Why isn’t IWRM working in the Caribbean?

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Abstract

At the global level, it appears that acceptance for integrated water resources management (IWRM) has been growing. In a status report by the United Nations in 2012, 82% of the 134 nations which responded indicated that they had embarked on reforms to achieve integrated approaches to water resources management. Over the last decade in the Caribbean there have been similar IWRM agendas. However, so far efforts to embed IWRM in the region have yielded few results. Hence it is appropriate to ask what has been the progress with adopting an integrated approach to water management in the Caribbean and are there lessons that can be learnt? The paper seeks to provide some answers to those two questions. An overview of the various national and regional IWRM initiatives over the last decade provides the basis on which the evaluation of the successes or otherwise is made. This is complemented by an assessment of the enabling conditions and the extent to which they have been able to support developments. The analysis of contributing factors uses a stakeholder characterisation typology developed by Mitchell and Agle. Finally, the need for ‘brokering’ actors as an integral part of policy reform is identified as a necessary element of success.

Keywords: Caribbean; Institutional reform; IWRM; Stakeholder analysis; Water policy

1. Introduction

Superficially, it would appear that integrated water resources management (IWRM) has been gaining ground at national policy levels globally. For the Rio +20 Conference the United Nations (UN) published a Status Report on Integrated Approaches to Water Resources Management (UN, 2012). In it, some 134 nations responded to the survey and of these 80% indicated that since 1992 they had embarked on reforms to improve the enabling environment and integrated approaches to water resources management but only 50% indicated that they had made significant progress towards developing and implementing IWRM plans. However, concerns about the reality of implementing integrated IWRM have been raised and there are questions about how it is being put into practice (Biswas, 2008).

In 2002, at the Johannesburg World Summit on Sustainable Development, the Caribbean states also committed to work towards developing IWRM plans and water use efficiency plans by 2005. For Small

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Island Developing States, realising these ambitious commitments was always going to be challenging. These states are particularly vulnerable to increased stresses on their water resources through the limitations of land, population, and water resources and the need for economic development and social well-being. The region contains some of the world’s most fragile economies and states vulnerable to impacts of projected changes in climate along with constrained development opportunities. Over the last decade much work has taken place in the Caribbean to push forward the IWRM agenda, adopting a ‘source to sea’ approach as the integrating framework, as discussed in section 3.1. Despite the fact that the Caribbean region has shown considerable understanding of and sensitivity to the need for IWRM, so far, efforts to embed IWRM in national policies and legislation have yielded few tangible benefits, particularly when these efforts have focused on institutional frameworks.

Given that a significant length of time has elapsed since the 2002 Johannesburg Summit and now with the formulation of the Sustainable Development Goals it is time to take stock. Furthermore, for over a decade there have been on-going interventions to mainstream IWRM in the Caribbean states. It is appropriate to ask: what progress has been made towards adopting an integrated approach to water management in the Caribbean and are there lessons that can be learnt? In seeking to answer this, the paper focuses on the 15 states in the English-speaking Caribbean, with their shared language and culture, and political similarities.

In the following section the background to the region and the focus of the review is provided followed by an overview of the IWRM-related developments that have taken place in the various states and territories. Section 4 discusses some of the themes that have a bearing on the extent to which the process of IWRM has been taken up at the regional and national level. The final section provides some thoughts on what might be learnt from the Caribbean’s experience to date in seeking to implement IWRM.

2. Background

2.1. The Caribbean

The waterscape of the Caribbean is rich and diverse; it is home to some of the most water-scarce nations on the planet, such as Barbados and the Bahamas. Yet in close proximity there are countries with abundant fresh water resources, such as Guyana and Belize. The term ‘Caribbean region’ provides a unifying idea, yet it has multiple uses and masks many differences among the sovereign states, overseas departments, and the dependent territories that exist within the region, Figure 1. The majority of countries became independent during the period of decolonisation that lasted from the early 19th century, in the case of Haiti, to the 1980s. Some of the former colonial powers though, such as France, the UK and the Netherlands still maintain considerable influence over their Caribbean territories in terms of policies.

