

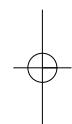
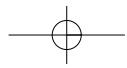


FIFTH ISLAMIC CONFERENCE OF ENVIRONMENT MINISTERS

**Report on ISESCO's Activities in the Field of
Sustainable Development over the Period 2002-2012**

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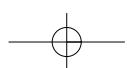
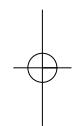
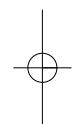
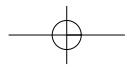


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Islamic Educational, Scientific and Cultural Organization (ISESCO), since its establishment worked on its vision for the preservation of nature, protection of life on the planet, response to sustainable development concerns, and promotion of international solidarity to help countries achieve their development and their peoples' prosperity. In all its actions, ISESCO emphasized the Islamic approach calling for maintaining man's dignity and fulfilling lieutenancy on earth through good and constructive actions, which is the mainstay of sustainable development, as well as for promoting integration values and the welfare of present and future generations.

ISESCO actively participated in the World Summit for Sustainable Development in 2002 in Johannesburg, South Africa and immediately embarked upon to reaffirm its commitments towards environment protection and sustainable development. The last ten years of ISESCO, therefore, are marked with efforts, actions, activities and programmes addressing the major challenges faced by the Islamic world in the field of sustainable development, materialized mainly in the protection of environment and biodiversity, management of ecosystem and water resources, cope with climate change, enhancing agricultural production, addressing health challenges, coping with disasters, alleviation of poverty, eradication of illiteracy, provision of primary education to all, improvement of economic and social conditions, disequilibrium between population growth and available natural resources, strengthening technical capabilities, developing expertise and skills in environment management, along with the negative impacts left by regional mayhem, foreign occupation of parts of its land and despoiling of its resources. Myriads of programmes and activities implemented by ISESCO marked a number of success stories helping to overcome the obstacles and challenges, laying down firm foundations for cooperation and coordination among the Islamic countries and promoting global solidarity to the concept of sustainable development, bring forward more concrete results for presentation to the World Summit on Sustainable Development in Rio+20.

In this report summarized details of ISESCO's Actions are given towards achieving the agenda of sustainable development and environment protection.

ESTABLISHING NECESSARY INSTRUMENTS FOR SUSTAINABLE DEVELOPMENT

Deeply concerned at the continuing deterioration of the global environment, including the worsening trends in environmental pollution, the degradation of natural resources and the scarcity of the fresh water resources, Islamic Educational, Scientific and Cultural Organization (ISESCO), since its establishment worked on its vision for the preservation of nature, protection of life on the planet, response to sustainable development concerns, and promotion of international solidarity to help countries achieve their development and their peoples' prosperity. In all its actions, ISESCO emphasized the Islamic approach calling for maintaining man's dignity and fulfilling lieutenancy on earth through good and constructive actions, which is the mainstay of sustainable development, as well as for promoting integration values and the welfare of present and future generations.

Well before earth summit Rio+10 ISESCO had renewed its resolve to work in the Member States to protect their environment from harmful activities, and to enhance cooperation among themselves. The period after Earth Summit RIO-10, till the World Summit for Sustainable Development in 2002 in Johannesburg, South Africa remained filled with actions, and various success stories in achievement of Sustainable development agenda.

ISESCO's commitments got further momentum towards achieving agenda of sustainable development also before the World Summit for Sustainable Development in 2002 when **First World Forum on Environment from an Islamic Perspective** was called in Jeddah, in 2000 at the initiative of the Custodian of the Two Holy Mosques, in which the officials and experts from various regions of the world convened to consider ways to create an Islamic space of cooperation, and unite stances on the issues of environment protection and sustainable development. The Forum triggered the interest of the political class on issues relating to the environment and sustainable development. The participants in the Forum recommended the adoption of the Jeddah Commitments for Sustainable Development as a framework for environmental action in the Islamic countries, and called for coordination with the regional and international institutions and organizations with a view to devising a programme of action highlighting the Islamic countries' view to the environment and suitable development, and submitting it to the Johannesburg Earth Summit.

Another milestone in the process of materializing joint action of the 57 Member States of the Organization of the Islamic Cooperation dedicated to the environment and sustainable development was achieved when the **First Islamic Conference of Environment Ministers** was called at Jeddah, Kingdom of Saudi Arabia in June 2002, to further emphasize all the 57 Member States the concept of sustainable development which augmented the efforts with a view to submit a unifying stances to the World Summit on Sustainable Development in 2002 at Johannesburg, South Africa.

The First Islamic Conference of Environment Ministers was a historic event as it highlighted the involvement of the Member States in the international efforts addressing environmental concerns, and proposed solutions inspired by the cultural and civilizational heritage of the Member States. Indeed, the Johannesburg Summit (2002) provided an opportunity for the Islamic Conference of Environment Ministers to present the international community with a comprehensive, balanced and insightful vision of today's multifaceted environmental concerns - a vision emanating from the rich Islamic value system which complements the contemporary international conceptions of the environment and sustainable development. The Islamic Conference of Environment Ministers highlighted the efforts the Islamic countries had devoted to sustainable development, together with the challenges facing them in this respect. In fact, the different documents and resolutions issued by the Conference brought to light the active involvement of the Muslim world countries in the global action aimed at achieving sustainable development and preserving the planet. In the same vein, the Conference urged States that have not then ratified the international conventions issued to this end to do so.

The Conference was marked by such important recommendations and documents it issued as **the General Framework for Sustainable Development in the Islamic World, the Islamic Declaration on Sustainable Development, and the Environment Challenges in the Muslim World**, in addition to the Final Communiqué of the conference. The General framework of the Islamic Agenda for Sustainable Development and the Islamic Declaration on Sustainable Development were accepted as background documents of the World Summit on Sustainable Development (WSSD) held in Johannesburg, in August 2002. ISESCO also produced a document entitled "**Islamic World and Sustainable Development: Specificities and Challenges**" issued by the conference represented perspective of the 57 Member States, which stressed on calling for a fair world order; fostering the role of the UN agencies and providing an environment conducive to concrete partnerships; establishing a fair world trade system to supersede the existing loan system which has exhausted the resources of peoples across the world; Urging the international community to deter practices and policies harmful to the environment and man. contributed to the Second World Summit on Sustainable Development features a number of cooperation fields and reviews environment issues in Islamic countries based on economic, environmental and social pointers. It also floats proposals to activate them as part of joint Islamic action.

These recommendations and commitments provided operational guidelines for the Member States to follow in international and regional forums on the environment. ISESCO focused institutional theme on the broader institutional landscape. While strengthening the environmental pillars expanded the scope to encompass finance, social and development institutions at all levels and improved coherence of the full multilateral development system, including interregional system wide coherence to satisfy the needs of updating sustainable development issues in Islamic World.

The Second Islamic Conference of Environment Ministers (Jeddah, Kingdom of Saudi Arabia: December 2006), held on the theme "**Environment Protection**

and Sustainable Development towards Building a Secure Future", under the high patronage of the Custodian of the Two Holy Mosques, King Abdullah Bin Abdulaziz, issued several resolutions and recommendations which provided the ground for inter-Islamic cooperation and set appropriate mechanisms for materializing it.

The second session of the Conference was marked by the launching of the preparation of a set of strategies, programmes and executive action plans. ISESCO was commissioned to supervise the devising of those documents and see to their implementation, in cooperation with the Member States and relevant regional and international organizations. In order to improve the **integrated management of water resources** the Conference invited the Member States to further cooperate with the Organization so as to develop water resources management mechanisms and improve the action of the relevant institutions and bodies, taking into account Members States' needs, priorities and general policies. The Conference also called upon ISESCO to double its efforts in the fields of **environment protection, health and population education**, in coordination and consultation with the competent national, regional and international bodies. In order to promote renewable energy technologies, the Conference stressed the need to devote further attention to the issues of renewable energies, and to foster their utilization in the Member States in the vital fields and for development purposes.

The Conference adopted the document on **General Framework of the Programme on Natural Disasters Management** prepared by ISESCO, and called upon it to draw up field programmes and activities for the benefit of Members States concerned by the dangers of natural disasters, and to provide technical assistance to them to address those dangers, within the framework of ISESCO's action plan and within the limits of the resources available, in cooperation with the relevant regional and international institutions.

The Second Islamic Conference also adopted the document on the Project of **Establishing the Islamic Environment Network**, which was submitted by the General Presidency of Meteorology and Environment in the Kingdom of Saudi Arabia, and invited the Member States and national, regional and international bodies to materially and technically support the Network's programmes and activities, and to provide facilitations for the Network to help it discharge its mission.

In order to establishing a specialized Islamic Body for the Environment the Conference decided to establish an **executive bureau for the environment**. The second session of the Conference also announced the **Jeddah Commitments for Sustainable Development**.

The Second Islamic Conference of Environment Ministers strengthened its organizational structure on the occasion of its third session held in Rabat, Kingdom of Morocco, in October 2008, under the high patronage of His Majesty King Mohamed VI. In this connection, the Conference elected an Executive Bureau entrusted with the reinforcement and follow-up of the resolutions of the previous sessions of the Conference, as well as standing for the Muslim world's causes in the regional and international forums and conferences dedicated to sustainable

development. The Bureau's mission also includes enhancing solidarity among Member States to address through mutual collaboration environment protection and rise to such enormous challenges facing many of them as climate change, depletion of natural resources, poverty and other relevant concerns.

The Conference set up **the Islamic Executive Bureau for Environment** to coordinate environmental policies and strategies, and to follow up the actions, initiatives and resolutions adopted by the Islamic Conference of Environment Ministers. The Conference placed the Bureau under the presidency of His Royal Highness Prince Turki bin Nasser bin Abdulaziz, President of the first and second sessions of the Conference, and General President of Meteorology and Environment in the Kingdom of Saudi Arabia. It also entrusted ISESCO with ensuring the General Secretariat of the Bureau in its Permanent Headquarters in Rabat. In the same vein, the Islamic Development Bank and the Arab, Islamic and international donors were called upon to provide adequate support to the Bureau, and invited ISESCO Director General to have the statutes and internal regulations of the Bureau drawn up.

The Third conference devoted a special attention to climate change as it was held under the theme "**Towards Mitigating the Impact of Climate Change in Islamic States**". On the sidelines of the conference, a round-table was organized on the same topic and saw the participation of experts from the Member States. This was a suitable opportunity for the experts in the Islamic world to examine climate change issues that adversely affect sustainable development in Muslim countries. A number of recommendations and approaches were approved to adapt to this phenomenon and work towards mitigating its impact on the Islamic world.

The Third Islamic Conference of Environment Ministers also approved the **establishment of the Islamic Environment Information Centre** proposed by the General Presidency of Meteorology and Environment in the Kingdom of Saudi Arabia. It also called on relevant institutions to cooperate with the Centre (Kingdom of Saudi Arabia) and provide it with the necessary information, data and statistics in order to facilitate exchange of expertise and experience in this field. The centre is aimed to provide environmental information, establish scientific bases to assist decision makers in developing strategies to reduce adverse effects on the environment, safeguard natural resources and firmly entrench the principle of sustainable environment in the Islamic countries.

In this connection, the General Presidency of Meteorology and Environment in the Kingdom of Saudi Arabia, jointly with a number of leading international expertise, conducted a study to identify the means to collect, process, store, retrieve and present environmental information and data. The Islamic Environment Information Centre will have as a core mission to fulfill local, regional and international environmental requirements (through contribution toward introducing, discussing, carrying out and testing environmental policies and relevant international conventions). The Centre will shore up sustainable development principles and orientations, integrate the concept of the environment into the national and regional policies, provide information services, and enforce the environmental management system. The centre will contribute to

entrenching environmental safety rules at the national, regional and international levels, through providing relevant data for decision-makers as well as scientific research centres, universities, and other executive and operating bodies.

The Third Islamic Conference of Environment Ministers was marked by a royal speech in which His Majesty King Mohammed VI of Morocco asked the Conference to consider setting up an **Islamic Academy for the Environment and Sustainable Development**. The underlying purpose, His Majesty stressed, would be to help increase research works, promote experience sharing, and upgrade skills via training programmes.

The Fourth Islamic Conference of Environment Ministers held in the city of Hammamet on 5th to 6th October 2010, also helped in setting up various vital instruments for protection of environment and sustainable development. Adoption of "**The Strategy on Management of Disaster Risks and Climate Change Implications in the Islamic World**" was another important landmark achievement which highlighted strategic orientations and the motives to mitigate disaster impact, through heightened awareness, good governance and the fostering of the culture of prevention and readiness. The Conference underlined the importance of increasing Islamic funds to face disasters, and emphasized on the need for adaptation in disaster reduction, through preventive measures such as the construction of dams and earthquake-resistant buildings, better fuel quality, and use of clean, renewable energy.

The Conference also approved **Islamic Action Programme to Benefit from Adaptation Funds and Clean Development Mechanisms**. The programme aims to develop capacities of the competent parties in Islamic countries to benefit from adaptation funds and clean development mechanisms, and enable them to mitigate greenhouse effect and climate change. The Conference stressed the need for the prompt establishment of a coordination mechanism for the Islamic countries, in order to enhance the local anti-desertification programmes, and to promote experience and expertise sharing for addressing the impacts of this phenomenon and benefiting from the Adaptation Funds and Clean Development Mechanisms, under the relevant Islamic action programme.

The Conference also approved the **Strategy for Promoting Energy Efficiency and Clean and Renewable Energy Sources Use in the Islamic World**. The strategy provides technical expertise needed by the Member States in this field, which will in turn help secure energy resources that are readily and sustainably available in the long term at reasonable cost, and can be utilized for all required tasks without causing detrimental effects to the environment or natural resources.

