



UWI

Assessment of Training Needs of Disaster Risk Management Professionals and National Disaster Organisations in the Caribbean

Canada

**Enhancing Knowledge
and Application
of Comprehensive
Disaster Management**
(EKACDM) Initiative

Title:

Assessment of Training Needs of Disaster Risk Management Professionals and National Disaster Organisations in the Caribbean:

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LIST OF ACRONYMS

CARDIN	Caribbean Disaster Information Network
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CDRMP	Caribbean Disaster Risk Management Programme
CIMH	Caribbean Institute for Meteorology and Hydrology
CRIS	Caribbean Risk Information System
CU	Coordinating Unit
DANA	Damage Assessment and Needs Analysis (DANA)
DM	Disaster Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRC	Disaster Risk Reduction Centre
EKACDM	Enhancing Knowledge and Application of Comprehensive Disaster Management
EOC	Emergency Operations Centre
ESSC	Education Sector Sub-Committee
EWS	Early Warning Systems
GAC	Global Affairs Canada
GDP	Gross Domestic Product
GIS	Geographic Information Systems
IFRC	International Federation of Red Cross and Red Crescent Societies
MS	Microsoft
NDMO	National Disaster Management Office
NDC	National Disaster Coordinator
NDO	National Disaster Organisation
NZ	New Zealand
NZCDEM	New Zealand Civil Defence and Emergency Management
PS	Participating State
SOP	Standard Operating Procedures
TCM	Training Courses and Materials
TNA	Training Needs Assessment
VCA	Vulnerability and Capacity Assessment

Background

1. BACKGROUND

The Enhancing Knowledge and Application of Comprehensive Disaster Management (EKACDM) Initiative is a five-year sub-project under the Caribbean Disaster Risk Management Programme (CDRMP) funded by Global Affairs Canada (GAC) and aimed at establishing an effective mechanism for managing and sharing Comprehensive Disaster Management (CDM) knowledge that will be of use for various stakeholders, including governments, local communities, the voluntary sector, and the private sector. The Initiative supports the Caribbean Disaster Emergency Management Agency (CDEMA)-led regional CDM Framework by generating and disseminating CDM knowledge and by providing training and tools for the public and private sectors.

The Initiative was developed by the Institute for Sustainable Development (ISD) in association with the Disaster Risk Reduction Centre (DRRC) at The University of the West Indies (UWI) in response to gaps identified in implementing CDM in the Caribbean, specifically as it pertains to Knowledge Management for Disaster Risk Reduction (DRR).

This Training Needs Assessment (TNA), which is being supported under the EKACDM Initiative, seeks to assess Comprehensive Disaster Management (CDM) training needs for National Disaster Organisations within the Caribbean, within the context of the regional and international strategies- CDM Strategy 2014-2024, the international Sendai Framework for Action 2015-2030 and the Sustainable Development Goals- using a competency-based approach.

Context of the Consultancy

2. CONTEXT OF THE CONSULTANCY

The required capacities for addressing disaster risk in the Caribbean have been evolving over the course of the last three decades. Adopting the Comprehensive Disaster Management approach in the region expanded the number and range of actors having roles and responsibilities related to disaster risk management, as well as the set of capabilities required by such actors. Climate change in relation to its impact on the nature and severity of climate-related risk is increasingly seen as a key driver of the DRM agenda in the region. Commitments to regional and international agendas relevant to DRM, such as the Regional CDM Strategy 2014-2024 and the Sendai Framework for Disaster Reduction 2015-2030, have also exerted some influence on the required capacities for DRM at the national-level. It has been recognised that as a result of these shifts in paradigm and risk landscape there has been recognition of a need to expand the scope and content of CDM education and training programmes.

Currently, CDM capacities vary across the various components of the CDEMA system, including the required knowledge and skills. Traditionally, education and training have been a significant aspect of the DRM programming in the region. However, the efficacy of capacity building programmes over time has been impacted by several challenges including limited funding, irregular or un-sustained training opportunities and a lack of standardisation (including content and approaches). Among these concerns has been the challenge in identifying the nature and extent of the capacity building needs and questions about whether past, existing and future training interventions are meeting these needs. Decision-making on the design and implementation of training programmes is influenced by a number of factors which are often outside of a consideration of clearly defined need, including the source and value of available funding and agenda external to the region. This has resulted sometimes in ad hoc training interventions and less than optimal use of scarce resources. Defining the training needs among key beneficiaries at the national level using systematic approaches grounded in sound data gathering and analysis will have the benefit of providing a clearer evidence-base for developing training initiatives.

There are multiple stakeholders who have roles and responsibilities for building CDM capabilities within the region. Of particular relevance to the region is the Agreement Establishing the Caribbean Disaster Emergency Management Agency which, for example, sets out the responsibilities of this Agency for building CDM capabilities within the CDEMA system (Caribbean Disaster Emergency Management Agency, 2009). This wide array of stakeholders results in an equally wide array of education and training programmes being designed and implemented as solutions to perceived capacity gaps. The availability of the education and training opportunities for DRM in the region must be considered against the identified needs to give a clearer picture of the nature of the capacity building landscape. A further consideration is that an analysis of training needs should be guided by an understanding of the expected performance of organisations and, by extension, that of their members.

Capacity gaps once identified can be addressed through the implementation of education and training initiatives. The distinction typically made between “education” and “training” may be somewhat artificial. A simple view of education is to associate it with acquiring knowledge, often through formal education systems and entities such as universities and schools. Training, on the other hand is considered learning specific skills for use on the job (differencebetween.net). Education and training are in fact “different facets of learning” (differencebetween.net). Learning is “the activity or process of gaining knowledge or skill by studying, practicing, being taught, or experiencing something.” (Merriam-Webster).

Formulating an understanding of the context and need for training is a key step in instructional design models. A TNA can direct training providers toward the critical gaps, however, further and deeper analyses for example, beneficiary analysis or task analysis) may be required to design appropriate and effective training solutions. Formal training is not always the only, or the best, solution for addressing a gap in capabilities. An executive level employee may see greater improvements in leadership skills through a programme of coaching twinned with formal classroom instruction than through the class alone. Administrative employees who manifest strong interest in advancement in the organisation may benefit from mentorship programmes which link them with more experienced colleagues who can guide their development and provide opportunities for enhancing skills and networking.

The TNA being developed under this Consultancy is therefore a critical foundational process that will provide a stronger, more scientific evidence base to inform the development of capacity building initiatives undertaken by regional stakeholders. This will also be an input in enhancing predictable and sustainable access to education and training opportunities which build capacity for CDM.

Methodology

3. METHODOLOGY

This TNA was informed primarily by the results of a survey of target beneficiaries and an investigation of existing training opportunities. It was further supported by a desk review of relevant literature including the 2016 CDM Audit, the Model NDO Structures and Generic Competency Framework (2014) and the Analysis Of Gaps And Similarities And Proposed Core Elements For Study In Disaster Risk Management (2012) supported by a review of other relevant literature and some expert consultations.

3.1 LITERATURE REVIEW

A desk review of relevant documents was conducted to inform the development of the survey, sampling and the subsequent analysis of results. The consultancy reviewed and considered inter alia the CDEMA Agreement, regional and international strategies for DRM and sustainable development, model documents aimed at fostering an enabling environment for CDM at the national level, the results of CDM audits conducted by the CDEMA CU, existing competency frameworks for DRM and existing guidance for DRM education and training developed by the Education Sector Sub-Committee (ESSC). The review also considered guidance on developing and executing assessments of training needs.

Key concepts for guiding the design and execution of the TNA were identified as follows:

- 1.** The philosophy of Comprehensive Disaster Management (CDM) should underpin, and be reflected in, the design of the survey instrument and in the identification of the targeted respondents. Broadly, the survey should consider all phases of the disaster management (DM) cycle- Mitigation and Prevention, Preparedness, Response and Recovery- as areas where DRM professionals and NDOs should have the requisite knowledge and skills. Therefore competencies relevant to all phases of the DM cycle should be considered. The survey should be congruent with the multi-hazard approach to DRM and avoid over-emphasis on specific hazards. Finally the target respondents should not be limited to NDMOs.
- 2.** Competencies, referring to the knowledge and skills that an individual must have to be capable of performing their functions to an acceptable level, are wide-ranging for DRM. In addition to technical knowledge and skills that are directly associated with DRM e.g. understanding risk or managing an EOC, actors at different levels and in different spheres should also possess other competencies e.g. negotiation, leadership, to effectively function. The suite of competencies identified should also consider the role of DRM professionals and NDOs in achieving the results articulated in the Regional CDM Strategy 2014-2024.
- 3.** The Terms of Reference identified the targeted group as DRM professionals and NDOs in the region. Given the distinction in the TOR, DRM professionals were identified as professionals within the NDMOs in the 18 CDEMA PS, because these are charged with the primary responsibility for establishing and maintaining DRM systems at the national level. The role of a broader group of actors is recognised in the inclusion of the NDO. The scope and structure of the NDO, for this TNA, was guided by the 2013 Model CDM Legislation and Regulations.

The agencies identified in the Model Legislation were further grouped into the following broad categories:

- a. First responders (e.g. fire, police, emergency medical response, SAR)
- b. Critical social and economic sectors (e.g. water, health)
- c. Critical private sector (e.g. utilities)

The NDOs in the 18 CDEMA PS were therefore considered relevant to this TNA.

