

KNOWLEDGE, ATTITUDE, AND PRACTICE (KAP) STUDIES ON CLIMATE CHANGE IN THE CARIBBEAN:

A Summary of Findings

March 1, 2006

Coordinated by the Mainstreaming Adaptation to Climate Change
(MACC) Project

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EXECUTIVE SUMMARY

The Caribbean is one of the world's most susceptible regions to the extreme weather conditions associated with climate variability and change. Recognising the imminent threats of climate change to communities in the Caribbean, the Mainstreaming Adaptation to Climate Change (MACC) Project, through its Public Education and Outreach (PEO) component, has initiated a series of Knowledge, Attitude, and Practice (KAP) studies in various Caribbean countries.

These KAP studies aim to obtain information from the public and its stakeholder groups regarding its relationship with climate change. They are based on information obtained from public opinion surveys of key stakeholder groups. To date, six KAP studies have been carried out in five countries, including St. Vincent and the Grenadines, Jamaica, Belize, Dominica, and Barbados. The studies are conducted by local organisations, enabling them to be tailored specifically to each country. The KAP studies initiative is coordinated by the MACC Project, which provides assistance and guidance to the local organisations where required. The MACC Project is also responsible for disseminating the results of the KAP studies among key stakeholders.

Most KAP study key findings pertain to the public-at-large. Findings indicate that Caribbean residents generally know something about climate change, considering it an important issue. They also consider themselves at risk of climate change, although attitudes toward the subject of climate change are not always consistent. While knowledge and attitude are important, it is ultimately practices or behaviours that provide the best protection against climate change. Findings reveal that residents are often uncertain as to what they are doing or what they can do about climate change, but some residents are indeed taking actions such as obtaining home insurance. Other stakeholder groups targeted by KAP studies in various countries include the private sector (including hotels in St. Vincent and farmers in Barbados), the public sector, and the media.

Findings often reveal “KAP gaps,” the term used to describe an inconsistency in knowledge, attitude, and practice, or the difference between an ideal state and an actual state. More research is required into this subject to uncover the causes of such discrepancies and to determine how to bridge these gaps.

The findings summarised in this report clearly demonstrate that there is much more work to be done with stakeholder groups to enable adaptation to climate change. Overwhelmingly, public education and awareness is identified as the main strategy to communicate with these stakeholders. Keeping the “human” side of climate change in mind is critical for organisations such as the MACC Project and its partners in their research and activities. This report discusses its immeasurable value to the mission at hand – enabling adaptation to climate change among the people of the Caribbean.

INTRODUCTION

The Caribbean is one of the world's most susceptible regions to the extreme weather conditions associated with climate variability and change. It comprises 28 insular and coastal states and 10 territories along the Caribbean Sea and the Gulf of Mexico – over 7,000 islands, islets, reefs, and cayes (<http://en.wikipedia.org/wiki/Caribbean>). The population of the Caribbean is over 40 million people, spread out in communities that range from tiny villages to modern cities. Many Caribbean communities are considered to be “communities at risk” – those that are especially vulnerable to the negative impacts of climate-related threats. Communities at risk are generally located on the coast, where an estimated 70 percent of the Caribbean population lives (Rankine, 2005).

Recognising the imminent threats of climate change to communities in the Caribbean, the Mainstreaming Adaptation to Climate Change (MACC) Project, through its Public Education and Outreach (PEO) component, has initiated a series of studies in various Caribbean countries. These studies, called Knowledge, Attitude, and Practice (KAP) studies, aim to obtain information from the public regarding its relationship with climate change. These studies are based on information obtained from public opinion surveys of key stakeholder groups. To date, six KAP studies have been carried out in five countries:

- St. Vincent and the Grenadines (May 2005), followed up by a study on communities at risk (August 2005);
- Jamaica (June 2005);
- Belize (August 2005);
- Dominica (December 2005); and
- Barbados, specific focus on agriculture and farmers (draft as of January 2006).