In order to renewed efforts and tackle with a systematic approach, the Fourth Islamic Conference of Environment Ministers adopted an **Environment Action Plan in the Islamic World**, to enable the competent parties in the Member States to implement field projects and programmes covering climate change, water issues, management of marine resources, meeting renewable energy demands, conservation of biodiversity, desertification control, mitigating the impact of disasters, health issues, etc.

Apart from the setting up of vital instruments of sustainable development, ISESCO regularly updated **the General Framework for Sustainable Development in the**

Islamic World which was adopted at the first Islamic Conference of Environment Ministers in the subsequent sessions. This General Framework of Islamic Agenda for Sustainable Development serves as a beacon for action by the Islamic Ummah, comprising actions in view of Islamic approach which calls for maintaining man's dignity and fulfilling lieutenancy on earth through good deeds, which are corner stone for sustainable development and preservation of natural resources. It also invited international and regional specialized institutions to cooperate with ISESCO in implementing the General Framework of Sustainable Development in the Islamic World. This document focused on formulating a common, integrated Islamic strategy for sustainable development through fostering the efforts dedicated to the promotion of peace and security; Combating illiteracy, poverty and unemployment and improving the quality of life for peoples, Improving and expanding the scope of health services, developing educational services and supporting capacities in the field of education and technology transfer; supporting the contribution of women, the youth and civil society to sustainable development and broadening the base of democracy and participation in decision-making. The General Framework of sustainable development also emphasized at preserving and rationalizing the use of water resources, preserving soil, land and biodiversity; Protecting oceans, seas and coastal environment, preserving ecosystems, adhering to international conventions on combating desertification and on biodiversity; taking interest in the quality of air; encouraging production and sustainable consumption and updating and enforcing special legislation.

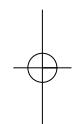
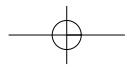
The General Framework of Sustainable Development in the Islamic World seeks to achieve a set of objectives through national or joint action-oriented activities and projects, like building capacities to achieve sustainable development in the Islamic world, fostering technical and institutional cooperation among Muslim countries in order to provide an open and suitable economic system, transferring debts and their ensuing interests towards funding sustainable development projects and providing a favourable Islamic environment for investment. The General Framework of sustainable development also focused on developing educational curricula that accommodate the objectives of sustainable development and the requirements of the labour market, promoting cooperation for optimum utilization of shared waters, developing and implementing joint projects on agricultural production and food security and supporting the promotion of sustainable consumption patterns.

Completing the formative structure of the Islamic Conference of Environment Ministers with such relevant implementation mechanisms as the Islamic Environment Information Centre and the Islamic Academy for the Environment and Sustainable Development will certainly provide necessary tools to better rise to today's world challenges in the fields of environment and sustainable development. No less important in this regard are the implementation of programmes and activities adopted as part of the General Framework for Sustainable Development in the Islamic World, the mission assigned to the Islamic Executive Bureau for Environment, the convening of the Islamic Environment Ministers' Conference on a regular basis, and the support pledged by the Kingdom of Saudi Arabia for the Conference.

AGENDA FOR RIO+20

Setting up the above mentioned vital institutional infrastructure and vision along with strategic documents provided a sturdy foundation for ISESCO's action towards achievement of the General Framework of Islamic Agenda for sustainable development, following the millennium development goals, agenda 21, and the goals set by the World Summit for Sustainable Development. As such, the last ten years of ISESCO, therefore, are marked with efforts, actions, activities and programmes addressing the major challenges faced by the Islamic world in the field of sustainable development, materialized mainly in the protection of environment and biodiversity, management of ecosystem and water resources, cope with climate change, enhancing agricultural production, addressing health challenges, coping with disasters, alleviation of poverty, eradication of illiteracy, provision of primary education to all, improvement of economic and social conditions, disequilibrium between population growth and available natural resources, strengthening technical capabilities, developing expertise and skills in environment management, along with the negative impacts left by regional mayhem, foreign occupation of parts of its land and despoiling of its resources. Myriads of programmes and activities implemented by ISESCO marked a number of success stories helping to overcome the obstacles and challenges, laying down firm foundations for cooperation and coordination among the Islamic countries and promoting global solidarity to the concept of sustainable development, bring forward more concrete results for presentation to the World Summit on Sustainable Development in Rio+20.

The Fifth Islamic Conference of Environment Ministers will strive to further renew the political commitment of the 57 Member States of the Organization of the Islamic Cooperation (OIC) towards achievement of the agenda for sustainable development, assessing the progress made so far, formulating steadfast road-map for environmental action to address new challenges and bridge up the remaining gaps in the implementation of the outcome of the major Summit as well as the outcome of the Agenda of Rio+20.



PROTECTION OF ENVIRONMENT AND NATURAL RESOURCES

Forty years ago, in Stockholm, the world leaders had agreed on the urgent need to respond to the problem of environmental deterioration. Twenty years ago, at the United Nations Conference on Environment and Development, held in Rio de Janeiro, it was recognized that the protection of the environment and social and economic development are fundamental to sustainable development. Under the Agenda 21 and the Rio Declaration on Environment and Development, a global programme was adopted which further reaffirmed commitment of the world leaders to protection of environment. The Rio Conference was a significant milestone that set a new agenda for sustainable development. The World Summit on Sustainable Development in Johannesburg, South Africa, in 2002, commitment to sustainable development and protection of environment were redefined and reaffirmed.

Deterioration of environment is being witnessed for the last so many years and will continue to deteriorate unless firm commitments are not vowed and unsustainable patterns of production and consumption are not abandoned for all. Deforestation, pollution, loss of bio-diversity, land degradation, ozone layer depletion, acid rain etc. and other such environment problems are a result of human activity and malpractices. Increase in population and industrial and commercial activities as well as economic crises prevailing for the last so many years have further enhanced threat to environment. Climatic changes and other natural factor and processes are indicating further perils and even risk of human survival in the future.

To cope with challenges emanated from Environment degradation and climate change, among other remedial measures, it was necessary to inculcate in general public and masses an attitude towards sustainable use of natural resources. The principles of the Islamic faith are inline with this global and profound view that man should deal with this environment as a public resource that should be protected to safeguard the continuity of the world and mankind on earth. In line with the teachings of Islam and the goals proclaimed in the "Islamic Declaration on Sustainable development" ISESCO has always devoted utmost attention to fortify consolidation among the Member States and encourage greater concern by international community at large, towards various issues of environment and natural resource protection. Protection and management of environment has been recognized as an integral part of ISESCO action towards sustainable development. The resolutions emanated from various sessions of Islamic Conference of Environment Ministers in Jeddah, including "Jeddah Commitments of Sustainable Development" added new dimensions to ISESCO activities and programmes which gained momentum with time, to keep pace with the requirements of sustainable development. ISESCO implemented strategic projects and programmes on sustainable development to address vital issues of environment protection. Under ISESCO environment management programme, the major goal is first to protect, maintain, and, where necessary, restore fully

functioning ecosystems at all spatial and temporal scales, and then to mould human activities that fit within those constraints.

ISESCO also actively pursued the General Framework of Islamic Agenda for Sustainable Development which was adopted by the First Islamic Conference of Environment Ministers held in Jeddah in 2002. This General Framework of agenda was later updated by successive sessions of the Islamic conferences in view of the emergence of new challenges as well as aggravating condition for environment degradation and enhanced needs to step up efforts for sustainable development. The General Framework of Islamic Agenda for Sustainable Development served as a beacon for action, comprising actions in view of Islamic approach which calls for maintaining man's dignity and fulfilling lieutenancy on earth through good deeds, which are corner stone for sustainable development and preservation of natural resources.

ISESCO build up capacities in implementation of policies and national strategies aiming to develop appropriate institutional mechanisms and infrastructure, well-trained human resources as well as easy access to the relevant information. Various forums of scientists, resource managers and conservationists were organized to devote special attention to the pressing problems. Networks among universities, environmental institutions were promoted to exchange experiences. By the same token, cooperation with international organizations was fostered to ensure follow-up action on international conventions on sustainable management of the environment. Continuous training of the staff concerned with the environment management in the utilization of new techniques and methodologies was provided to build up their capacities to improve quality of their environment protection programmes.

The conferences, forums and workshops carried out by ISESCO clarify that special attention has been given to the protection of environment and natural resources in the Islamic countries. In recognition of the value of forest ecosystems for the Member States in the new millennium, ISESCO has placed a high emphasis on advocating for policies and measures for the conservation and sustainable forestry development. ISESCO seeks to assist Member States in raising public awareness and ensuring adequate institutional and financial commitments for concrete action towards designing and implementation of national programmes towards sustainable development of coastal and marine environment.

ISESCO also introduced an Action Programme to Benefit from Adaptation Fund and Clean Development Mechanism in the Islamic Countries presented here is prepared with the primary objective to promote knowledge and understanding of the Islamic countries to improve capacities in mitigating the impact of climate change and launch useful and sustainable projects to enable them to tap the enormous potential of CDM and Adaptation fund meant for the developing and Least Developed Countries (LDC) under the Kyoto Protocol. Most of the Member States were found eligible for taking benefits from the provisions of the CDM and Adaptation Fund, yet no serious effort have so far been made to harness the available potential of CDM and Adaptation fund. A joint programme for Member States was expected to allow them to follow a direction which can benefit all the countries in the Islamic World.

The "International Conferences on Space Sciences and Adaptation and changes of Climate" provided a international forum to explore new avenues and techniques to promote efficient application of space technologies and remote sensing and discussed the impacts of climate changes on qualitative and quantitative aspects of environment and people's livelihoods in Africa in a context of sustainable development.

Dissemination of environment information, education and training were an integral part of activities for enhancement environment awareness. In order to enhance awareness and knowledge capacities of the general public and concerned scientists and Environment staff, ISESCO is regularly publishing various information material and state-of-the-art studies on various environmental issues and technologies and disseminate it widely to promote the use of new and economic technologies. As part of the implementation of the Resolution No.4/36-S&T on Environment Matters adopted by the Thirty-Seventh Session of the Council of Foreign Ministers held in and Dushanbe, Republic of Tajikistan in May, 2010, and seeking to step up its efforts in environment protection and enhance its contribution to sustainable development in the Muslim World. ISESCO also organized the Earth Day to sensitize the citizens to find and express their environmental engagement. ISESCO on these days explained its engagement in terms of valorisation and promotion of sustainable development which was published in a booklet form and distributed to the green participants, visitors, militants, political personalities, etc along with display of the publications of the ISESCO related to environment and sustainable development ISESCO also organized exhibition of environment publications on various occasion.

ISESCO also promoted global and regional partnership as they support capacity building measure by providing platforms for sharing experiences, knowledge and identifying region-specific issues as well as ways to benefit from more effective and balanced implementation of the conventions, protocols, agreement etc. ISESCO, since the World Summit for Sustainable Development, has successfully implemented joint programmes with international and regional organizations including UNESCO, WREN, UNEP, ASTF, PERSGA, IEPF, UNDP, WHO, IUCN etc. and other institutions in the Member States to encourage capacity building at workforce and institutional levels and to support national initiatives for new environmental science and technologies such as geo-information, remote sensing and earth monitoring technologies. ISESCO and UNEP also collaborated in identifying regional initiatives and programmes, allowing broader engagement of institutions and specialized organizations and the private sector. The expert consultation groups discussed ways and means in enhancing knowledge, sharing experiences, advancing initiatives, programmes and projects to respond to climate change challenges in the region.

ISESCO also collaborated in the organization of various sessions of the Arab Forum on Environment, under the framework of cooperation with the League of Arab States. This Forum helped to promote communication and dialogue between young people in the Member States of the Red Sea basin on environmental issues, especially with regard to the coastal environment and discuss the role of youth in preservation of the environment showcasing the regional experience in the preservation of the coastal environment. The Forum also encouraged young

people to interact with environmental issues and participate in national, regional and international events for the deployment of environmental concepts among the community and to mobilize the younger generation to preserve the natural resources from over-exploitation through the promotion of good governance.

ISESCO also organized a number of National Workshops which provided new knowledge and skill to the participants and provided opportunity to discuss environmental concerns in the longer term, including the impact of land degradation. Such workshops assisted actors and community to identify good practices for the restoration of damaged lands, soil conservation, and better management of forest ecosystems and protection of sensitive areas. These workshops also assisted rural communities to maximize economic and environmental benefits while maintaining or increasing their ability by providing these benefits and more to future generations. These workshops contributed to social and economic development by focusing attention on protection of local communities and improvement their environment.

ISESCO also organized Summer Schools to strengthen capacity for decentralized sustainable management and good governance of the environment and natural resources in line with the international negotiations on issues of sustainable management of environment climate change, desertification, biodiversity etc. During these schools the focus was oriented on the intensification of efforts related to environmental practices sustainable in order to ensure a cleaner environment and sustainable practices. The concentrated efforts of the participants in the Summer Schools focussed on study and discussion of environmental problems, especially climate change and its serious consequences, as well as drought stress and scarcity of water resources, especially in agriculture sector that lead to the spread of famine on a large scale and high numbers of people with symptomatic severe malnutrition..

ECOSYSTEM MANAGEMENT, BIO-DIVERSITY AND SUSTAINABLE UTILIZATION OF NATURAL RESOURCES

Conservation and Management of Natural Resources and Biodiversity was given attention under various chapters of the Agenda 21, which emphasized on combating deforestation (chapter 11), managing fragile ecosystems: combating desertification and drought (chapter 12), managing fragile ecosystems: sustainable mountain development (chapter 13); conservation of biological diversity (chapter 15). UN initiatives like the Convention on Biological Diversity (CBD) also emphasized tackling Ecosystem Management and Bio-diversity problem by encouraging development of 'conservation corridors' to form large-scale landscape systems of interconnected protected areas across boundaries, and encouraging countries to develop effective landscape management approaches to help reduce biodiversity loss. World Summit for Sustainable Development examined critical issues related to biodiversity and ecosystem management and emphasized immediate action to address environmental degradation and overuse of natural resources.