The various population mixes, languages, and cultures reflect the colonial and political histories of the various states and territories. Regionalism and collective coalitions have provided a means for the Caribbean states to play an important role in international politics that their individual small size might otherwise have prevented. This is facilitated through a number of institutions, such as the Caribbean Community (CARICOM), the Association of Caribbean States, the Organisation of Eastern Caribbean States (OECS), and others. Thus, the term Caribbean region can be interpreted in differing ways and as a result is often deliberately used loosely.
According to UN data, the Caribbean population more than doubled from 17 million in 1950 to 41 million in 2010 (United Nations Department of Economic and Social Affairs (UNDESA), 2013). However, as a general rule, water distribution infrastructure built in the 19th and 20th centuries did not anticipate this growth. This has led to many cases of water stress and scarcity, particularly in Antigua and Barbuda, Barbados, and Saint Kitts and Nevis (United Nations Environment Programme (UNEP), 2008). On top of this a high proportion of the population in many Caribbean states and territories live in urban areas.

2.2. Politics of water management in the Caribbean

The varied history of European colonisation in the Caribbean gave rise to differing legal arrangements with respect to water management. The growth of urban centres and the diffusion of ideas about providing water services in the middle to late 19th century influenced the institutional and legal arrangements governing those services. The predominant arrangement was for island administrations to provide water services as a municipal or government responsibility. Such arrangements survived well into the post-colonial period (Cashman, 2012). In Barbados for example, which became independent in 1966, it was not until 1980 that the Barbados Water Authority (BWA) took over from the Waterworks Department. This is typical for the region. In Jamaica the National Water Commission, responsible for water service provision, also came into being in 1980.
Little distinction was made between responsibilities for water services and the management of water resources as these were centralised within the same organisation. This arrangement reflected a predominant supply-side paradigm that conceived of water resources narrowly as an integral extension of water supply services (Cashman, 2012). One of the features of this dispensation was the relatively high ratio of un- and semi-skilled to professional staff in these departments. This has tended to privilege the day-to-day operation and maintenance activities while at the same time giving governments a means of providing employment opportunities. However, this focus on operation and maintenance has resulted in a relative deficiency of professional cadre resources and posts whose roles are to develop strategic actions required to ensure the long-term sustainable management of services and resources.

The centralising tendency within water sector management was underpinned by the political dispensations that came into being after independence. These sought to address a legacy of neglect and marginalisation of large sections of the population on the grounds of colour and race. Part of the measures implemented were programmes to greatly expand provision and access to basic services, such as health care, education, water and sanitation. A strong social welfare stance characterised governments throughout the region, The State assumed an important role in the economy and acted as a guarantor of essential services, water being the prime example of this (Portes et al., 1997). Evidence of this can be seen in the development of varying forms of social partnerships between government, trade unions, and the private sector that sought to improve the conditions of the workforce and provide a way to mitigate fluctuations in the economy, particularly economic downturns, through a collective shouldering of the burden by each actor (Springer, 2010).

Consequently, the public have come to expect that governments will provide services by guaranteeing financial support to ensure that services are affordable. Almost inevitably, water services have become politicised (Batley, 2004). With the possible exceptions of Jamaica and Saint Lucia, any changes in water tariffs have to be approved by the responsible minister. Hence, it is political rather than financial considerations that play a significant role in any decision about price rises. Many water service providers are governed by boards appointed by ministers and are required to resign at a change of government. In effect, therefore, members of the board are political appointees whose positions depend on their acceptability to the incoming regime. Such a system of governance provides parties with opportunities to forward their particular interests and gain favour with their electorates. As one political commentator observed, ‘The Caribbean’s political culture [is] based on authoritarian governance’ (Hinds, 2001) characterised by a tendency to centralise executive power and decision-making within a cabinet rather than in parliament.