More studies are planned in the Caribbean to cover other countries and to continue examining various stakeholder groups, such as specific industries and stakeholders that are particularly at risk. For example, the Communities At Risk initiative, which began in January 2006, aims to apply a model for sustainable communities to six pilot communities in Belize. The Belize portion of this initiative will begin in mid-2006, and rollout to the rest of the Caribbean will begin in 2007 and 2008. The model will require baseline data, as well as follow-up data in order to measure results. KAP studies will be conducted to obtain some of this data and other pertinent information.

These KAP studies are important because they lend a “human” side to the enormous amounts of scientific research and data that have been amassed on the subject of climate change in the Caribbean. In addition to gathering insightful data on the relation between humans and climate change, KAP studies also provide insight into the most effective ways to teach the public about what has been learned through scientific research and data. It is only through understanding humans that organisations such as the MACC Project can truly enable adaptation to climate change.

PROCEDURE

The KAP studies initiative is coordinated by the PEO component of the MACC Project. Individual KAP studies are conducted by local organisations in the various Caribbean countries, depending on who has the interest and resources required to complete this undertaking. This localised approach enables the studies to be tailored specifically to each country, by organisations and individuals that have the local know-how to do so.

As such, the government's statistical offices conducted the studies in both Belize and St. Vincent, and the Environmental Coordinating Unit of the Ministry of Agriculture, Fisheries, and the Environment conducted the study in Dominica. In Jamaica, the initiative was undertaken by the Jamaica Climate Change Enabling Activity (JCCEA) Project, which contracted the study to a private company (BRAC Ltd). The Barbados study was an initiative undertaken by a Masters student at the University of the West Indies Cave Hill Campus.

As overall coordinator, the MACC Project enables organisations undertaking KAP studies to review previous KAP studies and surveys in order to review past findings, adapt pre-existing surveys, and share ideas and techniques. The MACC Project also provides access to finances (if necessary), suggestions, feedback, editing, and other resources required to complete the study. Upon completion of the studies, the MACC Project is able to analyse the studies and their findings, comparing and contrasting them with each other to determine regional and local trends.

DISTRIBUTION

The MACC Project is also responsible for disseminating the results of these studies to various stakeholder groups. The full KAP studies and accompanying surveys are available on the MACC Project's website at www.caribbeanclimate.org and through CD-ROMs, which are often distributed at events. Interested parties can also contact the MACC Project directly to receive KAP information by e-mail or CD-ROM. Summary results are reported in the MACC Project newsletter, the MainstreamM. Results are also analysed and compiled into summary reports such as this one, which will be periodically updated to incorporate new findings. Finally, KAP study findings are often incorporated into various other reports and presentations, by the MACC Project as well as its partner organisations. For more information, please contact the MACC Project directly at (501) 822-1094 or e-mail Mr. Tony Deyal, Public Education and Outreach (PEO) Specialist, at tdeyal@yahoo.co.uk.

KEY FINDINGS OF PUBLIC-AT-LARGE

This section provides a general discussion of the results, describing some of the key trends and more revealing discoveries that have emerged from the studies, and posing questions for consideration by those interested in adaptation to climate change. Where possible, the results are compared and contrasted. In some instances, the surveys use the same or very similar wording, and comparisons can be made quite easily. However, often it is difficult to make direct comparisons due to different survey construction techniques. Please bear this in mind when reading and citing the findings of this report and of the original KAP studies.

K – Knowledge

According to the KAP studies, Caribbean residents are generally aware of climate change. The majority of respondents in all countries indicated that they had heard of climate change and/or could give an interpretation of the meaning of climate change. For example, 84% of Belizeans surveyed had heard the term “climate change.” However, most respondents interpreted the meaning of climate change as “a change in weather,” “a change in normal climate conditions,” or “a change in temperature” – answers that requires more common sense than climate change savvy.

