

ANNEX B

Analysis of Findings

Current Situation and Practices, Needs, Barriers and Recommended Interventions for integration of DRM in SME Practices

FACTOR 1.1 - SME HAZARD IDENTIFICATION

Table 1 - Needs and Barriers

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ SME awareness generally high for hydrological and seismic events but low for other events (biological, chemical, etc) 	<ul style="list-style-type: none"> ▪ Limited Hazard and Risk identification by SMEs ▪ Limited comprehensive multi hazard considerations by SMEs ▪ SMEs generally have no CDM Education or Plans 	<ul style="list-style-type: none"> ▪ SMEs identify Hazards / Risks ▪ CDM Education and Plans for SMEs 	<ul style="list-style-type: none"> ▪ False SME perceptions of their hazards and risks ▪ Lack of DRR / CDM exposure and knowledge of within SMEs ▪ Costs to SMEs 	<ul style="list-style-type: none"> ▪ SMEs to conduct Hazard and Risk identification ▪ SMEs to develop Multi-Hazard CDM Plans and SOPs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <li style="text-align: center;">Appropriate SME Committee
<ul style="list-style-type: none"> ▪ Hazard identification and mapping rarely used by SMEs and only for natural hazards. ▪ High vulnerability of many farms and small 	<ul style="list-style-type: none"> ▪ Limited Hazard Risk Identification and mapping by SMEs despite IDB funded vulnerability assessment and risk 	<ul style="list-style-type: none"> ▪ Institutionalize use of hazard information for SMEs into the planning process ▪ Systemic Identification of 	<ul style="list-style-type: none"> ▪ Lack of resources ▪ Cost and Financing for resources and training ▪ Lack of DRR exposure and knowledge among 	<ul style="list-style-type: none"> ▪ SMEs to have CDM plans to cover all hazards, including resource needs ▪ Extend the national hazard and risk 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <li style="text-align: center;">Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<p>hotels and guest houses to floods and hurricanes</p> <ul style="list-style-type: none"> ▪ Hotel properties are located on or in close proximity to the beach where coastal erosion and environmental impact most impact tourism. ▪ Visitor cancellations, food shortages, staff unavailability, water and electricity costs have disproportionately huge impact on SMEs recovery. 	<p>mapping project since 2007.</p> <ul style="list-style-type: none"> ▪ No SME comprehensive disaster plans ▪ Insufficient DRR education within the tourism sector. ▪ Limited enforcement of hotel set-back regulations ▪ Poor maintenance of roads and bridges and insufficient river dredging ▪ Limited 'recovery marketing' and other strategies 	<p>hazards and elements at risk.</p> <ul style="list-style-type: none"> ▪ Non-traditional hazards like "Bush Fires", "Hazardous Materials", "Oil Spills", "Explosions" and others should be included in hazard mapping and risk analysis programmes for SMEs. ▪ Hazard Risk and Vulnerability Analysis (HRVA) and DRR plans to determine resource needs for SMEs ▪ HRVA methodologies and procedures need harmonization and operationalization including SMEs ▪ Enforcement of 'setback' regulations ▪ Effective Roads, Rivers and other Infrastructure maintenance programmes ▪ Prevention and Mitigation strategies and training for SMEs 	<p>SMEs</p> <ul style="list-style-type: none"> ▪ No standardized HRVA tools ▪ SMEs have other priorities 	<p>mapping programme to include SMEs and all natural and man-made - technological hazards.</p> <ul style="list-style-type: none"> ▪ Develop and deploy On-line "Risk Maps" including DRR and other business risk factors for SME decision making (Web sites, Smart Phone Apps) "Model Business Continuity Plan" ▪ Develop and promote Apps for standardized "HRVA" tools including DRR and other business risk factors for SME decision making ▪ HRVA training workshops for SMEs ▪ Conduct HRVA to inform resource needs for each risk identified for each SME ▪ Implement set-back requirements considering projections for climate change impact and re-evaluate coastal development and placement of infrastructure. 	

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
		to include Greenhouse operations, crop planting seasons, etc		<ul style="list-style-type: none"> ▪ Study impact of adjustment from field vegetable crops to root crops as agriculture SMEs Prevention and Mitigation strategy 	

FACTOR 1.2 - RESEARCH AND DATA FOR SME CDM DECISION MAKING

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ SMEs not sure what DRR information is needed and available or how to use it for decision making 	<ul style="list-style-type: none"> ▪ DRR Education deficit within SMEs 	<ul style="list-style-type: none"> ▪ DRR Education for SME owners and staff 	<ul style="list-style-type: none"> ▪ Time and interest to do research 	<ul style="list-style-type: none"> ▪ On-Line” DRR Decision Making” Tools (Web site, Phone App). ▪ DRR Decision making training workshops for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA ▪ Appropriate SME Committee
<ul style="list-style-type: none"> ▪ Business Continuity and national development suffers from lack of availability or research for credible and comprehensive data ▪ Critical SME decisions and actions generally categorized as “business risk” and not evidence based, due to inadequate research or lack of available data ▪ Difficult to get access to comprehensive DRR data for SME business modeling ▪ SMEs not aware of several DRR projects implemented annually, with little knowledge of their outcomes (eg 	<ul style="list-style-type: none"> ▪ Project information and outcomes not filtered to SMEs and have little impact on them ▪ Deficit in DRR Education, knowledge, capacity and interest within SMEs 	<ul style="list-style-type: none"> ▪ Promote use of smart phones for access to DRR information and data ▪ Mandatory DRR databases and records to include data on agriculture and tourism. ▪ Mandatory data archiving within government agencies ▪ Ease of access to information ▪ Easy on-line access to risk maps ▪ Annual data audit ▪ Available data for DRR decision making analysis ▪ Research, data and 	<ul style="list-style-type: none"> ▪ Funding for development and maintenance of Web portals and phone Apps. 	<ul style="list-style-type: none"> ▪ Central on-line Regional Disaster Information Unit run by CDEMA documentation centre ▪ Include requirements for data collection, management and sharing in disaster legislation. ▪ DRR ‘data warehousing’ on universal servers with ‘data mining’ tools including data on all SME sectors ▪ Easy access to on-line “Risk Maps”, DRR Legislation and other relevant information (Web sites, Smart Phone Apps) for SMEs ▪ Continue discussion 	<ul style="list-style-type: none"> ▪ CDEMA

