

**Latin American and Caribbean Needs for Rural Energy**

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**Ambassador Christopher R. Thomas**

SPECIALLY INVITED GUESTS,  
LADIES AND GENTLEMEN:

IN THE CONTEXT OF DEVELOPMENT FOR THE TWENTY-FIRST CENTURY, THE QUESTION OF ENERGY PRODUCTION AND SUPPLY IS A KEY FACTOR. OUR CURRENT INTERNATIONAL ENVIRONMENT CANNOT BE SUSTAINED WITHOUT ENERGY; AND ENERGY WILL CONTINUE TO BE A FUNDAMENTAL ELEMENT FOR OUR FUTURE PRODUCTION.

THE ORGANIZATION OF THIS CONFERENCE AS A JOINT VENTURE BETWEEN THE NATIONAL RENEWABLE ENERGY LABORATORY (NREL) AND THE WORLD BANK ON SCALING UP ELECTRICITY ACCESS FOR SUSTAINABLE RURAL DEVELOPMENT, REFLECTS A MERGING OF POLICY AND FINANCE IN THE INTEREST OF THE RURAL ELECTRIFICATION AGENDA FOR LATIN AMERICA AND THE CARIBBEAN. IT IS IMPORTANT THAT SUCH EFFORTS BE TRANSLATED INTO CONCRETE PROGRAMS AND PROJECTS WHICH WILL GENERATE DEVELOPMENT OF OUR RURAL AREAS IN THE IMMEDIATE FUTURE.

IT IS CUSTOMARY TO SEE RURAL AREAS AS HAVING VERY LIMITED NEED FOR ENERGY BEYOND THAT PROVIDED BY TRADITIONAL SOURCES SUCH AS FIREWOOD, BAGGAS, CHARCOAL, RICE HUSK OR KEROSENE OIL, DEPENDING ON WHAT IS MORE NATURALLY OR CHEAPLY AVAILABLE IN A PARTICULAR AREA. THESE TRADITIONAL PERCEPTIONS, HOWEVER, MUST CHANGE AS THE CIRCUMSTANCES AND NATURE OF DEVELOPMENT HAVE EVOLVED IN WAYS

WHICH REQUIRE WIDESPREAD DISTRIBUTION OF LOW COST ENERGY TO EVEN THE MOST REMOTE RURAL COMMUNITIES.

THE GLOBAL COMMUNITY HAS MADE GREAT STRIDES OVER THE LAST TWO DECADES. NOT TOO LONG AGO OUR GLOBAL SYSTEM WAS HEAVILY REGULATED BY NATIONAL GOVERNMENT AND CORPORATE POLICIES. TODAY, IT HAS BECOME A HIGHLY INTERCONNECTED SYSTEM, PROGRESSIVELY DEREGULATED AND RAPIDLY CONSOLIDATING A PROCESS OF GLOBALIZATION OF UNPRECEDENTED IMPLICATIONS FOR ALL COUNTRIES.

GLOBALIZATION IS NOT SIMPLY A PHENOMENON AFFECTING THE ECONOMIC, FISCAL AND EVEN SOCIO-CULTURAL DIMENSIONS OF INTERNATIONAL RELATIONSHIPS. IT IS RATHER A FORCE OPERATING WITH A DYNAMISM WHICH CAN ONLY BE SUSTAINED IF CERTAIN CONDITIONS EXIST. THESE CONDITIONS RANGE FROM READILY AVAILABLE TELECOMMUNICATION/INTERNET SERVICES, READILY AVAILABLE TRANSPORTATION FACILITIES, EASY ACCESS TO THE OUTSIDE WORLD, AND SUSTAINABLE USE OF NATURAL RESOURCE FOR INCREASED PRODUCTION OF GOODS AND SERVICES

GLOBALIZATION CAN ONLY BE SUSTAINED UNDER THOSE CONDITIONS IF THERE EXISTS A NON-DISCRIMINATE AND COMMERCIALY VIABLE AVAILABILITY AND USE OF ENERGY – THE TYPE OF ENERGY, WHICH WILL OFFER CONTINUED ECONOMIC GROWTH WHILE AT THE SAME TIME OFFERING INCREASED ENVIRONMENTAL PROTECTION. THE INCREASING RURAL POPULATIONS OF LATIN AMERICA AND THE CARIBBEAN MAKE THIS TYPE OF ENERGY AN INDISPENSABLE REQUIREMENT. INDEED, GIVEN THE TREMENDOUS ECONOMIC DISPARITIES OF OUR REGION AND THE HEMISPHERIC PRIORITY NOW FOCUSED ON THE ALLEVIATION OF POVERTY, THE OPTIMIZATION OF ENERGY SOURCES AND USAGE IS CENTRAL TO FUTURE DEVELOPMENT.