3.2 IDENTIFICATION OF COMPETENCIES

Based on the findings of the literature review, a suite of competencies for DRM was delineated. In the absence of a regionally defined and agreed set of DRM competencies, the process was informed by a review of several existing frameworks and similar guidance. The CDEMA Model NDO Structures developed a Generic Competency Framework (2014) which articulated competencies at several organisational levels. However, while the competencies described in this Framework were appropriate and highlighted critical soft skills, the guidance did not capture more specific technical DRM competencies. Other frameworks and guidance were therefore included in the review. The New Zealand (NZ) Civil Defence and Emergency Management (CDEM) Competency Framework and Technical Standard (2009) was found to treat both technical and soft knowledge and skills.

The NZ Framework was mapped against the regional Framework to determine areas of congruence and divergence. Perhaps due to its generic nature, it was found that the CDEMA Framework mapped into the NZ Framework with few areas of divergence. However, there were areas of the New Zealand framework that were not well treated in the CDEMA framework. A suite of competencies was therefore derived, informed by the commonalities and divergences of the two frameworks. Areas identified by other documents, such as the 2011 ESSC guidance on course content for Caribbean DRM courses, also informed the suite of competencies. The competencies and the categories into which these were grouped are presented in Table 1.

TABLE 1:
COMPETENCY CATEGORIES THAT GUIDED THE TNA

No.	Competency Category	Competencies
1	Risk management	<ol style="list-style-type: none"> 1. Vulnerability Assessment 2. Risk Assessment 3. Hazard Mapping 4. Land Use Planning 5. Preparation of Mitigation Plans 6. Building Codes 7. Safety Standards 8. Risk Transfer Options 9. Concept of Community Resilience 10. Community Resilience Enhancement 11. Identification of threats to the environment 12. Strategize mitigation measures 13. Climate change adaptation 14. The relationship between Sustainable Development and DRM and Climate Change Adaptation 15. Assess the socioeconomic benefits of cost reduction actions 16. Assess the socioeconomic benefits of risk reduction actions 17. Assess the effects of disasters on various groups (Gender, children, youth, elderly and disabled) 18. Managing Medical Preparedness and Resources 19. Epidemics 20. Agricultural Threats
2	Relationship management	<ol style="list-style-type: none"> 21. Environmental Health 22. Identify purpose and objectives of engaging with partners 23. Identify partners to engage 24. Identify area of mutual benefit with partner organisations/individuals 25. Identify barriers to engaging partners and developing mutually beneficial relationships 26. Devise solutions to overcome barriers to the development of partnerships 27. Promote an understanding of the importance of partner engagement 28. Implement strategies for engaging partners and building relationships 29. Maintain and improve new and existing partnerships

3	Information Management	<ul style="list-style-type: none"> 30. Identify information needs 31. Develop systems and processes for managing data and information (collection, collation, storage, assessment of reliability and relevance) 32. Develop systems and processes for disseminating data and information 33. Monitor and evaluate the appropriateness and efficacy of information management systems 34. ICT Governance 35. Geographic Information Systems Early Warning Systems
4	Planning	<ul style="list-style-type: none"> 36. Contingency Planning 37. Emergency/Disaster Planning 38. Business Continuity Planning 39. SOP Design 40. Exercise Design and Management 41. National Recovery Planning 42. Mitigation Planning 43. Evaluation and updating of plans 44. Strategic Planning 45. National CDM Strategy and Programme Development 46. Policy development and planning 47. Programme and Project Management 48. Resource Management 49. Results Based Management 50. Monitoring and evaluation of projects and programmes 51. Reporting on projects and programmes
5	Communication	<ul style="list-style-type: none"> 52. Strategies/techniques for risk communication 53. Identification of key messages for different groups 54. Development of Public Education and Awareness programmes 55. Emergency/Crisis Communication 56. Managing media relations 57. Social Media Management 58. Public speaking and interviewing
6	Leadership	<ul style="list-style-type: none"> 59. Problem Solving 60. Conflict Resolution 61. Stress Management 62. Facilitation 63. Influencing People 64. Managing Change 65. Leveraging Opportunities 66. Advocacy and Negotiation 67. Knowledge of policy and legal frameworks

		<ul style="list-style-type: none"> 68. Navigating Cultures 69. Counselling 70. Human Resource Management 71. Management of Vulnerable Groups (Children, Elderly, Disabled) 72. Articulating vision and direction for CDM 73. Championing CDM at different levels
7	Response	<ul style="list-style-type: none"> 74. Emergency Response Coordination 75. Emergency Operation Centre (EOC) Management 76. Incident Command System 77. Damage/Needs Assessment (Postdisaster assessment) 78. Search and Rescue coordination 79. Mass Casualty Management 80. Warehouse management and logistics coordination 81. Relief supplies management 82. Shelter Management 83. Post disaster counseling and community care 84. First Aid 85. Nutrition Planning for relief 86. Prevention of post-disaster disease outbreak 87. After Action Review and Analysis
8	Capacity Development	<ul style="list-style-type: none"> • Identify needs for capability development within NDO (NDMO, other agencies, communities, volunteers) • Identify learning and development opportunities to address gaps in capacity • Develop training and education initiatives to address gaps in knowledge and skills in organisation • Evaluate effectiveness of training and education initiatives • Keeping uptodate with new developments and research in DRM practice • Ability to provide mentoring and coaching to colleagues and peers

3.3 DEVELOPMENT OF TNA SURVEY INSTRUMENT

A TNA seeks to answer the question of where, among a set of workers is there a need for training, and is one form of analysis that can inform training design (Piskurich, 2006). A TNA can be conducted at several levels including industry/sector, organisation, department/units, team and individual. This TNA is being conducted at a regional level and the following key questions were identified as useful to inform decision-making about the development of training at this level:

- > What competencies are most relevant to beneficiaries' work?
- > In what areas of competence are beneficiaries most interested in receiving training?
- > What gaps exist between the priority competencies for training and the existing availability of training in those areas?
- > What are the incentives and barriers to participation in training among beneficiaries?
- > What modes of training do beneficiaries consider effective/prefer?
- > What is the preferred time of year to participate in training?

A survey instrument was developed guided by the findings of the literature review and the assessment questions noted above. The instrument consisted of fifteen (15) questions which focused on the following broad areas (Appendix 1):

1. Demographic/Biographic Data
2. Organizational Data
3. General Data on Training
4. Relevance of DRM Competencies to Beneficiaries' Work
5. Beneficiaries' interest in receiving training in DRM Competencies

In the survey, respondents were presented with the selected suite of competencies and asked to rate the relevance of each to their work, using a 5-point scale that ranged from 5 = Very High Relevance to 1 = Very Low Relevance, with 3 = Neutral. The aim of this question was to identify the most important types of skills and knowledge to the DRM professionals and NDOs within the target group of training beneficiaries. Respondents were not asked to rank the relative importance of competencies or categories of competence because roles at different levels in DRM will require many competencies, possibly from several categories and at different levels, as necessary for effective DRM. A similar question was asked about their interest in receiving training in the same competency. The level of interest in training is complementary to the relevance and will provide guidance on where investment in training should be directed. A competency may be relevant but if there is little demand for training interventions, desired capacity building outcomes may not be achieved. This is an important consideration in an environment where resources for developing and delivering training are limited.

The survey instrument was developed and converted to an electronic, online format using the Google Forms web application. This allowed for automated data collection and survey results were immediately available once respondents submitted the survey. An online instrument also allowed for the survey to have wider reach across the 18 CDEMA Participating States. The survey instrument was tested and refined through interviews with, and online completion by, test respondents.

Based on the selected sample, the survey was shared with NDCs who were requested to complete it and to encourage the staff of the NDMOs to do the same.). The NDCs for a sub-set of countries (See Table 2) were also asked to circulate the survey to their wider NDOs.

Significant attempts were made to acquire as large a set of responses as possible, including:

1. Regular reminders via email.
2. Direct contact by telephone calls to NDCs and e-mails to small business associations.
3. CU direct distribution to NDOs where PS was willing to allow this.
4. Several extensions of the deadline to complete the survey.

3.3.1 SAMPLING APPROACH

Based on the objectives and scope of the TOR, the target population was established as National Disaster Organizations and DRM professionals. At the national level in the Caribbean, the NDO structures typically comprise (i) the National Disaster Management Office, which functions as a coordinating lead agency with direct responsibility for managing disaster risk, and (ii) a wider body of national agencies that support the national DRM programme with established roles of their own.

The TOR also required an analysis of the needs of the wider NDOs. However, taken together, the NDOs across the 18 PSs remain quite a large population, and a decision was taken to select a sample of PSs and target their NDOs for the survey. Given the objectives of the exercise, the information being sought and the nature of the target population, it was decided to consider the population in strata, rather than as a whole. The target population, as outlined by the TOR is vast, and encompasses a wide range of agencies and actors that may at first glance appear disparate. However, the DRM landscape in the Caribbean can be divided into broad groups based on underlying similarities inter alia geographical location, size and topography, economic factors such as Gross Domestic Product (GDP), and priority hazards. These can be used to identify and stratify the population. Out of this consideration, a sub-set of Participating States were selected and asked to share the survey with their wider NDOs, with the aim of capturing data that represent the training needs of the larger body.

CDEMA PS were sampled based on the Sub-Regional groups of the Regional Response Mechanism system. The CDEMA Sub-Regional system divides PSs into groups based their location. In addition to being an often-used framework for grouping the CDEMA PSs, the physical geography of the Caribbean area also results in further similarities of topography and priority natural hazards, and has some influence on shared socio-economic characteristics such as key earning sectors. Within each sub-region, a sub-set of countries was selected to form the sample. The selection sought to represent a range of physical and socio-economic factors which would influence DRM capacities and needs within the selected countries.

