON MAIN ACTIVITIES TO DATE</b>	<ul style="list-style-type: none"> <li>▪ Billing system Strengthened.</li> <li>▪ Strategic Plan completed.</li> <li>▪ The determination of Tariff.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Numerous training exercises as per requirements under CAP completed.</li> </ul>	Farmer Field School (FFS) Methodology used to train farmers as per the requirements of CAP.	<ul style="list-style-type: none"> <li>▪ Colbeck: 100%. System has been commissioned.</li> <li>▪ New Forest: 99 % System has been commissioned.</li> <li>▪ Yallahs: 99 % complete. All wells were completed. All pumps, motors, control centres, pipes, fittings, ancillary works and construction of pump houses now complete, except for Lane &amp; Plumwood.</li> </ul>
<b>AMOUNT SPENT TO DATE (I\$)</b>	67,704,194.20	43,775,013.31	43,991,815.75	733,530,639.85

- The determination of Tariffs for the three project areas and subsequent submission to the Office of Utilities Regulation (OUR).

## Component 2:

### Promotion and Formation of Water Users

#### Associations (WUAs)

Since October 2007, WUAs in Colbeck, New Forest/ Duff House and Yallahs have been registered under the Friendly Societies Act as Irrigation Specially Authorised

Societies (ISAS). All WUAs have signed Memoranda of Understanding (MOU) with the NIC aimed at clarifying the roles the respective stakeholders are expected to play.

Over the reporting period, having completed the Water Users office buildings in the three districts, the offices were furnished, to include the installation of 'One Stop' Shops.

The membership as at March 21, 2013 in each WUA is as outlined in the table.

SCHEME	LOAN AGENCY	PARISH	TOTAL WUA MEMBERSHIP	MALES	FEMALES	MEMBERS ABOVE 55 YRS	STATUS OF 2012 FINANCIAL AUDIT
Yallahs	IDB	St. Thomas	173	124	49	65%	2011 Audit report on file.
New Forest	IDB	Manchester	215	175	40	10%	2011 Audit report on file.
Colbeck	IDB	St. Catherine	68	56	12	65%	2011 Audit report on file.

### **Component 3: Farmer's Technical Assistance and Training**

The aim of this component is to support farmer's economic activities through training in the correct use of agricultural and marketing techniques. The main outcomes under this component include:

- Implementation of a comprehensive Training Plan under Consolidated Action Plan (CAP) to provide technical training and assistance for approximately 435 farmers, to include 28 lead farmers.
- The establishment of 20 demonstration plots.
- The implementation of the Farmer Field School under which 104 farmers were registered and trained (36 farmers in New Forest, 36 in Yallahs, and 32 in Colbeck).

The Consolidated Action Plan (CAP) evolved out of the mid-term evaluation. This was formulated to address concerns with Components II and III, following an evaluation of the three IDB funded projects, namely Colbeck (St Catherine), New Forest/Duff House (Manchester) and Yallahs (St Thomas). This in essence supported recommendations pertaining to irrigation development, agricultural production and building capacities within the legally constituted NIDP ISAS. The selection of crops grown by farmers and those ideally suited to the project areas were highlighted and evaluated against the background of justifying the added costs of irrigated agriculture vis-à-vis the gross revenue for the farm family.

Furthermore, deliverables under CAP were agreed to and the agricultural extension machinery of the Rural Agricultural Development Authority (RADA) in collaboration with that of the NIC was chosen as the vehicle for achieving the stated objectives. These were:

- The ISAS are strengthened as federative farmers' groups
- Farmer groups are empowered to mobilise ad-hoc technical services

- Farmers are empowered to explore marketing ventures through their ISAS
- Training in On-farm Irrigation Equipment is accessible to farmers
- The establishment of a Jamaican Irrigated Agriculture Framework

### **Component 4: Provision of Irrigation Infrastructure**

The objective of this Component is to construct and/or rehabilitate three irrigation schemes and complete the required pre-investment studies for two schemes. The major components are:

- Construction of pump houses, distribution infrastructure, the installation of pumps, and other support equipment for 3 project areas.
- Conduct feasibility studies for Essex Valley and St. Dorothy.

During the year under review, the NIDP experienced challenges but still managed to achieve the targets in the implementation schedule as outlined below:

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

This system was earlier commissioned on May 11, 2011 and as such very little work was required of NIDP under Component IV.

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

Following the successful completion of the well drilling programme and the requisite operating licences obtained from Water Resources Authority (WRA), the following have been achieved:

- **Supply and Installation of 3 pumps (\$77.3 million).** Two of the three pumps supplied by Y.P. Seaton and Associates were installed. Two of the three pumps supplied were oversized and as such one had to be installed in the alternate Duff House well. No pumps were installed in the Lane and Plumwood wells.





Pipe laying in New Forest/Duff House.



Prime Minister, the Most Honourable Portia Simpson Miller, opens the New Forest/Duff House pump station, while Minister of Agriculture and Fisheries, Honourable Roger Clarke (second right), and Chief Executive Officer of the NIC, Mr. Douglas Walker observe.

- **Supply & Installation of Pipes (J\$251.51 million).** Jamaica Drip Irrigation Ltd. supplied and installed all the pipes.

#### YALLAHS, ST. THOMAS

- **Supply and Installation of Pipes (J\$90.2 million).** Jamaica Drip Irrigation supplied all pipes and installed all Pumps, Motors, Pump Manifold, Control Centres and further constructed all Pump Houses as per contract.
- **Installation of Pipes and Fittings and Ancillary Works (J\$47 million).** Bacchus Engineering Works Limited completed the installation of the pipe distribution network in Yallahs.

#### ESSEX VALLEY & ST. DOROTHY

**Pre-Investment Studies (US\$249,000).** The feasibility study of Essex Valley was completed by Hydroplan, but on their recommendation, that of St. Dorothy was abandoned as the land use had changed in the area.



The NIC's Operations team members, Mr. Raymond Austin (left), and Mr. Phillip O'Reggio inside the pump house.



Demonstration of pump in Norris, St. Thomas.

# ENGINEERING & TECHNICAL SERVICES

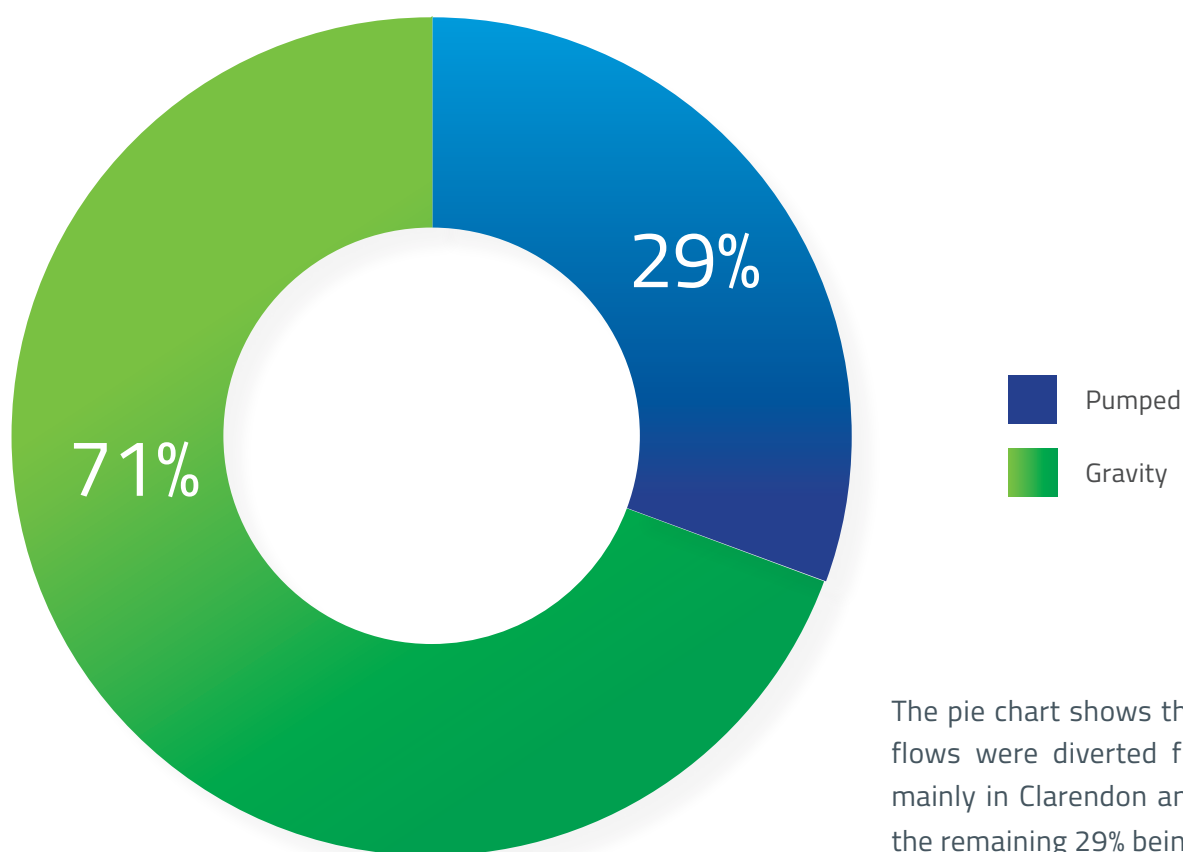
## Corporate Objective:

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

During the Financial Year, the Engineering & Technical Services Department continued work in critical business areas including:

- The production and distribution of irrigation water to our customers.
- Implementation of the energy management programme.
- Repairs and Maintenance of Irrigation Network along with the installation of water meters and regulating structures.
- Drainage cleaning and system maintenance in St. Elizabeth.
- Security monitoring to protect both staff and equipment.

Fig. 1 Percentage of Volume Produced from Pumped and Gravity Sources



The pie chart shows that overall 71% of the flows were diverted from surface sources mainly in Clarendon and St. Catherine, with the remaining 29% being pumped.

# 1. WATER PRODUCTION, DISTRIBUTION AND INVOICING

## 1.1 Production and Invoicing of Irrigation Water

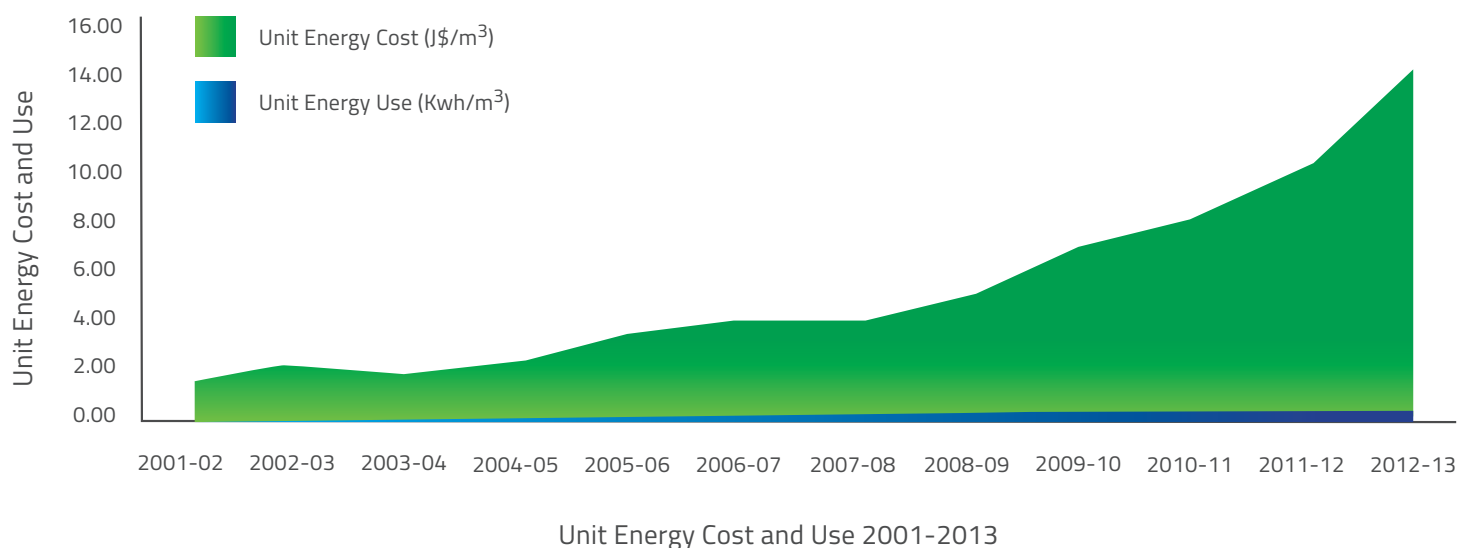
Table 1: Water Production, Invoicing, Energy Use and Energy Cost During 2012-13