All respondents were able to identify various aspects of climate change. Residents in the five countries have noted the effects of climate change, with references to rainfall, temperature, flooding, and tropical storms occurring most frequently. Respondents were also able to indicate the factors that contributed to climate change – with land use change/deforestation, industrial applications, and fossil fuel burning referenced most often.

Of respondents who were asked about their level of knowledge regarding climate change – those in Belize, St. Vincent, and Barbados – the majority believed that they knew “enough/sufficient” or “a fair amount/a great deal,” depending on the wording used in the survey. The lowest figure was St. Vincent at 54%. However, only 40% of respondents surveyed in St. Vincent’s communities at risk felt they knew “a fair amount/a great deal,” with the bulk (49%) choosing “not much” and another 11% choosing “hardly anything.” This leads to an interesting question – do residents of St. Vincent’s communities at risk actually know less about climate change than the average St. Vincentian, or do they just feel that they do? What relation, if any, does this have to the fact that they live in a community that is identified as “at risk” to climate change threats?



A – Attitude

The KAP studies clearly demonstrate that Caribbean residents feel they are at risk of climate-related threats. The vast majority (at least 79%) of those surveyed in Belize, St. Vincent, and Dominica indicated their community and/or country was “a great deal/extremely” or “somewhat” at risk. Of all Barbadian respondents, who were asked if they were “likely to be affected” by climate change, 87% felt that they would be (although “heat-related discomfort” was the top example of the likely effect). Jamaica was the exception – although a “majority” of respondents felt “somewhat” at risk, “many” chose “hardly at all.” In fact, the Jamaica reported that Jamaican respondents displayed a “general feeling of complacency and indifference” to climate change (JCEAA, 2005).

Not surprisingly, given their knowledge of climate change and its risks, residents display an attitude of concern regarding climate change. Anywhere from 87 to 99% of residents in the five countries indicating that they are “very concerned” or “moderately concerned” about climate change – including Jamaica, despite the attitude reported above. When asked for specific examples, St. Vincentians felt that the most important issue was tropical storms, while Barbadians cited temperature change.

Caribbean residents overwhelmingly share the attitude that their countries are not prepared for climate change. For example, only 4% of Belizeans and 6% of Dominicans felt that their country was prepared. Again, there was an interesting discrepancy in St. Vincent – 21% of St. Vincentians in communities at risk felt their country was prepared, compared to 7% of respondents from all of St. Vincent. In Belize, the main reasons stated for why the country was not prepared were financial difficulties, insufficient attention given to the issue, and lack of technology. In both St. Vincent studies, the majority of respondents said that the government’s knowledge of climate change was either “hardly anything” or “not much” (yet respondents from communities at risk were more likely to choose “a fair amount” or “a great deal”). Some 83% of Barbadians felt that their government was not doing enough about climate change. Only 21% of Jamaicans said that their government was doing anything – the rest were almost evenly split between “no” and “I don’t know.”

Do these attitudes adequately reflect the reality of the climate change situation? Some findings suggest that they do not. In the studies from both St. Vincent and Dominica, respondents indicated that climate change was a more important issue for the country as a whole than for their community – which, in such small countries (with areas of 389 and 754 square kilometers, respectively), is a difficult concept to comprehend. Also, why do respondents from St. Vincent’s communities at risk feel the country is more prepared and the government is more knowledgeable on climate change versus respondents from St. Vincentians as a whole? Does the government play a more active role in communities at risk? Or is this perhaps related to the perceived lower level of knowledge in St. Vincent’s



communities at risk – as in, do these residents feel they do not need to know as much about climate change because the government is taking care of the issue? Barbados presents another interesting case – according to the draft report from Barbados, many Barbadians displayed an attitude of “God will protect the island.” Does this also indicate an attitude of denial regarding climate change? Thus, are Barbadians less likely to take action in the face of climate change threats?