Table 2 outlines the selected countries. In each case the SR Focal Point Country was always selected, because these countries have an additional set of responsibilities (as per the Agreement Establishing CDEMA) which may have unique implications for capacity building.

TABLE 2:
SELECTION OF SAMPLE PS

CDEMA Sub-Region	Sample PS	Factors Represented
North-Western	Bahamas, Haiti and Jamaica	Sub-Regional Focal Point, multi-island state, varying levels of economic development, varied physical geography and priority hazards, industrial sectors
Eastern	Antigua and Barbuda, Montserrat, Virgin Islands (UK)	Sub-Regional Focal Point, varying levels of economic development, varied physical geography and priority hazards
Central	Barbados, Dominica	Sub-Regional Focal Point, varying levels of economic development, varied physical geography and priority hazards, recent hazard impacts
Southern	Guyana, Suriname, Trinidad and Tobago	Sub-Regional Focal Point, varying levels of economic development, varied physical geography and priority hazards, recent hazard impacts, industrial sectors

The Model National CDM Legislation and Regulation 2013, which was endorsed by the CDEMA Council of Ministers in 2013, establishes the structure of the NDO as a large group of critical public and private sector agencies. The combined NDOs of the sample countries remained a large group, and was further stratified into several broad categories:

1. First Responders – fire, police, ambulance, military. Members of this group have very specialized knowledge and skills in their field, and play key roles in national level preparedness and response.
2. Critical public/socio-economic sectors: Water, health, agriculture, education and tourism are priority sectors of concern in DRM at the national level, as well as priority sectors for the Regional CDM Strategy 2014-2024. These sectors are often prioritized for risk reduction interventions.
3. Private Sector represents key actors in utilities, small business or chambers of commerce. These sectors can also be viewed as critical to the recovery process, post-event.
4. For the purpose of this TNA, “DRM professionals” were identified as the professionals within the National Disaster Management Office because this is the entity charged with specific responsibility for national-level DRM. It was determined that, given the importance of this group, it was necessary to target the NDMOs of all 18 CDEMA PS to complete the survey.

3.4 ANALYSIS OF RESULTS

The results of the survey were collated and analysed in MS Excel. The findings are discussed below in Section 4. Summary of Key Results and recommendations are presented based on these findings. The draft TNA report was circulated to stakeholders to garner their feedback and provide some validation of the findings and recommendations. The final report is a revision of the draft report based on comments received.

Summary of Key Results

4. SUMMARY OF KEY RESULTS

4.1 RESPONDENT PROFILE

The survey was open from 19 December 2016 to 20 January 2017. At the close of this period, 26 responses were received from ten (10) PSSs, representing 55% of CDEMA countries. Of those taking the survey, female respondents accounted for 61.5% and males – 38.5%. Most respondents (42.3%) were in the age range of 41 – 50 years old. Only one (1) respondent (3.8%) was older than 60 years and none of the respondents were younger than 20 years of age.

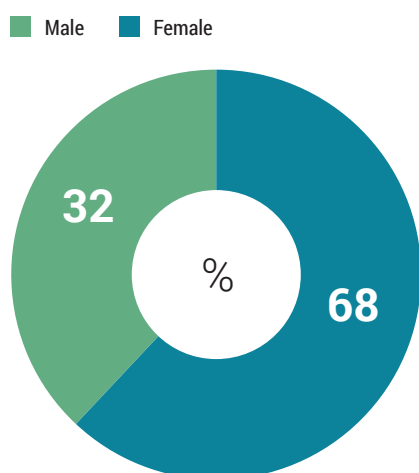


FIGURE 1: RESPONDENT GENDER

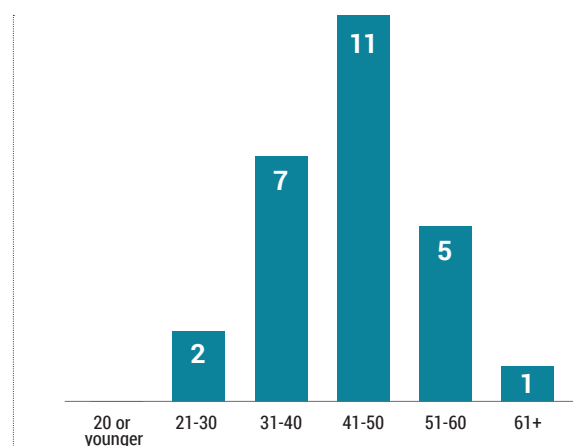


FIGURE 2: RESPONDENT AGE

4.2 PROFILE OF RESPONDENTS' ORGANISATIONS

Responses were received from the NDMOs in each of the ten (10) countries represented in the survey, with 50% (17) of the respondents being members of NDMOs, while 19.2% (2) represented other agencies in the wider NDO. NDMOs from three (3) of the four CDEMA Sub-Regional Focal Point countries responded to the survey, representing 75% of the Sub-Regional group. Seven point seven per cent (7.7% - 2) of the total respondents were first responders and 7.7% (2) fell into the category of key sectors (Education, Health).

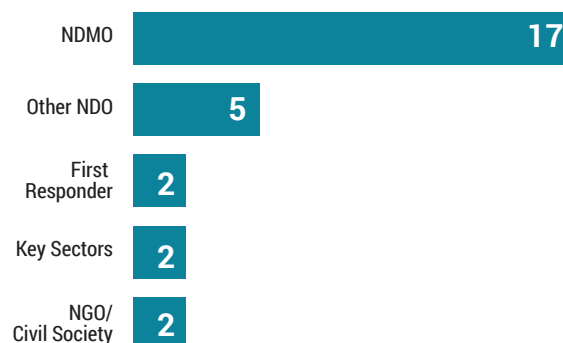


FIGURE 3: ORGANISATIONS PARTICIPATING IN THE SURVEY

Respondents mainly represented organisations of 25 persons or less - 61.5% (16) of total respondents. Of this group, more than half (62.5% - 10 of 16 persons) operated in organisations that had 10 staff members or less.

Most of the respondents (46.2%) described their position in their organisation as being at the Senior Management (Executive) level. Almost twenty per cent (19.2% - 5 persons) of respondents have been with their organisation less than 1 year, while 38.5% have spent 5 – 10 years at their organisation.

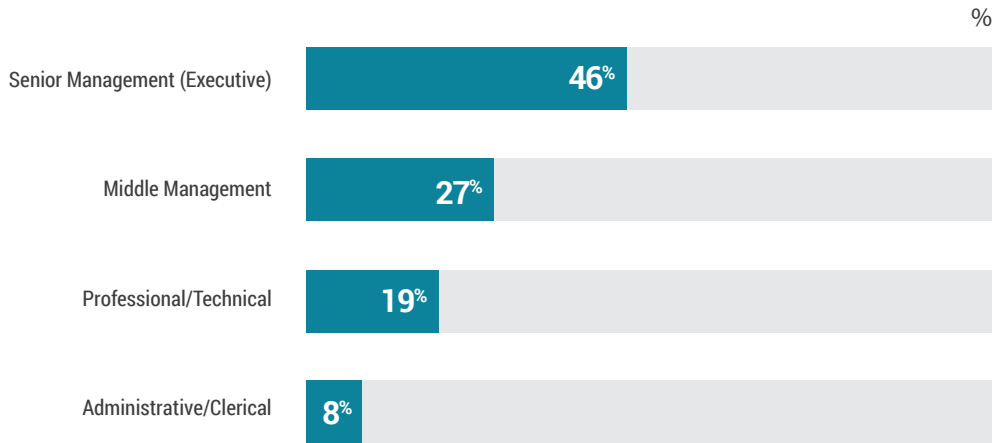


FIGURE 4:
RESPONDENTS' POSITIONS WITHIN THEIR ORGANISATIONS

4.3 GENERAL QUESTIONS ABOUT TRAINING

The survey investigated some common issues related to training and perceptions about training among respondents.

The survey examined the barriers and incentives to participation in training initiatives among regional DRM professionals and NDOs. Cost, the unavailability of training and the location of the training were most cited as barriers to participating in training initiatives, being selected by 84.6%, 46.2% and 42.3% of respondents respectively. The offer of financial support to participate in training was most cited as an incentive for registering for training, with 80.8% of respondents selecting this factor. Programme objectives (73.1%) and professional certification (57.7%) were the second and third most frequently cited factors of incentive.