LOCATION	PUMP HOURS (HR)	VOLUME PROD. (M <sup>3</sup> )	VOLUME INV. (M <sup>3</sup> )	% AGE INVOICED	JPS CONSUMPTION (KWH)	ENERGY COST (\$)	UNIT ENERGY COST (\$ / M <sup>3</sup> )	UNIT ENERGY COST (KWH/M <sup>3</sup> )
St. Dorothy	18,549	8,677,756	6,233,680	71.8%	1,669,750	55,339,728	6.38	0.19
Colbeck District	710	138,768	111,073	80.0%	55,800	3,200,893	23.07	0.40
Rio Cobre	31,825	3,846,385	2,800,758	72.8%	1,019,218	38,013,041	9.88	0.26
Phillipsfield	2,174	328,000	308,428	94.0%	144,116	4,569,598	13.93	3.11
<b>Total Pumped (Eastern)</b>	<b>53,258</b>	<b>12,990,908</b>	<b>9,453,939</b>	<b>72.8%</b>	<b>2,888,884</b>	<b>101,123,259</b>	<b>7.78</b>	<b>0.22</b>
Rio Cobre Division		34,613,049	23,351,220	67%				
<b>Eastern Regional Total</b>	<b>53,258</b>	<b>47,603,957</b>	<b>32,805,159</b>	<b>69%</b>	<b>2,888,884</b>	<b>101,123,259</b>	<b>0.47</b>	<b>0.06</b>
<b>CENTRAL REGION</b>								
Mid-Clarendon (Pumped)	40,362	11,177,495	8,001,480		2,570,430	93,366,171	8.35	0.23
Mid-Clarendon (Surface)		14,019,347						
<b>Mid-Clarendon Total</b>	<b>40,362</b>	<b>25,196,841</b>	<b>8,001,480</b>	<b>32%</b>	<b>2,570,430</b>	<b>93,366,171</b>	<b>3.71</b>	<b>0.10</b>
<b>WESTERN REGION</b>								
Hounslow	5,510	3,033,428	2,878,874	94.9%	1,746,254	46,181,052	15.22	0.58
Braco	3,743	559,435	440,973	78.8%	136,551	4,973,580	8.89	0.24
Beacon/Little Park	8,313	2,073,797	2,068,659	99.8%	1,581,530	57,584,733	27.77	0.76
<b>Western Sub-Total</b>	<b>17,566</b>	<b>5,666,660</b>	<b>5,388,505</b>	<b>95.1%</b>	<b>3,464,335</b>	<b>108,739,365</b>	<b>19.19</b>	<b>0.61</b>
<b>OVER ALL PUMPED</b>	<b>111,186</b>	<b>43,854,409</b>	<b>22,843,924</b>		<b>8,923,649</b>	<b>303,228,795</b>	<b>13.27</b>	<b>0.20</b>
<b>GRAND TOTAL</b>	<b>111,186</b>	<b>78,467,458</b>	<b>46,195,144</b>	<b>58.9%</b>	<b>8,923,649</b>	<b>303,228,795</b>	<b>3.86</b>	<b>0.11</b>

As outlined in table 1 above the NIC produced 78.5 million cubic meters of water in 2012 and invoiced 59% of this flow. Comparatively during the 2011/12 the overall flow invoiced was 64%.



Fig. 1.2 Energy Use and Cost



Invoicing levels were satisfactory in the pumped systems in the Western Region as well as Yallahs and Colbeck. Unfortunately however the invoicing levels in Mid-Clarendon were significantly lower than in previous year, reducing from 43% to 32%. The NIC has taken steps improve performance in this area including:

- Ordering of bulk flow meters to properly measure flows at the pump stations.
- Additional training in flow measurement for system operators.

## 1.2 Energy Use and Cost

Energy cost continues to increase year-on-year and consume a major portion of NIC resources, with a total of \$303.2 million spent during the Financial Year compared to \$239 million in the previous year. Concurrently, this resulted in a unit energy cost of increase from \$10.08/m<sup>3</sup> in 2011/12 to \$13.27 during the Financial Year under review. This increase of 31.6% has had severe negative consequences on the NIC's operations as fewer resources become available for other activities including system maintenance.

In response, the NIC continued to pursue energy improvement strategies at all levels:

- Commencement of effort to improve energy use at Colbeck including the replacement of the existing turbine and installation of a Variable Speed Drive (VSD).
- Assessment of alternative energy options including the commencement of work on a wind assessment study in St. Elizabeth.
- Retrofitting strategies at several stations.
- Meter installation programme at pump station to improve flow measurement and monitoring.

## 1.3 Energy Management Projects

Specific Energy Management projects include:

### Improved Flow Monitoring and Measurement:

During the year, the installed bulk flow water meters at ten stations mainly in the Rio Cobre and St. Dorothy areas were equipped with bulk flow meters. This has helped to improve the monitoring of water and energy use in these areas. For example, the overall

recovery in from pumped systems in the Rio Cobre area increased from 62 per cent in 2011/12 to 72.8 per cent in 2012/13. Going forward, the NIC will focus on measurements in the Mid-Clarendon area.

**Changing to LED Lighting:** During the year, the NIC completed the project to replace existing fluorescent lights with more modern and efficient LED lights at four offices. A total of 495 lighting fixtures were replaced resulting in improved illumination of the offices along with estimated annual energy savings of 23,225 kWh per year or 46.9 per cent reduction. A total of \$5.24 million was spent on the project.

**Power Factor Correction:** After assessing the power factor at all pump stations across the NIC a total of ten priority stations were selected for the installation of capacitor banks. This project costing \$4.83 million is expected to result in an annual saving of \$1.8M. To date tenders have been received.

**Installation of Variable Frequency Drives (VSDs):** The analysis undertaken during the year of power

consumption at NIC pump sites indicated that it will be beneficial to install VSDs at six sites. In support of this project, the NIC received funding commitment from the Petroleum Corporation of Jamaica (PCJ) to cover the \$11.8 million project. The PCJ is also handling the procurement process and to date tenders have been received from five contractors. The project will be completed during the 2013/14 Financial Year and result in an annual saving of \$18M.

**Wind Resource Assessment:** During the year, the NIC received a US\$60,000 grant from Energy and Climate Partnership of the Americas (ECPA) to undertake a wind resource assessment at a site in Pedro Plains, St. Elizabeth. The project involved the installation of wind monitoring equipment along with data collection by the University of the West Indies over a one-year period. At the end of the monitoring period, the technical feasibility of implementing a wind turbine project will be assessed. To date a total of US\$9,256.17 has been spent on the project, notably on the importation of the wind monitoring equipment.



LED Lights Installed at the NIC's Operation Centre, Spanish Town.

## 2. SYSTEM REPAIR & MAINTENANCE

### 2.1 Civil Works - Irrigation System Maintenance and Meter Installations

Irrigation System Maintenance was executed by both the Civil Works Unit and the Electrical/Mechanical Unit located at the Operation Centre in Spanish Town. A broad range of activities were undertaken during the year to sustain service quality and included the following:

Table 2: Pipeline undertaken by Civil Works Unit during repairs 2012/2013

LOCATION	Blacka	Spring Village	Thicke Road	Bowers & Bardles	Sandy Bay	Coldwick	Yallahs	TOTAL	Vernam-field	Upper Rhymes	Lower Rhymes	Ebony Park	McGlchild	St. Jago	Gravel Hill	Clarendon Park	TOTAL
Hydrants & Valves	2	1	1	2	6	7	6	6	1	7	1	3	8	0	6	4	8
Pipeline	2	1	3	7	1	3	3	10	3	2	1	4	9	2	5	0	10
Metre	2	1	1	1	1	1	8	6	8	1	8	2	2	8	4	1	9
TOTALS	7	4	5	1	1	1	1	23	6	4	3	9	3	1	1	1	26

Table 3: New Installations, Disconnections and Reconnections undertaken by the Civil Works Unit

LOCATION	PERIOD	NEW INSTALLATION	DISCONNECTION	TERMINATED	RECONNECTION
Rio Cobre	April to Mar	22	1	0	5
St. Dorothy	April to Mar	44	4	0	6
Yallahs	April to Mar	4			
TOTALS	April to Mar	70	5	0	11
MCIA	April to Mar	11	43		20
Grand Totals	April to Mar	81	48	0	31



- Repairs to pipe infrastructure in pressurised systems
- Installation and disconnection of water metres at both the pump station and consumers
- Preventative and restorative maintenance to the NIC plant including pump stations
- Repairs to pressurised pipes
- Canal network repairs and improvements

Repairs undertaken by the Civil Works Unit are shown in Tables 2 - 3 and Figure 3 below. As indicated, majority of the repairs were effected on pipe lines in both Eastern and Central Regions. The Ebony Park and Vernamfield systems in Clarendon continue to require the highest number of repairs. Fortunately the Vernamfield system is targeted for rehabilitation during the upcoming Financial Year, as part of the Ministry of Agriculture and Fisheries' Sugar Transformation Programme.

The majority of the customer service intervention effected by the Unit involved the installation of consumer metres in the Rio Cobre System as indicated in Table 3.

## 2.2 Mechanical/Electrical Services

The Electrical/Mechanical Department continued to play a pivotal role in the delivery of services to the NIC's consumers by making contribution in areas of:

- Fabrication and installation of gates and flumes
- Pumping station repairs and maintenance
- Preventative Maintenance (PM) programmes

In order to maintain flow measurement and regulation along the open channels in Clarendon and St. Catherine, the workshop team manufactured and installed several sluice gates and Parshall flumes as outlined in tables 4 and 5 on Page 46.