Attitude toward climate change and the resulting tendency to change behaviour is likely dependent on who Caribbean residents feel have the responsibility to respond to climate change. In Jamaica, St. Vincent, and Dominica, the majority of respondents (63% to 72%) felt that the government had responsibility for responding to climate change. However, a major discrepancy was noted in the Belize study, where only 23% of respondents stated that the government was responsible. Instead, the majority (57%) of respondents felt that *all* stakeholders were responsible – government, business, community organisations, and the public-at-large alike. Does this mean that Belizeans as individuals are more likely to choose practices that reflect adaptation to climate change? Will residents of other countries delay changing their behaviour to reflect the changing climate while waiting for the government to take action? If so, is this strategy in the best interests of the country and its residents? What kind of behaviour is desired in individuals who would otherwise wait for the government to take action?

P – Practice (or Behaviour)

BEHAVIOUR OF INDIVIDUALS

While knowledge and attitude are important, it is ultimately practices or behaviours that provide the best protection against climate change. Thus, KAP studies must attempt to discover what respondents are actually *doing* about climate change.

Overall, Caribbean residents appear uncertain about what they are doing and what they can do about climate change. In Barbados, only 26% felt they had the ability to do something about it. Only 29% of Belizeans said they had done anything to prevent or lessen the effects of climate change (fortunately only 12% felt they had done anything to *worsen* its effects). When asked what they have done to lessen the effects of climate change, 29% of St. Vincentians in communities at risk said that they had secured their property, and another 25% identified this as something they *could* do to lessen the effects of climate change. However, many Jamaicans and St. Vincentians, when asked what they had done to lessen the effects of climate change, responded “proper garbage disposal” – a good practice for mitigating climate change, but of arguable use in adapting to present climate-related threats. The majority of respondents in Jamaica and St. Vincent (at least



51% in each) felt they had done nothing to worsen the effects of climate change, although some mentioned burning garbage. Interestingly, when Jamaicans were asked what prevented them from taking action on climate change, the most popular answer, at 21%, was “nothing.”

Caribbean residents in Belize, Jamaica, and St. Vincent were also asked about their own homes in order to determine what protection they had against climate change. Regrettably, less than half of residents indicated that they have home insurance against climate-related threats, including only 15% of Jamaicans and 39% of Belizeans. Interestingly, St. Vincentians in communities at risk reported a lower rate of home insurance than the average St. Vincentian (25% versus 47%). As well, most St. Vincentians indicated that their houses were made of “wall” (73% on average and 81% in communities at risk), which is not as stable as materials such as concrete or brick. The majority of respondents in Belize, Jamaica, and Barbados said that their houses were made of concrete, and thus are much more able to withstand extreme weather events.

BEHAVIOUR OF COMMUNITIES AND COUNTRIES

Respondents were also asked what their communities and countries had done about climate change. These responses did not demonstrate much consensus and often provided inconclusive results. However, some of the key findings and trends for action taken by communities and countries are discussed below.

In Jamaica and St. Vincent, the most common response for what communities had done to lessen the effects of climate change was to keep the environment clean. Respondents in St. Vincent’s communities at risk also mentioned building safer homes (30%). The most common response for what communities had done to worsen the effects of climate change was improper garbage disposal, as well as removal of sand and stones in St. Vincent. When asked what could be done, “community awareness” was the most popular response in St. Vincent, along with “proper garbage disposal” in Jamaica. Jamaicans felt that any lack of community action was primarily due to “lack of civic pride” (21%) and “lack of information” (15%).

In terms of what countries have done to lessen the effects of climate change, about one third of St. Vincentians mentioned public education. Most Jamaican responses were either “nothing” or “I don’t know.” When asked what prevented their country from taking action on climate change, Jamaicans cited lack of resources and low priority on the government’s agenda. When asked what countries had done to worsen the effects of climate change, the most common response was industrial and/or vehicle pollution and deforestation in St. Vincent, and negligent garbage disposal and lack of planning/protection in Jamaica.