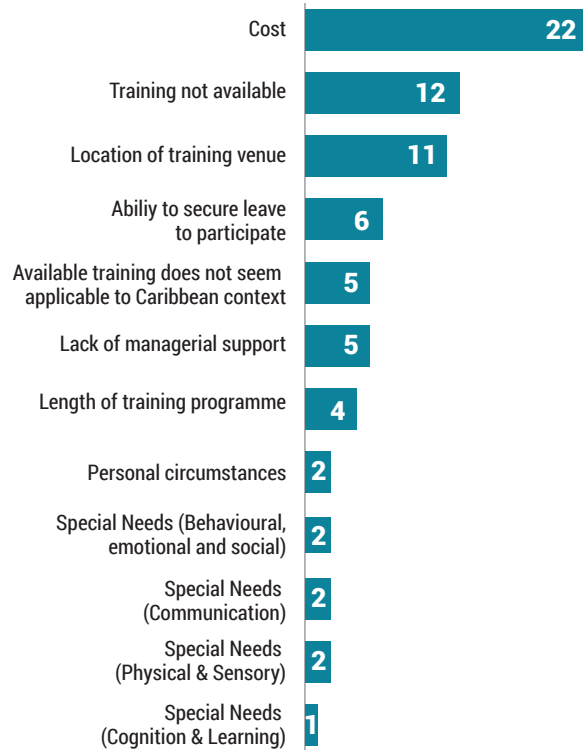


FIGURE 5:
BARRIERS TO PARTICIPATING IN TRAINING INITIATIVES



FIGURE 6:
INCENTIVES TO REGISTERING FOR TRAINING INITIATIVES

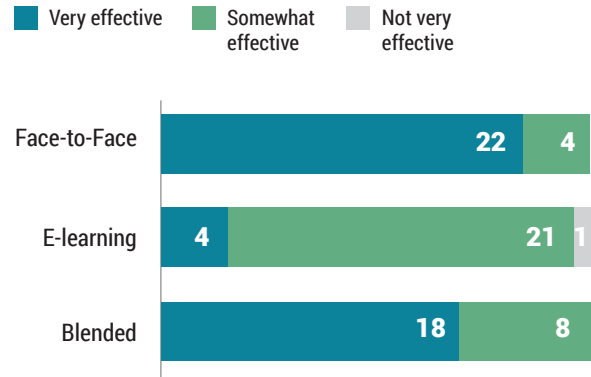


FIGURE 7:
PERCEPTIONS OF THE EFFECTIVENESS OF VARIOUS TRAINING MODES

The survey also investigated perceptions of the effectiveness of different modes of training. Face-to-face training was considered very effective by 84.6% of respondents. E-learning was considered somewhat effective by 80.8% of respondents while 15.4% thought it was a very effective mode of training. Blended learning was viewed as very effective by 69.2% of respondents. Face-to-Face and blended learning were not viewed as ineffective by any respondent.

Respondents were also asked to suggest other forms of training that they considered important. Responses spoke more to instructional strategies and techniques, and included:

1. On the job and peer-to-peer training, peers education
2. Observation and demonstration
3. Practical and exercises, “Hands on “ training, In Situ simulation

The survey queries the most appropriate times for holding training programmes. The months of January to June were most often cited as the best times, while August, July and December were the least popular times. More than half of respondents (65.4%) indicated that there was some process for assessing training needs in their organisation, but 38.5% of respondents were only moderately comfortable that the process could meet their training needs.

4.4 RELEVANCE OF TRAINING

Respondents were also asked to indicate the relevance of various competencies to their work. Responses to this question offer insights into what training is important to the work of DRM professionals in the region.

4.4.1 RISK MANAGEMENT

The competency areas most often cited by respondents as being “Very High” relevance were (i) risk assessment (76.9% of respondents), (ii) strategizing mitigation measures (73.1%), vulnerability assessment (69.2%) and preparing mitigation plans (69.2%).

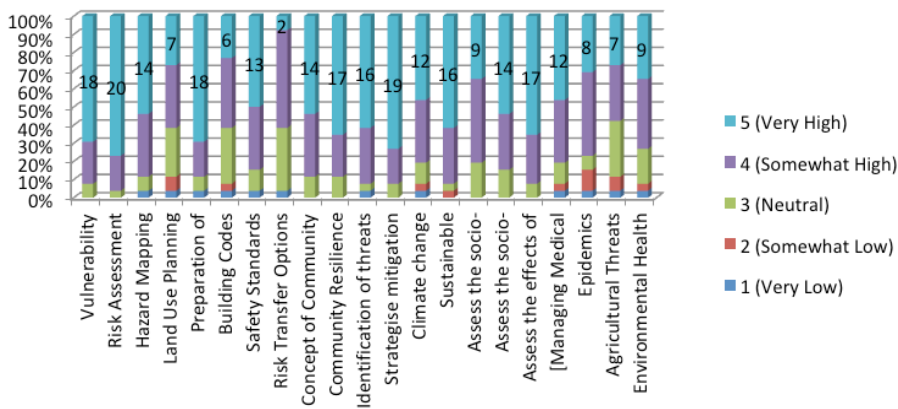


FIGURE 8: RELEVANCE OF RISK MANAGEMENT COMPETENCIES

4.4.2 RELATIONSHIP MANAGEMENT

Most of the competency areas under Relationship Management were rated by respondents as either “Very Relevant” or “Somewhat Relevant”. Identify the purpose and objectives of engaging with partners, Identify partners to engage, and Maintain and improve new and existing partnerships were considered “Very Relevant” by 69.2% of respondents. Identify areas of mutual benefit with partner organisations/individuals and Promote an understanding of the importance of partner engagement were cited as “Very Relevant” by 65.3% of respondents.

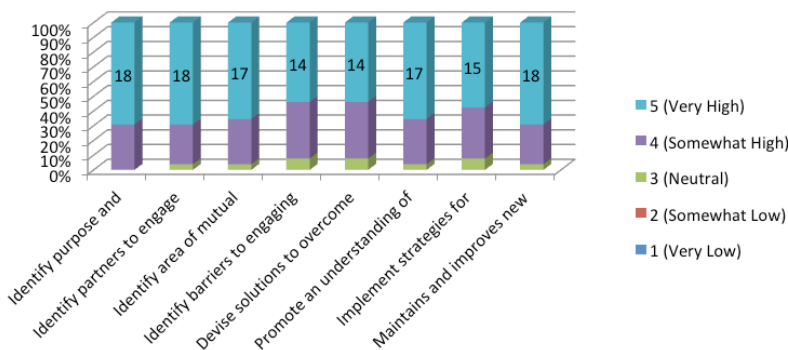


FIGURE 9: RELEVANCE OF RELATIONSHIP MANAGEMENT COMPETENCIES

4.4.3 INFORMATION MANAGEMENT

The competency areas under Information Management were also highly rated by respondents. Early Warning Systems, Develop systems and processes for disseminating data and information, and Develop systems and processes for managing data and information were most likely to be rated as “Very High” in relevance by the largest number of respondents - achieving 80.7%, 73.1% and 69.2% of respondents respectively.

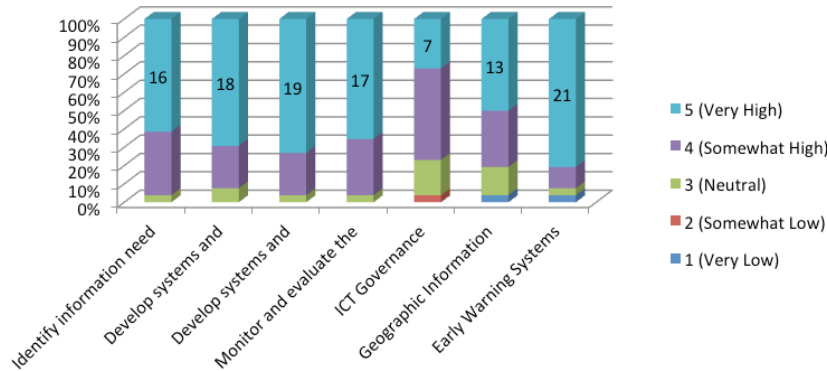


FIGURE 10:
RELEVANCE OF INFORMATION MANAGEMENT COMPETENCIES

4.4.4 PLANNING

Fourteen of the 16 competencies under Planning were rated as “Very Relevant” by more than 50% (13) of respondents. Emergency/Disaster Planning (84.6% of respondents), Contingency Planning (79.3%) and Business Continuity Planning (73.1%) were the three competency areas receiving the top rating by the largest portion of respondents. SOP Design, Exercise Design and Management, Strategic Planning, National CDM Strategy and Programme Development and Monitoring and evaluation of projects and programmes were all cited as “Very Relevant” by 65.4% of respondents assessing those competencies.

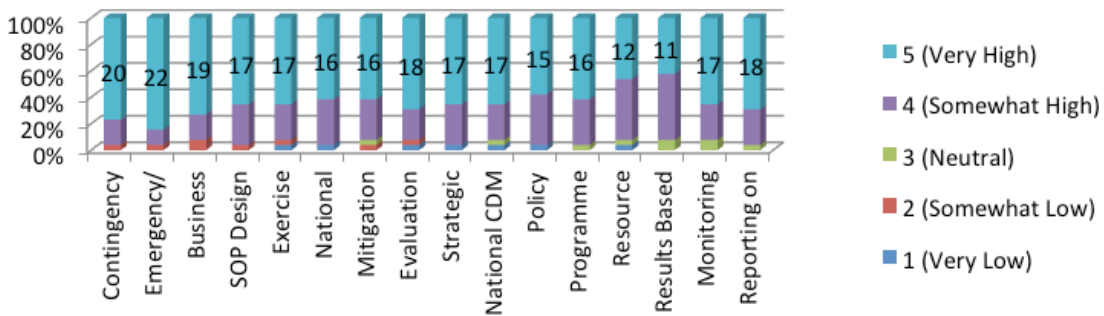


FIGURE 11:
RELEVANCE OF PLANNING COMPETENCIES

4.4.5 COMMUNICATION

The competencies under Communication which were identified as the most relevant were Emergency/Crisis Communication and Development of Public Education and Awareness Programmes, being cited as “Very Relevant” by 73.1% and 61.5% of respondents respectively. Two other competencies - Public speaking and interviewing and Strategies/techniques for risk communication - were both described as “Very Relevant” by 57.7% of respondents.