**Fig. 3: Pressurised system repairs in Clarendon and St. Catherine**  
Repair to Pressurised Infrastructure

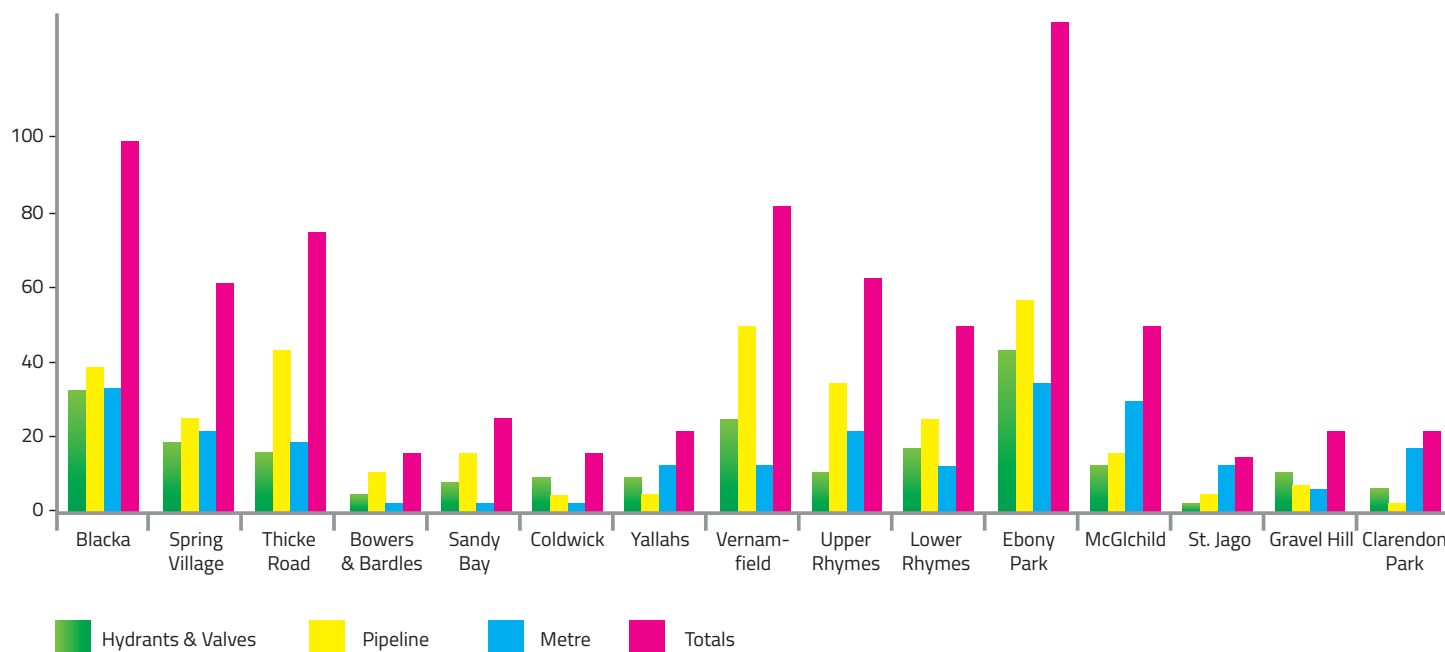


Table 4: Sluice Gates Fabricated by Workshop

ITEMS/WORKS	DESCRIPTION	PIPELINE
Sluice Gate	SIZE 6" WIDE x 40" HEIGHT	21
Sluice Gate	SIZE 9" WIDE x 40" HEIGHT	5
Sluice Gate	SIZE 12" WIDE x 40" HEIGHT	16
Sluice Gate	SIZE 15" WIDE x 40" HEIGHT	2
Sluice Gate	SIZE 18" WIDE x 40" HEIGHT	1
Sluice Gate	SIZE 2" WIDE x 40" HEIGHT	2
Sluice Gate	SIZE 3" WIDE x 40" HEIGHT	1
Sluice Gate	SIZE 4" WIDE x 40" HEIGHT	1
<b>TOTAL SLUICE GATES</b>		<b>48</b>

Table 5: Parshall Flume Measuring Devices Fabricated and Installed

Parshall Flume	SIZE 3"	14
Parshall Flume	SIZE 6"	6
Parshall Flume	SIZE 9"	2
Parshall Flume	SIZE 12"	3
Parshall Flume	SIZE 24"	2
<b>TOTAL FLUMES</b>		<b>27</b>



Port Henderson Relift In-take Improvement.



Excavating to Install River Crossing at Ebony Park.

### 3. OTHER DISTRICT ACTIVITIES

During the year, the Operations Team at the District Level executed several programmes aimed at delivering benefits to our customers throughout the island. These include:

LOCATION	PROGRAMME	PURPOSE	RESULT
Western Region	Drain Cleaning	Lower flood risk	92.94 kilometres of drains cleaned in the Upper and Lower Moraas Drainage area.
	Land preparation assistance	Improve land preparation	Ploughing of 71.83 hectares of land at subsidised cost in Hounslow.
	Delivery of trucked water	Service to areas without systems	4,101,400 litres of water was delivered.
Eastern Region	Emergency Repairs	Repair Caymanas Siphon dislocated during storm	Re-habilitated dislocated siphon including construction of thrust Block and gabion protection works.
Central Region	Sugar Transformation	Improve irrigation efficiency	Vernamfield system rehabilitation commenced with tendering of the material including pipes, fittings and all installation machinery. This project will be completed during the upcoming Financial Year.
	System Repairs	Reduce losses in Mid-Clarendon	Joints of rectangular section of aqueduct repaired with hydraulic cement. Breached section reconstructed.



Pipe Trench Excavation at Spring Plain.



Canal Siphon Pipeline Crossing the Rio Cobre River.



## 4. SECURITY MANAGEMENT

In the Financial Year of April 2012 to March 2013, while our Nation grappled with the massive challenge of increasing crime and violence, the Security Unit of the NIC by extension, continued to confront the security threats facing the Commission's staff, property and equipment. The Unit is charged with the responsibility of detecting and controlling vandalism of the Commission's systems including damage to irrigation works, water stealing, squatting and other breaches to the Commission's property. The main areas of the Unit's activities in the period under review are outlined below:

### 4.1 Pilfering/Blockages/Tampering with System

There was a slight increase in the number of incidents pertaining to tampering with the NIC's irrigation systems island wide, as well as the illegal extraction of irrigation water from our systems, remained constant. The number of incidents is tracked in Table 6.



**Illegal Connection to the NIC's System.**

**Table 6: No. of persons cited for either tampering or illegal use**

DISTRICT	NO. OF PERSONS CITED FOR EITHER TAMPERING OR ILLEGAL WATER USE
St. Catherine	5
Mid-Clarendon	4
Hounslow	1
Braco	1
<b>TOTAL</b>	<b>11</b>

Of the eleven (11) persons found in breach of Sections 39 and 42 for illegal extraction of irrigation water and tampering with the irrigation system, nine (9) were settled through the adjudication process under the Security Procedures of the NIC. The other two (2) cases are to be settled through the Courts.

The Security Department continued to maintain regular monitoring of the irrigation systems, primarily the canal network in St. Catherine and Mid-Clarendon Districts. This patrol presence combined with the erection of warning signs was aimed at reducing the incidents of vandalism and blocking of the canals especially for recreational purposes. Unfortunately many of the "Warning" signs erected at strategic locations were vandalised. Thankfully, there was no incidence of drowning during the year as experienced during the previous year.

### 4.2 Vandalism of Pump Stations

There were four (4) incidents of vandalism to the NIC's pump stations over the period under review. Table 7 summarises the extent of the damage/vandalism done at each station. Of note, is that all incidents took place within the Eastern Region of the NIC and resulted in an overall loss of \$810,000. The effects of these acts of

Table 7: Incidents of vandalism at pump stations  
PUMP STATIONS VANDALISED OVER APRIL TO MARCH 2013

LOCATION	PUMP STATION		
St. Dorothy	Bodles #2	Aug-12	Cable wires stolen, switch panel damaged
RCIW	Clifton #5	Aug-12	Cable wires stolen
RCIW	Port Henderson Relift	Nov-12	Wires removed from Pump Station
RCIW	Clifton #5	Nov-12	Cable & electrical wires stolen

vandalism were far-reaching, as irrigation service to a number of customers was adversely affected, and the Commission was again forced to incur expenditure to restore service to all locations.

The phased implementation of additional security measures to protect our pump stations continues, as the Commission remains resolute to preserve these equipment, as best as possible.

#### 4.3 Squatting

In order to deter squatting on the Commission's reservations, there was constant patrolling and monitoring, especially of the "red zones", or most vulnerable areas by Security personnel and District field staff. The assistance of community members was also enlisted, in a collaborative approach to "nip this practise in the bud" from an early stage.

With regard to established squatter settlements, an Inter-agency Committee formed with representatives from the Ministry of Health, Jamaica Constabulary Force (JCF), National Environment and Planning Agency (NEPA), Parish Council, National Water Commission (NWC) and National Works Agency (NWA) was set up to address this situation (primarily in Spanish Town) in an all-inclusive, holistic manner.

Squatting on these reservations can be a serious impediment to the efficient operation of the system, and is therefore a matter of great importance to the NIC. In addition, the irrigation water is often used for domestic purposes and there are usually no proper sanitary conveniences in these squatter communities, hence possible health implications.

The safety of staff especially in the execution of field duties remained a security concern in this year in review. While these safety concerns relate to all field personnel, those in St. Catherine and more recently, Clarendon were particularly affected, as irrigation service areas were used as criminal hideouts. Various security measures were put in place and staff constantly encouraged to maintain a high sense of security awareness. This included increased security patrol.

# INFORMATION SYSTEMS

## Corporate Objective:

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

The Information Technology strategy for the period included:

- The planning and organisation of Information Technology (I.T.) resources and activities to support the NIC's Business Strategies and Priorities.
- The acquisition and implementation of technology and processes to achieve business objectives.
- Delivery and support of I.T. Services.

### Planning and Organisation of I.T. Resources

#### 1. Technological Direction

The direction for period the continued to target the computer network infrastructure to support business

processes of Financial Management and Reporting, Customer Information and Billing, Electronic Corporate Collaboration and Operations Reporting.

The goal for the period was to ensure the maintenance, improvement and availability of computer network infrastructure. There was no deviation from the infrastructure plan and all business process applications were compliant with infrastructure.

#### 2. Management of I.T. Resources

Activities for period 2012/2013 were strategised on an annual planning budget of J \$10,077,500.

**Table 1: Budget Estimate**

EXPENSES	ESTIMATE J \$	ESTIMATE J \$	COMMENT
Computer Hardware, Application Support, Security	\$9,851,900.00	\$6,371,900.00	
Network & Internet	\$1,113,600.00	\$3,705,600.00	



Actual I.T. expenditures for financial year 2011/2012 were \$J5,880,353

Table 2: I.T. Expenditures

EXPENSES	ESTIMATE J\$ 2011/2012	ESTIMATE J\$ 2012/2013	COMMENT
Computer, Application Support, Security	\$4,524,515.00	\$3,711,853.00	
Network & Internet	\$1,049,292.00	\$2,168,500.00	
TOTAL	\$5,573,807.00	\$5,880,353.00	

Activities were prioritised and controls over hardware replacements due to budgetary constraint.

#### Update of I.T. Policies and Enforcement

Table 3: I.T. Policies Updated

POLICY	2011/2012	2012/2013	COMMENT
Information Systems Policy	Updated	Updated	Mostly Affected: Corporate Email Policy and Practice; Corporate Internet User Policy; User Responsibility; Confidentiality Policy; Physical Security Policy
Disaster Recovery Policy and Procedures	Updated	Updated	

#### Maintenance, Acquisition and Implementation of Technology and Processes

Table 4: Computer Hardware Operating Value

COMPUTER HARDWARE ITEM	2011/2012	2012/2013	COMMENTS
Value	32,433,000.00	33,686,600.00	
Number	258	276	Major Acquisition: GIS Printer 8 Desktops

Table 5: Network Infrastructure Projects Plan for Period 2012/2013

NETWORK PROJECT	STATUS	COMMENTS
Wide Area Network bandwidth upgrade for NIC Head Office	Completed	Faster access to network resources
Wide Area Network Expansion to NIC	Completed	
Wide Area Network bandwidth upgrade for NIC Rio Cobre and Operations Offices - St. Catherine	Completed	Faster access to network resources

Table 6: Major Business Application Support Renewals and Implementation

BUSINESS APPLICATION	SUPPORT RENEWAL	COMMENTS
Microsoft Dynamics GP	Completed for period	Financial Management Human Resources
		Inventory Fixed Asset
NIC CRMS	Completed for period	Customer Information
McAfee Total Protection	Completed for period	Anti Virus / Network Security

### Delivery and Support of I.T. Resource Services

#### Performance and Capacity Management

For the period, the availability of Information Technology resources to support the NIC's business requirements continued as a priority.

With renewal agreements for support and upgrades, two critical process applications that required high availability were Financial Management and Customer Information & Billing. For period, no major disruption occurred in service delivery.

The improvements in Wide Area Network bandwidth at two major locations increased the performance level in terms of reduced time to access information/data at the District Offices.

Hardware capacity was improved on a priority basis for mission critical services through replacement hardware. For critical business process users there were twelve (12) computer hour use lost for the year.

#### System Security

The maintenance of information integrity and protection of I.T. assets was a major procedure. The aim was to minimise the impact of vulnerabilities on the business process. This involved several activities:

- I. The application of security standards regarding information / network access and authorisation.
- II. Maintenance of anti-virus contract and updates including e-mail and web security.

III. Follow and enforcement of the NIC's policy as it relates to protection of physical assets for computer and network infrastructure.

**For the period:**

- No incidents of information access breach was reported.
- No network down-time due to malicious software / virus, the anti-virus was able to capture and remove those found or reported.



# COMMERCIAL DEPARTMENT

## Corporate Objective:

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

## WATER SALES AND DRAINAGE

Water Sales and Drainage Charges for the year under review increased by approximately 39.74 per cent or from \$339.67M to \$474.67M.