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<p>ADRM and IDB funded Tourism vulnerability assessment and risk mapping projects)</p> <ul style="list-style-type: none"> ▪ More than 60% of SME operators have access to smart phones that most use mainly for communications and not for web based access to information or research. 		<p>development to become a critical pillar in ensuring the sustained and improved success of SMEs</p> <ul style="list-style-type: none"> ▪ Sharing results of projects and data gathering efforts 		<p>among stakeholders on data collection, management and sharing,</p> <ul style="list-style-type: none"> ▪ Creation of a project inventory data base for DRR and CCA related projects would ensure that efforts would not be duplicated and that gaps would be addressed. ▪ Systematic circulation of project reports to all stakeholders 	

FACTOR 2.1 - LEGISLATION, STRATEGY, STANDARDS AND COMPLIANCE

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ HTAs know little about the national CDM strategic framework. 	<ul style="list-style-type: none"> ▪ No special DRR strategy being pursued for SMEs ▪ Limited effectiveness of limited SME training programme 	<ul style="list-style-type: none"> ▪ Regional and National DRR strategy for SMEs ▪ training programme for SMEs 	<ul style="list-style-type: none"> ▪ Financing ▪ Lack of SME Education and interest 	<ul style="list-style-type: none"> ▪ Establish and publicize on-line Regional and National Frameworks, Strategies, Policies and Standards for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA
<ul style="list-style-type: none"> ▪ SMEs do not systematically practice DRR measures ▪ Complacency from rarity of disaster experiences in some cases 	<ul style="list-style-type: none"> ▪ No natural hazards DRR legislation specifically for SMEs ▪ Mitigation not natural in a reactive culture ▪ Limited government incentives and/or sanctions to promote risk reduction within SMEs. ▪ Lack of DRR knowledge and training ▪ No imperative 	<ul style="list-style-type: none"> ▪ DRR Legislation to include SMEs ▪ Business Continuity Plans and accounting assistance ▪ SME Incentive programmes that promote risk reduction. ▪ Government incentives and/or sanctions which promote risk reduction. ▪ DRR Education and training ▪ CDM Plans 	<ul style="list-style-type: none"> ▪ Political will to get full cooperation and acceptance from SMEs ▪ DRR Education and understanding of the cost benefits to SMEs ▪ Financing for equipment resources, etc ▪ Limited capacities to incorporate DRR in SMEs. 	<ul style="list-style-type: none"> ▪ Amend DRR legislation specifically to include SMEs ▪ include DRR in Fiscal incentives legislation for both tourism and agriculture. ▪ Provide non-fiscal incentives for mainstreaming DRR into tourism plants, agri-businesses and large farms. ▪ Use regulations within existing laws to conduct DRR resilience programmes for 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				<p>SMEs</p> <ul style="list-style-type: none"> ▪ Business Continuity Plan "Apps" for SMEs ▪ Jointly planned performance based DRR compliance incentive programme for SMEs ▪ Certify and incentivize SME hotels and guest houses that meet minimum standards including hazard liability insurance and publish on Tourism Authority web site along with other incentives ▪ Lobby insurance companies to include DRR in tourism liability insurance and encourage banks to require DRR plans for loans. ▪ DM Training facilitated by Hotel 	

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				Associations <ul style="list-style-type: none"> ▪ Link to regional compliance incentive initiatives 	
<ul style="list-style-type: none"> ▪ Expectations that government will provide and sustain adequate human, material and infrastructure resources to facilitate SME DRR activities 	<ul style="list-style-type: none"> ▪ Govt. agencies not currently mandated or resourced to support SMEs in DRR ▪ Govt. agencies not adequately resourced to enforce existing DRR regulations. 	<ul style="list-style-type: none"> ▪ Mandate and resources for NDMAs to support SMEs in DRR ▪ DRR legislation and regulations for SMEs ▪ Adequate resources for Govt to enforce DRR legislation and regulations among SMEs 	<ul style="list-style-type: none"> ▪ No legislation ▪ Costs and Financing ▪ Monitoring staff shortages ▪ Other government priorities 	<ul style="list-style-type: none"> ▪ Amend DRR legislation to include SMEs ▪ Use regulations within existing laws to conduct DRR resilience support programmes for SMEs ▪ Seek development grant funding to finance government resourcing to support SME DRR activities 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ Little attention paid to SMEs from Govt. DRR agencies. 	<ul style="list-style-type: none"> ▪ No specific DRR legislation for SMEs ▪ No full time staff resources allocated to SMEs as they are not included in public sector DRR job descriptions. 	<ul style="list-style-type: none"> ▪ DRR Legislation for SMEs. ▪ SME inclusion in DRR job descriptions within Govt. agencies. 		<ul style="list-style-type: none"> ▪ Pass DR Legislation for SMEs ▪ Include DRR/DRM for SMEs in job descriptions, functions, roles and responsibilities within the national 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
	<ul style="list-style-type: none"> ▪ National DRR Platform, functions, roles and responsibilities exclude specific provisions for SMEs 			<p>DRR platform</p>	
<ul style="list-style-type: none"> ▪ SMEs can't afford to upgrade old inherited infrastructure to meet minimum DRR standards 	<ul style="list-style-type: none"> ▪ Risk Financing 	<ul style="list-style-type: none"> ▪ Current SME minimum standards to be upgraded to include DRR standards ▪ Need special Low cost financing mechanisms for SMEs 	<ul style="list-style-type: none"> ▪ Questionable Financial Viability ▪ Small scale operations 	<ul style="list-style-type: none"> ▪ Provide special affordable risk financing for small scale SMEs ▪ Set up financing facilities such as grants and concessionary loans intended for SMEs and a special credit line in the form of Business Disaster Loans (i.e. a risk mitigating facility) for medium-sized companies. Grants can be directed to affected micro and small enterprises that have no productive assets left and negligible creditworthiness. ▪ Provide additional capital support for SMEs during 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				disaster events, including optional loan restructuring. Tax reprieves should be considered especially for small and medium enterprises	
<ul style="list-style-type: none"> ▪ Limited environmental compliance by SMEs. 	<ul style="list-style-type: none"> ▪ Min of agriculture extension officers and other government agencies have comprehensive registration information on small farmers and other SMEs but this is not effectively analyzed or utilized 	<ul style="list-style-type: none"> ▪ Mandatory SME compliance ▪ Comprehensive SME database ▪ NDMA to acquire necessary skills and resources for Environmental monitoring 	<ul style="list-style-type: none"> ▪ Neither sector associations nor governments have comprehensive lists of operating SMEs ▪ Many SMEs not registered hence difficult to capture adherence to DRR standards ▪ Compliance with standards is a voluntary, political, social, institutional and not a technical issue in the Caribbean. ▪ Technical monitoring staff and resource shortages ▪ Monitoring costs to public agencies. 	<ul style="list-style-type: none"> ▪ Decentralized SME DRR compliance through financial Institutions, government agencies, etc ▪ Establish SME Certification to include DRR standards ▪ Include Environmental Compliance in Multi-Hazard SME CDM Plans and SOPs ▪ Develop SME Incentives programme alongside legislation. (Carrot and stick approach) 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p>Appropriate SME Committee</p>