Nature has bestowed with rich resources in most of the Member States of ISESCO but most of this potential is still unexploited due to the lack of management and institutional policies, adequate expertise and necessary technical know-how. Managing and utilization of the natural resources base in a sustainable and integrated manner without compromising the ability of future generations to meet their own needs and enjoy the same quality of living in a sound environment has remained an essential component of ISESCO's strategy for sustainable development. In this regard, to reverse the current trend in natural resource degradation, ISESCO implement programmes and strategies to protect ecosystems and to achieve integrated management of land, water and living resources, while strengthening regional, national and local capacities.

In order to promote sustainable utilization of the land, water and biological resources for economic and social benefits, ISESCO exerted efforts to build capacities of the Member States by encouraging and assisting them through meaningful dialogue to formulate national policies and regulations. Institutional capacities were built up through facilitating access to knowledge, acquisition of the required equipment and training programmes on new techniques. Action were taken to provide technical assistance and strengthened public and private institutional capacities, scientific capabilities, and local skills in resource management. Best methodologies and practices in mining were promoted through the provision of expertise as well as preparation and dissemination of high quality material. ISESCO also supported the national action of the Member States in sustainable exploitation of natural resources.

International conferences and forums carried out by ISESCO clarify that special attention has been given to the protection of environment and natural resources in the Islamic countries. In recognition of the value of mountain ecosystems for

the Member States in the new millennium, ISESCO has placed a high emphasis on advocating for policies and measures for the conservation and sustainable mountain development. ISESCO through these conferences assisted Member States in raising public awareness and ensuring adequate institutional and financial commitments for concrete action towards designing and implementation of national programmes towards sustainable development of mountain and low-land regions.

Various conference organized during the last ten years covered various technologies in space sciences, remote sensing, surveillance technology to map and asses the natural resources. The conferences on space technology highlighted the role of space science and astronomy in socioeconomic developments witnessed by human civilization throughout the ages, shedding light on the achievements of the Islamic civilization in advancing science and technology in the field of astronomy. These conferences provided an opportunity to monitor the past and the present status of space sciences and anticipated the future achievements and contribution of the space science and technology in the shaping of human civilization and in the accumulation of human knowledge. It indicated the role of astronomers and space scholars and their historical responsibility and devotion to the promotion of Arab and Islamic societies.

ISESCO successfully implemented joint programmes with international and regional organizations like UNESCO, WREN, UNEP, ALECSO, and other institutions in the Member States to encourage capacity building at workforce and institutional levels and to support national initiatives for conservation of nature.

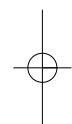
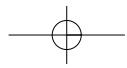
Biodiversity and habitats across the globe are leading to an alarming loss due to climate change, globalization and overexploitation, population growth and others factors. While a significant number of animals and plants species have already been wiped off the planet, several species are fighting for their very existence. Letting large amounts of biodiversity continue to disappear forever, will destroy the creation and huge benefits associated. It would take millions of years to replace what we are losing, even in part today. It is necessary to protect the biosphere and its millions of years old natural heritage, the rest of our lives. It was extremely necessary to take stern measures to protect ecosystem, and develop effective landscape management approaches to help reduce biodiversity loss. Spreading awareness among the masses, persuading from common people to economic planners and scientists, on countless benefits and the long-term implications, will definitely help them to take strong remedial action to safe variation of life forms in the ecosystem.

ISESCO organized workshops on ecosystem approaches where it presented a perfect mechanism for managing natural resources and the environment. Traditionally, management efforts were focused around particular uses such as agriculture or tourism, resulting in separate governance regimes for each use. The training workshops guided to formulate strategies and guidelines to make the ecosystem based management operational, which generally explain, beside the principles of the approach, the stepwise processes to shift from traditional types of management to the ecosystem based management.

Various seminar and conferences conducted by ISESCO emphasized conservation of biodiversity for sustainable development and discussed national policies and planning for sustainable uses of environmental resources. ISESCO focused to increase scientific knowledge and raising awareness for specialists and general public for sustainable environment and conservation of biodiversity. Workshops conducted by ISESCO on Biodiversity and International Trade of endangered species highlighted the role of trading in wildlife in local economies of the regional countries. These workshops showed concern on the extinction risk facing various types of plants and animals overexploited regardless of their already fragile environment that could hardly afford to risk the wildlife, in an attempt to ensure continuity of wildlife and conserve biodiversity from further deterioration. These Workshops contributed to raising awareness among stakeholders, civil society organizations and the members of the community, especially the young pioneers and stressed the necessity of providing appropriate solutions through a thorough review of wildlife trade policies at national and regional levels promoting legislation relevant to the conservation of natural resources. International events organized on medicinal plants emphasized that medicinal plants-based ecosystems harbour a high degree of biodiversity which attracted policy makers, donors and development agencies to devote greater attention to the potential of these plants. ISESCO also conducted various research projects on Biodiversity Assessment and Genetic Conservation in order to find practical solutions for conservation of biodiversity.

ISESCO conducted various Expert Meetings on action of the agreement of Copenhagen" which identified the opportunities available in the Copenhagen agreement, clarified the methodological approach for the development of adaptation projects/mitigation outside the negotiation process and brought the bilateral and multilateral partners to commit to support the process of preparation and implementation of adaptation projects as well as established a list of projects eligible for financial mechanisms existing in the projects. The Expert Meetings also elaborated the strength of North-South growing financial transfers, opening a new partnership of development of African countries, an opportunity to explore and set up projects, especially collaborative ones, to the fast start phase.

Since deforestation and erosion of lands are causing severe damage to environment, ISESCO implemented programmes to review the forestry in the Member States from the sustainable forest management point of view. Under this programme various policy issues as well as development tools for sustainable forest management such as criteria and indicators were brought under consideration. Forest certification initiatives and the governments own efforts to support and implementation of codes of practice for forest harvesting and reduced impact logging were encouraged. Efforts were made to develop a program that can be served as a policy model for achieving sustainable development of forestry.



WATER RESOURCE MANAGEMENT AND SANITATION

World Summit for Sustainable Development (WSSD) accorded a high priority to water issue and also placed water on top of WEHAB. WSSD also demanded the governments to halve the number of people lacking clean drinking water and access to basic sanitation by 2015. Further Sanitation was mentioned as one of the priorities of the World Summit on Social Development as it was intimately linked to good health and as a result of due insufficient or deficient sanitation facilities a huge number of deaths of children were happen every day. Furthermore, the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa committed to combat desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements.

Water is one of the most vital commodities which nature has bestowed upon mankind for its survival, continuity and progress. Islam clearly emphasizes the importance of water as a source of live on the planet. Integrated Management of water resources in ISESCO Member States is full of challenges due to aggravating conditions of water management. Depletion of fresh water resources and other issues related to water like pollution, disease, aquatic life, poverty and hunger require immediate attention of the relevant authorities. Access to enough water of sufficient quality is fundamental for all human, animal, and plant life as well as for most economic activity. In many regions the availability of water in both quantity and quality is being severely affected by climate variability and climate change, with more or less precipitation in different regions and more extreme weather events. It has been estimated that by the year 2025, Islamic countries will suffer a water shortage. In fact, the present water situation in most of them is already critical. To help remedy this grave situation and secure sustainability for future generations, ISESCO further stepped up its efforts and foster mutual cooperation to better manage water for the future.

Effective and sustainable management of water resources has always remained a top priority for ISESCO throughout its various Action Plans. Various areas of importance concern, aiming coordinated management of shared water resources were addressed, helping to preserve the hydrological, biological and chemical processes of the ecosystems and ensuring that adequate supplies of water of good quality are maintained for the entire population. ISESCO has organized various events to devote attention to issues like water scarcity crises, desertification control, protection of ecosystems, water pollution, flood control, giving greater emphasis to integrated management of water, aiming at observing climate changes and applying modern management techniques. Institutional capacities in management and development of water resources were strengthened through training imparting latest and useful knowledge and updating the technical skills of the staff and engineers on new and modernized water management technologies, methodologies and practices. Issues of vital concern like water pollution, sanitation and health situation which results in deaths and suffering of million of

people each year were given due consideration and various events were organized and training were offered, solely and jointly with international organizations to highlight issues, and ameliorate the adverse conditions. The development of education and raising awareness in water use and management were integral to the achievement of these targets. ISESCO implemented various initiatives to promote public awareness on the vital issue of water resource protection and on the necessity of coordination and cooperation at community, national and international levels for prosperous future.

Under ISESCO Water Programme a **Strategy for Integrated Management of Water Resources** was adopted by adopted which was later approved by the 10th Session of the Islamic Summit Conference held at Putrajay, Malaysia, in October 2003. Basic principles of this strategy are that; fresh water is limited resource, essential for life continuity, therefore, needs to be protected, adequate supplies of good quality water must be maintained for all population, integrated water resources management is a collective responsibility of all, therefore, it is extremely important to increase water awareness to preserve it from pollution. An **implementation mechanism of the water Strategy** was adopted by the Second Islamic Conference of Environment Ministers (ICEM-2), held at Jeddah, Kingdom of Saudi Arabia, in December, 2006. The Implementation Mechanism defining a middle and long term water resources development programme that is coherent at the level of the countries of the Islamic world, so as to bring it into line with the objectives of the local plans of each country.

As a new trend and orientation under the strategy for management of water resources and its implementation mechanisms, ISESCO adopted a methodological approach to problematic water issues in the Member States both from supply-side and demand-side managements. Programmes were implemented to address the need for institutional capacity building for water supply institutions at both governmental and private sectors, while other programmes targeted public education on best practices on water consumption and preservation of water resources. ISESCO exerted efforts to address various educational and social challenges facing the Member States under its various cross cutting areas. In the light of resolutions of the Islamic Conference of Environment Ministers, the programmes and the activities under the domain of water resource management were further expanded in view of increasing demand for human resource development and capacity building at institutional level. The policies and implementation strategies were regularly updated in the light of the outcome of the international discussion forums and major recommendations of international and regional expert meetings.

A large number of activities and programmes were implemented on efficient and environmentally sound water management techniques under the various successive Action Plans of ISESCO. These programmes and projects were organized in various regions including Asian, African and Arab regions. Programmes were implemented to use greyish water to economize water use. Training courses offered on the Use of brackish water also helped in building capacities of the concerned staff. ISESCO were extended research grants to young scientists and researchers in their endeavours in the field of water to find out better solutions to the existing problems.

The Islamic Executive Bureau for the Environment at its first meeting in January 2010 called upon ISESCO to undertake all necessary measures, to consider establishment of the "Islamic Council for Water Resources", under the Islamic Conference of the Environment Ministers, as approved by the 36th Session of the Council of Foreign Ministers, held in Damascus, Syrian Arab Republic, in May 2009. The establishment of the Islamic Council for water resources will enable actions to promote better water governance, reinforce political commitment, advocate for regional partnership for management of shared water resources, and serve as a platform for information exchange and awareness on critical water issues at all levels, including the highest decision-making level.

Various conferences conducted by ISESCO on Water Issues in the Member States, attracted a wide spectrum of stakeholders and audience at local and national level to share successful experiences and practices in encouraging public participation and participatory consumer education in relation to various water issues. Whereas the Arab and European scientists, partaking in the Expert Meeting embarked on reviewing, analysing and assessing the current national capacities available for the joint management of shared water resources in terms of achievement, constraints, challenges and opportunities. The outcome of these analysis led to the identification of gaps and determination of the capacity development needed for the establishment of competent national entities capable of effectively managing shared water resources. Given the importance of shared trans-boundary surface and ground water resources various workshops and events were conducted to discuss way and means to keep the groundwater in its natural state to use it as a strategic storage when the surface water is scarce. Also, the "Islamic Roundtable of Ministers of Water of OIC on the sideline of the 5th World Water Forum" held in March 2009 in Istanbul, Republic of Turkey, provided an Islamic platform to discuss the outstanding water issues in the Islamic Worlds and formulate a unified stands towards international and regional water issues.

Taking into consideration the crucial role of other water surface such as oceans, seas, islands and coastal zones for sustainable economic concerns, ISESCO carried out several programmes to emphasize sustainable use of these resources and their rational exploitation to safeguard their immense economic benefits especially to the off-shore communities. ISESCO encouraged policies and actions promoting the beneficial and long-term sustainable use of ocean resources management as well as resource utilization for economic benefits. Awareness of management of oceans and exploitation of marine environment was enhanced through organization of various training courses and workshops organized in cooperation with international and regional partners. Within the same context, ISESCO in cooperation with its regional and international partners focused on restoration of mangrove forests, preservation of fishery habitats and careful use of treated wastewater for the development of coastal zones.

ISESCO under its programmes also focused on women as professional and executive in the water sector and on strategies to promote their leadership role at the more abstract planning level. Such action was enriched through active participation and commitments of female executives and leaders from academia, government, public and private companies which demonstrated women capacities in all fields from science to business as well as their entrepreneurship

and leadership skills. Various other national, regional and international seminars were organized on various important water management issues with more emphasis on sustainable use of fresh water resources. Use of new and innovative technologies in water management was promoted through bringing appropriate technologies under discussion in many forums implemented during this period.

ISESCO also promoted international cooperation and worked together for achieving common agenda for protection of water resources. The outcomes of these and many other regional and national activities carried out in cooperation with UNEP, UNESCO, WREN, COMSTECH, PERSGA and other international and regional players in the field of pollution, resource protection, disaster management etc. indicated a great commitments of ISESCO to address environmental and sustainable development issues of outstanding concerns in the Member States. Some of the regional initiatives were carried on regularly basis to achieve on long term objectives. Under this category, Wadi hydrology a joint programme with UNESCO was regularly conducted all these years under which the water issues from the Arab region are considered various solution and proposal for jointly tackling issues were presented. The programme helped to follow up the objectives set up jointly by ISESCO and UNESCO in the previous Wadi hydrology conferences. It also provided opportunity to share successful experiences and practices.