Caribbean residents unmistakably feel that their countries can do a lot more. The majority (at least 90%) of respondents in Jamaica, St. Vincent, and Dominica either agreed or strongly agreed with the statement “my government should play a stronger role to address the impacts of climate change on communities.” In these same countries, at least 77% agreed or strongly agreed with the statement “my country should play a leading role to address climate change in the Caribbean region,” and at least 73% disagreed or strongly disagreed with the statement “there is nothing a small country like mine can do about climate change.” So what *can* these small countries do about climate change? What stakeholders need to be involved to make this happen, and what do they need to do? A discussion of key findings for various other stakeholder groups follows.

KEY FINDINGS FOR VARIOUS STAKEHOLDER GROUPS

All studies conducted surveys of the general public. However, some studies also surveyed other stakeholder groups in an attempt to provide greater context within the country’s social fabric. Belize surveyed representatives from the private sector, the public sector, and the media, while Jamaica surveyed private and public sector representatives. St. Vincent targeted the tourism industry through hotels, and Barbados focused on agriculture by surveying farmers as well as public sector representatives with involvement in agriculture.

Private Sector Findings

KNOWLEDGE AND ATTITUDE

Climate change is a widely acknowledged concept in the private sector, with 81% of Belizean and 71% of Jamaican private sector representatives saying that climate change is an “extremely” or “very” important issue. As well, 77% of Belizean respondents said that climate change was a threat to business, and 63% had already been economically impacted by climate change. Of those who had been impacted, 63% said it had slowed down business, 21% said they had to invest in adaptation measures, and 7% said they actually had to relocate their businesses. In Jamaica, the top three issues affecting businesses were beach erosion, loss of coastal vegetation, and sea level rise (mentioned by 97%, 93%, and 90% of respondents, respectively). Jamaican respondents felt that changes in weather patterns (21%), loss of electrical supply (21%), and drought (20%) were the top three climate changes issues that could affect business in the next five years.



In St. Vincent, 98% of hotel representatives surveyed were “very” or “moderately” concerned about climate change, with 44% feeling that climate change is a “very immediate” issue and another 36% stating that it is a “somewhat immediate” issue. These respondents felt that change in weather patterns (31%), decrease in fresh water supply, and increased air temperature (both 18%) were the top three climate change issues that could affect business in the next five years. These hoteliers are no doubt considering the financial implications of such changes – even gradual changes can have huge impacts on the bottom line, such as increased air temperature and the resulting higher costs for air conditioning.

In Barbados, some 83% of farmers surveyed had heard of climate change, and 77% were aware of the impacts of climate change. Some 95% said they were aware of changes in weather pattern, with extreme temperatures (35%) and flooding (28%) cited as the impacts to which they were most vulnerable as well as those with the most effect. Given the discrepancies in these figures, is it possible that farmers recognise the effects of climate change but do not attribute these effects to climate change? If so, is this because they do not know what climate change is or because they do not “believe” in the existence of climate change? How will this affect their behaviour and their crops?

BEHAVIOUR OF PRIVATE SECTOR

Private sector representatives were asked various questions about what their businesses have done regarding climate change. In both Belize and Jamaica, respondents indicated that the private sector has a role to play in addressing climate change issues (89% and 73%, respectively), along with 62% of St. Vincentian hotel representatives. In St. Vincent, 76% of hotels surveyed had incorporated climate change issues into their business plans, and 51% of Belizean businesses had done so. Of the Belizean businesses who did not address climate change in their business plans, 27% stated financial difficulties, another 27% stated lack of expertise, and 13% stated unavailability of assistance. Only 26% of Jamaicans indicated that their business plans identified climate change issues, although 19% did not know. Why is the percentage so much lower for Jamaican businesses? On the other hand, why is the percentage higher for St. Vincentian hotels – is this typical of all Caribbean hotels or is it unique to St. Vincent?