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<p>Limited environmental monitoring by authorities</p>	<ul style="list-style-type: none"> ▪ Lack of resources and mandate 	<ul style="list-style-type: none"> ▪ Strengthen SME monitoring mandate and resources of existing DRR monitoring agencies (eg Fire, Health, depts.) 		<ul style="list-style-type: none"> ▪ Seek grant funding or NGO support for monitoring resources ▪ Comprehensive SME Registration and Certification ▪ Use regulations within existing laws to conduct DRR compliance programmes for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p>Appropriate SME Committee</p>

FACTOR 2.2 - ORGANIZATION AND PARTNERSHIPS

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Tourism SMEs reluctant to join hotel associations ▪ While cooperative, SMEs unwilling to partner with government agencies ▪ Agri SME associations not well subscribed 	<ul style="list-style-type: none"> ▪ Costs of Membership Fees ▪ Few benefits expected ▪ Lack of trust from competition ▪ Bad experiences 	<ul style="list-style-type: none"> ▪ SMEs need representation, concessions and benefits ▪ SMEs to be represented through sector associations ▪ Sector concessions and benefits through sector associations ▪ SME associations build trust by larger businesses demonstrating benefits to smaller SMEs ▪ Establish a redress mechanism for poor representation ▪ Group applications, negotiations and benefits through sector associations ▪ SME associations to provide leadership and representations for each sector. ▪ SME Membership fees 	<ul style="list-style-type: none"> ▪ SMEs don't have the political, financial or social leverage that large businesses have so feel benefits skewed against them ▪ Lack of trust and Competition from larger businesses ▪ SMEs see few tangible benefits in joining associations ▪ Past experiences of underperformance and under representation of SMEs by both associations and Govt agencies ▪ Public cost of concessions and benefits to SMEs 	<ul style="list-style-type: none"> ▪ Strengthen sector Associations and conduct membership drive. ▪ Better utilize established organizations eg Chambers of Commerce, Small Business Associations, etc. ▪ SMEs form separate SME sector associations. 	<ul style="list-style-type: none"> ▪ SMEs

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
		paid for by third party (Sector association, Tourist Board or any other institution)			
<ul style="list-style-type: none"> ▪ Minimal communication between NDMA's and SME sector associations ▪ Little confidence among SMEs in NDMA's ability to direct and support their DRR programmes 	<ul style="list-style-type: none"> ▪ Few effective institutionalized partnerships between SME Associations and NDMA's ▪ Influence of larger private sector entities and individuals have historically proven more effective ▪ Resource gaps within NDMA's reduce effectiveness and ability to direct and support DRR programmes 	<ul style="list-style-type: none"> ▪ Bilateral agreements between SMEs and NDMA's and other relevant partners to support DRR activities ▪ Build trust and confidence to enable association membership and bilateral partnership arrangements to work. ▪ Closer SME partnerships to communicate in planning for disasters. ▪ NDMA resources and management for effectiveness with SME Disaster resilience 	<ul style="list-style-type: none"> ▪ Some HTAs don't see the need to work bilaterally with or support NDMA or other government agency ▪ Lack of Mutual Benefits ▪ NDMA ▪ SME Associations ▪ Chambers of Commerce / Private Sector Organizations ▪ Min of Agriculture 	<ul style="list-style-type: none"> ▪ MOUs and Work Plans to build partnerships between SMEs and NDMA and other Govt agencies ▪ Better utilize non conflicting established organizations eg Chambers of Commerce, Private Sector Organization, Small Business Associations, etc. ▪ Provide adequate resources for NDMA's to direct and support SMEs DRR programmes 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA ▪ Appropriate SME Committee

FACTOR 2.3 - PLANNING AND PLAN OPERATIONALIZATION

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ SMEs don't systemically prevent, prepare for, mitigate, respond to or recover from natural hazards. ▪ Ad hoc SME DRR activities ▪ Little or no Prevention or Mitigation activities by SMEs ▪ Low resilience of SMEs as many never recover after large disasters. 	<ul style="list-style-type: none"> ▪ DRR not specifically promoted for SMEs ▪ No Comprehensive Disaster Plans among SMEs ▪ Agri SMEs not aware of ADRM Plan. ▪ Agri SMEs not typically registered as businesses therefore not in mainstream for assistance from government through extension officers and other DRR information. ▪ CDM concepts not included in Business Continuity Plans ▪ Insufficient DRR planning assistance to small and medium enterprises. ▪ Business Plans don't include mandatory provisions for DRR ▪ SME hotels typically have limited plans for traditional hazards 	<ul style="list-style-type: none"> ▪ Assistance to SMEs to develop CDM Plans ▪ CDM Training for SMEs ▪ Promote Recovery Strategies and measures to ensure SMEs can recover quickly ▪ SMEs backup data as a Business Recovery measure. ▪ ADRM Plans to be regionalized and operationalized at all levels ▪ Include DRR considerations in Business Plans ▪ Sector (Agri and Tourism) CDM coordinators at national level ▪ Agri SMEs register for government DRR assistance 	<ul style="list-style-type: none"> ▪ Takes a long time ▪ Lack of DRR exposure and knowledge among SMEs ▪ Lack of leadership ▪ Cost and Financing ▪ Lack of resources ▪ Lack of SME interest ▪ Other business priorities 	<ul style="list-style-type: none"> ▪ CDEMA Finance and Economic Sector Sub-Committee to complete planning and implement the CDM Strategy for SME needs ▪ CDEMA to develop or amend model Multi-Hazard CDM Plans and SOPs for SMEs ▪ Appoint CDM Coordinators in relevant Ministries for every SME sector to manage CDM plans. ▪ SMES build capacity to implement and manage DRR plans and resources ▪ Implement CDM training workshops for SMEs ▪ Conduct joint NDMA-SME HVRA 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
	<p>(Hurricane, Fire, Pesticide, Electrical, Health, etc).</p> <ul style="list-style-type: none"> ▪ Ineffective Intra-regional and national communication and information sharing on DRR strategies 			<p>and BCP development for all hazards with CDM concepts</p> <ul style="list-style-type: none"> ▪ Joint DRR planning between SMEs, Sector Ministries and Associations ▪ Small Business Units of Financial Institutions to include DRR considerations in business plans for loans approvals ▪ Develop and deploy “Business Plan” and “CDM Plan” Apps for SMEs ▪ Conduct DRR training workshops for SMEs ▪ Establish joint Private/Public funding mechanisms for DRR training with curricula and schedules for Tourism and Agri SMEs. 	