THE EXPRESSION 'RURAL' COMMUNITIES EVOKES IDEAS OF REMOTENESS, DISTANCE, AND INACCESSIBILITY. THE EXPRESSION SOMETIMES CONJURES UP A SENSE OF HOPELESSNESS IN THE FACE OF THE DIFFICULTIES TO BE OVERCOME IN BRIDGING THE GAP IN THEIR DEVELOPMENT. HISTORY HAS SHOWN US, HOWEVER, THAT WHENEVER IT WAS NECESSARY MAN CONQUERED THE SEAS, MOUNTAINS, RIVERS, AND FOREST IN SEARCH FOR WHAT HE CONSIDERED VITAL TO HIS SURVIVAL AND FOR THE FUTURE OF HUMANITY. THE CHALLENGE OF MEETING THE ENERGY NEEDS OF RURAL AREAS IN LATIN AMERICA AND THE CARIBBEAN IS THEREFORE MINIMAL IN THE FACE OF THE SOLID ACHIEVEMENTS WHICH TESTIFY TO THE EXTENT OF OUR POSSIBILITIES. I AM ALSO PLEASED TO NOTE HERE THAT THIS CHALLENGE IS NOW FRONTALLY ENGAGED BY THE LEADERSHIP OF OUR REGION.

IN THEIR PREPARATION FOR THE SECOND HEMISPHERIC SUMMIT OF THE AMERICAS HELD IN CHILE EARLIER THIS YEAR, WORKING GROUP NUMBER SEVEN, CHARGED WITH DEVELOPING STRATEGIES FOR RURAL ELECTRIFICATION IN THE HEMISPHERE, HAD THE FOLLOWING OBJECTIVES:

“TO PROMOTE AND ACCELERATE THE DEVELOPMENT OF ECONOMICALLY SUSTAINABLE SOLUTIONS THAT WILL INCREASE ENERGY SERVICES IN RURAL AND INDIGENOUS COMMUNITIES THROUGHOUT THE HEMISPHERE;

TO ESTABLISH HEMISPHERIC COOPERATION FOR IMPLEMENTATION OF SUSTAINABLE RURAL ELECTRIFICATION DEVELOPMENT;

TO PROMOTE THE FLOW AND DISSEMINATION OF INFORMATION, FOSTER TECHNICAL COOPERATION, STIMULATE PRIVATE SECTOR INVOLVEMENT AND TO ESTABLISH COORDINATED STRATEGIES TO RESOLVE RURAL ELECTRIFICATION ISSUES AMONG THE COUNTRIES IN THE HEMISPHERE, TAKING INTO CONSIDERATION THEIR SOCIAL, CULTURAL, ENVIRONMENTAL, GEOGRAPHIC AND ECONOMIC DIFFERENCES.”

THESE OBJECTIVES REFLECT THE GROWING AWARENESS OF LATIN AMERICAN AND CARIBBEAN COUNTRIES OF THE NEED FOR ENERGY SUPPLY IN ORDER TO PROMOTE THE ECONOMIC GROWTH OF THEIR COMMUNITIES, IN THE CONTEXT

OF NATIONAL AND HEMISPHERIC OBJECTIVES. THESE OBJECTIVES ALSO UNDERLIE THE COMMITMENT OF THE HEADS OF GOVERNMENT OF THE HEMISPHERE WHEN THEY STATE IN THEIR PLAN OF ACTION THAT:

“...SUSTAINABLE ENERGY DEVELOPMENT AND USE PROMOTE ECONOMIC DEVELOPMENT AND ADDRESS ENVIRONMENTAL CONCERNS. GOVERNMENTS AND THE PRIVATE SECTOR SHOULD PROMOTE INCREASED ACCESS TO RELIABLE, CLEAN AND LEAST COST ENERGY SERVICES THROUGH ACTIVITIES AND PROJECTS THAT MEET ECONOMIC, SOCIAL AND ENVIRONMENTAL REQUIREMENTS WITHIN THE CONTEXT OF NATIONAL SUSTAINABLE DEVELOPMENT GOALS AND NATIONAL LEGAL FRAMEWORK.”

THEY FURTHER COMMITTED THEMSELVES TO “IDENTIFY FOR PRIORITY FINANCING AND DEVELOPMENT AT LEAST ONE ECONOMICALLY VIABLE PROJECT IN EACH OF THE FOLLOWING AREAS: NON-CONVENTIONAL RENEWABLE ENERGY, ENERGY EFFICIENCY AND CLEAN CONVENTIONAL ENERGY.”