At the national level, water governance is rooted in a state-based model of management, with the majority of the salient stakeholders being located within the public sectors. Caribbean actors outside the public sector, such as the private sector, customers, non-governmental organisations (NGOs), and community-based organisations (CBOs), seldom achieve the level of influence that can be witnessed in other parts of the world. Furthermore, a feature of this general arrangement is a lack of a system of checks and balances which would allow a degree of accountability on the part of those responsible for the management and provision of water services. The system of water governance, which has evolved since the mid-20th century, has proved itself to be resilient to change, exhibiting not so much inertia but rather ‘lock-in’ (Neff, 2013). With the exception of Jamaica, Saint Lucia, and Trinidad and Tobago there has been little fundamental reform of the national institutional frameworks governing water. In Trinidad and Tobago, a process of change is presently being undertaken by the utility sector, with the intention of separating the service function from resource management.
There are some similarities across Caribbean states in terms of the strategic issues they are facing, for example high levels of water loss. However, there are also some notable differences, for example in the relative use of water for agriculture, industry and municipal purposes, see Figure 2. Trinidad and Tobago, despite having relatively abundant rainfall and an extensive water supply system that services 95% of the population, is not able to provide a reliable and consistent 24-hr/7-day supply due to operational problems and high levels of leakage. In the Eastern Caribbean islands seasonal water shortages are a growing issue of concern along with aging infrastructure. In Barbados, reliant on groundwater, abstract levels equal the recharge rate and along with high system losses make the country vulnerable to the periodic droughts. For Saint Kitts and Nevis the over-exploitation and pollution of groundwater resources is becoming a critical issue, as it is too for Antigua and Barbuda though this is off-set by a heavy reliance on desalination which increases the cost of water. Jamaica has a relatively well developed institutional structure but its challenge is that although, like Trinidad, it has relatively abundant rainfall, the water resources are not where the centres of water demand are so that, for example, the Greater Kingston metropolitan area experiences water shortages from time to time.

3. Policy related developments

3.1. Regional and sub-regional IWRM developments

In 2010 the CARICOM\(^1\) agreed upon the terms of reference for a consortium of water institutions to lead to the development of a Common Water Framework. The framework was to assist member states with developing and implementing their IWRM plans, facilitate the assessment of national water resources, identify priority issues, and assist with the updating of water legislation. However, the lack of funding and the voluntary nature of the consortium have severely hampered its ability to address any of the objectives set out in the terms of reference. As a result, IWRM-related activities have taken place in the absence of any regional level coordination and been specific interventions at the national level by supra-national bodies.

Among the examples of this approach has been the Global Environment Facility’s (GEF) Caribbean-wide Integrated Water and Coastal Areas Management (IWCAM) project, completed in 2011, which provided support for the development of national IWRM plans. It also reviewed policy, legislation, and institutional structures in the participating countries (GEF-IWCAM, 2014). Other initiatives have included the Global Water Partnership Caribbean’s set of IWRM road maps for individual countries (GWP-C, 2014) and other capacity building measures. More recently, in 2012, the Secretariat of the OECS commissioned the development of a model water policy and legislation.

3.2. National IWRM developments

Antigua and Barbuda’s water management is still guided by the 1973 Public Utilities Act, under which responsibilities for water management are dispersed across a number of agencies within

\(^1\) The CARICOM is a regional grouping of 20 countries: 15 Member States and 5 Associate Members. CARICOM provides a governance and coordination framework that rests on: economic integration; foreign policy coordination; human and social development; and security. CARICOM has a quasi-Cabinet of individual Heads of Government, with specific portfolios.
government, including the Water Division in the Antigua Public Utilities Authority. Regulatory measures are minimal to non-existent (United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC), 2007). In 2011, Antigua and Barbuda completed the preparation of an IWRM road map, driven by government technocrats responding to issues of increasing water scarcity (insufficient water from groundwater sources and desalination plants to meet demand), competition from agriculture, and the increasing exploitation of groundwater. It focuses on integrating strategies and activities to improve water, wastewater, land management, and disaster preparedness.

In the Bahamas a national dialogue to identify key issues was initiated (Merla & Simmons, 2012) which was supported by the GEF-IWCAM project. There is though, a requirement for a national water management plan contained within the Bahamas’ climate change policy.

Barbados, being in the top 20 water scarce countries (Ekwue, 2010), has potentially much to gain from adopting IWRM which would promote better water management. However, the institutional arrangements in the water sector have not changed significantly since the 1980s. An attempt was made in 1997 to develop a National Water Resources and Development policy, which was taken to the cabinet in 2000, but was shelved. In 2008 an IWRM road map was formulated but despite widespread national consultation and stakeholder buy-in it was not possible to get the responsible minister to accept it. The only significant advance has been the preparation of the economic regulation of the BWA, under the terms of a loan from the Inter-American Development Bank (IDB).

Belize’s geographical position on the edge of the Caribbean region within Central America has placed it very much on its own with respect to mainstream IWRM activities in the Caribbean. A process of water policy development and legislative change was commenced in 1993 with technical and financial assistance from the Food and Agricultural Organization (FAO). That process stalled, though there were
attempts to revive it in 1998, 2003, and 2005. Progress was realised as a result of severe flooding in 2008 and in 2010 with support from the CARICOM Climate Change Centre, legislation governing water resources management was passed (Cashman, 2012).