Businesses were also asked what they could do to address climate change. St. Vincentian hotel representatives stated they could educate and sensitise guests (27%), keep the environment clean (27%), and plant more trees (18%). However, they also said they required more information, financing (both 29%), and physical resources such as facilities and equipment (27%), in order to participate in such activities. The largest percentage of Jamaican respondents, 25%, answered “nothing” to the question of that they could do to address climate change, although 12% mentioned disaster preparedness. Some 43% of Jamaican respondents said they needed more information on climate



change in order to participate. If indeed more information were provided to Jamaican businesses, would many still think there was nothing they could do to address climate change? If not, what would they think of? Most importantly, would they actually do it?

The role of government in private sector adaptation to climate change was also addressed. Hotel representatives in St. Vincent largely shared the same attitude as the public-at-large toward government responsibility (previously mentioned in this report), as 67% indicated that the government held the responsibility for addressing climate change. When asked what government could do to assist businesses, St. Vincentian hotels stated that it could finance climate change projects (27%), provide tax breaks on the important of “safe” products (24%), and clean the beach and build sea walls (22%). In Belize, 74% of businesses felt that government could assist with adaptation to climate change; the Belize study gives the example of low-interest financing and technical assistance. In Jamaica, businesses mentioned public education (34%), improvement of infrastructure (16%), and the imposition/enforcement of regulations (10%). Barbadian farmers were asked if they were aware of the incentives programs offered by government to assist in adaptation to climate change, and the majority (61%) were.

One interesting question asked of Belizean businesses and St. Vincentians hotels was whether their business was engaged in government policy on climate change. Only 30% of Belizean and 2% of St Vincentian respondents indicated their businesses/hotels were. Belizean respondents who were not involved mostly said that they were not invited (67%), but also mentioned other commitments or important issues (17%) and financial difficulties (9%). This leads to several other pertinent questions. For instance, how does climate change rank as an economic priority for governments? And how can stakeholders such as private sector representatives provide input in and obtain benefits from government climate change programs and strategies?

Public Sector Findings

Public sector representatives in three countries – Belize, Jamaica, and Barbados – were also probed regarding their practice or behaviour in the face of climate change, although the sample sizes were smaller and the results therefore less revealing. It must also be kept in mind that they were chosen based on their roles in government (for example, Barbadian representatives were chosen based on their involvement in agriculture). Thus, their opinions likely do not reflect those of the public service as a whole.

In Barbados, 100% of public sector representatives surveyed said they had heard of climate change. Most representatives in Jamaica (54%) and Belize (51%) said they were involved in climate change in their roles and/or departments. Yet only 35% of Belizean respondents said that their department was giving climate change the required



importance. When asked why it was not considered important, respondents cited financial difficulties (47%) as the top answer, as well as lack of political commitment, inadequate planning, and little interest given to issue (16% each).

Public sector representatives were also asked whether their department had policies and strategies to address climate change. Only 40% of Jamaican and 37% of Belizean respondents said that there was. As well, 55% of Barbadian respondents said there were no policies for staff on climate change that they were aware of. In Belize, strategies that respondents felt should be implemented include the promotion of energy efficiency and research and development (R&D) on renewable energy resources, among others.

Given the roles of Barbadian public sector representatives, they were asked specific questions about agriculture. Some 73% said that there were policies and strategies in place to address climate change in agriculture. When asked about the adequacy of incentives for agriculture, however, only 9% said that they were adequate. As well, 73% said that there were no initiatives taken to educate the farming community about climate change that they were aware of (although 18% said that there were seminar and educational programs).

Media Findings

The Belize study was the only one to survey some members of the media. Of these respondents, only 45% said they include stories that deal with climate change. Yet 85% said that climate change was a “very” important issue (the other 15% said it was a “somewhat” important issue). When asked why they do not include such stories, Belizean media representatives stated limited information (59%), no attraction for audience (19%), no interest on the part of the media (9%), and little knowledge of the subject (9%).