PROJECTS IN THE AREAS MENTIONED ABOVE ARE VITAL FOR THE FUTURE DEVELOPMENT OF RURAL COMMUNITIES IN LATIN AMERICA AND THE CARIBBEAN BECAUSE OF THE ENORMOUS DISADVANTAGE OF NEGLECT WHICH AFFECT THESE COMMUNITIES. WHEN FUNDS ARE LOW, THEY ARE USUALLY THE FIRST TO BE FORGOTTEN AND RURAL AREAS FIND THEMSELVES FACING A NUMBER OF HANDICAPS, MANY OF WHICH ARE AGRAVATED BY THE ABSENCE OF ELECTRICITY SUPPLY. THESE DISADVANTAGES RANGE FROM: ABSENCE OF PROPER SOCIAL SERVICES (E.G., HOSPITALS AND SCHOOLS), NON-EXISTENCE OF ALMOST ALL COMMERCIAL ACTIVITY, LIMITED POSSIBILITIES FOR DEVELOPMENT EVEN IN THOSE SECTORS WITH THE GREATEST POTENTIAL (E.G., TOURISM); TO LIMITED INTERACTION WITH THE OUTSIDE WORLD – A CONDITION WHICH REINFORCES THE RETARDATION OF THESE COMMUNITIES

ONE OF THE BASIC FINDINGS OF THE UNITED NATIONS CONFERENCE ON NEW AND RENEWABLE SOURCES OF ENERGY OF 1981 WAS THAT THERE WAS TREMENDOUS POTENTIAL SOURCES OF ENERGY IN MANY RURAL AREAS OF THE WORLD WHICH COULD BE TAPPED FOR PRODUCTIVE DEVELOPMENT. IN LATIN AMERICA AND THE CARIBBEAN, NON-CONVENTIONAL RENEWABLE ENERGY, SUCH AS SOLAR, WIND AND GEOTHERMAL POWER, ARE RELIABLE SOURCES WHICH CAN BE PROFITABLY EXPLOITED FOR RURAL ELECTRIFICATION AND PRODUCTION.

INVESTMENT IN RENEWABLE ENERGY INCREASES ENERGY SECURITY BY DEPENDENCE ON LOCAL RESOURCES AND THE APPLICATION OF ENERGY EFFICIENCY STRATEGIES IN CONSUMPTION PATTERNS. PROJECTS IN THE PRODUCTION OF SUCH ENERGY HAVE ALREADY BEEN IMPLEMENTED IN SOME COUNTRIES IN LATIN AMERICA. BOLIVIA IS A CASE IN POINT.

THERE IS NEED, HOWEVER, FOR MANY MORE SUCH PROJECTS IN OTHER RURAL AREAS OF LATIN AMERICA AND THE CARIBBEAN. SUCH PROJECTS COULD ALSO INCLUDE THE EXPORT OF ELECTRICITY FROM ONE COMMUNITY TO ANOTHER WITHIN AND ACROSS NATIONAL BORDERS. THIS WOULD, OF COURSE REQUIRE THE ELABORATION OF REGULATIONS GOVERNING INTERNATIONAL TRADE IN ENERGY. HOWEVER, WITH HEMISPHERIC POLITICAL WILLINGNESS FOR ACTION IN THIS AREA ALREADY IN PLACE, THE FUTURE SEEMS ENCOURAGING.

WHAT APPLIES FOR NON-CONVENTIONAL ENERGY ALSO APPLIES FOR SUCH CONVENTIONAL ENERGY SOURCES AS PETROLEUM AND NATURAL GAS. EXPERT STUDIES, HOWEVER, INDICATE THAT AT THE RATE OF PRESENT GLOBAL CONSUMPTION, MOST FOSSIL FUEL SUPPLY WILL BE SIGNIFICANTLY DEPLETED WITHIN THE NEXT TWO DECADES. WITH OR WITHOUT THAT DEPLETION, GLOBAL ECONOMIC DEVELOPMENT CANNOT BE SUSTAINED ON CONVENTIONAL

ENERGY SOURCES INDEFINITELY. SINCE GLOBAL DEVELOPMENT AND STABILITY MUST ULTIMATELY BE A FUNCTION OF RURAL DEVELOPMENT, FUTURE HEMISPHERIC DEVELOPMENT IS AN INTERRELATION RATHER THAN A PRODUCT OF RURAL DEVELOPMENT.

ONE BY NO MEANS ASSUMES THAT IMMEDIATE AND EFFECTIVE RESPONSE IN THIS CONTEXT WILL BE EASY. HARNESSING THE ENGINES OF GROWTH TO ENSURE DEVELOPMENT, ESPECIALLY RURAL DEVELOPMENT, HAS ALWAYS BEEN A DIFFICULT TASK IN LATIN AMERICA AND THE CARIBBEAN. BARRIERS APPEAR FORMIDABLE. HOWEVER, MANY OF THESE BARRIERS CAN BE GRADUALLY OVERCOME IF APPROPRIATE PUBLIC POLICY CAN BE ELABORATED AND IMPLEMENTED IN RELEVANT SECTORS AS THEY RELATE TO RURAL DEVELOPMENT.