The increase in sales can be attributed to:

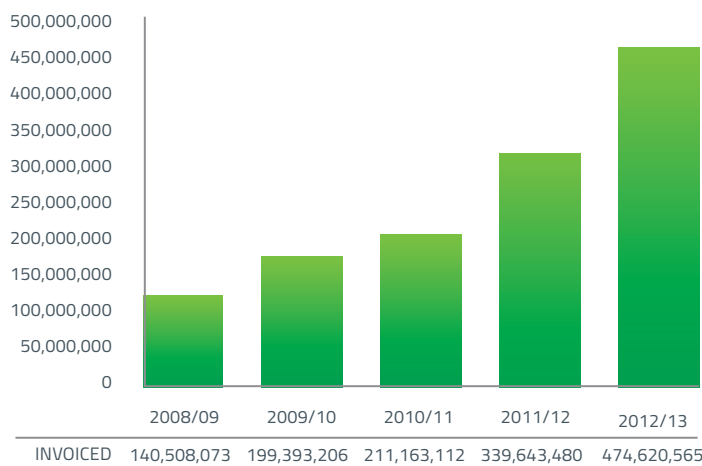
- (a) A twenty-five per cent (25%) increase in irrigation rates for agricultural users and thirty-three and a third per cent (33 1/3 %) rate increase for non-agricultural users. This rate increase was effected on April 1, 2012.
- (b) The continued expansion of sugar cane production especially in the Mid-Clarendon area resulting in the re-engaging of non-utilised and under-utilised irrigation lands. This has resulted in increased demand for irrigation water.

The percentage rate of collection remained in the high nineties.

The Commission continues to accommodate its credit challenged customers through the pre-payment facility and has employed an array of other collection strategies, geared towards revenue optimization.

The Commission's levels of invoicing for the Financial Years 2008/2009 to 2012/2013 are outlined below: -

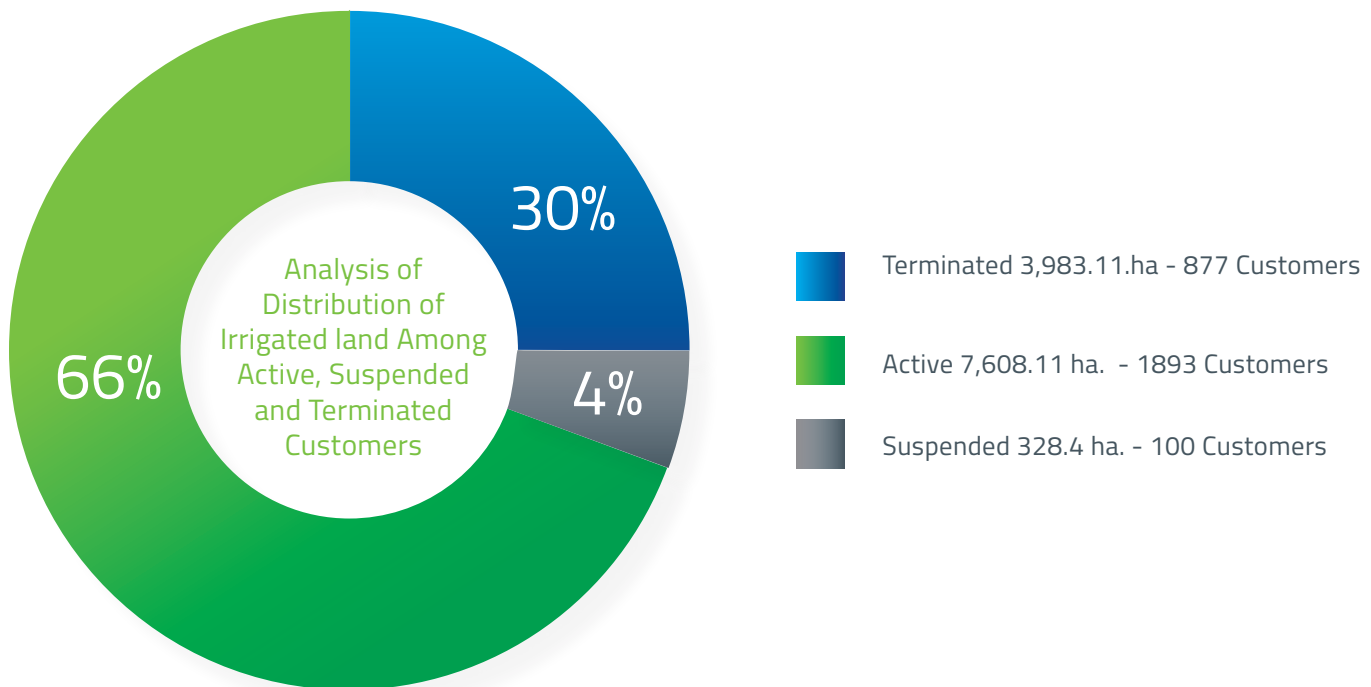
### Total Water Sales And Drainage



## Customer Service

The National Irrigation Commission Limited has made quality customer service, the hallmark of its service to customers.

The training of relevant staff members in customer service continues, and this has greatly enhanced the efficiency with which services are delivered. The new Customer Relationship Management System (CRMS) continues to greatly enhance the customer service experience through increased timeliness and efficiency of the services delivered.



## Customer Status

The pie chart above depicts the distribution of irrigated lands among customers classified as active, suspended and terminated. With a total customer base of 2,870 occupying 11,919.22 hectares of land, 66 per cent or 1,893 customers on 7,608.11 hectares were active, 4 per cent or 100 on 328.4 hectares were suspended and 30 per cent or 877 customers on 3,983.11 hectares were terminated. The number of active customers increased from 1,734 in the previous year to 1,893 reflecting a 9 per cent increase.

## Initiatives

The New Forest Irrigation System has been completed under the National Irrigation Development Programme. This system is expected to serve 497 customers with 398 hectares of land. To date, 308 applications for service have been received and 250 processed.

The Yallahs Irrigation System is almost completed and seventy-five (75) applications have been received. These new systems are expected to serve 640 new customers on 742 hectares of land for irrigation.

## Complaints

Minimising negative feedback towards our service is being addressed at all levels of the Commission. As such, customer satisfaction minimal number of complaints. During the period under review, four (4) major complaints were received in the Eastern Region, all of which were resolved within the guaranteed time for resolving issue impacting customers. Complaints received in the Western Region were five (5) and all have been resolved.

## Irrigation Water Application

### Eastern Region

Applications received for the year under review were as follows:

(1) Seventy-two (72) applications were received, sixty-one (61) of which have been approved, while seven (7) are pending. Corresponding acreage is 93.43.

### Western Region

One hundred and ninety-nine (199) applications were received, an increase of 7 per cent over the previous period, with corresponding acreage of 201.58 hectares. One hundred and sixty-five (165) applications were approved, while thirty-four (34) are awaiting approval.





Irrigation in progress by means of the Sprinkler System.



# ON-FARM WATER MANAGEMENT UNIT

## Corporate Objectives:

- To plan, direct and implement on-farm water management and drainage techniques by providing sound technical advice of a high standard to the farming sector.
- To increase the production and productivity of cultivable lands by the use of irrigation technology.
- To assist farmers to improve their knowledge and income by the adaptation of suitable on-farm irrigation systems through technology transfer.
- To promote sustainable use of land and water resources through appropriate water management techniques.
- To help farmers optimise the use of scarce water resources by helping them improve their on-farm water use efficiency whilst improving productivity.

The On-Farm Water Management Unit has been focusing on the methods to improve on-farm water management and water use efficiency along with the training of both farmers and technical officers. The Unit also facilitates the development of small-scale irrigation schemes, rainwater harvest systems as well as develops relevant farm demonstration plots and provides guidance on best practices in irrigation.

## Core Functions

1. On-farm irrigation system designs and irrigation schedules.
2. Farm visits to do advisory work and/or collect field data.
  - a. Provide advice on the design and installation of minor irrigation systems.
  - b. Respond to request from farmers experiencing difficulties with their irrigation system or installing a new system.
3. Install irrigation systems.
4. Irrigation system monitoring and recommendations.

5. Manage the activities of the NIC research plots at Hounslow and Braco, which will be used as a demonstration plot for training of farmers.
6. Assist with the monitoring of water quality in the irrigation schemes.
7. Recommend and establish small irrigation schemes in rural communities.
8. Inter-Agency collaboration.

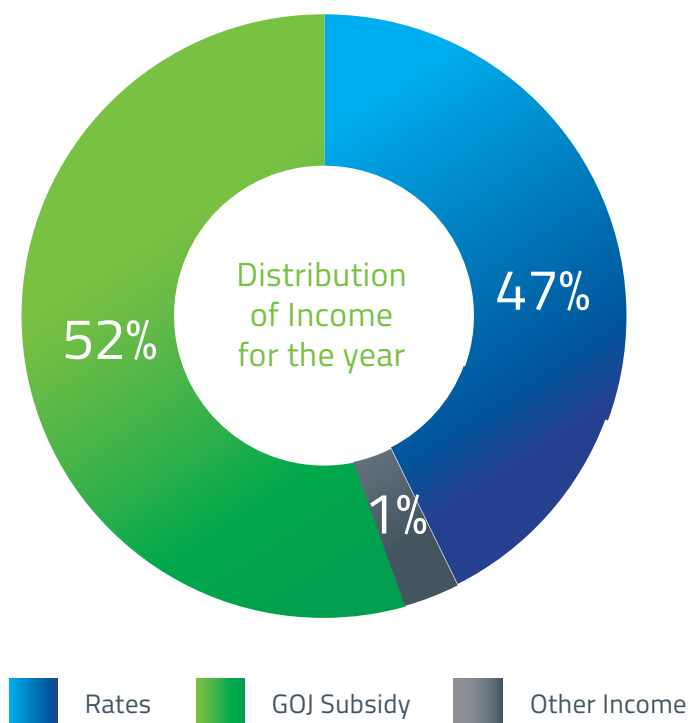
## Special Projects

- Focus on the development of irrigation systems island wide both public and private.
- Develop irrigation project proposals for farmer groups.
- Assist in the development and implementation of small-scale irrigation schemes, e.g., Gravity Drip Irrigation project, rainwater harvesting funded by local/international partners.
- Design and develop Rainwater Harvesting Systems.
- Promote sustainable water resource management.

# Finance & Corporate Planning

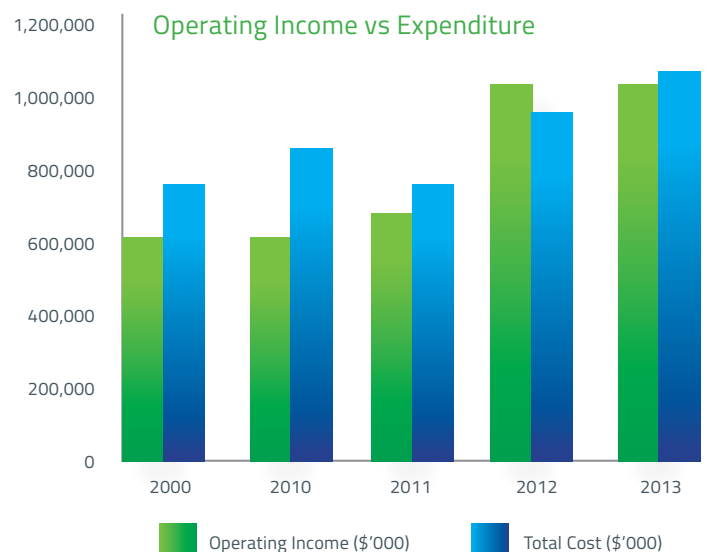
The Commission earned a surplus of approximately \$38M in the 2012/2013 financial year. This surplus represents a \$20M or 34 per cent reduction on the \$58M surplus earned in the previous year. Revenue from our core business (water sales and drainage charges) increased significantly by \$136M or 40 per cent over that earned in the previous year.

Operating costs increased by 7 per cent or \$51M from \$713M in the prior year to \$764M in the current year. Increased operating costs were driven by an \$11M or 4 per cent increase in pump electricity costs, a \$20M or 8 per cent increase in salaries and related expenses and a 33 per cent or \$23M increase in maintenance costs.