Are these results typical of the whole Caribbean region? If climate change is such an important issue, why did less than half of media representatives say they include stories on climate change? If the media were to receive more information on climate change, would it then include more stories that deal with climate change?

These questions are very important, as the media is considered one of the primary means of educating the public on climate change. Thus, it is seen as a key stakeholder group to target in adaptation to climate change. Recognising this, the MACC Project has already released a comprehensive document on climate change written specifically for media representatives, entitled *Concepts and Issues in Climate Change: A Handbook for Caribbean Journalists*. It is hoped that initiatives such as this handbook will increase knowledge of and interest in climate change among Caribbean media representatives, so that they can pass along this knowledge and interests to their audiences.



KAP GAPS

A “KAP gap” is the term used to describe an inconsistency in knowledge, attitude, and practice, or the difference between an ideal state and an actual state. These gaps represent potential trouble spots in enabling adaptation to climate change, and often require additional research in order to determine why they exist and how to minimise or eliminate them. Sometimes KAP gaps represent an area of opportunity, providing insight that leads to a new approach or way of thinking that works better than previous alternatives.

One example of a knowledge-attitude gap in these studies involves the high level of knowledge of climate change among Caribbean residents, yet the poor attitudes reported in some surveys, such as the indifference and complacency reported in Jamaica. Will providing more information change attitudes if residents are already well aware of climate change and its dangers, or are other measures required? An example of a knowledge-practice gap involves housing insurance – if Caribbean residents know about climate change, why do they report such low levels of housing insurance? Maybe they do not feel housing insurance is important. More likely, factors such as income level and inaccessibility of insurance also play a role. Finally, an example of attitude-practice gap can be seen in the attitude in most countries that the responsibility for taking action on climate change lies with the government rather than the public-at-large. Is this attitude preventing residents from taking action on climate change? The exception is Belize, where the majority of respondents feel that all stakeholders have the responsibility for taking action on climate change. Does this attitude mean that other stakeholder groups (public-at-large, private sector, etc.) are taking more action on climate change? If not, why not? How can attitudes be changed, or how can they be used to induce ideal behaviour?

More research is required into this subject to uncover the causes of such discrepancies and to determine how to bridge these gaps. Are they related to socioeconomic variables such as age, education level, income level, etc., or some combination thereof? Are there some gaps that exist in certain Caribbean countries or communities but not in others? Do the gaps change after an extreme weather event such as a hurricane? Are there other issues and factors that have not been addressed in this report at all? As mentioned, often KAP gaps reveal opportunities for enabling adaptation to climate change by providing new alternatives. For example, up until now Faith-Based Organisations (FBOs) have had little formal involvement in adaptation to climate change. However, after considering the perception that “God will protect the island” in Barbados, is it now appropriate to consider churches and other FBOs as a key stakeholder group, capable of distributing information on climate change just like the media? Could FBOs help to dispel the feeling of impotence in the face of a disaster and to develop self-efficacy solutions on the basis that “The Lord Helps Those Who Help Themselves” or some similar idea?



It is recognised that most people take risks because they believe that the rewards outweigh the risks – in other words, what is in it for them. KAP gaps can result when people underestimate the risks or overestimate the rewards. The decision to take risks is based on knowledge available to them, which is then filtered by their self-interest issues. Through in-depth KAP studies, it is possible to establish the extent to which the knowledge held by Caribbean residents is consistent with objective reality. Do they know all that they should know about the situation in order to make a rational decision? If information proves to be lacking, how should it be provided to be most effective? If residents have enough information, what is causing the KAP gap? Are the risks, as well as the rewards, clearly understood by all stakeholders involved – including those providing the information?

THE ROLE OF PUBLIC EDUCATION

The summary provided in this report clearly demonstrates that there is much more work to be done to understand knowledge, attitude, and practice regarding climate change, and to communicate to various stakeholder groups what must be done to adapt to climate change. When respondents were asked what actions or strategies should be used to address or adapt to climate change, the top answer was indisputably public education and awareness (78 to 95%).