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				<ul style="list-style-type: none"> ▪ Agri SMEs register to receive government assistance and information 	
<ul style="list-style-type: none"> ▪ SMEs show little understanding of or adherence to land Use planning regulations and Building Codes ▪ SMEs pay little attention to environmental protection and sustainability of some critical natural resources ▪ Poor use of water resources by SMEs 	<ul style="list-style-type: none"> ▪ No Comprehensive Disaster Plans ▪ Agri SMEs not aware of DRR mitigation plans and standards or the ADRM Plans ▪ Ad-hoc shelter plans for guests, animals, etc. ▪ Limited training on CHTA compiled disaster preparedness manual for small hotels and guest houses ▪ Agricultural DRR (ADRM) plan not yet ratified after 3 years in some cases ▪ Agricultural DRR Plan largely ignores livestock ▪ Incomplete and disconnected Evacuation Plans ▪ Incomplete Pesticide Plans 	<ul style="list-style-type: none"> ▪ SME sector Associations to monitor and enforce compliance of its membership. ▪ Govt to enforce existing best practice regulations and mechanisms ▪ DRR guidelines from Forestry department for small farmers ▪ Shelter plans needed with protocols for guests, animals, etc. 	<ul style="list-style-type: none"> ▪ Sector Association membership does not include all SMEs ▪ No mandate for Sector Associations 	<ul style="list-style-type: none"> ▪ Amend legislation with regulations to address CDM standards for SMEs to include Hazard Inspections, Environmental Protection, Sustainability, Monitoring and Compliance, Land Use Planning, compliance with Building Codes, Use of Water Resources, Agri standards and shelters. ▪ Develop Multi-Hazard SME CDM Plans and SOPs to address Land Use Planning and Building Codes, Environmental Protection, Sustainability, Monitoring and 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				<p>Compliance, Use of Water Resources, Agri standards and shelter training workshops for SMEs</p> <ul style="list-style-type: none"> ▪ Develop and conduct SME training workshops for Land Use Planning and Building Codes, Environmental Protection, Sustainability, Monitoring and Compliance, Use of Water Resources, Agri standards and Shelter Management. ▪ Modify and conduct CHTA Training for all small hotels ▪ Include livestock in Multi-Hazard ADRM Plans and ratify. ▪ Develop Small Hotel Evacuation Plans to interface with Local and 	

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				<p>National Evacuation Plans</p> <ul style="list-style-type: none"> ▪ Include Evacuation plan in Multi-Hazard SME CDM Plans and SOPs ▪ “On line support to SMEs for developing “Evacuation Plans”, (Web sites, Smart Phone Apps, etc) ▪ Evacuation training workshops for SMEs ▪ Develop Pesticide Plans for SMEs ▪ Include Pesticide plan in Multi-Hazard SME CDM Plans and SOPs ▪ “On line support to SMEs for developing “Pesticide Plans”, (Web sites, Smart Phone Apps, etc) ▪ Pesticides training workshops for SMEs 	

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ SMEs characterized by ad-hoc responses to emergencies and disasters. 	<ul style="list-style-type: none"> ▪ Limited Contingency Planning 	<ul style="list-style-type: none"> ▪ Mandatory DRR and Business continuity plans and SOPs ▪ Develop SOPs that mandate preparedness activities to be conducted by SMES, particularly hotels, including regular drills. 	<ul style="list-style-type: none"> ▪ Other SME priorities ▪ Cost and Financing ▪ Lack of DRR exposure and knowledge among SMEs 	<ul style="list-style-type: none"> ▪ Joint Contingency Planning between SMEs, Ministry and Sector Associations ▪ Business Continuity, Contingency and Recovery Planning workshops for SMEs ▪ Develop model Contingency and Business Continuity Plan” Apps for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ High impact on GDP from natural disasters (ECLAC studies of Hurricane Thomas floods of 2011 and Dec 2013 trough), however DRR not treated as a national economic development issue in SMEs 	<ul style="list-style-type: none"> ▪ SMEs not aware of CDM framework and their direct contributions to national economic development. ▪ SMEs don’t have Comprehensive Disaster Plans ▪ SMEs focused on bread and butter business issues 	<ul style="list-style-type: none"> ▪ Greater DRR education within SMEs ▪ Publicize data to show contribution of SMEs to economy and employment ▪ Tourism and agri SMEs to be recognized as part of the community for development initiatives. ▪ Programme for gradual reduction of external aid for DRR. 	<ul style="list-style-type: none"> ▪ Inadequate and insufficient small business financing options ▪ Competitive pressures on SMEs from larger, more engaged enterprises ▪ Lack of higher level education and engagement within SME sector ▪ Feeling of insignificance among SMEs due to small scale operations 	<ul style="list-style-type: none"> ▪ Include Economic Development orientation in Multi-Hazard SME CDM Plans and SOPs ▪ Publicize data to show contribution of SMEs to economy 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Ad hoc Recovery efforts by SMEs ▪ Ad-hoc SME recovery support by Govt. ▪ High SME failure rate after major disasters 	<ul style="list-style-type: none"> ▪ Limited Business Continuity and Recovery Planning by SMEs ▪ Lack of DRR exposure and knowledge within SMEs ▪ Ineffective communication between SMEs and DRR agencies 	<ul style="list-style-type: none"> ▪ Standardized Business Continuity and Recovery Plans ▪ Assistance for SMEs in drafting DRR and Business Continuity and Recovery Plans ▪ Mainstream recovery financing mechanisms ▪ Joint NDMA-SME Business Continuity and Recovery Plan development for all hazards ▪ Special Govt assistance for SME business continuity planning and recovery 	<ul style="list-style-type: none"> ▪ Recovery often seen as a government responsibility ▪ Recovery Cost and Financing ▪ Lack of resources ▪ Lack of DRR exposure and knowledge among SMEs ▪ Insufficient Govt. capacity ▪ Financial risk to public institutions not allowed 	<ul style="list-style-type: none"> ▪ Develop model BCP and Recovery Plans for SMEs ▪ Develop “On line support to SMEs for “Business Continuity and Recovery Planning” (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, LEAD etc) ▪ SMEs liaise with NDMA to develop comprehensive Business Continuity and Recovery Plans 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ No systematized or procedural conduct of studies and lessons learned from disasters ▪ No coordinated institutional mechanisms for disseminating lessons learned from every hazardous events throughout the region 	<ul style="list-style-type: none"> ▪ No DRR Standard Operating Procedures (SOPs) in SMEs including post-event AARs and studies ▪ Lack of DRR exposure and knowledge within SMEs or external assistance to them ▪ Lack of funds. Studies and publications usually financed by 	<ul style="list-style-type: none"> ▪ Protocols for conducting, coordinating and disseminating results of AARs, studies and lessons learned from every disaster event ▪ Tourism and Agriculture recognized as ‘community-based’ rather than ‘sector based’ issues with SMEs recognized as 	<ul style="list-style-type: none"> ▪ Costs and financing of studies ▪ Lack of financial and physical resources to implement programmes ▪ Limited Institutional capacity 	<ul style="list-style-type: none"> ▪ Develop standard Protocols for conducting, coordinating and disseminating results of AARs, studies and lessons learned from every disaster event across the Region to be included in DRR SOPs for SMEs ▪ DRR SOPs training 	<ul style="list-style-type: none"> ▪ CDEMA