Increased revenues were driven primarily by higher irrigation rates that were effected on April 1, 2012 as the Government of Jamaica (GOJ) reduced its subvention to the Commission by 20 per cent or \$131M thereby mitigating the impact of increased irrigation rates.

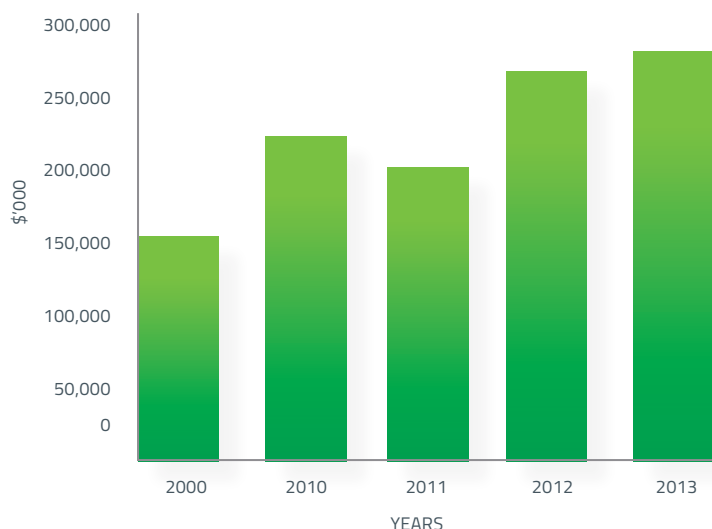
The increased electricity costs were due to an increase in the kilowatt-hour consumption in the current year as the kilowatt-hour consumption grew by 14 per cent arising from increased demand over the period.



Increased personnel emoluments cost as a result of the payment of salary arrears during the year as well as increased travelling costs resulting from a 22.5 per cent increase in upkeep rates during the year drove the increases in salaries and wages. Maintenance expenditure was split between labour and material

costs in the amount of \$15M and \$8M respectively. These costs were incurred for work to keep the conveyance systems functional across all nine districts during the period.

#### Electricity Cost

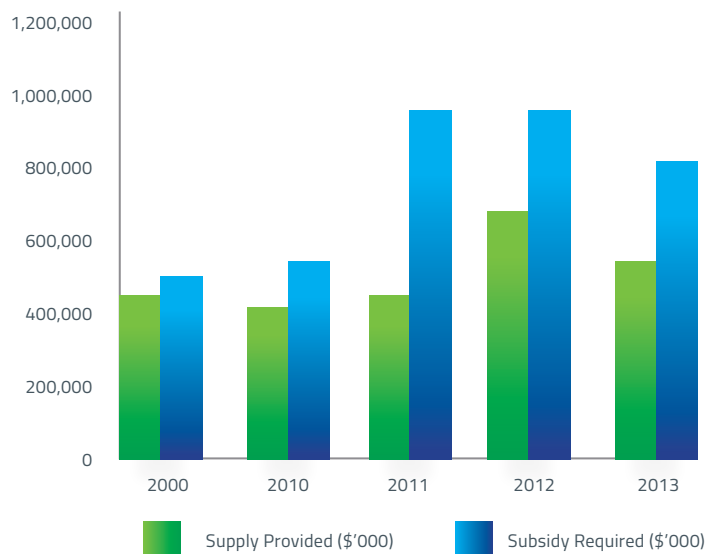


Administration expenses also increased significantly by \$20M or 8 per cent when compared to the prior year. Contributing to the increase recorded in administration expenses was a \$6M increase in advertising and public relations costs as a result of a very active public relations campaign during the year that resulted from the airing of several promotional videos as well as the NIC's participation in the annual Denbigh Agricultural Show. In addition, provision for bad debts increased by \$4M while salaries and wages increased by \$5M. The increase in salaries and wages was due to the issues highlighted previously while the apparent increase in provision for bad debts was as a result of the mitigating impact of bad debt recoveries in the prior year that are not a feature of the current year.

As a result of a \$25M or 9 per cent increase in current assets and a \$25M or 3 per cent reduction in non-current assets, total assets remained constant at approximately \$1.2B when compared to the prior year. The increase in current assets was due to an \$81M increase in accounts receivables while cash and cash equivalents declined by \$63M. The increase in accounts receivables was split between trade receivables and amounts receivable from unfunded

expenditure on the NIDP of \$36M and \$33M respectively.

#### Government of Jamaica Subsidy on behalf of Farmers



Following the repayment of the final installment of the \$60M FINSAC loan, during the year, as well as expenditure on the NIDP project amounting to \$68M, total liabilities declined by 6 per cent or \$37M. The overall reduction in total liabilities was tempered by a \$107M or 107 per cent increase in accounts payable and accrued charges arising from a build up in JPS arrears.

The foregoing has resulted in a slight improvement in the Commission's current assets ratio from 1.05:1 in the current year to 1.23:1 in the current financial year.

The surplus of \$38M earned during the financial year resulted in a 25 per cent and a 7 per cent increase in the accumulated surplus and shareholders' equity respectively.

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

For the year ended March 31, 2013, certain new, revised and amended standards and interpretations came into effect. Based on the Company's current operations none of them had any significant effect on the amounts and disclosures in the financial statements.



# Auditors' Report



NATIONAL IRRIGATION COMMISSION LIMITED

FINANCIAL STATEMENTS

MARCH 31, 2013



**KPMG**  
**Chartered Accountants**  
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Kingston  
Jamaica, W.I.

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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 3 to 33 which comprise the statement of financial position as at March 31, 2013, the statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

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

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

#### *Auditors' Responsibility*

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

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

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





To the Members of  
NATIONAL IRRIGATION COMMISSION LIMITED

**Report on the Financial Statements, continued**

*Opinion*

In our opinion, the financial statements give a true and fair view of the financial position of the company as at March 31, 2013, and of its financial performance, changes in equity and cash flows for the year then ended, in accordance with International Financial Reporting Standards and the Jamaican Companies Act.

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

We have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of our audit.

In our opinion, proper accounting records have been maintained, so far as appears from our examination of those records, and the financial statements, which are in agreement therewith, give the information required by the Jamaican Companies Act in the manner required.

A handwritten signature in black ink, appearing to read 'KPMG', written in a stylized, cursive-like font.

Chartered Accountants  
Kingston, Jamaica

July 29, 2013

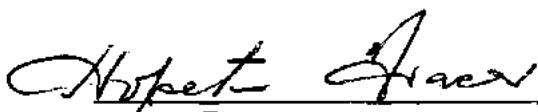
# Financial Statements



**NATIONAL IRRIGATION COMMISSION LIMITED****Statement of Financial Position**  
**March 31, 2013**

	<u>Note</u>	<u>2013</u>	<u>2012</u>
<b>CURRENT ASSETS</b>			
Cash	4	39,762,456	102,556,568
Resale agreements	5	38,954,963	37,315,059
Accounts receivable	6	172,260,699	91,309,619
Current portion of long-term receivables	8	13,826,726	13,541,602
Inventories		54,223,356	49,185,814
Income tax recoverable		<u>8,361,240</u>	<u>7,753,217</u>
<b>Total current assets</b>		<b><u>327,389,440</u></b>	<b><u>301,661,879</u></b>
<b>NON-CURRENT ASSETS</b>			
Long-term receivables	8	14,308,198	13,488,836
Employee benefit asset	7	47,486,000	51,763,000
Intangible asset	9	10,439,999	11,744,965
Property, plant and equipment	10	776,714,116	796,628,369
Deferred tax asset	11	<u>59,069,163</u>	<u>59,757,759</u>
<b>Total non-current assets</b>		<b><u>908,017,476</u></b>	<b><u>933,382,929</u></b>
<b>Total assets</b>		<b><u>\$1,235,406,916</u></b>	<b><u>1,235,044,808</u></b>
<b>CURRENT LIABILITIES</b>			
Accounts payable and accrued charges	12	206,719,573	100,072,171
Government of Jamaica project advances	13	60,387,026	128,458,480
Current portion of long-term debt	14	<u>-</u>	<u>60,000,000</u>
<b>Total current liabilities</b>		<b><u>267,106,599</u></b>	<b><u>288,530,651</u></b>
<b>NON-CURRENT LIABILITIES</b>			
Deferred credit	15	<u>368,799,935</u>	<u>384,855,124</u>
<b>Total non-current liabilities</b>		<b><u>368,799,935</u></b>	<b><u>384,855,124</u></b>
<b>Total liabilities</b>		<b><u>635,906,534</u></b>	<b><u>673,385,775</u></b>
<b>EQUITY</b>			
Share capital	16	100	100
Capital reserve	17	408,130,161	408,130,161
Accumulated surplus		<u>191,370,121</u>	<u>153,528,772</u>
<b>Total equity</b>		<b><u>599,500,382</u></b>	<b><u>561,659,033</u></b>
<b>Total liabilities and equity</b>		<b><u>\$1,235,406,916</u></b>	<b><u>1,235,044,808</u></b>

The financial statements on pages 3 to 33 were approved for issue by the Board of Directors on July 29, 2013 and signed on its behalf by:

 Chairman  
Hopeton Fraser

 Director  
Linford Cooper

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

**NATIONAL IRRIGATION COMMISSION LIMITED**

**Statement of Comprehensive Income**  
**Year ended March 31, 2013**

	<u>Note</u>	<u>2013</u>	<u>2012</u>
Operating revenue:			
Water sales and drainage charges		475,841,553	339,643,490
Government of Jamaica subsidy on behalf of farmers	18	529,510,668	660,317,536
Other funding for non-capital expenditure		<u>501,179</u>	<u>-</u>
		1,005,853,400	999,961,026
Cost of producing water and distributing it to farm gates		<u>( 764,141,981)</u>	<u>(712,758,173)</u>
Gross operating surplus		241,711,419	287,202,853
Amortisation of deferred credit	15	40,914,194	39,805,864
Other income	19	14,226,273	12,492,177
Administration expenses		<u>( 256,810,701)</u>	<u>(237,222,231)</u>
Profit before finance costs and taxation		40,041,185	102,278,663
Finance costs	20	<u>( 1,511,240)</u>	<u>( 8,915,354)</u>
Profit before taxation		38,529,945	93,363,309
Taxation charge	21	<u>( 688,596)</u>	<u>( 35,798,657)</u>
Profit, being total comprehensive income for the year	22	<u>\$ 37,841,349</u>	<u>57,564,652</u>

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



**NATIONAL IRRIGATION COMMISSION LIMITED****Statement of Changes in Equity  
Year ended March 31, 2013**

	<b><u>Share capital</u></b> (Note 16)	<b><u>Capital reserve</u></b> (Note 17)	<b><u>Accumulated surplus</u></b>	<b><u>Total</u></b>
Balances at March 31, 2011	100	408,130,161	95,964,120	504,094,381
Profit, being total comprehensive income for the year	-	-	<u>57,564,652</u>	<u>57,564,652</u>
Balances at March 31, 2012	100	408,130,161	153,528,772	561,659,033
Profit, being total comprehensive income for the year	-	-	<u>37,841,349</u>	<u>37,841,349</u>
Balances at March 31, 2013	<u>\$100</u>	<u>408,130,161</u>	<u>191,370,121</u>	<u>599,500,382</u>