In Dominica, a water policy reform process was mobilised under two initiatives supported by the European Union (EU). In 2005 a policy statement was developed, but was never ratified and in 2008 an extensive institutional review to improve the management and operational framework was instituted. In 2011 under GEF-IWCAM, further consultations were held on a national IWRM policy and guidance paper for ratification of the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol) by the Cabinet. Although this received support from technocrats in the water sector and from the minister responsible, the proposals have yet to be ratified by the cabinet (Caribbean Environmental Health Institute (CEHI), 2013).

Grenada’s water resources policy development process was supported initially with contributions from the GEF-IWCAM project and from GWP-C, with the formulation of an IWRM road map in 2007. This work provided the foundation for the FAO-assisted national policy for water management that was required to be in place under an EU financed water supply development project. The draft National Water Policy and Implementation plan was presented and accepted by the cabinet in 2007 (Merla & Simmons, 2012; CEHI, 2013). However, in 2008 there was a change of government but because of the persistence of national stakeholders who had developed the policy, the new minister was persuaded to accept the plan.

In 2000, with the assistance of foreign donors, the Guyanese water sector was reorganised, leading to setting up of Guyana Water Inc. (GWI). Since 2010, interest in IWRM has increased, actively supported by the former Minister of Housing and Water and the National Water Council. With assistance from GWP-C work was commenced on an IWRM road map for the country. Although presented to the minister, it was not taken to the cabinet. However, GWI started to prepare a framework for the management of water resources through its Water Resources Department, coordinating with the Ministry of Agriculture. A recent change in government (2015) will delay developments.

The water sector in Jamaica has undergone the most organisational change away from the centralised government service provision model (Cashman, 2012). The current institutional framework was set up in the late 1990s with the assistance of the IDB. In 2013 Jamaica reorganised ministerial responsibilities and created the Ministry of Water, Land, Environment and Climate Change. Jamaica has very much sought to adopt and operationalise IWRM and is something of an example for other countries in the region. One of the biggest challenges though, is the loss of skilled water sector professionals.

Under the GEF-IWCAM project a Strategic Plan for the Water Resources Management Agency was developed for Saint Kitts and Nevis, emerging from the development of a National Water Policy. However, there is little progress in implementing the provisions. Saint Kitts and Nevis, as a member of the OECS, may well benefit from the development of the OECS Model Water Policy and Legislation (CEHI, 2013). These processes are being driven by national water sector practitioners.

Saint Lucia provides an example of how change in the water sector has been promoted by outside agencies. With financial assistance from the EU Water Resources Management project and the Organization of American States, a National Water Policy was developed and legislation passed (Government of Saint Lucia (GoSL), 2004). In 2010 an IWRM road map was finalised under the GEF-IWCAM project (CEHI, 2013). In addition to this the GEF-IWCAM project also gave rise to a number of CBOs active in local water management initiatives. It has though been making steady progress in improving its sector management.
On the island of Saint Vincent all the water is supplied by the Central Water and Sewerage Authority. However throughout the Grenadines these small islands are mostly self-supplied, using a variety of approaches. Between 2008 and 2010, an EU-funded project looked at the management of water resources in Saint Vincent. This produced a draft policy document on water resources management including the proposal to set up a Water Resources Management Agency, as a way of promoting IWRM. Although widely endorsed by those in the water sector, no further action was taken (CEHI, 2013).

A degree of impetus for reforming the Trinidadian water sector arose out of a World Bank public sector institutional strengthening exercise in the 1990s. One of the outcomes was the 2000 water resources management strategy study which recommended the adoption of IWRM and the need to establish an effective and financially autonomous institutional framework (Government of Trinidad and Tobago (GoTT), 2005). The resulting National Water Resources Management Policy was adopted in 2005 but has only partly been put into practice due to a lack of consensus among the various agencies. Anecdotal evidence suggests that the policy process was driven by the then minister, but when the minister was transferred the process lacked the necessary political patronage to progress. A notable innovation was the creation of the Regulated Industries Commission (RIC) to oversee the activities of the Water and Sewerage Authority though there continue to be difficulties facing the RIC in carrying out its functions (Cashman, 2012). Again, the impact of recent political changes (2015) will have to be awaited.