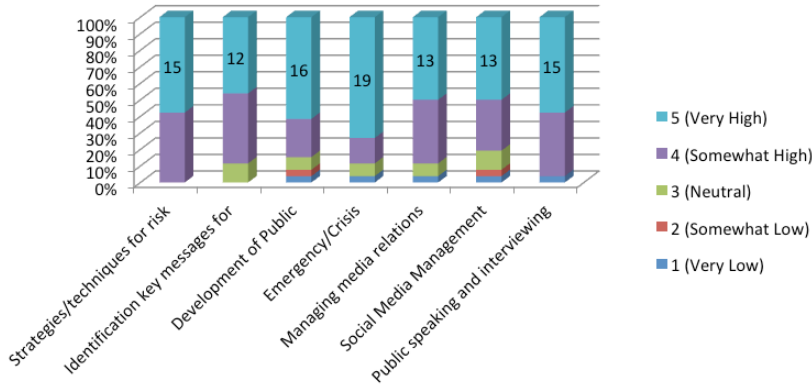


FIGURE 12: RELEVANCE OF COMMUNICATION COMPETENCIES

4.4.6 LEADERSHIP

Ten (10) of the 15 competencies in the Leadership group were cited as “Very Relevant” by more than 50% of respondents in each case. Problem Solving and Conflict Resolution received the highest number of “votes” (73.1% - 19) for being “Very Relevant” to respondents’ work. Advocacy and Negotiation (69.2%), Stress Management (65.4), Leveraging Opportunities (61.5%), and Knowledge of Policy and Legal Frameworks (61.5%) were next in popularity.

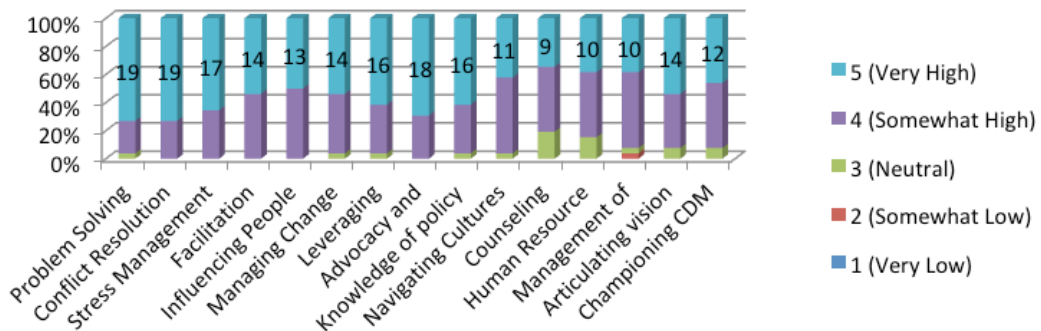


FIGURE 13: RELEVANCE OF LEADERSHIP COMPETENCIES

4.4.7 RESPONSE

Emergency Operation Centre (EOC) Management (80.8%), Incident Command System (73.9%), Emergency Response Coordination (73.1%) and Damage/Needs Assessment (Post-disaster assessment) (65.4%) were the Response-related competencies that were identified as “Very Relevant” by the largest number of respondents.

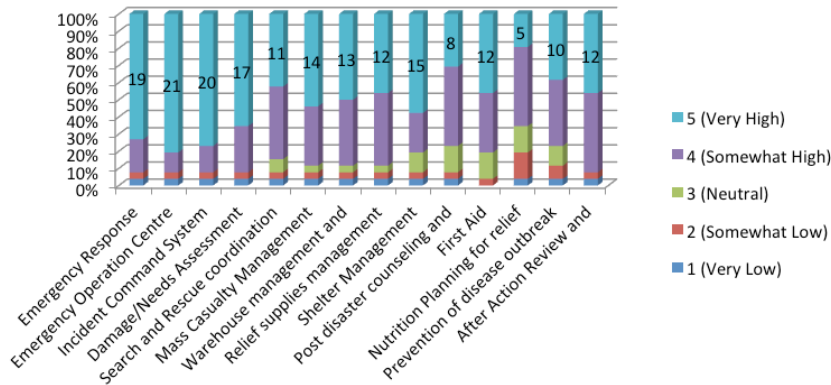


FIGURE 14:
RELEVANCE OF RESPONSE COMPETENCIES

4.4.8 CAPACITY BUILDING

With the exception of Ability to Provide Mentoring and Coaching to Colleagues And Peers, all of the competencies in the Capacity Building Category were cited as “Very Relevant” by more than half of respondents. Among these, Identify Learning and Development Opportunities to Address Gaps in Capacity (65.4%) and Keeping Up-To-Date with New Developments and Research in DRM Practice (61.5%) were the most frequently cited as “Very Relevant”.

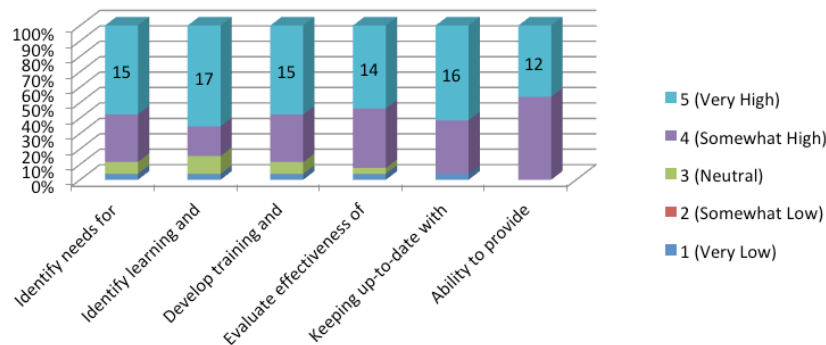


FIGURE 15:
RELEVANCE OF CAPACITY DEVELOPMENT COMPETENCIES

4.5 INTEREST IN RECEIVING TRAINING

Respondents were also asked to indicate their interest in receiving training in the various competencies. Training demand is one consideration that must be factored in the development of capacity building programmes.

4.5.1 RISK MANAGEMENT

The competency areas in which the largest number of respondents indicated interest were (i) Risk Assessment (73.1% of respondents), (ii) Assess the effects of disasters on various groups (69.2%) and (iii) Vulnerability assessment (65.4%), while 61.5% of respondents reported being “Very Interested” in Hazard Mapping and Community Resilience Enhancement.

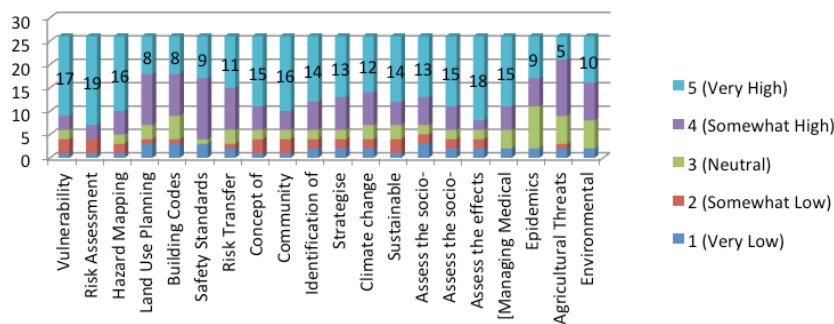


FIGURE 16:
LEVEL OF INTEREST IN RECEIVING TRAINING IN RISK MANAGEMENT COMPETENCIES

4.5.2 RELATIONSHIP MANAGEMENT

There was a high level of interest in receiving training in all competency areas under Relationship Management. In each competency area, more than 50% of respondents were “Very Interested”. Respondents were particularly interested in Identify barriers to engaging partners and developing mutually beneficial relationships (61.5%) and Implement strategies for engaging partners and building relationships (61.5%).

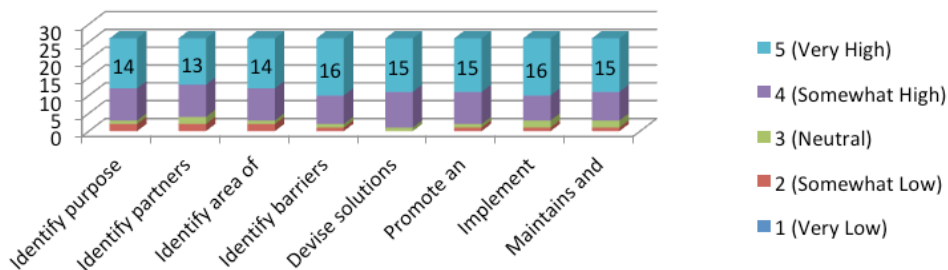


FIGURE 17:
LEVEL OF INTEREST IN RECEIVING TRAINING IN RELATIONSHIP MANAGEMENT COMPETENCIES

4.5.3 INFORMATION MANAGEMENT

The greatest interest lay in the competencies (i) Early Warning Systems (65.4%) and (ii) Develop Systems and Processes for Managing Data and Information (61.5%). Strong interest also lay in (i) Develop Systems and Processes for Disseminating Data and Information (53.8%), (ii) Monitor and Evaluate the Appropriateness and Efficacy of Information Management System (53.8%) and (iii) Geographic Information Systems (53.8%).