Organization of the Islamic Cooperation drafted a document on Water Vision 2025 for the Member States. During the various Meetings of the Advisory Panel on OIC Water Vision, ISESCO sought to strengthen the complementarities and synergy at regional levels in water resources monitoring and management in order to cope with impacts of climate change and avoid conflicts over common water resources. In this connection, the ISESCO-devised Strategy for Management of Water Resources which was endorsed by the 10th Session of the Islamic Summit was consulted in revising the OIC Water Vision and ISESCO was invited to play determinant role in implementation of OIC-WV action plan and initiatives.

Since climate change impact on water resources was becoming sensitive, ISESCO assisted in the formation of a comprehensive system for the integrated water resource Management process to ensure the sustainable water management based on the available resources. During various conferences and seminars ISESCO brought water and climate change experts to discuss in detail the problem of climate changes and its negative impacts on water budget in Member States to find out the methods used to mitigate and adapt with the water shortage. The problems related to changes in water budget in different Member States such as desertification and demographic changes were discussed and presented new techniques and ideas about international programs used to adapt and mitigate the problem of green house gases and its impacts on rainfall and its seasonal and geographical distributions.

In order to combat desertification and mitigate the effect of drought ISESCO exerted efforts to improve the use of climate and weather information and forecasts, early warning systems, land and natural resource management, agricultural practices and ecosystem conservation. Various seminars and other events

organized on combating desertification and land use policies addressed the problem of desertification which prevail the various regions of the Member States. Such seminars raised awareness to take care on desertification phenomena and identified the main reasons responsible for causing this problem, defined strategies and action plans to face the phenomena of desertification and exchange experiences and practices, on the used legislations and laws for preventing the expansion of desertification.

In order to enhance awareness and knowledge capacities of the general public and concerned scientists and water resource management staff, ISESCO regularly published various information material and state-of-the-art studies and books on water issues and technologies and disseminate it widely these publications and also sensitize the use of new and economic technologies and also alertness to impeding problems in water resources preservation. In the same vein ISESCO also published material on water ethics and conservation and economic use of water.

In view of increased demand of the fresh water in the Member States, ISESCO also promoted desalination techniques which have improved tremendously to make effective use of the brackish and saline water enabling various villages, cities and industries in arid and water short areas to fulfill their water demands. Due to success of technology and decrease in the overall cost of desalination capacity, the water output through desalination was an easy way to fulfill the demands. ISESCO also paid attention to improve efficiency of desalination plants which were not working up to their maximum capacities and tried to solve the operating problems.

ISESCO also devoted attention to improve sanitation services in the Member States. There are millions of poor people in the Member States suffering from various infectious diseases and food deficiencies due to poor sanitation conditions. ISESCO's efforts were exerted in collaboration with WHO and other international bodies to bring continuous improvement in sanitary situation in the Member States. Available resources were boosted and sanitation infrastructure was strengthened to achieve maximum benefit for solving longstanding pollution problems. Education and public awareness are one of the mean means to create conducive environment for improving the sanitary and health situation. However, in most of the Member States, the education and public awareness programs lacked information on sanitation and health management. The impacts of many water and sanitation programmes were limited, and many systems broke down and were abandoned prematurely. In fact, most of the surveys showed that schools and colleges buildings in developing countries had very poor sanitation conditions. This, on the one hand made the schools unsafe places causing transmission of diseases, impairs children's growth and development and on the other hand, poor sanitation instilled a careless attitude in the public towards tackling the situation. ISESCO guided the Member States on best approaches to tackle sanitation problem. Awareness raising exercises brought immediate improvements in various Member States. ISESCO also stressed Member States to develop sound strategies for community water supply and sanitation programmes based on a clear understanding of the existing problems, the beneficial impacts achievable, and the factors which determine sustainability.

For projecting sensitivity of water issues of vital concern like water pollution, water related diseases, availability of clean drinking water, etc. it was of prime importance to enhance awareness through its integration into the education process. ISESCO tried to enforce integration of these issues in the curricula of schools and colleges. ISESCO also enhanced skills and expertise of the teachers in tackling important water issues through dissemination of high quality required knowledge and technical information. Such Trainings were supervised by expert which consolidated the concept of sustainable development strategies and policies among the school teachers contributed towards sensitization and awareness of issues of vital concern and highlighted the concept of sustainable development, mainly water resources as source of life. ISESCO also published curricula and teaching guide of special course on "Water Resource Management" proposed for university level studies in the Islamic countries to fulfil educational needs in water resources management and ISESCO also addressed water resource management in term of theory and practice with special relevance to water resource issues in the Member States. Various programmes like award of fellowship for higher studies, careers development grants to promising young scientists, research grants also contributed towards development of required human resources in water management.

ISESCO devoted more attention to pollution creeping in fresh water resources which also takes a large number of human lives in the Member States. The Workshops conducted in this regard served as a basis for the development of policy guidance to assist the Member States in addressing water quality challenges for sustainable water resources management. These workshops also identified the critical problems related to water quality and water pollution, assessing their causes and trends, and developing recommendation for solutions and strategies to tackle the water quality challenges in Member States..

PROTECTING OCEANS AND MARINE RESOURCES

World Summit for Sustainable Development committed to improve the links with strategic plans for the sustainable development of coastal and marine resources, noting in particular areas that are subject to accelerated environmental changes and development pressures. WSSD also emphasized strengthen the capacity of developing countries in the development of their national and regional programmes and mechanisms to mainstream the objectives of the Global Programme of Action and to manage the risks and impacts of ocean pollution. Earlier Agenda 21 had commits nations to the "conservation and sustainable use of marine living resources on the high seas" as well as to long-term cooperative research to improve the quality of the information on the oceans and thus improve their effective management. The relevant document in Agenda 21 is entitled "Protection of Oceans, All Kinds of Seas Including Enclosed and Semi-Enclosed, Coastal Areas and the Protection, Rationale Use and Development of Their Living Resources." A central proposal in Agenda 21 is a Global Ocean Observation System which would study the role of the oceans as the sink for pollution and for 50% of the carbon dioxide put into the atmosphere, a key factor in the role of the oceans in climate change.

The world's oceans, seas, islands and coastal zones are witnessing increased economic activity and are expected to witness more in the coming years. Most of the Member States of the Islamic Educational, Scientific and Cultural Organization (ISESCO) lie on shores and, therefore, sustainable use of ocean resources and exploitation offers immense economic benefits especially to the off-shore communities. Lack of coordination, data, planning and management expertise are some of the major weaknesses. Further the misuse of the ocean and shores has continuously polluted the marine environment. Efforts exerted by ISESCO in management of marine environment and safeguarding ocean resources of the Islamic world under its Natural Resource Development Programme helped to improve the situation. Conservation and management of fisheries and other resources were developed through sustainable practices. Other international organizations and bodies were involved to address a wide range of marine issues. ISESCO draw attention to marine pollution problem in the Member States and the need to detect both bio-toxins and anthropogenic contaminants, chemical of emerging concern in the marine environment, the thorough scientific evaluation of their toxicity and ecological risks to marine environment.

Introduction of new techniques to the off-shore communities offered new benefits to the shore communities and thus helped in the alleviation of poverty. Policies and actions promoting beneficial and long-term sustainable use of ocean resources management as well as resource utilization for economic benefits were supported. Measures were taken to develop knowledge on physical, chemical, biological, geological, geophysical and engineering aspects of the sustainable development of ocean resources and protection of marine environment. Conservation and management of fisheries resources, shore monitoring and use

of sea for economic benefits was strengthened. Information and knowledge was enhanced through training activities, workshops and wide dissemination of useful material like reports, studies, proceedings and provision of simplified information. Capacities were built to tackle ocean disaster and shore pollution problems. Assistance was provided in ocean data and information collection, information networking and exchange of experiences.

Efforts were done to support the sustainable development and assessment of oceans by improving the scientific knowledge and understanding and promoting the use of new tools. Marine institution capacities were strengthened through the provision of support to marine resource exploration, utilization and sustainable development of living marine resources like conventional and non-conventional fisheries resources, mangrove forests, coral reefs, aquaculture etc. Capacities of the Member States were built in management of oceans and coastal environment through provision of training in data, GIS application and processing. Marine resource appraisal was promoted through publication of useful material like reports, studies, proceedings and disseminating them among the Member States.

Since misuse of the ocean and shores continuously pollute the marine environment ISESCO encouraged policies and action promoting the beneficial and long term sustainable and clean use of ocean resources management as well as resources of utilization for economic benefits. The international Conferences on Monitoring and modeling of Marine Pollution helped active researchers in Marine pollution, modellisation, marine chemistry, ecotoxicology, ecology, aquaculture, fisheries fields as well as international, national and local authorities from many Member States concerned with pollution and its impact on coastal and sea marine environment, who shared their experiences and explored the feasibility of using the forefront knowledge. These conferences discussed the need to detect both bio-toxins and anthropogenic contaminants, chemical of emerging concern in the marine environment, the thorough scientific evaluation of their toxicity and ecological risks to marine environment. These conferences draw attention that marine pollution problem in the Member States was exacerbated as the construction of waste treatment facilities was unlikely to catch up with increase in human activities. It was recommended to fight eutrophication and hypoxia which has resulted in major changes in marine ecosystem worldwide and considerable economic losses to fisheries and aquaculture. Actions were also taken to tackle shore pollution problems through the provision of scientific and technical guides to the Member States to enable them to devise appropriate policies and management projects. Investigation into the causes and impact of marine pollution and development of appropriate management methods and practices were executed by bringing together the leading international experts to present internationally agreed-on strategies.

The unprecedented impacts likely to occur from climate change represent serious concern that will increase the challenge of sustainable management of marine resources as well. Establishing a dynamic system at both national and regional levels for assessment of coastal vulnerability to climate change was needed. ISESCO under the framework of its Agenda for Sustainable Development

conducted programmes on likely impacts of climate change on coastal and marine environment and the risks imposed on infrastructures, natural resources, biodiversity, and other socioeconomic aspects and hold trainings on approaches and methodologies currently used in vulnerability assessment of coastal and marine environment.

Regional Seminars on Coastal Water Management and Sustainable Use of Marine Resources discussed vulnerability assessment in order to provide the theoretical background and knowledge on approaches and methodologies used in vulnerability assessment of coastal and marine environment. These Seminars presented various economic valuation tools which could be used to identify the existing and potential economic value of the coastal and marine environment and implement measures to integrate the environment into the socio-economic development process in the region. These Seminars also discussed various drivers and likely impacts of climate change on coastal and marine environment and the risks imposed on infrastructures, natural resources, biodiversity, and other socioeconomic aspects. The experts also talked on topics like risk prediction, assessment and management, observation systems and forecasting, developing vulnerability scenarios and data analysis.

Management and sustainable exploitation of fisheries resources is vital for offshore communities. ISESCO organized training courses on sustainable fisheries exposed the participants to methodology and principals of management of marine ecosystem, adaptation of precautionary approaches to fisheries management, protection of ecological and species diversity; and critical ocean habitat, in view of promoting sustainable marine fisheries, and responsible, environmentally appropriate, socially beneficial and economically viable fishing practices. The training courses were also intended to shed light on different approaches to environmental management of fisheries through a review of internationally adopted guidelines as well as discussed the existing situation of fisheries by focusing on the difficulties that would hinder the adoption of the ecosystem approach to fisheries management. These training courses emphasized the importance of fisheries in the national economy, serving as means of livelihood for people. Training courses opened to the participants to a broad horizon for the exchange of regional experiences in the development of fisheries management and discussed the possibility of the involvement of regional experts in networking to exchange experiences, skills and information necessary for inventory management in the fisheries. In another workshop focus was devoted on "Ecosystem Approach to Fisheries Management in the Region" helped to bring new knowledge to the trainers and experts who were from the nucleus of the regional team involved in further training and executing future demonstration activities and pilot projects in their own countries. The workshop program included both theoretical and practical aspects, and it was designed to allow participants to understand the principles and concepts of EAF and acquire the theoretical background to the approach; other scientific principles of relevance. The participants trained on methodologies to make EFA operational taking into consideration of various dimensions, assumptions, risks and constraints in shifting from traditional to EAF based management.

The mangrove forests, established at the confluence of salt sea and freshwater rivers, form a unique environment which reacts with sea and land to create a suitable ecosystem for different kinds of plants and animals and provide a wealth of ecological goods and services to coastal communities. However, mangrove forests are exposed to extensive degradation and destruction as a result of excessive deforestation for timber production, rapid expansion of fish and shrimp farming, and establishment of tourist resorts and development projects based on profitability and not sustainability. It was extremely necessary to undertake the necessary measures to protect and rehabilitate mangrove forest in order to preserve the environment and ensure the safety and sustainability of coastal communities. ISESCO devoted special attention to protection of Mangrove forest and organized a series of Training Workshops on Mangrove protection and Re-Plantation Techniques programme" on mangrove rehabilitation for the benefit of Member States in Southeast Asia. By opening these workshops to a wider range of regional and national partners and audience, ISESCO intended to enrich the training environment with new knowledge and experience, and to diversify data, techniques and approaches and finally to enhance creativity and interaction in delivering scientific and technological findings. ISESCO strived to encourage more plans and policies at national and regional level to safeguard this natural wealth and to ensure its regeneration and restoration in a sustainable manner.

PROMOTING SUSTAINABLE AGRICULTURE AND FOOD SECURITY

Agenda 21, under chapter 14, stressed on Promoting Sustainable Agriculture and Rural Development as it was inextricably linked to poverty eradication, especially in developing countries. The Millennium Declaration also targeted to halve by the year 2015 the proportion of the world's people who suffer from hunger and realize the right to a standard of living adequate for the health and well-being of themselves and their families, including food, including by promoting food security and fighting hunger in combination with measures which address poverty. This was also in consistent with the outcome of the World Food Summit. World Summit for Sustainable Development adopted agriculture as one of the main targets under WEHAB.