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

# NATIONAL IRRIGATION COMMISSION LIMITED

## Statement of Cash Flows Year ended March 31, 2013

	Note	2013	2012
Cash flows from operating activities:			
Profit for the year		37,841,349	57,564,652
Adjustments to reconcile profit for the year to net cash provided/(used) by operating activities:			
Depreciation	10	47,266,366	45,469,425
Amortisation of intangible asset	9	1,304,966	1,304,996
Loss on disposal of property, plant and equipment		24,634	239,024
Amortisation of deferred credit	15	(40,914,194)	( 39,805,864)
Property, plant and equipment written-off	10	501,179	-
Employee benefit asset		4,277,000	2,643,000
Taxation	21	688,596	35,798,657
Interest income		( 1,867,917)	( 2,349,904)
Foreign exchange gain		( 2,870,280)	( 457,698)
Interest expense	20	<u>1,495,890</u>	<u>8,893,151</u>
		47,747,589	109,299,439
Decrease/(increase) in current assets:			
Resale agreements		( 1,639,904)	( 1,506,410)
Accounts receivable		(81,002,141)	5,275,921
Inventories		( 5,037,542)	1,808,796
Income tax recoverable		( 608,023)	( 579,194)
(Decrease)/increase in current liabilities:			
Accounts payable and accrued charges		107,156,991	( 61,399,384)
Government of Jamaica project advances		( 68,071,454)	32,932,174
Interest paid		<u>( 2,005,479)</u>	<u>( 10,345,491)</u>
Net cash (used)/provided by operating activities		<u>( 3,459,963)</u>	<u>75,485,851</u>
Cash flows from investing activities:			
Purchase of property, plant and equipment	10	( 27,877,926)	( 46,945,825)
Acquisition of intangible asset	9	-	( 13,049,961)
Proceeds from disposal of property, plant and equipment		-	1,222,966
Interest received		1,918,978	2,294,898
Long-term receivables		<u>( 1,104,486)</u>	<u>1,208,098</u>
Net cash used by investing activities		<u>( 27,063,434)</u>	<u>( 55,269,824)</u>
Cash flows from financing activities:			
Deferred credit	15	24,859,005	52,894,653
Long-term debt		<u>( 60,000,000)</u>	<u>( 60,000,000)</u>
Net cash used by financing activities		<u>( 35,140,995)</u>	<u>( 7,105,347)</u>
Net (decrease)/increase in cash and cash equivalents		( 65,664,392)	13,110,680
Cash and cash equivalents at beginning of the year		102,556,568	88,988,190
Effect of exchange rate fluctuations on cash held		<u>2,870,280</u>	<u>457,698</u>
Cash and cash equivalents at end of the year		<u>\$ 39,762,456</u>	<u>102,556,568</u>

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

## NATIONAL IRRIGATION COMMISSION LIMITED

### Notes to the Financial Statement Year ended March 31, 2013

#### 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 Hounslow, Braco, Mid-Clarendon, Rio Cobre, Yallahs, Beacon/Little Park, Seven Rivers, Colbeck 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) as issued by the International Accounting Standards Board (IASB), and comply with the provisions of the Jamaican Companies Act.

##### **New, revised and amended standards and interpretations that became effective during the year**

Certain new, revised and amended standards and interpretations came into effect during the current financial year. Based on the company's current operations, none of them had any significant effect on the amounts and disclosures in the financial statements.

##### **New, revised and amended standards and interpretations not yet effective:**

Certain new, revised and amended standards and interpretations have been issued which were not yet effective for the current financial year and which the company has not early-adopted. The company has assessed the relevance of all such new standards, amendments and interpretations with respect to its operations and has determined that the following may have an effect on the financial statements:

- IAS 19, *Employee Benefits* (effective annual reporting periods beginning on or after January 1, 2013) has been amended to require all actuarial gains and losses to be recognised in other comprehensive income. This change will remove the corridor method and eliminate the ability of entities to recognise all changes in the defined-benefit obligation and in plan assets in profit or loss. It also requires the expected return on plan assets recognised in profit or loss to be calculated based on the rate used to discount the defined-benefit obligation. The amendment also includes changes to the definitions and disclosure requirements in the current standard. The company is assessing the impact this amendment may have on the 2014 financial statements.

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

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

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

- Amendment to IAS 32, *Financial Instruments: Presentation* – Clarifies that an entity currently has a legal enforceable right to offset, if that right is not contingent on a future event; and enforceable both in the normal course of business and in the event of default, insolvency or bankruptcy of the entity and all counterparts. In addition, it clarifies that gross settlement is equivalent to net settlement if, and only if, the gross settlement mechanism has features that eliminate or result in insignificant credit and liquidity risk; and process receivables and payables in a single settlement process or cycle. The amendment is effective for annual reporting periods beginning on or after January 1, 2014. The company is assessing the impact this amendment may have on the 2015 financial statements.
- IFRS 9, *Financial Instruments*, is effective for annual reporting periods beginning on or after January 1, 2015. The standard retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortised cost and fair value. It eliminates the existing IAS 39 categories of held to maturity, available-for-sale and loans and receivables. For an investment in an equity instrument which is not held for trading, the standard permits an irrevocable election, on initial recognition, to present all fair value changes from the investment in other comprehensive income. The standard includes guidance on classification and measurement of financial liabilities designated as fair value through profit or loss and incorporates certain existing requirements of IAS 39 *Financial Instruments: Recognition and Measurement* on the recognition and de-recognition of financial assets and financial liabilities. The company is assessing the impact that the standard may have on the 2016 financial statements.
- IFRS 13, *Fair Value Measurement* defines fair value, establishes a framework for measuring fair value and sets out disclosure requirements for fair value measurements. It explains how to measure fair value and is applicable to assets, liabilities and an entity's own equity instruments that, under other IFRS, are required or permitted to be measured at fair value or when disclosure of fair values is provided. It does not introduce new fair value measurements, nor does it eliminate the practicability exceptions to fair value measurements that currently exist in certain standards. The standard is effective for annual reporting periods beginning on or after January 1, 2013. The company is assessing the impact that this standard may have on the 2014 financial statements.
- IAS 1, *Presentation of Financial Statements*, has been amended by the issue of a document entitled *Presentation of Items of Other Comprehensive Income*, effective for annual reporting periods beginning on or after July 1, 2012, to require a reporting entity to present separately the items of other comprehensive income (OCI) that may be reclassified to profit or loss in the future from those that would never be reclassified to profit or loss. Consequently an entity that presents items of OCI before related tax effects will also have to allocate the aggregated tax amount between these sections. The existing option to present the profit or loss and other comprehensive income in two statements has not changed. The title of the statement has changed from 'Statement of Comprehensive Income' to 'Statement of Profit or Loss and Other Comprehensive Income'. However, an entity is still allowed to use other titles. The company is assessing the impact this amendment will have on its 2014 financial statements.



## NATIONAL IRRIGATION COMMISSION LIMITED

### Notes to the Financial Statement (Continued) Year ended March 31, 2013

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

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

- *Improvements to IFRS 2009-2011 cycle* contains amendments to certain standards and interpretations and are effective for accounting periods beginning on or after January 1, 2013. The main amendments applicable to the company are as follows:
  - *IAS 16 Property, Plant and Equipment* – The standard is amended to clarify that the definition of ‘property, plant and equipment’ in IAS 16 is now considered in determining whether spare parts, standby-by equipment and servicing equipment should be accounted for under the standard. If these items do not meet the definition, then they are accounted for using *IAS 2 Inventories*.
  - *IAS 32 Financial Instruments: Presentation* – The standard is amended to clarify that *IAS 12 Income Taxes* applies to the accounting for income taxes relating to distributions to holders of an equity instrument and transaction costs of an equity transaction.

The company is assessing the impact that the amendments may have on its 2014 financial statements.

##### (b) Basis of preparation:

The financial statements are prepared on the historical cost basis 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 reporting date and the income and expenses for the year then ended. Actual amounts could differ from those estimates.

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

##### Key sources of estimation uncertainty:

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

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

### 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 (cont'd):

- Pension and other post-employment benefits:

The amounts recognised in the statements of financial position and comprehensive income 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.

- Deferred taxation:

In recognising a deferred tax asset in the financial statements, management makes judgements regarding the utilization of losses. Management makes an estimate of the future taxable profits against which the deductible temporary differences, unused tax losses or unused tax credit will be utilised.

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.

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

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

#### (b) Resale agreements:

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

Resale agreements are accounted for as short-term collateralised lending. Resale agreements are classified as loans and receivables and are carried at amortised cost. Interest 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.

#### (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 profit or loss.

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

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

#### (e) Inventories:

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

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

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

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

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



## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

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

#### (g) Impairment:

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

##### (i) Calculation of recoverable amount:

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

##### (ii) Reversals of impairment:

An impairment loss in respect of receivables 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.

#### (h) Taxation:

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

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

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

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

## NATIONAL IRRIGATION COMMISSION LIMITED

### Notes to the Financial Statement (Continued) Year ended March 31, 2013

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

(i) Accounts receivable:

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

(j) Intangible asset:

Intangible asset, which represent computer software costs, is stated at cost less accumulated amortisation and, if any, impairment losses. It is being amortised on the straight-line basis at annual rates estimated to write down the assets over their expected useful lives, not exceeding a period of ten years. Costs associated with maintaining computer software programs are recognised as an expense as incurred.

(k) Accounts payable and accrued charges:

Accounts payable and accrued charges are stated at their cost.

(l) Foreign currencies:

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

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

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

(m) Related parties:

A related party is a person or entity that is related to the entity that is preparing its financial statements (referred to in IAS 24, *Related Party Disclosures* as the ("reporting entity"), in this case the company.

(A) A person or a close member of that person's family is related to the company if that person:

- i) has control or joint control over the company;
- ii) has significant influence over the company; or
- iii) is a member of the key management personnel of the company or of a parent of the company.

(B) An entity is related to a company if any of the following conditions applies:

- i) The entity and the company are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
- ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
- iii) Both entities are joint ventures of the same third party.

**NATIONAL IRRIGATION COMMISSION LIMITED**

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

**3. Significant accounting policies (cont'd)**

**(m) Related parties (cont'd):**

**(B) An entity is related to a company if any of the following conditions applies (cont'd):**

- iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- v) Both entities are joint ventures of the same third party.
- vi) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- vii) The entity is a post-employment benefit plan for the benefit of employees of either the company or an entity related to the company. The entity is controlled, or jointly controlled by a person identified in (A).
- viii) A person identified in (A)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

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

**(n) Revenue recognition:**

Revenue from water sales and drainage services are recognised in profit or loss when water is delivered to the customer, drainage services are rendered and the amounts can be reliably measured.

Government subsidy and other funding are recognised when received.

**(o) Interest income and expense:**

Interest income and expense are recognised in profit or loss on the accrual basis, using the effective interest method, except that where collection of interest income is considered doubtful, or where payment is outstanding for 90 days or more, the cash basis is used.

**4. Cash**

	<u>2013</u>	<u>2012</u>
Cash	490,674	577,007
Bank balances	<u>39,271,782</u>	<u>101,979,561</u>
	<u>\$39,762,456</u>	<u>102,556,568</u>

**NATIONAL IRRIGATION COMMISSION LIMITED****Notes to the Financial Statement (Continued)**  
**Year ended March 31, 2013****5. Resale agreements**

At the reporting date, the fair value of underlying securities used as collateral for resale agreements was \$40,870,082 (2012: \$38,097,552).