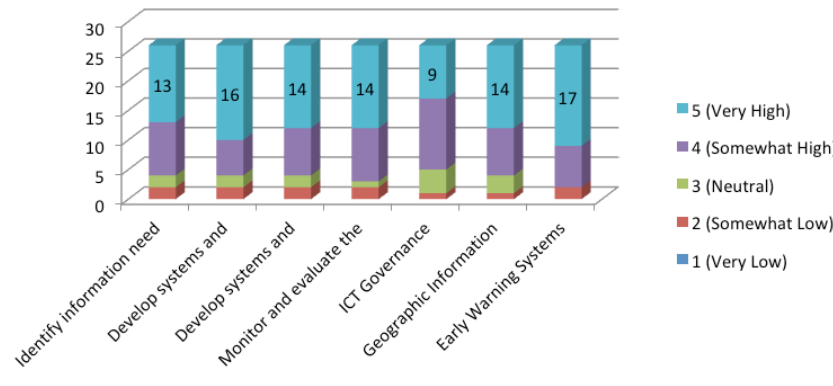


FIGURE 18:
LEVEL OF INTEREST IN RECEIVING TRAINING IN INFORMATION MANAGEMENT COMPETENCIES

4.5.4 PLANNING

Thirteen of the 16 competencies under Planning were identified by respondents as areas in which there was a high level of interest, with more than 50% (13) of respondents indicating the highest level of interest. Emergency/Disaster Planning (76.9% of respondents), Contingency Planning (73.1%) and Strategic Planning (69.2%) were the three competency areas receiving the top rating by the largest portion of respondents. Business Continuity Planning, Exercise Design and Management, and Mitigation Planning were areas in which 65.4% of respondents were "Very Interested" in receiving training.

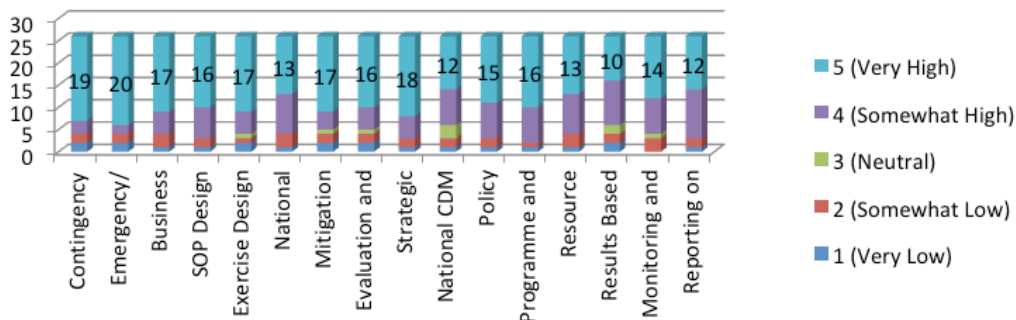


FIGURE 19:
LEVEL OF INTEREST IN RECEIVING TRAINING IN PLANNING COMPETENCIES

4.5.5 COMMUNICATION

The competencies under Communication in which respondents were most interested in receiving training were (i) Public speaking and interviewing (65.4% were “Very Interested”), (ii) Emergency/ Crisis Communication (57.7%) and (iii) Strategies/techniques for risk communication (57.7%).

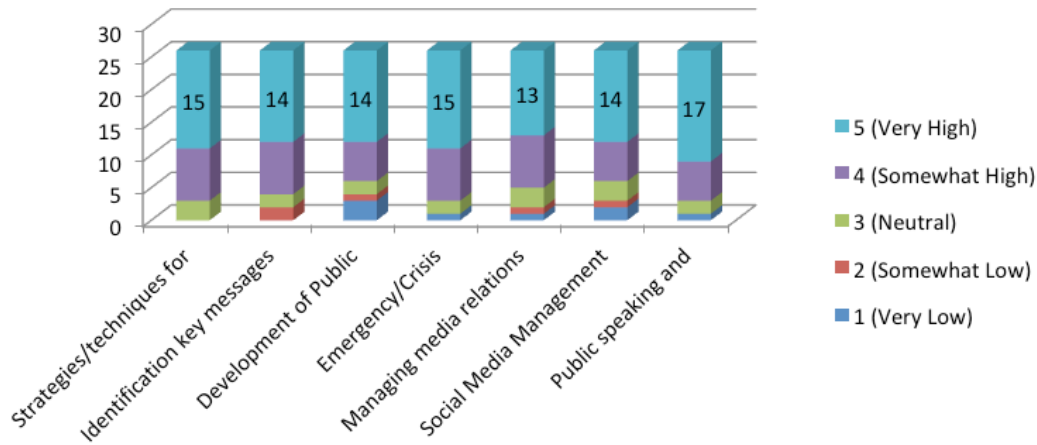


FIGURE 20:
LEVEL OF INTEREST IN RECEIVING TRAINING IN COMMUNICATION COMPETENCIES

4.5.6 LEADERSHIP

Of the 15 competencies in the Leadership group respondents expressed the greatest interest in Advocacy and Negotiation (69.2% selected “Very Interested”), Conflict Resolution (65.4%) and Stress Management (65.4%). Problem Solving (53.8%) was also of great interest to respondents.

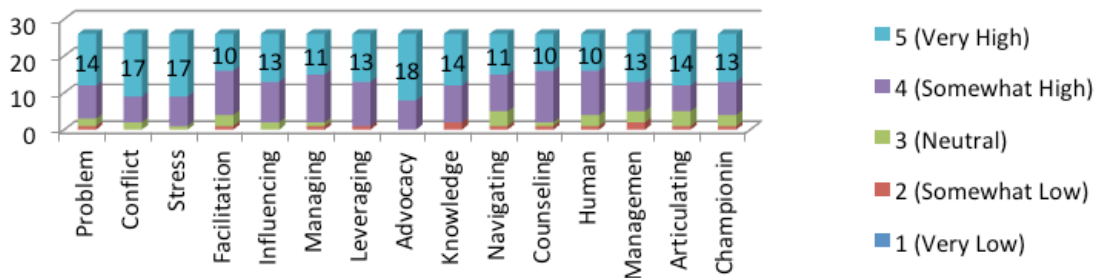


FIGURE 21:
LEVEL OF INTEREST IN RECEIVING TRAINING IN LEADERSHIP COMPETENCIES

4.5.7 RESPONSE

Emergency Operation Centre (EOC) Management (69.2% of respondents) were, Incident Command System (65.4%), and Emergency Response Coordination (65.4%) were the competencies in which the largest number of respondents were “Very Interested” in receiving training. It is notable that the next most popular competency area was After Action Review and Analysis (57.7%).

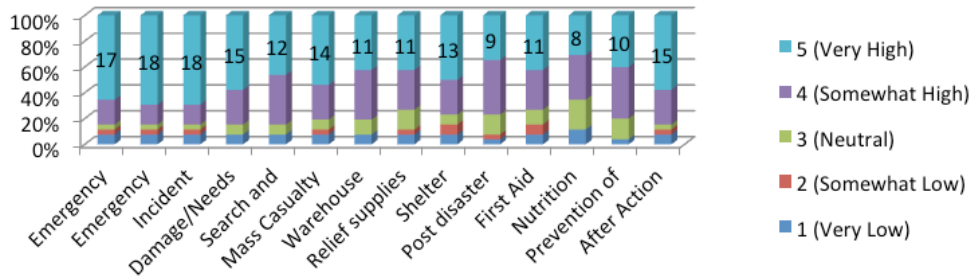


FIGURE 22: LEVEL OF INTEREST IN RECEIVING TRAINING IN RESPONSE COMPETENCIES

4.5.8 CAPACITY BUILDING

In all competencies, more than half of respondents were “Very interested” in receiving training. The greatest interest seemed to be in (i) Develop Training and Education Initiatives to Address Gaps in Knowledge and Skills in Organization (65.4%), Identify Learning and Development Opportunities to Address Gaps in Capacity (57.5%) and Evaluate Effectiveness of Training and Education Initiatives (57.5%).

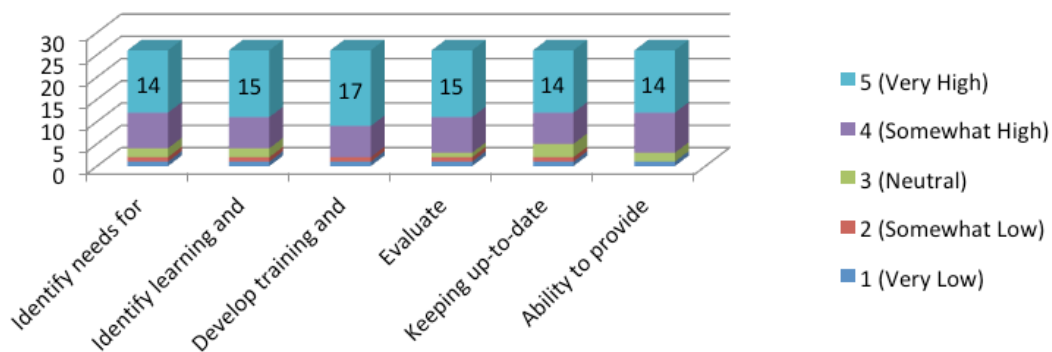


FIGURE 23: LEVEL OF INTEREST IN RECEIVING TRAINING IN CAPACITY DEVELOPMENT COMPETENCIES

Respondents were also invited to suggest up to three (3) areas which they thought were not treated in the list of competencies examined in the surveys. Five (5) respondents provided the following responses:

- 1.** Mass Crowd Management
- 2.** CBRNE Response and Management (Hazardous Materials)
- 3.** Proposal Writing
- 4.** Mass Migration
- 5.** Community assessment
- 6.** CBRNE (Hazardous materials)
- 7.** Disaster Management training for media professionals

It is notable that most of the suggested areas are not competencies but rather topics that would treat a range of competences in the training content.