Agriculture sector has critical importance for many Member States of the Islamic Educational, Scientific and Cultural Organizations (ISESCO), in particular for the least developed ones, because agricultural development is prerequisite for economic development and provides livelihood for major part of the OIC population. In urban areas a very high percentage of population is connected with agricultural sector, whereas more than half of the population living in rural areas is mostly dependent on agriculture for their income and survival. Sustainable agricultural productivity in the Member States was therefore, deemed very crucial for sustainable development and the best safety net against the poverty and hunger. In ISESCO Member States the agriculture production is comparatively weak and low as compared to the world average. Approximately 200 million people can not access to sufficient food, which is the most basic need of human beings to healthily sustain their life and pursue economic development. Without enough and adequate food, it is not possible to climb the ladder of sustainable development. The rapid increases in agricultural production, as well as rising levels of consumption exerted increasing pressure on the environment as well as exacerbating the climate change. One of the greatest threats to natural rural ecosystems is population growth resulting in land expansion devoted to low productivity crop farming and livestock grazing. In order to mitigate these adverse effects, environmental friendly effective agricultural management and policy-making was promoted in agriculture sector.

Agriculture is central to sustainable development. Agricultural science and technology has played a remarkable role in enhancing productivity in the last decade, making it possible for most people around the globe to have access to a greater variety of nutritious and affordable foods than ever in the past. Despite massive population growth the global malnutrition rate decreased due to increase in grain production. Member States that embraced advanced agricultural technologies were able to increase agricultural production bringing prosperity to their people, making food vastly more affordable and abundant. Without these improvements in plant and animal genetics and other farming technologies known as the **Green Revolution**, it would not have been possible

to increase productivity, close nutrition gap and allowed to feed the burgeoning population growth.

ISESCO strived to improve productivity, increase income, provide sustainability of agricultural activities, and improved nutritional status by implementing basic training activities for farmers and farm household members, especially the women and youth. ISESCO brought more investment in agriculture in order to meet the ever growing demand for agricultural commodities. ISESCO supported agricultural projects leading to substantial improvements even with small amount of technical and financial support. Increase in agricultural production in a sustainable manner was also reinforced through Research and Development. In this regards ISESCO offered a number of research grants in agricultural sector to enhanced productivity, though search of more appropriate crops, better control of pest and also drought and also improving the fertilizers for increased production. More emphasis was placed on public-private partnership for technology R&D and for expanding technology access, encouraging consistent, well formulated government policies to incentive technology development and distribution, supply of appropriate agricultural inputs, and strengthening of agriculture and nutrition science in institutions of Member States.

The Training Workshop conducted by ISESCO provided the new knowledge and best practices in the agricultural areas. These workshops were organized targeted small scale farming communities in Rural Areas as farmers were facing serious problems in agriculture concerning pests and irrigation system. The trainings included scientific lectures with panel discussions as well as field trip. The scientific lectures covered several criteria and expertise besides the main presentation on control of agriculture pests, methods of applying pesticides and safety using of chemical pesticides and ground water and Irrigation systems, means of applying developed systems of irrigations and crop rotation. The trainings projected measure for use of the underground reservoir lands and identification of the quantity and quality of water in it, planning for developing of modern spray irrigation projects in order to rationalized the limited water resources and increase agricultural development. Training programmes also focused on the area of maintenance of irrigation systems and methods of modern fertilization with irrigation. The workshop helped the farmers to apply recent trends in pest control and new approaches in irrigation system to improve agriculture productivity and conserve nature and human health.

ISESCO also devoted special attention to the need of conflict affected countries. ISESCO launched a series of capacity building programmes that had been supporting towards rehabilitation of agriculture sector in Afghanistan. The main objectives were to assess key on-farm water management constraints of irrigation systems in Afghanistan with reference to major cropping systems and to demonstrate a model of water management suitable to Afghanistan climate conditions. The programme also addressed the vast development of wastewater treatment technologies that increase the potential of transforming wastewater from being a threat to health and the environment to a source of water to enhance water budgets in agriculture sector. Using reclaimed wastewater in agriculture was also outlined as an approach to preserve freshwater for drinking purposes and other critical developmental needs.

Within the context of sustainable development, efforts were made to develop the indigenous knowledge towards more profitable and efficient use of local natural resources. Developing apiculture as local bee keeping practices and systems was done in effort to enhance productivity and incomes of the farmers. It was revealed that in many honey producing Member States, the major constraint is insufficient scientific knowledge on bee keeping. The objectives of these workshops were to improve traditional bee keeping, to modernize hive and management system and to document traditional practices. The program included lectures and hands-on training in bee biology and beekeeping. These workshops were designed to provide a high level of training that exceeds that of traditional bee keeping focusing hive inspections for pests and predators to successfully keep bees. In addition to practical beekeeping, participants were trained how to correctly assemble hives, open and examine colonies, see how honey and bees wax are harvested hygienically, and how to prepare hive products for commercial purposes.

Over the past decade, there has been a remarkable progress in the use of ICT in agriculture, especially in the area of farmers' access to market information. Farmers Information Services at both the national and regional level are a promising new field of research and application especially in developing countries in the emerging field of agriculture. ISESCO, therefore, also launched a set of training programmes on use of IT for Small Scale Farmers Communities in Rural Areas. The training programme was designed to train the related senior officers and trainers, enabling them to support farmers of rural areas for using agricultural best practices and improving their incomes. Analyses of the outcomes of the course indicated that the participants emphasized the utilization of all kinds of ICT tools to strengthen the livelihoods of small scale farmers of rural areas. National authorities were solicited to provide free of cost agricultural information services to the farmers.

In the light of hunger and famine specially in the horn of Africa the need for an emergency response mechanism for Member States was addressed by the OIC Council of Foreign Ministers in Astana in June 2011, where it was decided to establish an Emergency Assistance Fund to be managed by the Humanitarian Assistance Department in the Organization of Islamic Cooperation (OIC), and financed by the Muslim diaspora through an International NGO to be formed for this purpose.

Biotechnology is the technology which could save million of people from starvation. Biotechnology-derived products have the potential to positively change our society, from increasing agricultural products to producing a cleaner environment. New bio-techniques in the field of agricultural and food production horticulture, forestry with adequate ethical and safety standards, has enormous potential to increase productivity, food qualities, improved environment protection. ISESCO therefore, strived to encourage biotechnologies for boosting agricultural production. During the year 2003, a **Strategy for Promotion of Biotechnology in Islamic Countries**, was adopted by the 10th Islamic Summit held in Malaysia, October, 2003. Under the strategy the concerned highest authorities in the Member States were urged by ISESCO to facilitate development of biotechnologies,

prepare research and development programs consistent with the needs and priorities of each country, establish biotechnological centers with high level research and innovative capacities and develop necessary infrastructures to ensure valorization of biotechnologies. ISESCO offered research grants leading to application of biotechnologies in the agriculture and food production and processing sector to extend its benefits to million of poor people living in the rural areas to enhance their capacities to meet their own food and fibre requirements. ISESCO also drafted the **Implementation mechanisms of the Strategy for Promotion of Biotechnology in Islamic Countries** which was prepared by genetic engineers experts from the Member States. The Implementation Mechanism helped to set up **local Bio-clusters** in each Muslim country in accordance with the characteristics of each region and the specific needs of its population. It was recommended that each country should set up its own **National Biotechnology Development Agency (NBDA)**, if not already done so. NBDA was envisaged to act as a true task force dedicated to promote and coordinate all local biotechnology initiatives in alignment with national priorities and development programs. ISESCO also established an **International Biotechnology Advisory Committee (IBAC)** consisting of biotechnology experts to contribute toward biotechnology progress and to meet from time to time to evaluate the progress in the field of Biotechnology under the Strategy and also strive to support the implementation of Biotechnology programme in their own countries.

ISESCO also fostered its cooperation with FAO and has singed a comprehensive programme on the project "**Globally Inherited Agriculture Heritage System (SIPAM/GIAHS)**" towards the promotion of the conservation, the management and the durable exploitation of the natural resources of its Member States. This programme to sensitize the importance of the agro cultural knowledge and to set up pilot actions in order to develop and conservation farming systems of the clever systems of the World Agricultural Inheritance, particularly with Morocco, country occupying the 2nd rank among the Mediterranean countries for his wealth of biodiversity.

Ecological foundation were build towards sustainable agricultures in the cross-cutting areas, utilization of new and renewable energy resources for improving, ISESCO also supported pilot projects for enhancing the agricultural output. Further, ISESCO also encouraged sharing of best practices and technologies for environmentally sustainable agriculture, improving water resource management through increased public-private collaboration, reducing post-harvest losses and food waste by improving transport, storage, and waste recycling, reducing greenhouse gas emissions from agriculture, through policy and financing incentives.

COPING WITH NATURAL AND MAN-MADE DISASTERS

World Summit for Sustainable Development regarded disaster reduction as an essential component of sustainable development with proposed targeted actions. Based on the momentum generated by the International Decade for Natural Disaster Reduction (1990-1999) and the Action Plan adopted at the First World Conference on Natural Disaster Reduction held in Yokohama in 1994, the World Summit on Sustainable Development provided the opportunity for the conceptual integration of disaster reduction within the agenda of sustainable development. WSSD also acknowledges that today, the impacts of natural disasters are more frequent and more devastating, with developing countries more vulnerable to hazards than ever before. Disaster risk reduction was therefore an emerging issue taken into consideration during the preparatory phase of WSSD. The International Strategy for Disaster Reduction (ISDR) was established to mobilize governments, UN agencies, regional bodies, the private sector and civil society to unite efforts in building resilient societies by developing a culture of prevention and preparedness.

During the last ten year, the world witnessed an increase in frequency of natural and man-made disasters due to global warming and other such anthropogenic factors. The member States of ISESCO with fragile economies suffered the most in terms of loss of life and property in such eventualities. Various catastrophic natural disasters faced by the Member States included Tsumani in Asia and earthquakes in Algeria, Iran, Morocco and Pakistan which engulfed hundred of thousands of human lives in the Member States. The unprecedented flood in Pakistan caused huge damages to the life and property of million of people and gave a serious blow to economy. The increasing in number and frequency of natural disasters is a direct result of the global changes experienced by the world in the form of climate change, and of the worsening vulnerability that affects a large swathe of the earth's population. Most of the casualties are results of un-preparedness of countries, unawareness of general public on precautionary measures and absence of expertise and facilities at the National level to cope with such natural disasters.

The increasing vulnerability to natural disasters caused by earthquakes, floods, landslides, drought, windstorms, hurricanes, and volcanic eruptions pose a major threat to sustainable development and often afflict poor population. Disasters, whether increasing natural or caused by human wrong practices, occur worldwide, often in remote and undeveloped regions. However, when disasters affect a large region including cities and towns they cause havoc and huge loss of human lives. In order to prepare in advance the ways to handle the professional and personal challenges, ISESCO strived to implement programmes and projects to enhance the capacities of the Member States to better cope with natural disaster. ISESCO urged the Member States to enforce their commitment to disaster management, integrate into national policies and programme, accord due importance under public and private sector decision making, develop and

modify policies and action planning to integrate disaster and risk management and allocate sufficient resources in order to save lives and livelihood threaten by natural disasters. ISESCO also focused to training and awareness raising of the masses to better equip the masses with necessary skills to cope with natural disasters.

ISESCO organized a number of conferences and seminars to discuss the sea level rise and land degradation, sea water intrusion in coastal aquifer, rainfall pattern changes and changes of crop pattern as well as demographic migration. These seminars projected ways and means in facing and mitigate the adverse effects of other natural disasters like earthquakes, landslide, floods and infecting diseases. The Regional Seminars on Disaster Management also tackled a number of issues in disaster management that include risk assessment, prevention measures, preparedness to cope with future disasters, emergency response to a disaster, recovery and reconstruction. Such seminars demonstrated that good development and community preparedness can reduce the impact of a disaster especially for the most vulnerable people, such as those living in hazard-prone areas with few financial resources to help them recover if they lose their means of livelihood. Such seminar also explored possibilities for regional cooperation for tackling disasters collectively in emergency response and a number of options were identified in this aspect.

ISESCO undertook the preparation and publication and distribution of important scholarly books. During 2009, a book on space technologies and how to use them in the management of environmental risks was published and distributed. The book was an important reference in the field of cartography, which helps determine accurately the location of floods when they occur, and measure the areas that experienced flooding in order to guide the relief topping an effective manner, and provide quantitative data to assess the area of land and infrastructure that may hit by floods. In order to improve the knowledge of general public and student community to create better aware communities, ISESCO also prepared small booklets on various sustainable practices to preserve the environment and better equipping for recurrent natural disasters States. These booklets, covered subjects like floods and hurricanes, wind, fires, drought and desertification, and earthquakes and are expected to educate school students and the public in order to increase the preparedness and resilience of the societies.

ISESCO also provided training to all concerned and disaster mitigation officials on better management of natural disasters. Such training courses which focused on preliminary aids and relief for disaster prone region promoted national capacity in disaster mitigation, preparedness and relief actions. The training courses also assisted in developing necessary skill in order to better prepare for natural disasters. The trainings also focused attention on technologies for disaster mitigation and to create a culture of safety and resilience among all societal groups. The training courses stressed the importance of early warning, education and raising awareness for better coping with disasters. Participants from different duty stations in disaster reduction were able to benefit from these trainings and shared their experiences and knowledge.