4. Adoption of IWRM – so where are we?

4.1. Public participation

In spite of the acknowledged failings, particularly in service delivery, consumers have shown very little appetite for change, and so the existing arrangements continue. Suggestions of privatisation, or even management contracts, have generally been met with opposition from many quarters not least the Unions, e.g. Saint Lucia. There is little conviction that changes would bring about any improvement in the quality of service (Batley, 2004). Furthermore, given the monopolistic way water services are organised and provided, customers have little influence over the service provider or any ability to hold them to account. The type of corporatisation of Caribbean water service providers also creates obstacles between citizens, politicians, administrators, and service providers. These lessen the ability of citizens and customers to exert influence on the service provider. This appears to be concomitant with the weak regime for consumer protection and little understanding by the general public of their entitlements with regard to quality of service. Within this arrangement, it is the minister’s voice that carries the weight and influence.

What is interesting is that the often-employed exhortation that ‘the public needs to be educated about water matters’, implies that the public is uneducated in this respect. As a result, within some projects efforts have been made to raise levels of awareness. But they have done so without first establishing what the level of understanding actually is. Implied, but not stated, is that somehow the responsibility for at least some of the problems being experienced lies with the consumers. Hence, if they were to change their ways, things would be better. Paradoxically, none of the projects or efforts reported has addressed the need to educate the service providers to be responsive to the needs of their customers.
and citizens. This is clearly not in line with one of the Dublin Principles on which IWRM is based – the importance of stakeholder involvement and a participatory approach to water management involving users at all levels (Jønch-Clausen, 2004).

4.2. Political support

Evidence also indicates that the lack of public interest in change is compounded by the perceived political risks of change (Batley, 2004). The risks arise from raising water rates, improved collection of unpaid bills, de-politicising investment decisions, loss of political patronage, and changes in employment levels. In contrast, the potential benefits arising from more efficient service provision are less visible, often long-term, and difficult to quantify and convey to an electorate. Since politicians are elected they have a limited period of time within which to effect change and realise the benefits; we may say that they have a high personal discount rate. This suggests the valuing of immediate results more highly than longer-term benefits. It appears that the incentives for politically driven reform are low. Only when there has been sustained support at the highest political level has there been a degree of success.

Potentially, the cabinet-based approach to political decision-making in much of the Caribbean and the subordinate role of parliaments could provide a mechanism for mobilising political support, if ministers become champions of reform, but this does not seem to have been the case. There has been ministerial championing of efforts to inculcate IWRM into the workings of the water sector in Grenada, Guyana, Jamaica, and Saint Kitts and Nevis, but with mixed results, as reflected in the previous section. The perception at the political level that the disadvantages of reform outweigh the advantages helps to explain the historically slow pace at which any environment-centred reforms happen.

Support for this argument can be seen in progress towards the adoption of IWRM. Belize, Grenada, Saint Lucia, and Trinidad and Tobago are examples in which external influence, predominately in the form of funding and grants, has brought about some change. In such cases funding was conditional on the adoption or implementation of changes in institutional frameworks or the enabling environment. The fact that, in most cases, the full adoption and implementation of IWRM has not taken place, also accords with other international evidence. This suggests that governments cannot be wholly influenced or controlled by external influences. External influence appears to be most easily asserted in the short term, where immediate benefits can be realised.

4.3. Institutional and professional support

International evidence indicates that sector bureaucrats and professionals play a key role in promoting or resisting change (Batley, 2004). Many of the changes implicit in the adoption of IWRM – changing institutional frameworks, changing the enabling environment, and the adoption of management instruments – are essentially bureaucratic. These require a redistribution of the functions and power of government agencies and cooperation in the reduction of their own power. Further, acceptance of a different ‘role of government’ requires changes in attitudes and work practices, which in turn demand sustained administrative and political commitment. This puts existing administrative and professional apparatus in a strong position to assist or resist reforms. So, for water sector bureaucrats and professionals to act as agents of change there have to be perceived benefits. International evidence (Saleth & Dinar, 2005) suggests that change has often been initiated by this cadre as a result of perceived
benefits. This facilitation of change is most apparent when professionals are able to direct the incremental emergence of new arrangements and practices, while loosening the constraints associated with being part of government service.