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
	<p>donor funds</p> <ul style="list-style-type: none"> ▪ Findings mostly treated as academic and recommendations not implemented. 	<p>community members for development planning initiatives.</p>		<p>workshops for SMEs.</p> <ul style="list-style-type: none"> ▪ "On-line publication of generic DRR SOPs for SMEs (Web sites, Smart Phone Apps, etc) 	

FACTOR 3.1 - RESOURCES AND TECHNOLOGY

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Small farms and guest houses depend predominantly on limited manual labour and cannot respond sufficiently quickly or adequately to minimize losses from disasters. ▪ Many small farming SME operations are not sustainable as profitability is too low to recover from disaster events 	<ul style="list-style-type: none"> ▪ Techniques and resources outdated and inefficient ▪ Scale of individual operations too small to benefit from efficiencies of scale 	<ul style="list-style-type: none"> ▪ Insufficient use of technology and “smart agriculture” for productivity and profitability on small farms ▪ Need for mechanization with farm equipment resources to improve output and profitability ▪ Training and awareness of new innovations and smart farming practices that that minimize labour and increase productivity and profitability. Eg greenhouses, smart drip irrigation, solar PV systems, etc ▪ Need to operate as collective entities to benefit from shared financing, resources etc ▪ Specialized training and exposure to hi- 	<ul style="list-style-type: none"> ▪ Costs and Financing ▪ No special facility currently available for SME resourcing and retooling 	<ul style="list-style-type: none"> ▪ SMEs use modern technological techniques and facilities with low overheads (eg solar and other forms of alternative energy) ▪ Government assistance to SMEs to select and acquire most suitable resources to mitigate, respond to and recover from disasters ▪ Establish coordinated programme of DRR resourcing, monitoring and compliance along with incentive policies for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
		tech tools for DRR			
<ul style="list-style-type: none"> ▪ Poor accountability of existing DRR resources within Govt. agencies 	<ul style="list-style-type: none"> ▪ Inadequate resource management systems, resources and staff within Govt. agencies. ▪ Management practices 	<ul style="list-style-type: none"> ▪ Regular resource inspections and audits ▪ Capacity building for resource management. ▪ Professional hiring and resource management practices 	<ul style="list-style-type: none"> ▪ Cost and Financing ▪ Poor management practices ▪ Lack of accountability ▪ Government HR regulations 	<ul style="list-style-type: none"> ▪ Build Govt. capacity to manage DRR plans and resources. ▪ Improve Govt. management and accountability of existing DRR resources ▪ Acquire additional resources to monitor and enforce DRR plans and activities 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ No dedicated staff provision for DRR within SMEs 	<ul style="list-style-type: none"> ▪ Affordability of dedicated DRR staff 	<ul style="list-style-type: none"> ▪ Trained and knowledgeable DRR staff within SMEs 	<ul style="list-style-type: none"> ▪ Cost of staff and DRR training 	<ul style="list-style-type: none"> ▪ Affordable SME Staff training programme for DRR competency 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ Government agencies and staff hide and hold data and information for possible future institutional or personal leverage 	<ul style="list-style-type: none"> ▪ Poor management of projects and information within government departments 	<ul style="list-style-type: none"> ▪ Annual data and information audits 	<ul style="list-style-type: none"> ▪ Difficult to audit ▪ Audit staff capacity shortages 	<ul style="list-style-type: none"> ▪ Mandatory annual data external audits with accountability clauses and sanctions 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

FACTOR 3.2 - FINANCING

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ SMEs are highly vulnerable to disasters 	<ul style="list-style-type: none"> ▪ SMEs rarely have comprehensive DRM training or plans 	<ul style="list-style-type: none"> ▪ DRR and DRM training and CDM plans 	<ul style="list-style-type: none"> ▪ Lack of interest from SMEs during normalcy ▪ Cost and financing ▪ Lack of DRR exposure and knowledge 	<ul style="list-style-type: none"> ▪ Financing organizations provide Training in business and Disaster Planning for SMEs and include Disaster Plans in loan approvals. 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA ▪ Appropriate SME Committee
<ul style="list-style-type: none"> ▪ More than 50% of SMEs are either uninsured or underinsured. 	<ul style="list-style-type: none"> ▪ Insufficient affordable risk transfer mechanisms for SMEs. ▪ Risk insurance too expensive and unsustainable for SMEs 	<ul style="list-style-type: none"> ▪ Affordable group disaster risk insurance options for SMEs ▪ Sustainable risk transfer mechanisms suitable to SME for early recovery. 	<ul style="list-style-type: none"> ▪ Scale of SME operations too small to attract affordable risk insurance 	<ul style="list-style-type: none"> ▪ Establish and/or modify government Risk Transfer and Recovery support mechanisms for SMEs to include adequate Pooled, Contingency Funds and other financing methods ▪ Affordable hazard insurance packages offered to SMEs by the government for recovery from a range of hazards ▪ Recovery financing mechanisms through SME sector Associations 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA ▪ Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Government assistance from CCRIF is currently only partially accessible to SMEs. 	<ul style="list-style-type: none"> ▪ Subscriptions limited to supporting individual household and 'micro' enterprises. 	<ul style="list-style-type: none"> ▪ Full participation and benefits in CCRIF and other national insurance mechanisms for SMEs. 	<ul style="list-style-type: none"> ▪ CCRIF subscribed by governments currently without full provision for private sectors support. 	<ul style="list-style-type: none"> ▪ Modify CCRIF terms and subscriptions to more substantially include SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ CCRIF not fully subscribed by CARICOM member states as was hoped and expected. 	<ul style="list-style-type: none"> ▪ There is no mandate for CCRIF subscription ▪ Hazard risk insurance not affordable or prioritized by some states 	<ul style="list-style-type: none"> ▪ Increased subscriptions to CCRIF ▪ Mandated subscriptions to CCRIF 	<ul style="list-style-type: none"> ▪ Fiscal and legislative challenges mandating additional costs to already tight government budgets. 	<ul style="list-style-type: none"> ▪ Expand membership in the CCRIF or similar parametric hazard risk insurance facility through mandates or other methods to allow economies of scale for sustainable and affordable risk insurance for SMEs ▪ Identify or create parametric or other affordable insurance options for individual SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ There is much discussion within the agri livestock industry about animal insurance 	<ul style="list-style-type: none"> ▪ No affordable livestock risk transfer mechanisms. 	<ul style="list-style-type: none"> ▪ Affordable Livestock insurance 	<ul style="list-style-type: none"> ▪ Increased cost of insurance resulting in additional costs to SMEs 	<ul style="list-style-type: none"> ▪ Include livestock insurance within all recovery insurance protocols. 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