The Fourth Islamic Conference of Environment Ministers also helped in setting up various vital instruments for protection of environment and sustainable development. The Conference approved "**the Strategy on Management of Disaster Risks and Climate Change Implications in the Islamic World**". The strategy is based on important pillars, like improvement of risk assessment to strengthen monitoring systems and control, development of early warning systems, preparedness to face the dangers and take action to reduce their vulnerability and good management of risks, rapid intervention and relief, reconstruction and restoration and also combating various kinds of vulnerability at community level. The Strategy highlighted strategic orientations and the motives towards better preparedness to mitigate disaster impact, through heightened awareness, good governance and the fostering of the culture of prevention and readiness. The strategy aimed to reduce and mitigate the impact and effects of disasters, develop good governance within sustainable development and in coordination with its programmes, projects and initiatives. Priority is given to partnership, ongoing training and improving the quality of life. The strategy recommends constructive research, build up and utilize information and draw benefits from everything achieved by the Kobe Action Plan. It urges cooperation among Member States on the basis of experience sharing and building capacities at all levels and develop information tools and mechanisms to facilitate dialogue among the partners. It also proposed information management networks and databases to develop common tools, sound applications and expertise sharing. This strategy expected to help the member States in understanding the different types of disasters and preparedness measures for dealing with emergencies.

The First Expert Meeting on Earthquake and Natural Disasters in Arab World" organized in Rabat focused on disaster reduction and provide necessary mechanisms in order to put in place, and appropriate policies to be adopted and integrated into disaster-prevention programs. The Meeting stressed to build up the capacity of individuals and communities to confront disasters. It was revealed that Member States when drawing up their development plans, they rarely earmark resources to priorities such as disaster-related damages. It was recommended to work on coordination between scientific and research institutions located in the Arab States and the surrounding area on the dangers of earthquakes and other natural hazards, and exchange visits. It was agreed to create standards legislation and code of construction and reconstruction appropriate to the reality of the Arab region and to impose the regulations and building codes to resist the dangers of earthquakes and natural hazards in order to reduce the human and material losses in the Arab Member States.

Using Technology Systems Global navigation satellite in various applications has expanded significantly in recent years, it provides three basic services (position, speed and time) and now part of everyday life. ISESCO organized the Training Course on "GNSS applied for sustainable development" to provide theoretical and practical knowledge on GNSS systems as well as references and contact information. The Training course imparted skills to exploit the knowledge base relevant to the use of positioning systems. ISESCO also initiated a diagnostic Study on Recent Mega Flood and Other Climate Extremes in Pakistan in Relation

to Climate Change. This study is expected to help immensely the member states to take all precautionary measures to save life and property and huge economic losses, which is caused to lack of preparedness.

ISESCO is also translating into Arabic language material on warning systems for tsunamis and other sea-level related hazards for Arab Member States in the Maghreb region. The activity was undertaken in Cooperation with the Tsunami Information Centre for the North-eastern Atlantic and the Mediterranean (NEAM-TIC) to develop the Tsunami Early Warning and Mitigation System for the NEAM region (NEAMTWS). Making citizens, especially youth, aware of risks of floods from the sea in coastal areas, such as tsunamis, storm surges and strong swells and acquiring knowledge on and practicing safe behavior. Identification, sharing and dissemination of good practices in plans, methods and procedures to strengthen preparedness for sea level related hazards is expected to build capacities of the Member States. Currently, 37 NEAMTWS Member States, out of 39, have established their Tsunami Warning Focal Points. The Tsunami Warning Focal Point receives international tsunami warnings from the NEAMTWS or other regional warning centers. The availability of these documents and booklets into Arabic language will involve Arab countries in this project. It is expected that these efforts will thereby increase the number of Arab countries actively involved in NEAMTWS.

ADDRESSING THE CLIMATE CHANGE IMPACT ON ISLAMIC COUNTRIES

The speed of change in climate is unprecedented which is threatening social, economic and environmental systems that cannot adjust at the same pace. Change in hydrological cycle and scarcity of water resources is likely to induce forced mass migration and make many parts of this world uninhabitable. Affect on agriculture due to further drying of arid and sub humid areas will deepen the food crises for many of the world's poorest and most vulnerable people. A small fraction of global temperature rise can lead to enormous loss of biodiversity resulting in extinction of 20% to 30% plant and animal species. Tropical forests are continuing to disappear at an alarming rate. During the last decade, the rate of deforestation averaged about 13 million hectares a year, of which some 6 million hectares were primary forest. A small rise of sea levels could wreak havoc for tens or even hundreds of millions of people. Developing countries, with less technical, economic and institutional capacity to adapt, are likely to find it hardest to cope.

Measures to reduce the extent of global warming are crucial. Various resolutions adopted at international level to mitigate the impact of climate change, including resolutions adopted by various Islamic Summits and conferences, Earth Summit, held in Rio de Janeiro, Brazil, 1992, the Kyoto Protocol to the UN Framework Convention on Climate Change, Agenda 21 of World Summit on Sustainable Development, UN Climate Change Conference held in Bali, Indonesia in December 2007, Tunis Declaration on Climate Change etc. as well as various international reports, projects and programmes draw due attention to climate change impact and emphasized for implementation and mitigating the impact of human activity on environment. However, as being observed there was much to do in order to take the climate change challenge seriously and adapt ourselves to changes. There was need to promote further knowledge on climate change and its economic and social impacts, to accord priority for fulfillment of international commitments, to trace financial resources, to promote adequate technical knowledge and skill along with suitable technologies, to strengthen national institutional capacity, to enhance networking and collaboration for joint activities at regional and sub regional levels.

The 57 member States of the Organization of the Islamic Cooperation constitute the world largest grouping, consisting of all developing countries dependent on either agricultural activities or extracting oil and natural gas. Contribution of all these countries towards green house gases and other emissions is at the world lowest and will remain as such in near future in spite of expected industrialization of economies as well as population growth. However, all these countries are highly vulnerable to climate change effects, and needed to adopt appropriate measure to mitigate its effects.

ISESCO examined the capacity of the Islamic countries to adapt to climate change through organizing various international events to assess the environment

situation and future prospective. Manners to preserve surface and underground water resources, essential for continuity of social and economic activity, from adverse effects of climate change were also evaluated. Impact of climate change on biodiversity, desertification and deterioration of lands, impact on marine and coastal environment as well as on general health was given due attention.

During the 3rd Islamic Conference of the Environment Ministers ISESCO devoted special attention to climate change and its impact on the Member States. The round table organized on this occasion looked into mitigating the effects of climate change in the Member States, examined the climate change adaptation and mitigation options and also economic and social effects of climate change and the impact of response measures on the Member States. The Conference recommended working towards developing a joint Islamic action mechanism to support and strengthen negotiation stance in relation to climate change, promoting cooperation among Islamic countries and exchanging expertise in various fields of climate change and stressed on the importance of adoption measures as a priority for Member States to counter the increasing risks, particularly in the fields of water resources, desertification, drought, marine and coastal environment and health. The Conference also recommended to develop an institutional and administrative structures for climate change institutions, particularly in the field of adaptation at the national, regional and international levels;

ISESCO established a working group from the experts of Member States to follow up the latest developments in the scientific, technological, methodological and negotiation fields of climate change. The Conference also urged the Member States to take a unified position resting on the Rio principles, especially the principle of common but differential responsibility, and effective participation in the next meeting of stakeholders in Poland.

SEARCH Project "Social, Ecological and Agricultural Resilience in the Face of Climate Change Project" was developed to implement a framework for local-level capacity development and methodology development as to increase resilience to climate change. Training Workshops on impact assessment, vulnerability and adaptation to climate changes focused on a better understanding of all project staff and key stakeholders on climate Risk vulnerability assessment (using CRISTAL and CVCA) that will be used in SEARCH. Furthermore, the workshops used the outputs of the vulnerability assessment process to develop an adaptation strategy and M&E plan for a resilience strategy. International Conference on information space and climate change: Geo-spatial information and climate change: impact and adaptation in Africa strengthened and supported existing networks of experts in the field of space information. The Conference promoted the exchange of geospatial information needed to conduct impact assessments of climate change in Africa and encouraged African institutions for setting up projects and funding offered through international programs aimed at reducing the effects of climate change. This international conference also highlighted the state of the art on climate change and its effects in Africa (impacts continental, regional, local adaptation to climate change, extreme events and natural hazards).

ISESCO also introduced an Action Programme to Benefit from Adaptation Fund and Clean Development Mechanism in the Member States with the primary objective to promote knowledge and understanding of the Member States to improve capacities in mitigating the impact of climate change and launch useful and sustainable projects to enable them to tap the enormous potential of CDM and Adaptation fund meant for the developing and Least Developed Countries (LDC) under the Kyoto Protocol. Most of the Member States were found eligible for taking benefits from the provisions of the CDM and Adaptation Fund, yet no serious effort have so far been made to harness the available potential of CDM and Adaptation fund. A joint programme for Member States was expected to allow them to follow a direction which can benefit all the countries in the Islamic World.

The programme provided detailed information on Adaptation fund to Climate change, an assessment of the possibilities and mechanisms for improved co-ordination and coherence with the international efforts, availability of assistance, various measures to be taken to benefit, procedures and formalities, necessary skills, involvement of bilateral and multilateral donor agencies, and international financing institutions, benefiting from international expertise, and policy and operational constraints which need to be taken up to channel assistance available at international level. These documents explained useful and important climate change projects to the Member States e.g. sea walls to guard against expanding oceans, early warning systems for extreme events, improved water supplies for drought areas, training in new agricultural techniques and the conservation and restoration of mangroves to protect people from storms, etc. which may get immediate support from the Adaptation Funds.

The Action programme to benefit from the Adoption Fund and Clean Development Mechanism was an important document for the Member States which specified ways to optimize their resources and integrate their efforts towards their sustainable development. Adoption of appropriate means to face up the Climatic Changes has become an emergency for all the countries and requires the setting up of an adequate institutional framework to boost scientific research, prevention and awareness in addition to the intervention on the national and regional levels to guarantee an efficient participation of all the components of the civil society. The document facilitated the decision makers as well as relevant institution to adopt sustainable programmes to maximum benefit from the existing opportunities.

Adoption of appropriate means to face up the Climatic Changes has become an emergency for all the countries and requires setting up of an adequate institutional framework to boost scientific research, prevention and awareness in addition to the intervention on the national and regional levels to guarantee an efficient participation of all the components of the civil society. The Kyoto Protocol, the first international agreement on tackling climate change, stipulates that developed countries, due to heavy industrialization, contributes to most green house gases emissions, must act first to curb emissions, giving time for developing countries to grow their economies and raise their peoples' living standards. The developing countries, in addition to mitigation efforts, should

adopt policy of adaptation to climate change, in order to mitigate economic and social impact of climate change particularly in regions which are more prone to affects of climate change.

PROMOTING ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCES

RIO Agenda 21 does not contain a specific chapter dedicated to the energy sector, energy issues were addressed throughout the action plan with its linkages to goals of achieving sustainable development. The Millennium Development Goals developed in September 2000 provide key targets to address the most pressing development needs, still there was no MDG explicitly on energy, as energy was considered essential for achieving all the goals set by the world's leaders. World Summit for Sustainable Development stressed extra attention in improving energy efficiency and energy was included an important issue under WEHAB cluster of critical concern.

Energy is a key factor in socio-economic development and in providing vital services that improve quality of life but uses of renewable sources of energy is the only way in achieving a sustainable and safe future for all. Large dependence on the use of fossil fuel and unsustainable practices have already caused major damages to environment as their combustion produce pollution, greenhouse gases, acid rain, global warming and climate change, resulting rise of sea level, an increase in the intensity of extreme weather events, and significant changes to the amount and pattern of precipitation. Other expected effects of climate change include changes in agricultural yields, modifications of trade routes, glacier retreat, species extinctions and increases in the ranges of disease vectors. To overcome these global effects, sustainable, clean and safe energy policies that would satisfy the energy demand needs to be implemented more seriously through sustainable management of the available sources of energy and promoting the use of new and renewable sources.

In order to reduce emission of greenhouse gas emission the Islamic Educational, Scientific and Cultural Organizations (ISESCO) has always supported United Nations agenda for promotion of renewable energy in order to meet the burgeoning energy demands. ISESCO placed a high emphasis to implement programmes to conserve and manage the available sources of energy and to utilize new and renewable resources of energy in the Member States under its various short and long term planning during the last ten years. In view of climatic changes and global rise in temperature ISESCO consolidate its commitment on sustainable development of renewable energy sources and initiated joint programmes with other international organizations to expand use of renewable energy especially for the welfare of the developing countries. This commitment helped provision of modern energy services to the people in the needy areas. In order to fulfill the energy requirement of the Member States it is indispensable to explore new avenues and techniques and promote the efficient application of economic renewable energy technologies. Improved information and education of these technologies may help specially people in the underdeveloped rural and remote areas to utilize it to meet their basic energy needs.