**6. Accounts receivable**

	<u>2013</u>	<u>2012</u>
Trade receivables for water sales and drainage charges [note 25(b)(ii)]	100,186,664	64,497,777
Staff loans	23,106,198	18,055,390
Other receivable	<u>75,694,229</u>	<u>31,142,551</u>
	198,987,091	113,695,718
Provision for probable losses	<u>( 26,726,392)</u>	<u>( 22,386,099)</u>
	<u>\$172,260,699</u>	<u>91,309,619</u>

The aging of trade receivables at the reporting date was:

	<u>2013</u>		<u>2012</u>	
	Gross	Impairment allowance	Gross	Impairment allowance
Not past due	40,372,600	1,594,867	29,331,447	152,445
Past due 1-30 days	24,926,294	1,310,441	11,850,201	-
Past due 31-60 days	13,906,544	2,839,858	2,239,627	1,157,152
Past due 61-90 days	1,666,890	1,666,890	1,405,532	1,405,532
More than 90 days	<u>19,314,336</u>	<u>19,314,336</u>	<u>19,670,970</u>	<u>19,670,970</u>
	<u>\$100,186,664</u>	<u>26,726,392</u>	<u>64,497,777</u>	<u>22,386,099</u>

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

	<u>Carrying amount</u>	
	<u>2013</u>	<u>2012</u>
Balance as at April 1, 2012	22,386,099	22,014,295
Amounts written back	( 4,901,466)	( 6,192,201)
Provision recognised	<u>9,241,759</u>	<u>6,564,005</u>
Balance as at March 31, 2013	<u>\$26,726,392</u>	<u>22,386,099</u>



**NATIONAL IRRIGATION COMMISSION LIMITED**

**Notes to the Financial Statement (Continued)**

**Year ended March 31, 2013**

**7. Employee benefit asset**

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

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

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

	<u>2013</u>	<u>2012</u>
Present value of funded obligations	(641,112,000)	(620,822,000)
Fair value of plan assets	<u>764,757,000</u>	<u>722,716,000</u>
Net asset	123,645,000	101,894,000
Unrecognised actuarial gains	( 76,159,000)	( 50,131,000)
Asset recognised in the statement of financial position	<u>\$ 47,486,000</u>	<u>51,763,000</u>

**(b) Movement in present value of defined-benefit obligation:**

	<u>2013</u>	<u>2012</u>
Present value of obligation as at April 1, 2012	620,822,000	583,307,000
Benefits paid	( 48,389,000)	( 24,027,000)
Service and interest costs	73,812,000	74,626,000
Contributions	17,362,000	16,873,000
Value of purchased annuities	24,181,000	15,394,000
Actuarial gain	( 46,676,000)	( 45,351,000)
Present value of obligation at March 31, 2013	<u>\$641,112,000</u>	<u>620,822,000</u>

**(c) Movement in plan assets:**

	<u>2013</u>	<u>2012</u>
Fair value of plan assets as at April 1, 2012	722,716,000	640,989,000
Contributions paid	34,854,000	33,367,000
Actual return on plan assets	41,690,000	67,502,000
Benefits paid	( 58,685,000)	( 34,536,000)
Value of purchase annuities	<u>24,181,000</u>	<u>15,394,000</u>
Fair value of plan assets at March 31, 2013	<u>\$764,756,000</u>	<u>722,716,000</u>

**NATIONAL IRRIGATION COMMISSION LIMITED****Notes to the Financial Statement (Continued)**  
**Year ended March 31, 2013****7. Employee benefit asset (cont'd)****(c) Movement in plan assets (cont'd):**

Plan assets consist of the following:

	<u>2013</u>	<u>2012</u>
Equity fund	180,254,000	188,972,000
Fixed income fund	96,264,000	127,069,000
Mortgage and real estate fund	73,371,000	60,058,000
Money market fund	45,236,000	43,775,000
Foreign currency fund	203,907,000	70,744,000
Uninvested contributions (late deposits)	1,040,000	3,103,000
Value of purchased annuities	74,144,000	53,033,000
CPI fund	<u>90,541,000</u>	<u>175,962,000</u>
Total plan assets	<u>\$764,757,000</u>	<u>722,716,000</u>

**(d) Expense recognised in profit or loss:**

	<u>2013</u>	<u>2012</u>
Current service costs	21,639,000	23,450,000
Interest on obligation	52,173,000	51,176,000
Expected return on plan assets	<u>(52,042,000)</u>	<u>(55,489,000)</u>
Recognised in profit or loss (see note 23)	<u>\$21,770,000</u>	<u>19,137,000</u>
Actual return on plan assets	<u>4%</u>	<u>9%</u>

**(e) Principal actuarial assumptions at the reporting date (expressed as weighted averages):**

	<u>2013</u>	<u>2012</u>
Discount rate	10%	10.0%
Expected return on plan assets	9.0%	7.0%
Future salary increases	5.5%	5.0%
Future pension increases	<u>4.0%</u>	<u>4.0%</u>

**(f) Historical information:**

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Present value of defined benefit obligation	(641,112,000)	(620,822,000)	(583,307,000)	(642,335,000)	(386,301,000)
Fair value of plan assets	<u>764,757,000</u>	<u>722,716,000</u>	<u>640,989,000</u>	<u>551,868,000</u>	<u>418,605,000</u>
(Deficit)/surplus in plan	<u>\$123,645,000</u>	<u>101,894,000</u>	<u>57,682,000</u>	<u>(90,467,000)</u>	<u>32,304,000</u>
Experience adjustments arising on plan liabilities	<u>\$(46,676,000)</u>	<u>(45,351,000)</u>	<u>(170,936,000)</u>	<u>176,849,000</u>	<u>31,103,000</u>
Experience adjustments arising on plan assets	<u>\$ 20,648,000</u>	<u>1,503,000</u>	<u>5,829,000</u>	<u>(56,036,000)</u>	<u>(79,700,000)</u>

**(g) The company expects to pay \$16,735,000 in contributions to the plan in 2013/2014 (2011/2012: \$14,000,000).**

NATIONAL IRRIGATION COMMISSION LIMITEDNotes to the Financial Statement (Continued)  
Year ended March 31, 20138. Long-term receivables

	<u>2013</u>	<u>2012</u>
Refundable utility deposits	2,575,379	2,575,379
Employee loans	<u>25,559,545</u>	<u>24,455,059</u>
	28,134,924	27,030,438
Less: Current portion	<u>(13,826,726)</u>	<u>(13,541,602)</u>
	<u>\$14,308,198</u>	<u>13,488,836</u>

Employee loans are for the purchase of motor vehicles. The loans are repayable over 4-8 years. The interest rate on motor vehicle loans are 0%. The loans are measured at commercial bank interest rate and are secured by the respective motor vehicles [see note 25(b)(iii)] on which the loans are outstanding.

9. Intangible asset

	<u>Computer software</u>	
	<u>2013</u>	<u>2012</u>
Cost	<u>13,049,961</u>	<u>13,049,961</u>
Amortisation:		
At beginning of year	1,304,996	-
Charge for the year	<u>1,304,966</u>	<u>1,304,996</u>
At end of year	<u>2,609,962</u>	<u>1,304,996</u>
Net book value	<u>\$10,439,999</u>	<u>11,744,965</u>

NATIONAL IRRIGATION COMMISSION LIMITEDNotes to the Financial Statement (Continued)  
Year ended March 31, 201310. Property, plant and equipment

	<u>Building &amp; leasehold improvements</u>	<u>Utility plan</u>	<u>Furniture, fixtures &amp; equipment</u>	<u>Motor vehicles</u>	<u>Capital work-in- progress</u>	<u>Total</u>
Cost:						
March 31, 2011	60,682,820	1,691,690,673	78,983,517	44,473,156	38,666,278	1,914,496,444
Additions	16,849,169	3,301,450	16,303,189	2,626,249	7,865,768	46,945,825
Disposals	-	-	(44,120)	(4,599,534)	-	(4,643,654)
March 31, 2012	77,531,989	1,694,992,123	95,242,586	42,499,871	46,532,046	1,956,798,615
Additions	536,394	7,849,337	4,647,297	13,108,167	1,736,731	27,877,926
Disposals	-	-	(123,173)	-	-	(123,173)
Reclassification	20,435,498	8,757,042	-	-	(29,192,540)	-
Written-off	-	-	-	-	(501,179)	(501,179)
March 31, 2013	<u>98,503,881</u>	<u>1,711,598,502</u>	<u>99,766,710</u>	<u>55,608,038</u>	<u>18,575,058</u>	<u>1,984,052,189</u>
Depreciation:						
March 31, 2011	13,568,002	1,037,108,369	49,307,344	17,898,770	-	1,117,882,485
Charge for the year	1,703,453	32,210,840	8,474,497	3,080,635	-	45,469,425
Eliminated on disposals	-	-	(12,500)	(3,169,164)	-	(3,181,664)
March 31, 2012	15,271,455	1,069,319,209	57,769,341	17,810,241	-	1,160,170,246
Charge for the year	2,003,819	31,940,860	9,411,712	3,909,975	-	47,266,366
Eliminated on disposals	-	-	(98,539)	-	-	(98,539)
March 31, 2013	<u>17,275,274</u>	<u>1,101,260,069</u>	<u>67,082,514</u>	<u>21,720,216</u>	<u>-</u>	<u>1,207,338,073</u>
Net book values:						
March 31, 2013	<u>\$81,228,607</u>	<u>610,338,433</u>	<u>32,684,196</u>	<u>33,887,822</u>	<u>18,575,058</u>	<u>776,714,116</u>
March 31, 2012	<u>\$62,260,534</u>	<u>625,672,914</u>	<u>37,473,245</u>	<u>24,689,630</u>	<u>46,532,046</u>	<u>796,628,369</u>
March 31, 2011	<u>\$47,114,818</u>	<u>654,582,304</u>	<u>29,676,173</u>	<u>26,574,386</u>	<u>38,666,278</u>	<u>796,613,959</u>

Included in building and leasehold improvements is leasehold improvements with a net book value of \$78,485,161 (2012: \$58,513,269).

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



# NATIONAL IRRIGATION COMMISSION LIMITED

## Notes to the Financial Statement (Continued) Year ended March 31, 2013

### 11. Deferred tax asset

Deferred tax asset is attributable to the following:

	<u>2013</u>	<u>2012</u>
Property, plant and equipment	29,788,118	27,755,071
Accounts receivable	( 29,102)	( 49,356)
Accounts payable and accrued charges	12,591,161	15,133,934
Unrealised exchange gains	-	152,566
Tax losses	32,726,239	35,433,606
Intangible asset	( 1,761,753)	( 1,413,746)
Employee benefit asset	(14,245,500)	(17,254,316)
	<u>\$59,069,163</u>	<u>59,757,759</u>

Movement in temporary differences during the year:

	<u>Balance at</u> <u>March 31, 2011</u>	<u>Recognised</u> <u>in income</u> [Note 21(a)(ii)]	<u>Balance at</u> <u>March 31, 2012</u>	<u>Recognised</u> <u>in income</u> [Note 21(a)(ii)]	<u>Balance at</u> <u>March 31, 2013</u>
Property, plant and equipment	24,787,036	2,968,035	27,755,071	2,033,047	29,788,118
Accounts receivable	( 31,021)	( 18,335)	( 49,356)	20,254	( 29,102)
Accounts payable and accrued charges	12,544,231	2,589,703	15,133,934	(2,542,773)	12,591,161
Unrealised foreign exchange gain	( 288,449)	441,015	152,566	( 152,566)	-
Tax losses	76,709,952	(41,276,346)	35,433,606	(2,707,367)	32,726,239
Intangible asset	-	( 1,413,746)	( 1,413,746)	( 348,007)	( 1,761,753)
Employee benefit asset	(18,165,333)	911,017	(17,254,316)	3,008,816	(14,245,500)
	<u>\$95,556,416</u>	<u>(35,798,657)</u>	<u>59,757,759</u>	<u>( 688,596)</u>	<u>59,069,163</u>

### 12. Accounts payable and accrued charges

	<u>2013</u>	<u>2012</u>
Accrued vacation leave	45,776,605	46,010,937
Customer deposits	9,156,735	7,348,007
Trade payables	123,756,458	33,436,177
Provision for litigation settlement	3,684,256	-
Other accruals	3,107,700	2,261,270
Other payables	<u>21,237,819</u>	<u>11,015,780</u>
	<u>\$206,719,573</u>	<u>100,072,171</u>

**NATIONAL IRRIGATION COMMISSION LIMITED**

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

13. Government of Jamaica project advances

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

	<u>2013</u>	<u>2012</u>
National Irrigation Development Plan (NIDP)		
- Implementation [see below]	31,786,256	116,942,324
Miscellaneous capital projects	2,733,146	3,950,490
Rain Water Harvesting Project	-	3,309,933
GOJ Agricultural Productivity Projects	21,608,839	-
Fishing Beach Projects	<u>4,258,785</u>	<u>4,255,733</u>
	<u>60,387,026</u>	<u>128,458,480</u>

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

14. Long-term debt

	<u>2013</u>	<u>2012</u>
Financial Sector Adjustment Company Limited (FINSAC)	-	60,000,000
Less: current portion	<u>-</u>	<u>(60,000,000)</u>
Non-current portion	<u>\$ -</u>	<u>-</u>

In June 2010, the company received a loan from FINSAC of \$120,000,000. The loan was unsecured and is repayable in two equal instalments on June 30, 2011 and June 30, 2012. Interest was charged on the loan on the reducing balance at a rate of 10% per annum. The loan was repaid during the year.