While there is no research that provides evidence of this in the Caribbean, the degree to which water sector professionals, rather than bureaucrats, have involved themselves in the various IWRM-related initiatives over many years would seem to support the argument. An assessment of the key actors involved in initiatives undertaken by GWP-C, the GEF-IWCAM project, and others, indicates a high level of support among professionals working alongside water agencies and utilities. These professionals were in senior positions and thus well able to provide and mobilise a range of resources. An interpretation of the BWA’s Water and Sanitation Upgrade Project and the Review of the Groundwater Protection Zone Policy lends support for the role of water professionals in bringing about reform. Elements of both projects address the modernisation of the institutional setting, strengthening the role of professionals, and giving them greater autonomy and control over the workings of the organisation. At the same time the proposals do not entail additional bureaucratic conditions that could pose a challenge to the organisation. Similar factors could be cited to account for the support for organisational changes in Saint Lucia (with the setting up of the Water Resource Unit) and for the protection of the Basseterre aquifer in Saint Kitts and Nevis.

4.4. Project-based support

Over the last decade, the most successful IWRM interventions have been those that addressed specific issues identified by ‘stakeholders’ at national and community levels. In this respect the GEF-IWCAM project to strengthen the commitment and capacity of participating countries to implement integrated approaches to the management of watersheds and coastal areas was the most significant, reflecting the fact that, with adequate financing, meaningful interventions are possible. These projects were carried out by local partners, contributing to their success and to capacity building. The availability of funding was an important factor in promoting IWRM interventions. Projects that had a specific set of objectives and deliverables to be achieved over the short to medium term were most likely to result in positive change.

Complementing these projects are the ongoing efforts in training and capacity building among government officials and water sector professionals. The knowledge and understanding of IWRM within the region have been significantly enhanced by these efforts, introducing IWRM precepts to institutional actors and contributing to the discourse of the need for water sector reform. The fact that there have been few positive outcomes as a result of these interventions is not necessarily a reflection of their failure, but rather suggests that there are other factors at work.

Many external agencies promoting IWRM road maps and plans adopted a ‘project-oriented’ approach. However, transitioning and reforming national water sectors is a protracted exercise that does not work well with such an approach, and the associated funding implications. More importantly, almost all of the IWRM road maps were initiated by external agencies, working through national actors.

Four overarching lessons were identified from the GEF-IWCAM project, which reinforce some of the above. There is a need for partnering with other agencies and organisations to ensure the long-term sustainability of IWRM initiatives. A good way to foster public engagement with water management issues is to emphasise the detrimental effects on public health of the poor management of water resources. Equally important is public education and awareness-raising efforts, which should focus on the effects
of poor water management on livelihoods and how these effects can be mitigated. Lastly, the GEF-IWCAM project identified the empowerment of local organisations as essential to these efforts. In other words, attempts need to be made to highlight the benefits, particularly in the short-term, as a means of offering an alternative to a discourse of costs. The strategic issues facing the water sector management included: unclear and overlapping institutional responsibilities; inadequate financing mechanisms and revenue streams; ineffective control of pollution of water sources; inefficient use of water by consumers; excessive levels of water loss; and aging water infrastructure. Addressing each and any of these common issues involves costs.

4.5. Stakeholder legitimacy

Only through the explicit support of government administrative processes can any sort of change be brought about in the water sector, particularly legal and organisational changes. In view of this, the perceived legitimacy of external bodies should be considered, especially when this involves restructuring national water sectors. Why should changes be supported, in the absence of any clear public support and in the absence of any clear political support?

While the GEF-IWCAM project could justifiably claim some legitimacy to interact with government administrations, many others cannot. In the absence of crises or political initiative it is hard to see how or why the benefits of adopting IWRM outweigh the burden. It is clear that the process of reform is a long one and that there are advocates who are supportive and working towards the goal of institutionalising IWRM. The larger question concerns how various regional and national bodies, advocacy and interest-based organisations, and NGOs and CBOs can coordinate their activities to better support each other and define what role they play in the region’s water sector(s).