During the third Islamic Conference of Environment Ministers held under the High Patronage of His Majesty King Mohammed VI, sovereign of the Kingdom of Morocco adopted a draft programme on promotion of renewable energy in the Islamic countries and its implementation Mechanism. It urged to step up efforts to promote renewable energy and called upon the Member States to develop national and regional strategies for promotion of renewable energy, as well as energy efficiency and preservations. The Islamic Executive Bureau for the Environment during its first meeting in Rabat, Kingdom of Morocco, in January 2010 entrusted the Environment Secretariat with drafting a strategy to develop renewable and clean energy sources in the Islamic countries, in line with the resolution of the third Islamic Conference of the Environment Ministers. The Fourth Islamic Conference of Environment Ministers held in the city of Hammamet in October 2010, approved the **Strategy for Promoting Energy Efficiency and Clean and Renewable Energy Sources Use in the Islamic World**. The strategy provides technical expertise needed by the Member States in this field, which helped secure energy resources that are readily and sustainably available in the long term at reasonable cost, and can be utilized for all required tasks without causing detrimental effects to the environment or natural resources. The strategy presented various options of renewable energy resources, including solar, wind, hydropower, geothermal, wave and tidal energy, Hydrogen energy and fuel cells. It gave details about energy supply, energy consumption, electricity generation and consumption in the Member States. The strategy recommended enhancing awareness of the rationale to renewable energy technology in the general public as well as in academia and official machinery. It suggested widespread actions, from education programmes to provide the technical knowledge and improving the level of competency of service providers, engineer, architects, technical and academia. It highly recommended institutional and international collaboration within Member States. The strategy presented focus on renewable energy market and financing mechanism and suggested demonstration projects to provide first hand experiences for improvement in the training and skills of the stakeholders as well as increased efforts in research and development activities. A number of Member States now have goals and plans for their own renewable energy futures, and are enacting a far-reaching array of policies to meet those goals. Multilateral agencies and private investors alike are mainstreaming renewable energy in their portfolios. Many renewable technologies and industries have been growing particularly for wind energy and photovoltaic.

ISESCO also focused on educational programmes are able to provide the technical knowledge and improve the level of competency of service providers, engineers, architects, technicians and academia. Other capacity building programmes were launched to raise the awareness level of the rationales for renewable energy technology among the public, policy makers, investors and financial institutions so that they could understand better the technologies, are aware of its true benefits and ecological significances, understand the purpose and appreciate the functions of the technology.

ISESCO organized World Renewable Energy Congresses biennially and various regional seminars and conferences in various regions of the world during the last ten years. These events were attended by a large number of renewable energy

scientists and technologists from around the World, honoured by the Presidents of the countries, participated by ministers of energy, heads of many renewable energy organizations, private companies, representatives of various international organizations. The plenary, technical and special sessions along with workshops were organized to accommodate a large number of papers received from the delegates. These Congresses honoured distinguished scholars from around the world with various awards including World Pioneer Awards in recognition of outstanding contributions to renewable energy. The renewable Energy expositions in conjunction with WREN brought together approximately major players from government, industry and academia to showcase the diversity of technology solutions. These congresses helped to establish networking among the ISESCO Member States, and to further promote efforts for promotion of renewable energy.

International Seminars, on Renewable Energy covered various areas like Policy, Security, Electricity, Sustainable Transport, Water Resources Management and the Environment. These Seminars were also supported by other leading renewable energy organizations, like the British Council, Commonwealth, Elsevier Sciences, DTI, National Renewable Energy Laboratory (NREL) of USA which was pioneer in renewable energy. Similarly, the Training Courses and Workshops organized in collaboration with UNESCO, IEPF and other international organizations, renowned international experts were invited which presented the state of the art review on renewable energy technologies and imparted the latest knowledge. Best practices and successful experiences in the application of renewable energy resources in different sectors were presented. These training courses introduced various renewable energy technologies such as solar, hydro, wind, biomass and its potential applications.

ISESCO also continued attaching importance dedicated to new and renewable energy sources, believing in Member States need for care and attention to develop unpolluted and cheap energy sources that can substitute at least partly for the traditional energy sources within the Member States, the majority of which have new renewable energy sources. With this framework, ISESCO organized the International Conferences on new development in the field of solar energy, and the other national training courses for promoting renewable energy.

ISESCO always focused on the development of well trained human resource as per need in the current era. Efforts were concentrated on human resource development and on promoting large scale use of sustainable and renewable energy, and increased energy efficiency with special emphasis on the needs of the Member States. Under this effort the international organizations particularly UN agencies were involved or assisted for synergized efforts. The training programmes conducted by ISESCO with various United Nations organizations and international organizations at national and regional levels helped to promote utilization of local technologies for renewable source of energy. It also helped to improve information and updated their knowledge on utilization of local renewable energy resources. ISESCO published a number of books and material and disseminated it widely on various important topic of renewable energy in order to improve awareness on new and renewable energy resources and

understanding of the cost-effective renewable energy technologies. The training courses were also conducted to help the participants to promote and strengthen their capacities in repair and maintenance of renewable energy equipments and gave them more opportunities to find jobs and therefore, to contribute to improve the living conditions in rural and remote areas.

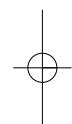
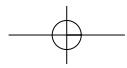
ISESCO also constituted Renewable Energy Expert Group of the Member States which met regularly and reviewed successful experiences in the application of renewable energy resources in different sectors in close cooperation with other major programmes of the international and regional organizations. Technical support was provided to modernize power systems, as well as new and renewable energy systems.

ISESCO conducted a number of Asian, African and European Schools on regularly basis mostly in collaboration with UNESCO, which exposed the participating to international perspectives and experiences in solar, hydro, wind biomass, fuel cell and other renewable energy applications and policy and presented the state-of-the-art review on solar energy technologies for useful applications. The regional training course and seminars provided opportunities to the experts and policy makers from all member countries to develop quality information on a wide array of renewable energy application in the new life.

ISESCO in cooperation with UNESCO conducted a series of regional consultation group meetings to review the energy profiles in the Member States paving the way for formulating a general consensus among the neighbouring Member states to adopt national and regional policies and strategies in order to promote renewable energy technologies. The Regional Experts consultation Meetings held in middle east were more valuable as these consultation helped in devising the broad lines of a road map to formulate a comprehensive strategy for the development of renewable energy technologies in the Member States.

One of the most immediate root hurdle in ameliorating the economic condition and alleviating poverty in the Member States was unavailability of energy for their rural and remote areas, where most of the population lives. This unavailability of energy was not only keeping the people cut off from new technology era but also hampering the economic development. ISESCO devoted a special attention to the promotion of utilization of renewable energy resources, which are environmentally clean and technically simple, by the population of under-developed rural and remote areas having no access to electricity. Joint programmes with international and regional organization like UNESCO, UNEP, WREN, ALECSO, AIF, COMSTECH, WICS, etc. contributed towards achievement of common objectives. Conduction of national and regional training courses in rural and remote areas on important topic like the use of solar electricity, bio-mass and wind energy and other local resources of energy helped to promote renewable energies technologies in addressing development issues in rural and remote areas. ISESCO supported renewable energy projects in order to promote large-scale use of low cost technologies like solar electricity, biomass and wind energy in rural and remote areas. ISESCO also disseminated manuals and maintenance guides to complement the efforts on the utilization of local resources of energy.

However, these sporadic successes, and efforts are not sufficient to provide us energy security to our future generations. In order to fulfill our sustainable development demands, a sustainable supply of energy resources that, in the long term, is readily and sustainably available at reasonable cost and can be utilized for all required tasks without causing detrimental effects to the environment or our natural resources, should be rigorously pursued at the RIO+20. This path can allow us to tackle core issue o environment degradations, diminishing natural resources and increased poverty. It is essential precondition for social and economic development of a country.



ERADICATION OF POVERTY AND ALLEVIATING LIFE STANDARDS

World Summit for Sustainable Development, Rio+10 Agenda 21, the relevant outcomes of other United Nations conferences and the United Nations Millennium Declaration all emphasized concerted and concrete measures at all levels to enable developing countries to achieve their sustainable development goals as related to the internationally agreed poverty-related targets and goals. United Nations Millennium Declaration to Eradicate poverty and Hunger set various targets mainly focusing to halve the proportion of the world's people whose income is less than one dollar a day and of people who suffer from hunger by the year 2015. The Second UN Decade for the Eradication of Poverty (2008-2017) set "Full employment and decent work for all" as a theme for the Decade. The resolution called for a more coherent and integrated UN system-wide response.

Poverty has always remained one of the colossal problems of major global concern and the greatest impediment in achievement of the agenda for sustainable Development particularly for developing countries. Most of the problems prevailing in various parts of the world emanate from poverty. With it comes hunger, sickness, inadequate housing, illiteracy, poor sanitation, unemployment and, increasingly, environmental degradation. A quarter of the world's population, live in severe poverty. There is much skepticism about the actions being taken at the international level and in the developing countries reaching the poor and that the noticeable improvements taking place on the ground. It is necessary to muster up further support to work collectively to further analyse the causes, examine the status of poverty as well as devise and implement suitable and realistic projects and programme to deal with existing problems being faced by poor communities to alleviate their sufferings.

Tackling the Millennium Development Goal to reduce the number of people living in poverty by half by 2015, and in conformity with the Decade for the eradication of poverty, as well as under the Framework of the Islamic Agenda for Sustainable Development, ISESCO developed synergy with United Nations Agencies, other international and regional organizations to consolidate efforts in achievement of common objectives. ISESCO under its various strategies, vision documents, policies and programmes on capacity building focused more attention to alleviate poverty and improve the living conditions of the people surviving in poor communities both in urban and rural areas. ISESCO also exerted efforts to create economic opportunities and facilitating provision of necessary social services in the poor communities. Action under cross-cutting themes to deal with social problems like AIDS, drug trafficking, disease, violence, hunger, malnutrition and other social problems of underprivileged people, poverty stricken communities handy-capped and destitute people, were given due attention in order to ameliorate sufferings and to improve the quality of life.

Generation of income opportunities and tackling wide spread unemployment in Member States, ISESCO launched programmes to enhance interest and

boost unemployed youth's capacities and skills to get better job opportunities for them. International workshops on skills acquisition and job opportunities creation to ensure social integration helped to build professional and functional skills in the occupational disciplines highly demanded in the labour market, and providing them with the latest techniques used in the management of income-generating micro-projects. A large number of unemployed graduates benefited from such workshops. In the same vein, ISESCO workshops also exposed them to various opportunities existing in various domains and also on, to find productive job opportunities and which also provided training and skills in developing their own business projects to help them establish their businesses accordingly, contribute to social development.

Youth participation in activities conducive to societal development plays a major role in enhancing sense of responsibility among the citizens and developing confidence. ISESCO implemented programme to improve opportunities for career development of youth, to consolidate their role in the society and to tackle various existing problems in the youth. Training sessions for the youth on vocational training and special skills development imparted necessary skills to boost the capacities of the youth and help them play an effective role in society, and in a bid to develop their careers and strengthen their trust in society. Such trainings helped sensitize the youths to the importance of adequate vocational training, its role in fighting poverty, and the role of income-generating micro-projects in sustainable development.

Activities of Non-Governmental Organizations (NGOs) working in the field of social and human sciences were strengthened to tackle issues of vital concern for populations living in poor localities. This programme also strengthened the action of the parties engaged in the alleviation of the suffering of impoverished populations. ISESCO financed a number of micro-projects during the last ten years. This included working with some local community organizations in Member States. These efforts were part of the support extended to the parties involved in alleviating the suffering of poor people in such a way as to attend to the real needs of their communities. This programmes enabled various NGOs from Member States to tackles important problems and suffering of the poor communities.

Peace, security, stability and respect for human rights and fundamental freedoms, including the right to development, as well as respect for cultural diversity, are essential for achieving sustainable development and ensuring that sustainable development benefits all. Deteriorating economic conditions of the poor communities affects peace, security and respect of human rights, more then in any other society. Recognition of human rights include civil and political rights, such as the right to life and liberty, freedom of expression, and equality before the law; and social, cultural and economic rights, including the right to participate in culture, the right to food, the right to work, and the right to education, which provides firm foundation of freedom, justice and peace in the world. The Universal Declaration of Human Rights (UDHR) provided basic foundation to proclaim that all human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. ISESCO always promoted human, civil, economic and social rights,

asserting these rights provides firm foundation for peace and justice and allow all human fellows to live with each other with dignity and freedom. ISESCO in cooperation with UNESCO published a study on economic, social and cultural rights in Algeria, Egypt, Libya, Morocco, Mauritania and Tunisia. The study stressed on the state of the art in the field of economic, social and cultural rights in the target region and identified the weakness of these aspects within international laws and human rights and presented an action plan adapted to the current and local case of each country.

In order to consolidate understandings among people and contribute to the achievement of peace and security ISESCO spearheaded to deal with various social and human issues in the society and devise ways to cope with them in order to streamline the contributions towards the development of an ideal Islamic society. This program also focused on to promote justice, human rights and consolidation of the rule of law and the agreement among the societies in the Member States. ISESCO also prepared a study on critical social security problems causing conflict in Islamic societies, to encourage the diffusion of information on the social problems which block peace and social tranquillity. This document has indeed the ambition to be a source of reference for the Member States in the installation of educational programs on the culture of peace, like on the social dialogue and policy. It will be placed at the disposal of the universities and research institutes of the Islamic world in the form of a handbook of information. In addition, it identifies the social and human main issues which block the development of peace and quietude in the world and presents the strategic directions necessary to the safeguard of dignity and the human solidarity.

ISESCO also devoted attention during the period 2002-2011 to examine these new human behavioural patterns, social and cultural trends which were giving new shapes to societies. A number of research grants were offered to understand some of the rapid transformations as well as various social problems prevailing in our societies. ISESCO supported the social and human sciences institutions, universities and research centres through strengthening their research programmes in order to understand, analyse and manage social transformations. Various research projects analysed difficulties and hurdles in ameliorating poverty like examining the difficulties that prevent communities from achieving food self-sufficiency. Such studies provided solutions to various problems existing in poor communities.

ISESCO also accorded special attention to ameliorate the suffering of the underprivileged people as well as handicapped people. A number of projects were launched to support such people enabling them to attain profession as per their capacities. Under the programme on handicaps in Afghanistan, ISESCO drafted the first strategy for working to ameliorate the suffering of the handicaps giving them a suitable position in the society.