Analysis of Results

5. ANALYSIS OF RESULTS

Adopting Comprehensive Disaster Management as a philosophy for addressing disaster risk precipitates a need for a wide range of roles and responsibilities and consequently actors, knowledge and skill-sets. The body of knowledge and required skill-sets are not all lodged in the NDMO, but extend to organisations that typically constitute the NDO. Further, CDM evolves and expands traditional ideas about the roles of NDMOs, the composition of the NDO and the network of partners involved in building national and local-level resilience. An appreciation of this expanding set of competencies that is required by all actors in the NDO, has been reflected in the results of this assessment of training needs. The results also show consistency with the weaknesses that have been identified by CDM Audits of CDEMA PS completed to date.

However, education and training for CDM is an environment of constrained technical and financial resources. It is necessary for training providers to make strategic decisions about investments in training interventions that will balance the need to address gaps in capacity while maximizing limited resources. Therefore this training needs analysis also sought to identify areas of training in each competency category where there is likely to be strong demand among targeted beneficiaries. These results have been juxtaposed against consideration of the existing training landscape, including what training courses and materials are already available to meet needs and demand, and the extent to which existing offerings cover the identified needs.

The eight (8) categories of competency are considered below in groups as follows:

1. Planning and Response- competencies that support preparedness and response
2. Risk Management, Information Management and Communication- competencies that support mitigation and recovery, and to some extent preparedness
3. Relationship Management and Leadership
4. Capacity Building- thematically these competencies cut across all phases of the DM cycle

5.1 PLANNING AND RESPONSE COMPETENCIES

The emergence of a risk-reduction agenda does not negate the importance of Preparedness and Response, and this remains a core business area within the direct responsibilities of NDOs. The competencies for Preparedness and Response, which are found primarily in the Planning and Response competency groups, were identified by most respondents as areas of high importance. Based on the results of the assessment, skill-sets which support (i) better preparedness and (ii) improved coordination of the response to emergency or disaster events the following areas are critical for respondents:

The expressed need for training in these areas also overlapped the level of interest in receiving the training. This should be viewed in union with the relatively high percentage of respondents who worked in NDMOs and the wider NDOs, which offers a level of validation for the results. Given that these are the key groups targeted by this intervention there can therefore be some confidence that the following areas outlined in Table 3 are the most important for training for target beneficiaries:

**TABLE 3:
PREPAREDNESS AND RESPONSE COMPETENCIES OF GREATEST RELEVANCE AND INTEREST**

Planning (Preparedness)	Response
Emergency/Disaster Planning	EOC Management
Contingency Planning	Incident Command System
Business Continuity Planning	Emergency Response Coordination
Exercise Design and Management	Damage Assessment and Needs Analysis (DANA)

The Inventory of DRM Training Course and Materials (TCM) indicates that there are existing training opportunities in Emergency/Disaster Planning, EOC Management, Exercise Design, Incident Command System and Damage Assessment and Needs Analysis (DANA), many of which fuse theory with practice. Training in Disaster Response and Recovery (32%) also comprised the largest portion of the TCM identified in the Inventory. However, few of these courses offer professional certification.

5.2 RISK MANAGEMENT, INFORMATION MANAGEMENT AND COMMUNICATION COMPETENCIES

The competencies under Risk Management, Information Management and Communication, along with a number of competencies under Planning, come together to define the knowledge and skills for reducing vulnerability and building resilience.

Risk Assessment, Vulnerability Assessment and Assess the Effects of Disasters on Various Groups were all cited as very relevant and also identified as areas where there was strong interest in receiving training. The areas of Strategize Mitigation Measures, Preparation of Mitigation Plans, Community Resilience Enhancement and Hazard Mapping were also very relevant and identified as being of strong interest. Early Warning Systems, developing systems and processes for managing and disseminating data and information and monitoring and evaluating the effectiveness of these systems showed the highest level of consistency between relevancy and interest.

It is interesting to note that strategizing mitigation measures and preparing mitigation plans were considered very important by more respondents, compared to the number who cited Hazard Mapping as very important. However, interest in receiving training in Hazard Mapping was greater. This could, again, be a reflection of the high percentage of respondents from NDMOs, where the core business is preparedness and response. The placement of leadership for mitigation planning and management within the national DM system, remains an ongoing debate in the CDEMA system, but it is generally viewed as an area of primary responsibility for agencies outside of the NDMO (and other frontline responders such as Fire, Police and the Military). While the preparation of Hazard Maps supports the risk assessment process, these maps are also key decision-support tools for preparedness and response, and this may help to explain the results observed.

Emergency/Crisis Communication and Public Speaking and Interviewing were the primary areas where respondents' view of their relevance and their interest in receiving training converged. Development of Public Education and Awareness Programmes and Strategies/Techniques for Risk Communication also presented high levels of relevance and interest. It is notable that fewer respondents cited Social Media Management and Media Relations as Very Relevant or Very Interested by, despite regional and national experiences with media during and outside of crises and the emergence of social media as a significant factor *inter alia* in managing crises information, for formulating a comprehensive situational analysis and for disseminating public education information. However, if the total number of persons responding Somewhat Relevant, Very Relevant and Somewhat Interested and Very Interested are considered around three-quarters of the respondents expressed some level of relevance and interest.

The results of the CDM Audit add useful information to this picture. The Audit identified weakness in the following areas, which are consistent with the results of the TNA survey:

1. Risk, vulnerability and hazard assessment
2. Planning frameworks
3. Addressing community resilience
4. Public awareness of EWS and the linkages between national and community level EWS.
5. ICT interoperability and automation in data management

Training opportunities in some of these areas are less clear, compared to, for example, the Preparedness and Response competencies. The inventory categorises a third of the TCM collected to date as supporting risk management competencies, suggesting that training exists. However, it may be necessary to investigate this competency area more deeply, particularly against specific barriers to participating in risk management training. Some discussion on Risk Assessment training follows given the importance of this activity and the results of the TNA. Basic training on hazard and vulnerability mapping and related skills, such as GIS, was not found as stand-alone courses, though it was recognized that these skills may be subsumed within larger courses e.g. the UWI M. Sc in Natural Resource and Environmental Management and the International Federation of Red Cross and Red Crescent Societies (IFRC) Vulnerability and Capacity Assessment (VCA). Some courses where GIS is central, such as the Caribbean Institute for Hydrology and Meteorology (CIMH) Flood Hazard Mapping course, may be better suited to those who have existing experience/skills of GIS. This may have implications for the accessibility that DRM professionals may have to training in competencies that support risk assessment.

There are also other considerations such as the availability of or access to equipment, software and other elements that allow for risk assessments to be completed. There are other fundamental issues such as the lack of an agreed standard for how risk assessment should be done (which would inform the identification of competencies and the design of training), multiple methodologies, access to data and prohibitive costs for implementing risk assessment processes.

5.3 RELATIONSHIP MANAGEMENT AND LEADERSHIP COMPETENCIES

The results regarding Relationship Management and Leadership lead to some interesting considerations. As noted in Section 4 above, most areas under Relationship Management were highly rated for Relevance and Interest. It should be noted that high levels of relevance and interest were expressed by respondents at the Senior Management (Executive) and Professional levels. It also points to the importance that DRM professions are placing on identifying, building and maintaining partnerships. These groups as well as Middle Management also considered Leadership skills such as Problem Solving to important.

This suggests that there is recognition among senior and technical DRM professionals of the importance of “softer” skills to effective DRM, which are not limited to Communication and Information Management competencies. To illustrate this conclusion, a selection of the responses for Relationship Management competencies is shown in Table 4 below. The three (3) selected competencies scored the highest in terms of relevance.

TABLE 4:
RELATIONSHIP MANAGEMENT COMPETENCIES THAT WERE RATED HIGHLY FOR RELEVANCE AND INTEREST

Relationship Management Competencies	Relevance to Work					Level of interest in Receiving Training				
	2 (Somewhat Low)	3 (Neutral)	4 (Somewhat High)	5 (Very High)	Grand Total	2 (Somewhat Low)	3 (Neutral)	4 (Somewhat High)	5 (Very High)	Grand Total
Identify purpose and objectives of engaging with partners										
Administrative/Clerical	0	0	1	1	2	0	0	0	2	2
Middle Management	0	0	2	3	5	1	1	2	1	5
Professional/Technical	0	0	1	6	7	0	0	2	5	7
Senior Management (Executive)	0	0	4	8	12	1	0	5	6	12
Grand Total			8	18	26	2	1	9	14	26

Identify partners to engage										
Administrative/Clerical	0	0	1	1	2	0	0	0	2	2
Middle Management	0	0	2	3	5	1	1	3	0	5
Professional/Technical	0	0	1	6	7	0	0	2	5	7
Senior Management (Executive)	0	1	3	8	12	1	1	4	6	12
Grand Total		1	7	18	26	2	2	9	13	26
Maintains and improves new and existing partnerships										
Administrative/Clerical	0	0	1	1	2	0	0	0	2	2
Middle Management	0	1	2	2	5	0	1	4	0	5
Professional/Technical	0	0	1	6	7	0	0	1	6	7
Senior Management (Executive)	0	0	3	9	12	1	1	3	7	12
Grand Total	0	1	7	18	26	1	2	8	15	26

However, only three courses (4.8%) collected by the TCM Inventory to date could be mapped to the Leadership and Relationship Management competencies. This suggests a significant gap between training need and availability of training for developing these competencies.