FACTOR 3.3 - RECOVERY MARKETING

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Lowering market share for agri products ▪ Gluts and shortages in agri product supplies 	<ul style="list-style-type: none"> ▪ Periodic hurricanes and droughts cause inconsistency in production without effective strategic mitigation and contingency plans ▪ Periodic diseases (eg 'Black sigatoka' banana disease) compromise quality and quantity of products without effective prevention and mitigation strategies ▪ Loss of trade agreements for banana and sugar farmers. ▪ Insufficient product consistency, quantity and quality from small farmers to compete in global markets 	<ul style="list-style-type: none"> ▪ Access to disease eradication resources ▪ Contingency plans, procedures and resources for disease eradication. ▪ Shared resourcing and disease eradication financing ▪ Timely national access to and dissemination of information ▪ Trade deals to protect SME agricultural markets ▪ Small farmers access to information and affordable financing ▪ Agri -disease and quality control 	<ul style="list-style-type: none"> ▪ Quality and delivery schedules uncertain ▪ No special affordable facilities available for SMEs ▪ Cost and Financing for resources ▪ Govt. staff and resource capacity ▪ Negative economies of scale to complete globally 	<ul style="list-style-type: none"> ▪ DRR Contingency plans, procedures and resources for SMEs. ▪ Agri -disease and quality control ▪ Access to agri disease eradication equipment and resources ▪ DRR resource financing for small farmers ▪ Establish dedicated National Emergency Broadcast Radio to provide guidance to SMEs ▪ On line awareness information packages, (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, etc) for SME owners and staff ▪ Promote and 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p style="text-align: center;">Appropriate SME Committee</p>

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				<p>coordinate intra-Regional tourism for recovery marketing for small hotels.</p> <ul style="list-style-type: none"> ▪ Coordinated Intra - Regional agri recovery marketing for small farms and agri industry 	

FACTOR 4.1 - EDUCATION, TRAINING AND CAPACITY DEVELOPMENT

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ DRR not comprehensively and effectively planned and coordinated in both public and private (SME) sectors 	<ul style="list-style-type: none"> ▪ DRR agencies and SMEs lack capacity to effectively plan and implement DRR programmes ▪ No standard and formalized DRR procedures in SME sectors 	<ul style="list-style-type: none"> ▪ Increased DRR education and training across all public and private sectors ▪ Increased effectiveness of collaboration and cooperation among agencies and sectors involved in natural disasters. 	<ul style="list-style-type: none"> ▪ Cost and Financing ▪ NDMA Staff resources ▪ SME interest 	<ul style="list-style-type: none"> ▪ On-line (Moodle) DRR training for SMEs ▪ DRR training workshops for SMEs ▪ Sector Associations partner with NDMA to support and facilitate DRR training for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ Few cases of formally trained DRR staff in SMEs ▪ Low incidents of formally DRR staff within Govt agencies ▪ Lack of understanding of DRR issues among SME key personnel ▪ Govt agencies including NDMA lack capacity to provide DRR education and training support to SMEs 	<ul style="list-style-type: none"> ▪ DRR Training workshops not readily available to SMEs. ▪ SME owners rarely invest in DRR training for staff. ▪ DRR training seen as added expenses by hotel SME owners, with high expectation of losing trained staff to competitors, cruise ships, other countries, etc. ▪ Govt agencies 	<ul style="list-style-type: none"> ▪ SMEs need easy access to DRR Training ▪ Government to take the lead in DRR Education and Training for SMEs ▪ Executive DRR Education and Training programme for SME owners and key stakeholders ▪ Public administration training for SME owners and staff ▪ Govt and SME Staff training 	<ul style="list-style-type: none"> ▪ Cost and Financing ▪ Lack of resources ▪ Lack of DRR knowledge and interest among SME owners ▪ High staff attrition in SMEs ▪ Rapid turnover of government personnel ▪ Uncertainty of business cost benefit 	<ul style="list-style-type: none"> ▪ On-line (Moodle) DRR training for SMEs and Govt employees ▪ DRR training workshops for SMEs and Govt employees ▪ Emergency services conduct regular training for SMEs ▪ Emergency services conduct regular training for SMEs ▪ SME associations and appropriate Govt. agencies 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
	<p>including NDMAs rarely offer specialized DRR Education and Training for SME staff</p> <ul style="list-style-type: none"> ▪ No Laws mandating SME DRR training ▪ Low training capacity within NDMAs as this is traditionally expected of external donors 	<ul style="list-style-type: none"> ▪ Mandatory DRR training for Govt. DRR staff. 		<p>provide structured technical training and advice to SMEs.</p> <ul style="list-style-type: none"> ▪ Course development and training in Livestock Emergency Guidelines and Standards (LEGS) ▪ DRR Training workshops on “Awareness for new technological innovations and farming practices” 	
<ul style="list-style-type: none"> ▪ Limited internal DRR drills (evacuation, fire, emergency communications, etc) undertaken and conducted by SMEs 	<ul style="list-style-type: none"> ▪ Lack of DRR Plans and SOPs within SMEs ▪ Limited external training within SME staff ▪ Limited SME resource with which to conduct drills. 	<ul style="list-style-type: none"> ▪ Easy access to DRR Training for SMEs ▪ Orientation of SME staff in basic DRR ▪ Sensitization of hotel staff/ tour operators/taxi drivers associations etc to major Hazards ▪ Regular emergency drills and training simulations with SMEs owners and staff 	<ul style="list-style-type: none"> ▪ Cost and Financing ▪ Lack of DRR exposure and knowledge among SMEs ▪ Training not readily available or accessible ▪ Lack of interest of SME owners ▪ Uncertain of business benefit 	<ul style="list-style-type: none"> ▪ SMEs and sector associations conduct or facilitate training and regular drills ▪ Develop Plans and SOPs that schedule regular drills for SMES ▪ Establish and conduct regular monitoring and drills with an Emergency communications 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p>Appropriate SME Committee</p>