IN MOST INSTANCES, PUBLIC POLICY CAN BE IMPORTANT ALSO IN THE NURTURING OF GROWTH. FOR EXAMPLE, IN THE CONTEXT OF A PUBLIC/PRIVATE SECTOR PARTNERSHIP WHERE PUBLIC SECTOR HAD BEEN UNABLE TO PROVIDE BASIC INFRASTRUCTURE, CREDIT OR OTHER BASIC INPUTS, IT COULD STILL OFFER INCENTIVES IN THE AREA OF LABOUR LEGISLATION, LAND AND RELATED CONCESSIONS. SUCH SECTORAL POLICIES IN THE AREA OF ELECTRICITY PRODUCTION FOR RURAL AREAS WILL ULTIMATELY BE SUCCESSFUL AND HIGHLY PROFITABLE IN THE LONG RUN BECAUSE THEY WILL FORM THE BASIS FOR EXPANDING OTHER SECTORS OF THE ECONOMY INTO THE RURAL COMMUNITIES. EXAMPLES OF SUCH POLICIES FAVOURING EXPANSION IN THE PAST HAVE BEEN THE CASE OF BASIC INDUSTRIES IN BRAZIL, TEXTILES IN COLOMBIA, MAGUILADORES IN MEXICO, TOURISM IN BARBADOS.

IN THE CONTEXT OF TWENTIETH CENTURY CIRCUMSTANCES, THERE IS NEED TO CORRECT INHERENT IMBALANCES AND INEQUALITIES IN THE

OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT AND THE DISTRIBUTION OF THE BENEFITS OF DEVELOPMENT INITIATIVES. LATIN AMERICA WILL CONTINUE TO HAVE A COMPARATIVE ADVANTAGE, GIVEN ITS SIGNIFICANT NATURAL RESOURCE BASE. BUT IN THE CONTEXT OF THE TWENTY-FIRST CENTURY CIRCUMSTANCE, THIS IS NO LONGER ENOUGH TO ENSURE ECONOMIC SUCCESS. NEW NON-TRADITIONAL EXPORTS ARE BEING SOLD AND MUST BE SOLD IN THE GLOBAL MARKETPLACE, WITH PARTICULAR AND EQUAL ATTENTION BEING PLACED ON QUALITY, DESIGN AS TO PRICE AND QUANTITY. THESE ARE COMMODITIES WHICH CAN BE PRODUCED EQUALLY WELL IN RURAL COMMUNITIES EQUIPPED WITH THE NECESSARY INFRASTRUCTURE AND CAPABLE HUMAN RESOURCE. ELECTRIFICATION OF THESE COMMUNITIES SHOULD THEREFORE BE AN INTEGRAL PART OF NATIONAL AND REGIONAL POLICIES FOR HEMISPHERIC DEVELOPMENT AND INTEGRATION.

THE ENERGY SECTOR HAS NOT ESCAPED THE ONSLAUGHT OF PRIVATIZATION AND LIBERALIZATION, WHICH IS SWEEPING THE GLOBAL ECONOMIC SPACE. ACCORDING TO THE 1998 CARIBBEAN BASIN PROFILE

“INDEPENDENT POWER PROJECTS ARE EVOLVING FROM THE SIMPLE SUPPLY OF ELECTRICITY TO MEETING A COUNTRY’S BROADER ENERGY NEEDS, AND INDUSTRY EXPERTS CLAIM THAT COUNTRIES WHICH GO BEYOND PRIVATIZATION TO FULL DEREGULATION, ALLOW INDUSTRY TO SOLVE THE PROBLEMS AND PROVIDE BETTER SOLUTIONS... THE INDUSTRY HAS SEEN AN EXPANSION IN THE NUMBER OF POWER PLAN DEVELOPERS OFFERING A FULL COMPLEMENT OF SERVICES. THIS INCLUDES THE FIRST STEPS OF EVALUATING A COUNTRY’S INFRASTRUCTURE (E.G., AVAILABILITY OF INDIGENOUS FUELS AND THE ABILITY TO SELL ELECTRIC POWER AT AN ECONOMICAL RATE) TO CREDIT RATING AND INVESTMENT STUDIES.”

AN OVERVIEW OF THE REGION’S ENERGY SITUATION WOULD SUGGEST THAT THE REGION IS IN A PERIOD OF TRANSITION. IT IS THEREFORE TIMELY TO ENSURE THAT POLICIES IN THAT SECTOR COVER THE ELECTRIFICATION AND SUBSEQUENT DEVELOPMENT OF RURAL COMMUNITIES. IT IS ALSO TIMELY TO

REINFORCE THE PUBLIC/PRIVATE SECTOR AWARENESS OF THE NEED FOR REALISM, EFFICIENCY AND COMMITMENT IN THIS REGARD.