Indeed, these KAP studies indicate that public awareness on climate change is already high, although there is always room for improvement. Fortunately, there also appears to be a high level of public interest regarding climate change. In St. Vincent, 100% of respondents were interested in finding out more about weather impacts, along with 91% of Dominicans and 86% of Jamaicans. Tropical storms and hurricanes top the list in most countries, with rainfall/flooding, drought, and coastal erosion also garnering interest. There are also many different channels to use in public education, many of which have not been fully explored or used to their full potential, such as incorporating climate change into school curriculums.

As mentioned, it is important to recognise the media as a key stakeholder group, as the media can play a key role in public education. Indeed, the vast majority of respondents (91 to 97%) indicated a desire for climate change stories. Yet the highest percentages of respondents (44% to 53%) indicated only “occasional” exposure to climate change stories, with much lower percentages (16% to 39%) indicating “frequent” exposure. Belizeans, who were asked the reasons for infrequent exposure, indicated limited access to information (38%) and lack of programs and articles (23%). Only 29% indicated that other preferences in news stories reduced their exposure to climate change stories. This indicates that there is a need for climate change stories in the media that is not being met,



which could represent an opportunity for media organisations in Belize and possibly the rest of the Caribbean region.

Respondents in all countries were asked how they received media information on climate change. The top three answers were overwhelmingly television (63 to 97%), radio (70 to 76%), and newspaper (44 to 69%). The one oddity was found in St. Vincent's communities at risk, where the highest percentage indicated they received information from radio (70%) as opposed to television (63%). Other popular responses were the Internet in Belize (53%), Barbados (58%), and Dominica (39%); friends and family in Jamaica (38%), St. Vincent (21%), Barbados (36%), and Dominica (34%); and environmental groups in Belize (55%). It is also interesting to note how Barbadian farmers responded to these questions, as there were palpable differences – radio was the top response (48%), followed by television (44%) and the Internet (10%). Some 11% of Barbadian farmers indicated they did not use media at all to access climate change information. Are these differences in media choices attributable to certain factors – for example, do rural residents (such as farmers) rely more on radio than more urban dwellers? And what role can informal modes of communication, such as friends and family, play in adaptation to climate change?

In Belize and Dominica, respondents were asked what they consider to be the most effective means of getting climate change information. Once again, television, radio, and newspaper topped the list. However, the majority of Belizeans also mentioned the environmental groups and the government, and the majority of Dominicans mentioned schools and the Internet. These suggestions also represent potential areas of opportunity in communicating with stakeholder groups and mobilising them to enable adaptation to climate change.

CONCLUSION

The findings thus far illustrate the importance of continuing to work with Caribbean stakeholders in order to enable adaptation to climate-related threats. KAP studies, when conducted of all relevant stakeholder groups, help to determine the role that each can play in addressing climate change. They permit the establishment of baseline levels that can be used to measure the effects of events such as natural disasters and success of initiatives such as public education campaigns, and to complement the range of indicators used by scientists and other climate change experts. They also allow the identification of KAP gaps that need attention, and that can also provide insight into new approaches and ideas. Finally, KAP studies allow for comparisons between countries in the Caribbean that can lead to the identification of “best practices” and techniques that might be shared between countries or applied to the region as a whole.

Overall, KAP studies provide a glimpse into the “human” side of climate change. After all, people stand the most to lose from climate change – their houses, their businesses, their livelihoods, perhaps even their lives. Yet these people often do not know or understand all they need to in order to make the “right” decisions, ones that will protect them most against climate-related threats. Thus, it is critical that organisations such as the MACC Project and its partners are aware of the human element when conducting their research and activities. Doing so is of immeasurable value to the mission at hand – enabling adaptation to climate change among the people of the Caribbean.

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