The GEF-IWCAM project was supported by and executed through Caribbean Environmental Health Institute (CEHI), a CARICOM-mandated agency, which is empowered to act on behalf of, and provide support to, Caribbean governments. This gave it standing and hence a high degree of legitimacy to act. Its position was not one of an external agency. Reference to the stakeholder typology developed by Mitchell et al. (1997), which considers power, legitimacy, and urgency, see Figure 3, suggests that

Fig. 3. Stakeholder typology (Mitchell et al., 1997).
CEHI had the power to influence through its access to funds and expertise, as well as legitimacy, given its mandate. But these factors were insufficient to ensure that governments listened to them. They were thus what Mitchell et al. (1997) class as a ‘dominant’ stakeholder. Using the same approach, GWP-C, along with others such as the Caribbean Water and Wastewater Association (CWWA) and Caribbean Water and Sewerage Association Inc. (CAWASA), could be described as ‘discretionary’ stakeholders, in that they have legitimacy, but little power (in terms of resources). However, they can stress the urgent need for governments and agencies to pay attention to them.

Overall, a decade of effort to embed IWRM throughout the Caribbean region has so far yielded few tangible benefits. However, in terms of understanding and sensitivity to the need for IWRM, the Caribbean region is very well placed. The administrative and professional classes in the water sector throughout the region are very well acquainted with IWRM and actively include it in the working environment. In a large part this is a result of the training and capacity building efforts that the advocacy organisations have made. The greatest impact can be seen in the specific ‘demonstration’ projects, usually at the community or watershed level. The tangible benefits that have emerged serve as testaments to the effectiveness and importance of IWRM. This reinforces the message that IWRM works best when it addresses real issues that resonate with people’s everyday experiences with water and their environment.

5. Conclusion

A key element in the improvement of water governance is the drafting and adoption of legislation that provides an enabling environment and establishes the institutional framework. The fact that in the Caribbean there are few examples of transformation through legislative reform may be seen as a failure to embed IWRM. Yet this is despite clear evidence that among water sector professionals there is a high degree of awareness, knowledge and commitment to implementing IWRM, as a process. On top of this, there is also a high degree of trust between actors in the Caribbean water sector and the ‘champions’ of IWRM. In part this is a result of the dense actor networks, the presence of bridging organisations (e.g. GWP-C, CWWA, CEHI, and Caribbean Institute for Meteorology and Hydrology) and some opportunities to collaborate and come together. So, it can be said that there is a good level of consensus between actors and their commonly-held beliefs about what constitutes good water governance. It would seem therefore that the necessary conditions for putting IWRM into practice are in place. Furthermore, over the past decade, there have been a number of crises which provided opportunities for transformative change. These include Hurricane Dean in 2007, the 2010 severe region-wide drought immediately followed by Hurricane Tomas, and the Christmas Day storm over Saint Vincent in 2013. Whilst these gave rise to much talk about the need for improvement, nothing came of them. In addition, some ministers have championed IWRM; ministers from Jamaica and from Saint Lucia. However, there has been little notable impact, either at the national or regional level. The fact that the pace of change has been slow suggests that these conditions and the presence of champions alone are not sufficient to bring about change.

Work by Neff (2013) suggests that advocacy needs to be complemented by ‘brokering’ actions. Brokering requires the ability to recognise and reconcile the needs and aspirations of different stakeholders, particularly the political ones, by ensuring that there is a ‘fit’ between the problem and the proposed solution. Often the fit is poor in the eyes of the public and in the water sector. Decision-makers and politicians are attuned to the views of their constituencies on which they depend for support. The general
public seldom identify the problems and the necessary solutions according to IWRM principles. The Grenadian tariff is an example of this. Advocating the need for an increase in the tariff was, by itself, not sufficient to bring about change, despite the poor financial position of the National Water and Sewage Authority. Rather, it was the brokering actions located within the political arena that reduced potential political fall-out and enabled the recommended increased tariff. The case also reinforces the observation that, often, change requires support from the very highest political level, in this case the prime minister. Brokering involves a process whereby all parties involved believe that they have gained something as a result. This is necessary to address the perception that change only implies disbenefits.

This suggests a need for a better understanding of how to realise benefits to all stakeholders in the short as well as the long term and further research on the role of ‘brokers’ rather than focusing only on ‘champions’. We might also observe that, from the stakeholder typology discussed above, the actors advocating change in the Grenadian case (unlike in the case of interventions by CEHI, CAWASA or GWP-C) had legitimacy, power, and urgency on their side, making them definitive stakeholders. But we may infer that it was their actions and strategy as much as their position that contributed to the change. This also suggests that approaches that seek the wholesale implementation of IWRM will seldom ‘fit’ and that more incremental approaches that are peculiar to each country, combined with international financial contributions, may be more successful.

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