# NATIONAL IRRIGATION COMMISSION LIMITED

## Notes to the Financial Statement (Continued)

Year ended March 31, 2013

### 15. Deferred credit

	Balance 2011	Movement during 2012	Balance 2013	Movement during 2013	Balance 2013
Grant for acquisition of property, plant and equipment (net of disposals)	176,168,353	27,510,833	203,679,186	52,815,993	256,495,179
Property, plant and equipment gifted by Agro 21 Corp., net, in 1991	1,198,152	-	1,198,152	-	1,198,152
Property, plant and equipment gifted by Ministry of Agriculture	1,203,061	-	1,203,061	-	1,203,061
Property, plant and equipment transferred from NIDP Project	1,896,725	-	1,896,725	-	1,896,725
Property, plant and equipment, other than utility plant, gifted by district irrigation authorities	3,520,295	-	3,520,295	-	3,520,295
Utility plant acquired under CDB/IDB 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	1,233,211	-	1,233,211	-	1,233,211
Irrigation pipes gifted by Chinese Government	41,993,367	-	41,993,367	-	41,993,367
Computers funded by the NIDP Project	14,546,237	-	14,546,237	-	14,546,237
Global Positioning System (GPS) units funded by the NIDP Project	854,367	-	854,367	-	854,367
Motor vehicle acquired out of NIDP project funds	2,945,000	-	2,945,000	-	2,945,000
Motor vehicle gifted by the Ministry of Agriculture and Fisheries	-	950,000	950,000	-	950,000
Customer Relationship Management System (CRMS) funded by the NIDP	-	13,049,961	13,049,961	-	13,049,961
Expenditure on contracts-in-progress (net of amounts expensed) (note 10) out of GOJ project advances	35,148,187	11,383,859	46,532,046	(27,956,988)	18,575,058
	1,013,744,970	52,894,653	1,066,639,623	24,859,005	1,091,498,628
Amortisation transferred to profit or loss	( 641,978,635)	(39,805,864)	( 681,784,499)	(40,914,194)	( 722,698,693)
	<u>\$ 371,766,335</u>	<u>13,088,789</u>	<u>384,855,124</u>	<u>(16,055,189)</u>	<u>368,799,935</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 Statement (Continued)**  
**Year ended March 31, 2013**

**16. Share capital**

	<u>2013</u>	<u>2012</u>
Authorised, issued and fully-paid:		
100 ordinary shares at no par value	<u>\$100</u>	<u>100</u>

**17. 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.

**18. Government of Jamaica subsidy on behalf of farmers**

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

In light of the last review conducted by the Office of Utilities Regulation, the company estimated that the subsidy would need to be \$834.0 million (2012: \$956.6 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). Of this amount, \$529.5 million (2012: \$660.3 million) was approved by Parliament and paid to the company.

**19. Other income**

	<u>2013</u>	<u>2012</u>
Finance income:		
Investments and cash and cash equivalents	1,867,917	1,583,373
Other	810,135	766,531
Amortisation of interest on concessionary loans	4,406,896	4,083,064
Exchange gain	2,870,280	457,698
Service fees	1,428,401	1,870,528
Loss on disposal of property, plant and equipment	( 24,635)	( 239,024)
Insurance settlements	-	164,272
Miscellaneous	<u>2,867,279</u>	<u>3,805,735</u>
	<u>\$14,226,273</u>	<u>12,492,177</u>

**20. Finance costs**

	<u>2013</u>	<u>2012</u>
Bank overdraft	15,350	22,203
Long-term debt	<u>1,495,890</u>	<u>8,893,151</u>
	<u>\$1,511,240</u>	<u>8,915,354</u>

**NATIONAL IRRIGATION COMMISSION LIMITED**

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

**21. Taxation**

- (a) The provision for income tax is computed at 30% (2012:33½%) of the results for the year, as adjusted for tax purposes, and is made up as follows:

	<u>2013</u>	<u>2012</u>
(i) Current tax charge:		
Provision for charge on current year's profits	-	-
(ii) Deferred tax:		
Origination and reversal of temporary differences (note 11)	(2,018,771)	( 5,477,689)
Tax losses	<u>2,707,367</u>	<u>41,276,346</u>
Actual tax charge recognised	<u>\$ 688,596</u>	<u>35,798,657</u>

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

The effective tax rate charge of 1.79% (2012: 38.34%) on pre-tax profits of \$38,529,945 (2012:\$93,363,309) compared to the statutory rate of 30% (2012: 33½%).

The actual taxation charge differs from the "expected" tax charge for the year as follows:

	<u>2013</u>	<u>2012</u>
Profit before taxation	<u>\$38,529,945</u>	<u>93,363,309</u>
Computed "expected" tax charge	11,558,984	31,117,991
Tax effect of treating items differently for financial statements and tax reporting purposes -		
Depreciation, amortisation and capital allowances	3,902,292	6,345,629
Foreign exchange gain, capital	( 708,518)	( 593,566)
Amortisation of deferred credits	(12,274,258)	(13,267,294)
Expenses not allowed for tax purposes	1,142,621	175,703
Loss on disposal of property, plant and equipment	7,390	79,667
Interest on concessionary loans	( 37,919)	( 332,511)
Effect of change in tax rates	6,562,583	-
Tax losses	-	7,041,375
Other	<u>( 9,464,579)</u>	<u>5,231,663</u>
Actual tax charge recognised	<u>\$ 688,596</u>	<u>35,798,657</u>

- (c) During the year the corporate income tax for non-regulated entities was reduced from 33½% to 25%. A surtax of 5%, in addition to the corporate income tax of 25%, is levied on unregulated entities with gross income equal or greater than \$500 million.



**NATIONAL IRRIGATION COMMISSION LIMITED****Notes to the Financial Statement (Continued)**  
**Year ended March 31, 2013****22. Profit for the year**

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

	<u>2013</u>	<u>2012</u>
	\$	\$
Directors' emoluments [note 24(c)]:		
Fees	2,174,500	2,080,500
Travel	2,314,873	2,146,346
Management remuneration	-	2,250,102
Auditors' remuneration	1,900,000	1,900,000
Depreciation	<u>47,266,366</u>	<u>45,469,425</u>

**23. Employee numbers and costs**

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

	<u>2013</u>	<u>2012</u>
Full-time	151	152
Part-time	13	17
Other	<u>35</u>	<u>40</u>
	<u>199</u>	<u>209</u>

The aggregate payroll costs for these persons were as follows:

	<u>2013</u>	<u>2012</u>
Salaries	326,100,753	306,241,801
Statutory payroll contributions	10,291,479	15,465,921
Pension benefit cost (net of contribution) [note 8(d)]	21,770,000	19,137,000
Travel and subsistence	85,505,650	77,013,938
Gratuities	4,950,444	4,174,478
Training	3,869,705	2,454,229
Accrued vacation leave	4,096,118	4,173,730
Insurance scheme	20,084,431	23,529,061
Staff welfare	<u>4,890,851</u>	<u>4,170,496</u>
	<u>\$481,559,431</u>	<u>456,360,654</u>

**24. Related party balances and transactions**

Identity of related parties:

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

	<u>2013</u>	<u>2012</u>
	\$	\$
Accounts receivable:		
Directors	247,603	75,263
Long-term receivables:		
Employee loans - key management personnel	<u>2,354,167</u>	<u>1,583,750</u>

**NATIONAL IRRIGATION COMMISSION LIMITED**

Notes to the Financial Statement (Continued)

Year ended March 31, 2013

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

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

	<u>2013</u>	<u>2012</u>
	\$	\$
Compensation paid to key management personnel:		
Directors' emoluments (note 22)	4,489,373	6,476,948
Salaries to other key management personnel	27,925,860	33,080,294
Post-employment benefits	<u>792,000</u>	<u>685,000</u>
	<u>33,207,233</u>	<u>40,242,242</u>
Interest income from directors	<u>655,570</u>	<u>89,785</u>

25. Financial risk management

- (a) Overview:

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

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

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

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

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

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

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

### 25. Financial risk management (cont'd)

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

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

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

#### (b) Credit risk:

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

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

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

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

##### (ii) Trade receivables

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

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

NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

25. Financial risk management (cont'd)

(b) Credit risk (cont'd):

(ii) Trade receivables (cont'd)

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.

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

*Exposure to credit risk*

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

	<u>Carrying amount</u>	
	<u>2013</u>	<u>2012</u>
St. Thomas	491,402	453,890
St. Catherine	39,525,775	28,531,610
Clarendon	26,391,834	13,149,812
St. Elizabeth	31,420,856	20,359,399
Trelawny	2,052,271	1,722,188
St. James	<u>304,526</u>	<u>280,878</u>
	<u>\$100,186,664</u>	<u>64,497,777</u>

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

(iii) Long-term receivables

The company grants loans to its employees to facilitate the purchase of motor vehicles. Loans are repayable over a period of 4-8 years; however, the repayment period may not exceed the expected remaining years to retirement of individual employees. Management does not expect any counterparty to fail to meet his/her obligations.

**NATIONAL IRRIGATION COMMISSION LIMITED**

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

25. Financial risk management (cont'd)

(b) Credit risk (cont'd):

(iii) Long-term receivables (cont'd)

*Collateral held against financial assets*

Loans granted are secured by the registration of a lien on the motor vehicles acquired as well as a bill of sale. Estimates of the fair values are based on the sum insured of the collateral, at each reporting date. The fair value of these collateral as at March 31, 2013 was \$77,815,808 (2012: \$63,720,500).

(c) Liquidity risk:

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

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

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

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

(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

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 reporting date was:

	<u>2013</u>	<u>2012</u>
	US\$	US\$
Cash and cash equivalents	<u>240,414</u>	<u>287,112</u>



NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

25. 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, 2013 was: US\$1.00 = J\$97.9353 (2012: J\$87.1154).

*Sensitivity analysis*

A 1% (2012: 1%) strengthening of the US\$ against the Jamaica dollar would have increased profit by \$235,474 (2012: \$197,091). A 10% (2012: 1%) weakening would have decreased profit by \$2,354,478 (2012: \$197,091). This analysis assumes that all other variables, in particular, interest rates, remain constant. The analysis is performed on the same basis as for 2012.

(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:

	<u>Carrying amount</u>	
	<u>2013</u>	<u>2012</u>
Resale agreements	38,954,963	37,315,059
Employee loans	<u>23,106,198</u>	<u>18,055,390</u>
	<u>\$62,061,161</u>	<u>\$55,370,449</u>

These financial assets are carried at cost and bear interest at fixed rates.

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

(e) Operational risk:

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

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

## NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)  
Year ended March 31, 2013

### 25. Financial risk management (cont'd)

#### (e) Operational risk (cont'd):

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

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

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

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

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

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

#### (f) Capital management:

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

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

NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statement (Continued)

Year ended March 31, 2013

26. Fair values

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

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

The fair value of long-term receivable approximates to its carrying value as no discount is expected on settlement.

27. Contingent liabilities

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

The company made an appeal against the claim which was heard on 26<sup>th</sup> January 2010. The appeal was allowed with cost. A determination of the cost is currently being made to bring closure to the above matter. No provision has been made in these financial statements.

- (ii) A claim was made against the company by an ex-employee in which the court awarded cost to the ex-employee. An amount of \$3,684,256 is included in accounts payable (note 12) pending any claims.

28. Capital commitment

Pipes valuing \$24,000,000 were being procured for the Vernamfield Irrigation System Project, which is to be funded by grant from the Sugar Rehabilitation Unit. No provision has been made in these financial statements.

# Corporate Data

## **REGISTERED OFFICE**

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## **THE OPERATION CENTRE**

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St. Catherine  
Tel: 984-0625/5792

## **DISTRICT OFFICES:**

**St. Catherine Irrigation District**  
Rio Cobre Office  
17 Barrett Street, Spanish Town  
St. Catherine  
Tel: 984-2334/4022  
Fax: 984-8401

## **Mid-Clarendon Irrigation District**

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

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

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St. Elizabeth  
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Fax: 965-0232

## **St. Dorothy Office**

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St. Catherine  
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## **Yallahs Irrigation District**

Yallahs, St. Thomas  
Tel: 706-3159

## **Braco Irrigation District**

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