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
				<ul style="list-style-type: none"> network ▪ DRR simulations for agri sector including small farmers ▪ Evacuation training workshops and periodic simulations including SMEs ▪ Tourism Authority conducts trainings and periodic simulations for NDMA's and SMEs 	
<ul style="list-style-type: none"> ▪ SMEs have limited access to relevant DRR educational, promotional and training material ▪ NDMA's normally out of copies when SMEs request printed promotional DRR material like fliers and brochures ▪ Requests for DRR material usually made by SMEs only when disaster is imminent 	<ul style="list-style-type: none"> ▪ Volumes of DRR material exists on various web sites but difficult to access specific material due to incoherent storage. ▪ Insufficient DRR Educational material produced by NDMA's for wide distribution ▪ NDMA's provide promotional DRR educational material in print format ▪ Printed DRR 	<ul style="list-style-type: none"> ▪ DRR Educational, Promotional and Training material in electronic format for users to print as required ▪ Comprehensive sets of DRR Educational, Promotional and Training material made available from CDEMA documentation Centre. (Not currently fully functional) ▪ Comprehensive set of DRR country specific 	<ul style="list-style-type: none"> ▪ Cost effectiveness of large volumes of printed material ▪ Cooperation from states ▪ Cost and Financing ▪ NDMA capacity and resource limitations 	<ul style="list-style-type: none"> ▪ On-line multi hazard, multi sector "Educational, Promotional and Training Material", (Web sites, Smart Phone Apps, etc) ▪ Implement DRR 'data warehousing' on universal servers with 'data mining' tools for accessing DRR Educational, Promotional and Training material 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
	<p>educational and promotional material typically produced only under specific projects</p> <ul style="list-style-type: none"> ▪ SMEs disengaged or unaware of available plans and materials when there is no imminent threat of disaster. ▪ Limited resources for printing large volumes of educational and promotional DRR material. 	<p>Educational, Promotional and Training material uploaded to universal regional education and training web site, including material produced under special projects.</p>		<p>including SME sectors .</p>	
<ul style="list-style-type: none"> ▪ Limited SME interest and receptivity to DRR issues ▪ While being receptive to national governments, larger SME hotels liaise more closely with the CTA where they find more understanding and benefit than through their own NDMA. 	<ul style="list-style-type: none"> ▪ SMEs have not shown sufficient interest or taken the time to research and apply available DRR information ▪ Lack of effective or applied DRR exposure and knowledge among SME Owners ▪ Ineffective communications and understanding between SMEs and 	<ul style="list-style-type: none"> ▪ SME owners Knowledge and experience of DRR, economic and development issues ▪ Business Benefits to SME ▪ NDMA staff knowledge and experience ▪ Shared common understanding of DRR and business issues ▪ Govt entities and SME owners to understand 	<ul style="list-style-type: none"> ▪ Lack of SME interest unless immediate and tangible direct benefits seen ▪ SME staff and other resources and capacity ▪ Cost and Financing for education and training programmes ▪ Lack of public DRR resources and capacity (Department budgets, trained staff, literature, various types of 	<ul style="list-style-type: none"> ▪ Joint DRR Training Workshops for public servants and SME owners to include national economic and development issues ▪ Joint Business workshops for NDMA staff, executives and SME owners ▪ On-line (Moodle) multi hazard, multi 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
	key DRR agencies.	<p>the private sector its roles and needs in the development context.</p> <ul style="list-style-type: none"> ▪ Joint Business Education and Training for DRR public servants and SMEs ▪ Joint DRR and business sensitivity training 	<p>equipment, communications, computers, radios, vehicles, stationery, etc for providing DRR information, training and education.</p> <ul style="list-style-type: none"> ▪ Casual perceptions about the cost benefits of DRR measures ▪ DRR not mandatory ▪ Intuition driven entrepreneurs ▪ Other business priorities for SMEs 	<p>sector “Educational and Training Material”, (Web sites, Smart Phone Apps, etc) to include tourism and agriculture</p> <ul style="list-style-type: none"> ▪ NDMAs to become self-sustaining Executive Agencies, allowing charges for DRR services 	

FACTOR 4.2 - COMMUNICATIONS, AWARENESS AND INFORMATION SHARING

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Low receptivity despite DRR information disseminated on TV and other high profile media. 	<ul style="list-style-type: none"> ▪ SMEs unconvinced of relevance or disinterested in DRR measures ▪ TV ads mainly directed to households and schools and not targeted to businesses 	<ul style="list-style-type: none"> ▪ Greater SME Awareness ▪ Targeted CDM Promotion for SMEs ▪ DRR TV ads to target SMEs ▪ Public broadcasts ▪ Targeted awareness programme specific to SME challenges ▪ Develop awareness products for SME context ▪ DRR education and awareness for SMEs that relate to business challenges 	<ul style="list-style-type: none"> ▪ Costs to SMEs and NDMA ▪ Public resource shortages ▪ NDMA staff capacity 	<ul style="list-style-type: none"> ▪ Develop On line awareness campaign targeting SMEs (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, etc) ▪ Promote DRR awareness through dedicated National Emergency Broadcast Radio. ▪ Conduct a sustained public information and awareness programme for SMEs 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p style="text-align: center;">Appropriate SME Committee</p>
<ul style="list-style-type: none"> ▪ Response oriented reactive culture with DRR activity only when an emergency occurs ▪ SMEs act only after hazards affect their businesses 	<ul style="list-style-type: none"> ▪ No CDM understanding, Education and training within SMEs 	<ul style="list-style-type: none"> ▪ Develop SME capacity to move from reactive to proactive approach ▪ Education, training and legislation necessary to change paradigm ▪ Comprehensive disaster plans 	<ul style="list-style-type: none"> ▪ Cost and resources to SMEs for capacity development 	<ul style="list-style-type: none"> ▪ Conduct Public Awareness campaigns targeted to SMEs promoting proactive Prevention strategies instead of reactive approaches ▪ Provide "On line support to SMEs for development of "Comprehensive Disaster Plan" (Web sites, Smart Phone Apps, etc) 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p style="text-align: center;">Appropriate SME Committee</p>