5.4 CAPACITY BUILDING COMPETENCIES

Knowledge and skills for identifying learning and development opportunities and for developing training and education initiatives to address gaps were the competencies which were highly rated for both Relevance and Interest. This suggests that DRM professionals recognize that there are different pathways to building capabilities, in addition to traditional training approaches. There may also be room for building capacities to develop well-designed training.

An interesting result from the survey was the level of interest in keeping up-to-date with new developments and research in DRM practice. While this competency was not the highest rated in terms of relevance to their work, particularly Senior NDO officers and those at the Professional/Technical level expressed strong interest in being exposed to current DRM knowledge.

The CDM Audit results were consistent with the above TNA results. The Audit highlighted a need for improved networks for knowledge sharing as a weakness in education and information for CDM. It also found that there was a need for evaluation of information sharing initiatives and that there was a dearth of accredited professional certifications in DRM competencies. Certification was an important incentive for NDO professionals to engage in capacity building. This was also reflected in the Inventory where only 20% (approximately) of TCMs offered an accredited award.

Recommendations

6. RECOMMENDATIONS

The below recommendations are informed by the preceding analysis. The recommendations have also been linked to the CDM Strategy 2014-2024 as the major strategic framework guiding CDM in the region. General recommendations are as follows:

- 1.** There is a critical need to develop and deliver training courses and materials that will build capacity in the following competency areas:
 - a.** Leadership
 - b.** Relationship Management
 - c.** Community resilience
- 2.** There is a need for more accredited professional certification to be offered- this was cited as a strong incentive for participation in training. There is a need for more accredited, professional certifications in DRM competencies
- 3.** Examine what avenues are available for sharing up-to-date DRM research consistently and regularly, recognizing that this information may need to be “translated” into language and terms easily understood by laymen at all levels.
- 4.** It may be advisable to do deeper analyses of specific factors that affect capacity in specific competency categories e.g. target audience, facilitators/instructors, to develop (i) a better understanding of the nature of the perceived capacity gap and (ii) a better sense of the market for training.
- 5.** There is a need to develop a regionally agreed and recognized competency framework prior to another TNA exercise.

Some specific recommendations for priority competencies in each category are presented in Table 5.

**TABLE 5:
SPECIFIC RECOMMENDATIONS FOR TRAINING NEEDS IN EACH COMPETENCY CATEGORY**

No.	Competency Category	Specific Recommendations to Address Training Needs		Link to Regional CDM Strategy 2014-2024
		Key Competencies Identified as Gaps	Recommendations	
1	Risk Management	<ul style="list-style-type: none"> • Risk Assessment, • Vulnerability Assessment • Assess the Effects of Disasters on Various Groups • Strategising Mitigation Measures, • Preparation of Mitigation Plans • Community Resilience Enhancement • Hazard Mapping 	<ul style="list-style-type: none"> • Prioritise accreditation of existing training courses- either as professional certification or as continuing education courses • Given that the inventory identified a number of training opportunities in these areas, it may be necessary to investigate these competencies more deeply, particularly against specific barriers to participating in risk management related training. 	Priority Areas 1, 3, 4
2	Relationship management	<ul style="list-style-type: none"> • Identify partners to engage • Identify purpose and objectives of engaging with partners • Maintain and improve new and existing partnerships 	<ul style="list-style-type: none"> • Prioritise the development and delivery of training in the areas • Support with other capacity building approaches such as mentoring/coaching 	Priority Areas 1, 3
3	Information Management	<ul style="list-style-type: none"> • Early Warning Systems • Developing systems and processes for managing and disseminating data and information • Monitoring and evaluating the effectiveness of these systems 	<ul style="list-style-type: none"> • Training in these competencies should be targeted at empowering the local/community levels with relevant knowledge and skills, to realise the greatest benefits 	Priority Areas 1, 4 Regional Outcome 4.3
4	Planning	<ul style="list-style-type: none"> • Emergency/Disaster Planning • Contingency Planning • Business Continuity Planning • Exercise Design and Management 	<ul style="list-style-type: none"> • Prioritise accreditation of existing training courses- either as professional certification or as continuing education courses 	Priority Areas 1, 3, 4
5	Communication	<ul style="list-style-type: none"> • Emergency/Crisis Communication • Public Speaking and Interviewing • Development of Public Education and Awareness Programmes • Strategies/Techniques for Risk Communication 	<ul style="list-style-type: none"> • Regional and national DRM training providers should establish partnerships with Media and Communications Sector to develop training in these areas 	Priority Areas 1, 4
6	Leadership	<ul style="list-style-type: none"> • Advocacy and Negotiation • Conflict Resolution • Stress Management • Problem Solving 	<ul style="list-style-type: none"> • Formal training developed in these areas should be supported with other capacity building approaches such as mentoring/coaching 	Priority Areas 1, Regional Outcome 1.1
7	Response	<ul style="list-style-type: none"> • EOC Management • ICS • Emergency Response Coordination • DANA 	<ul style="list-style-type: none"> • Prioritise accreditation of existing training courses offered at the regional level 	Priority Areas 1, Regional Outcome 1.1
8	Capacity Development	<ul style="list-style-type: none"> • Identify learning and development opportunities • Develop training and education initiatives to address gaps 	<ul style="list-style-type: none"> • Knowledge sharing networks are critical e.g. CARDIN, CRIS, but may not be well known. Identify entry points in TCM for other competencies, where these networks can be highlighted. • Develop partnerships with Media and Communications Sector to translate research into accessible information for practitioners (CIMH Drought Bulletin may provide a useful model and lessons that can be shared) • Develop training that targets NDMO staff that are responsible for training, to enhance their skills in developing capacity building interventions for their constituents. 	Priority Areas 1, 2

- 6.** Other gaps in training identified by analysis of the Inventory include
 - a.** Lack of introductory courses in many key topics
 - b.** Glaring lack of professional certification in many competency areas
 - c.** Lack of accreditation of continuing education courses

General Recommendations for Enhancement and Sustainability of the TNA

- 7.** Institutionalise the Inventory of DM TCM and the TNA within the CDEMA system (for sustainability of investment):
 - a.** The CDEMA RTC should consider taking leadership for coordinating the maintenance and dissemination of the Inventory, as well as implementing the TNA. An option to consider is to apply to the TNA a similar schedule to that of the CDM Audit to maximize efforts and resources.
 - b.** Present a brief report of the findings of the TNA to the 2017 TAC.
- 8.** Expand the Inventory to become an authoritative source of information on DRM training opportunities- this should be a consistent activity. Consideration can be given to a mechanism for training providers to submit their courses (new or updated), on a regular schedule, to be reviewed for inclusion in the inventory (rather like a call for papers). A vetting process would be necessary.
- 9.** Convert the Inventory into a searchable database.
- 10.** The Inventory should also be accessible via public information repositories such as the CDEMA CRIS.
- 11.** Refine the TNA instrument and process for future application. Refinement should be done as a collaborative, stakeholder effort.
- 12.** The ESSC can support many of the above recommendations.

Limitations and Challenges

7. LIMITATIONS AND CHALLENGES

1. Some PS submitted one survey to reflect the views of the local DRM system. While this is efficient it presents challenges for data analysis of a survey that was designed for staff at all levels of target organisations to complete.
2. While organisations were invited to circulate the survey to all members of their organisation, it has been recognised that often only one response was received.
3. Lack of a CDM competency framework that is widely recognised by organisations and actors in the CDEMA system.
4. Length of the survey may have discouraged potential respondents from completing it.
5. DRM professionals at the administrative levels are not well represented in the survey results.
6. Lack of consistency in how training providers present information on training courses presents challenges in linking courses to competencies and identifying gaps.

Lessons Learned

8. LESSONS LEARNED

- 1.** Future applications of the TNA should be designed to allow for local/in-country data collection and resourced accordingly.
- 2.** Investigating training needs based on DRM competencies is, by necessity, a longer survey than target beneficiaries may be willing to fill out. Also, it was noted that an interview-style approach to filling the survey takes longer than an individual filling the survey personally. More time must therefore be invested in sensitizing PS and securing buy-in for the TNA survey.
- 3.** Administration of the survey should allow space for ensuring that NDCs understand the target audience for the survey and that it is seeking to survey at all levels of the target organisations.

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THE EKACDM INITIATIVE

The Enhancing Knowledge and Application of Comprehensive Disaster Management, EKACDM) Initiative is a five year project which was implemented in the Caribbean region from September 2013 to December 2018 by the Disaster Risk Reduction Centre, the Institute for Sustainable Development, the University of the West Indies. This Initiative seeks to establish an effective mechanism and programme to promote an integrated approach to Comprehensive Disaster Management knowledge in the Caribbean region, to fast track the implementation of the CARICOM Enhanced Comprehensive Disaster Management (CDM) Strategy and Frameworks (2007 - 2012 and 2014 - 2024).

The ultimate outcome of the EKACDM Initiative is to reduce the impact of natural and technological hazards and the effects of climate change on men, women and children in the Caribbean region. It seeks to position the region with greater knowledge and practical solutions to strengthen climate adaptation, and other sustainable practices that will make the region more resilient and sustainable.

For further information:

<http://www.uwi.edu/EKACDM/index.aspx>

<http://uwi.edu/drrc/>

<http://www.uwi.edu/isd/>