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ SMEs not sufficiently aware of consequences of ‘low profiled’, ‘slow onset’ hazardous events to their businesses. 	<ul style="list-style-type: none"> ▪ Inadequate publicity of slow onset events 	<ul style="list-style-type: none"> ▪ Increased publicity of the slow onset events ▪ Make the disaster emergency event registry more public and accessible 	<ul style="list-style-type: none"> ▪ Cost and resources for publicity 	<ul style="list-style-type: none"> ▪ Increase accessibility and publicity of the disaster emergency event registry ▪ Provide real time Emergency Events Reporting (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, etc) utilizing “Des Inventar” and other sources 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee
<ul style="list-style-type: none"> ▪ SMEs are under prepared and under respond to warnings ahead of disaster events as warnings from some NDMAs often not taken seriously 	<ul style="list-style-type: none"> ▪ SMEs do not have adequate EW resources. ▪ SMEs do not have sufficient time or capacity to react adequately to precautionary measures at the last minute before disaster strikes ▪ SMEs try to maximize profits often at the risk of incurring greater damage, resulting in more difficult and expensive recovery, which often does not occur. ▪ SMEs rarely have disaster risk 	<ul style="list-style-type: none"> ▪ Early Warning systems for a wide range of hazards (Hydro Met, Technological, Health Biological, Chemicals, and other hazards) ▪ CDM education and training ▪ Business Continuity Plans ▪ Risk Financing 	<ul style="list-style-type: none"> ▪ Very tight business environment ▪ Profit motive of SMEs ▪ Lack of affordable Risk Financing 	<ul style="list-style-type: none"> ▪ Real time, On-Line Early Warning Systems for Hydro Met, Technological, Health, Biological, Chemical, and other hazards) ▪ “On line support to SMEs for “Business Continuity and Recovery Planning” (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, etc) ▪ On-line (Moodle) multi hazard, multi sector “Educational and Training Material”, (Web sites, Smart Phone Apps, etc) to include tourism and agriculture 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Limited crisis communications with SMEs during major climate and seismic disaster events 	<p>education or training or Business Continuity Plans</p> <ul style="list-style-type: none"> ▪ SMEs rarely hold communications equipment that works with national emergency networks ▪ No dedicated public emergency broadcast facilities ▪ Limited operational disaster communications systems including SMEs ▪ Limited or no emergency communications facilities at local level for SMEs during disasters 	<ul style="list-style-type: none"> ▪ Emergency communications mechanisms at local levels for SMEs. ▪ Early Warning systems particularly for small hotels / guest houses and farmers ▪ Readily available and accessible real-time actionable Information 	<ul style="list-style-type: none"> ▪ NDMA Staff shortages ▪ Costs to SMEs and public agencies ▪ Financing availability 	<ul style="list-style-type: none"> ▪ Establish dedicated National Emergency Broadcast Radio ▪ On-line, Real-time, Emergency Events Reporting (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, etc utilizing “Des Inventar” and other sources 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p>Appropriate SME Committee</p>
<ul style="list-style-type: none"> ▪ Awareness levels strategically downplayed for specific hazards. ▪ Credibility of DRR agencies questioned for lack of transparency in reporting on some high risk regional hazards 	<ul style="list-style-type: none"> ▪ Information not effectively filtered down to general population 	<ul style="list-style-type: none"> ▪ Greater Awareness ▪ Establish real time on line operational information systems ▪ All hazards (including major volcanic threats) to be treated with equal veracity ▪ Govt. DRR agencies need to be more reliable, 	<ul style="list-style-type: none"> ▪ National Security, Economic or Political considerations ▪ Uncertainty about scientific warnings and forecasts ▪ Fear of keeping population in permanent state of fear and panic 	<ul style="list-style-type: none"> ▪ Establish dedicated National Emergency Broadcast Radio ▪ On line awareness information packages, (Web sites, Text messaging, Voicemail, Email, Smart Phone Apps, etc) for SME owners and staff ▪ Latest comprehensive 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p>Appropriate SME Committee</p>

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<ul style="list-style-type: none"> ▪ Recent disaster events described as “unexpected” have previously occurred but were not documented or effectively shared with the general public ▪ The “true” status of the Kick-em-Jenny volcano is not known by potentially affected persons and is not being purposefully addressed as a credible threat. ▪ New policies outsourcing air transportation to multiple commercial air carriers operating under marginal safety conditions increase risk of aircraft accident, 		<ul style="list-style-type: none"> responsive and effective in information sharing and coordination ▪ SMEs do not communicate with DRR authorities ▪ On-line up to date Emergency events register 		<ul style="list-style-type: none"> information and scientific data on Kick-em-Jenny, Soufriere and other slow onset hazards in the region to be constantly updated on CDEMA Web site. ▪ Outsource maintenance of updated on-line emergency events register to NGO or private company for easy, sustainable access eg. “Des Inventar” and other providers. 	
<ul style="list-style-type: none"> ▪ A significant amount of records and data exists, particularly for hydrological events, but very difficult to thread all related studies and data together for credible 	<ul style="list-style-type: none"> ▪ Availability and access for CDM information not mandated as an accountable institutional responsibility 	<ul style="list-style-type: none"> ▪ Data not readily available in one place ▪ Universal servers and centralized web site with analytical tools and features ▪ Examine current data 	<ul style="list-style-type: none"> ▪ Funding 	<ul style="list-style-type: none"> ▪ Make DRR data available on universal web sites ▪ DRR ‘data warehousing’ on universal servers with ‘data mining’ tools including data on all 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA Appropriate SME Committee

CURRENT SITUATION AND PRACTICES	GAPS	NEEDS	BARRIERS	RECOMMENDATIONS FOR DRM INTEGRATION	LEAD AGENCY
<p>and comprehensive analyses</p> <ul style="list-style-type: none"> ▪ NDMA's hold little or no DRR data on SME sectors 	<ul style="list-style-type: none"> ▪ No single virtual access point, warehousing or data mining tools through which SMEs (and others) may systematically locate DRR information to track trends and to drive DRR decision making processes. 	<p>collection approaches to include analysis of data related to women, children and vulnerable groups.</p>		<p>SME sectors</p>	
<ul style="list-style-type: none"> ▪ Climate Change not real and meaningful to population 	<ul style="list-style-type: none"> ▪ Deficit in CCA understanding within general population. 	<ul style="list-style-type: none"> ▪ Promote CCA education and understanding throughout populations. 	<ul style="list-style-type: none"> ▪ Lack of urgency with slow onset hazards ▪ Population fatigue with slow onset hazards 	<ul style="list-style-type: none"> ▪ Provide universally available information about events in each country resulting from Climate Change. ▪ Research into downscaling of global models by the Mona Climate Studies Group supported and outputs factored into physical planning, development planning, socio-economic planning, hazard mapping and risk analyses as part of climate change adaptation and disaster risk reduction planning 	<ul style="list-style-type: none"> ▪ CDEMA ▪ NDMA <p>Appropriate SME Committee</p>