In line with WSSD Declaration, ISESCO also integrated women equal access and participation in all its policies, programme and strategies, acknowledging of social rights of women, eliminating all forms of violence and discrimination and

projected women's role in social development through improved access to economic opportunity, land, credit, education and health-care services. Various activities were organized to examine women progress towards empowerment and gender equality and tackling of social, economic, political and cultural obstacles to increase their capacity. Within the framework of this programme and to contribution to the promotion of the gender equality and empowering of the woman, and in accordance with the principles and values Islamic, ISESCO through various training workshops projected reinforcement of the capacities of the women in the governorship and local development as well as the transverse integration of the approach kind in all the various sectors of local development. The basic concepts of citizenship, good governance, leadership, sustainable development in comprehensible manner were projected. Information and exchanges of ideas relating to the constraints of professional and political empowering of women were discussed and important proposals and recommendations were formulated in social and educational, economic, political domains to be followed in future through complementarities between the public authorities and the international organizations to improve development projects and integration of the woman towards common objectives. Training courses on the "Reinforcement of competences and the capacities of women in the public administration, the governorship of the businesses and the local leadership" promoted the gendre equality and the empowering women. ISESCO registered the reinforcement of the capacities of the women in the governorship and local development as well as the transverse integration of the approach in all the various sectors of local development.

Working under various crosscutting areas in other domains, ISESCO's policies and programme facilitate in achievement of the objectives of ISESCO's main programme of alleviation of poverty. These programmes included enhancing agricultural productivity, support to farming communities, improving access to safe drinking water, addressing water pollution and improving sanitation services, combating desertification and mitigate the effects of drought and floods, access to education, provision of health services, reducing vulnerability to natural disasters, provision of renewable energy resources in the rural and remote areas etc.

PROMOTING GENDER EQUALITY AND EMPOWERMENT OF WOMEN

No agenda of sustainable development can be successful without effective participation of women. As such women empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium development goals and also the Plan of Implementation of the World Summit on Sustainable Development (Earth Summit 2002). WSSD while reaffirming their commitments towards promotion of women's equal access to and full participation in, on the basis of equality with men, decision-making at all levels, mainstreaming gender perspectives in all policies and strategies, eliminating all forms of violence and discrimination against women and improving the status, health and economic welfare of women and girls through full and equal access to economic opportunity, land, credit, education and health-care services.

Women all over the world face many social, economic and judicial problems and OIC Member States are no exception to them. Since, almost all 57 OIC Member States are in the developing category, they face problems of illiteracy, poverty and lack of good governance and other economic and social factors and like other sectors of the society, women problems are aggravated. Women are denied opportunities in education and work and face many other problems in spite of women rights which are specified in the Constitutions of most Islamic countries. In societies with high rates of illiteracy we find many misconceptions that undermine and hinder women's role in the society especially in rural areas. The status of women in Islam constitutes no problem as the women have been granted an equal status to men in the pursuits of education and knowledge. It is incumbent on every Muslim, men and women alike, to pursue knowledge. Islam has given rights and privileges to the women which are not enjoyed in other religions and constitutional system. It is false customs, the traditional values and practices, prevalent in some societies, which assign an inferior role to women in society and within the family. It is ignorance and lack of proper knowledge which impedes the full participation of women in their economic, social and cultural pursuits.

ISESCO also integrated women equal access and participation in all its policies, programme and strategies, acknowledging of social rights of women, eliminating all forms of violence and discrimination and projected women's role in social development through improved access to economic opportunity, education and health-care services. In design and preparation of all the major vision documents, strategies, policies and programmes, gender equality was made an essential component in achievement of the objectives. Women and young girls were supported and accorded priority in all fellowships, endowment, scholarships, grants funding, award of prizes and fostering trainings at various level and in various categories. Women's role was strengthened in such a way to make an effective impact in social change. As such, efforts were made to mobilize the

opinion of society in general and women in particular for acquiring education. Awareness was promoted through the use of modern techniques such as mass-media, science popularization programs, non-formal education, vocational training etc. ISESCO published a book on "Gender Mainstreaming" in Arabic language with UNESCO which presented comprehensive account on gender equality and recognition of women as decision-makers in the field of science and technology. Various solutions and measures were presented for the developing countries to take advantage of talent from women in society in general and women in science in particular.

Various international Seminars on Empowering Women were launched to address a range of critically important themes related to gender equality and women empowerment in the Member States. The events invited various speakers from the Member States to inform on status specially their involvement of women in formulation of policies, decision making and national planning process. The Member States were stressed to implement international standards and norms as well as extend technical and financial support to forge conducive environment for empowering women. The role of women in various sectors was also examined and a set of measures were recommended for promotion of women role in national development process in the Member States. The events covered different subjects including Empowering Women and Girls to Excel in STEM (science, tech, engineering, math), Impacts of Media Images on Women and Girls, Changing Institutional Frameworks to Advance Women Scientists, and Women and Science: Basis of 21st Century Knowledge Economies, which held to develop exact ideas for various action to be taken to empower women in scientific professions.

Some events were organized to expand business opportunities for women, by involving women leaders and many partners with ISESCO to enhance the women leadership in development and the expansion of women's capabilities in business and commercial activities. Such events integrated gender issue with the larger perspectives and reform needed to recognize women as crucial stakeholders in economic and business development in the Member States. The presentations and workshops given during the Forum were related to gender and its role in enhancing and empowering women in business and economic development.

ISESCO through various training workshops projected reinforcement of the capacities of the women in the governorship and local development as well as the transverse integration of the approach kind in all the various sectors of local development. The basic concepts of citizenship, good governance, leadership, sustainable development in comprehensible manner were projected. Information and exchanges of ideas relating to the constraints of professional and political empowering of women were discussed and important proposals and recommendations were formulated in social and educational, economic, political domains to be followed in future through complementarities between the public authorities and the international organizations to improve development projects and integration of the woman towards common objectives. Training courses on reinforcement of the competences and the capacities of women in the public administration, the governorship of the businesses and the local leadership promoted the gendre equality and the encouraged women in these

fields. ISESCO registered the reinforcement of the capacities of the women in the governorship and local development as well as the transverse integration of the approach in all the various sectors of local development.

The Fourth Islamic Conference of the Ministers of Higher Education and Scientific Research, held in Baku, Republic of Azerbaijan, in October 2008 adopted the proposal for creation of the "Islamic Network of Women Scientists". The Founding Conference of the Women Network was held in 2010 which drafted the Statutes of the Network. These Statutes are now under consideration of the Member States. The main objective of the Islamic Network of Women Scientists were to examine the present status of women in Science and Technology in the Islamic countries, identify major weaknesses, obstacles and challenges in pursuing professional career development in scientific fields and define ways and mean to encourage their participation in scientific activities. The Network seek to reform current national legislation and policies to provide a conducive environment for women's advancement. The establishment of the Islamic Network of women scientists will strive to muster support of decision makers and from the political arenas towards encouraging and empowering women scientists and enhancing their role in national planning process. It will conduct regular training and capacity building for existing and future knowledge workers to achieve the necessary number of women scientists. The Network will establish women scientist web portal, prepare directory of active women scientists, and grant scholarship to young women scientists. ISESCO also conducted women regional Scientific Networks in collaboration with UNESCO, which included Women Arab Scientist Network.

ISESCO also organized various Camps of excellence for Young Girls both as an awareness raising educational tool allowing different countries involved to compare their status, to share lessons learned in education. It was an instrument of integration to bring together in one place youth girls, teachers, coaches and women scientists. Such camps helped empowerment for girls who lacked confidence and access than boys especially when it comes to science and technology. The camps were held each summer in a different country, thus giving an opportunity for best students from all countries of the Member States to share and increase excellence in various fields. Some caravans were organized to sensitizing the girls on the code of the family and violence with regard to the woman in villages. This caravan sensitized the young girls and the associate managers on the physical and psychic risks of the early marriage like on their rights by implying them in social development of their locality. Various competition and Olympiads were also organized for young girls, which were both an educational tool allowing competitiveness and promoting gender issue by highlighting the competency. It also served as a tool of empowerment for girls and an instrument of integration and provided girls with the possibility of embarking upon suitable profession careers in the quest of self-dependence and poverty reduction.

ISESCO also focused on the need of women and young girls in rural and remote areas. Workshops were conducting for women and girls to improve their understand of their position and rights and enabling them to benefit from anti-poverty, income-generating micro-projects. This also encouraged women associations

involved in fighting poverty to enhance their own capacities and play an active role in sustainable development. In the same vein, ISESCO, also conducted training sessions to impart skill enabling women and young girls to initiate their own career. Such training programmes played an effective role in society, and offered young girls opportunities of professional development so that they could contribute to fighting poverty and mitigating its impact.

ISESCO encourages participation of women in socio-economic development process of the Member States and fully recognizes women's rights as human rights and is committed to equalize the opportunities for men and women in all fields and work for eliminating all forces of discrimination against women. ISESCO encourages women participation in all scientific programmes and implements a number of activities to highlight the role of women in the development process and to create an environment that stimulates participation of women in the overall development process.

ISESCO has also established Women Science Chairs in different regions of the world. ISESCO also regularly holds courses to impart skills and vocational training to the women for self-employment and establishment of micro-enterprises through science and technology inputs. These chairs conducted various programmes and also published directory of the active scientists in the Member States.

PROTECTING AND PROMOTING HUMAN HEALTH

The World Summit on Sustainable Development (WSSD) held in August 2002 in Johannesburg, devoted increased recognition of health as a resource for, and as an indicator of, sustainable development. Health was singled out as one of five priority issues, under WEHAB. The Rio Declaration in 1992 had stated that "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature." Further, Chapter 6 of Agenda 21 emphasizes the fundamental commitment within sustainable development to "protecting and promoting human health". Meetings of the G8, the United Nations Security Council, the World Economic Forum, as well as follow-up to major international conferences have also reinforced the importance of health, environment and development issues on the international development agenda.

Health has, in effect, become recognized as a central concern in development - both as a resource for, and as an indicator of, sustainable development. Sustainable development cannot be achieved where there is a high prevalence of debilitating illnesses, and the health of the population cannot be maintained without a healthy environment. ISESCO recognize that the promotion and protection of the health of the people is essential to sustained economic and social development and provide vital inter-linkages between the social, economic and environmental pillars of sustainable development. Good health is vital for improving the standard of living. Enjoyment of highest standards of health is a fundamental right of every human being. The fundamental conditions and resources for health are peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity. The improvement in health requires a secure foundation in these basic prerequisites.

ISESCO Member States are experiencing a number of health challenges. Economically stable Member States are suffering from a high and increasing burden of non-communicable diseases and injuries, whereas low-income and middle-income Member States are facing a huge burden of disease, characterized by rise in the dilemma of non-communicable diseases and injuries with a persisting problem of communicable diseases and malnutrition. There is need of higher involvement in informed decisions making about health services. With reference to their distinct socioeconomic and environmental conditions, as well as demographic and epidemiological transition, climate change, food insecurity and the global financial crisis, new approaches and institutional realignments are critical to meeting these emerging trends. ISESCO made steady progress towards achievement of social and economic development, health, equity and the Millennium Development Goals in the Member States through supporting activities and programmes extending health services.

ISESCO develop and strengthen national strategies and programmes for health, advance good governance mechanisms for health services to ensure rigorous application of global norms and standards and improved the collection of reliable health information and data and ensure their free and unrestricted availability in the public domain. Focus was attached to create equal opportunities for

educating, recruiting, and training of health professionals, decision-makers, media and the community to enable them provision of better health services. The Member States were encouraged to prioritize provision of resources, financial or otherwise, from all sources, to tackle health inequities, with a special focus on vulnerable people.

ISESCO also developed a health science library network with cooperation of WHO EMRO. The objective of the virtual health and biomedical library was to make available and/or accessible the widest range of health and biomedical literature to potential users in a most cost-effective way in the Member States. Virtual health and biomedical library included huge information and used to disseminate scientific/technical information, linking information from various WHO sources and other relevant scientific institutions world-wide.

Unhygienic conditions and unhealthy sanitary practices contributed towards significantly number of deaths and suffering of million of people. The overwhelming majority of the people suffering due to lack of access to water and sanitary facilities were the people living in sheer poverty, which further aggravate their sufferings. Lack of better sanitation condition further contributed to the cycle of disease, poverty and powerlessness, access to safe water supply and sanitation facilities were therefore, considered of prime importance to rescue people from poverty. ISESCO solely and in collaboration with other international bodies strived to bring continuous improvement in sanitary situation in the Member States, boosted available resources and enhanced efforts to strengthen sanitation infrastructure to benefit maximum for solving our longstanding problems. Continuous training, sharing of best practices and networking among the concerned institutions provided a boost to sanitation projects and programmes. Programmes and activities contributed to enhance understanding in tackling the existing hurdles and improve implementation of various sanitation programmes bringing benefits and improvement in the quality of life of million of poor in return. Attention was given to improve education, information as well as public awareness on sanitation and health management so as to create conducive environment for improving the sanitary and health situation.

ISESCO also accorded priority to research and innovation that could be utilized as an effective tool to improve health security, enhance health-related development, reduce health inequities and contribute to achieving the Millennium Development Goals (MDGs) in the Member States. Efforts were made to develop a culture of research helping to plan, design and conduct research and to disseminate, utilize and translate the findings into health policy and interventions.

The convening of the Islamic Conference of Health Ministers to examine keys health-related issues of concern to the OIC Member States was an important initiative taken by the 10th Islamic Summit. The mandate the ICHM also covers the establishment of Inter-Islamic cooperation in the field of health in general, including pharmaceuticals products, shall be considered as the main specialized mechanism for regular consultation and coordination on health related issues among the OIC Member States. ISESCO as an active Member of the Steering Committee, contributed towards its proceedings and to develop effective programs addressing health inequities which emanate among others from structural problems and weak multi-sectoral approaches in the Islamic Ummah through improvements in social determinants of health. ICHM, which meets biennially

has now conducted its three session. One of the important initiative was developing of a Strategic and Health Programme of Action of the OIC Member States for 2012-2022 which was adopted at the Third Session of the ICHM.

Recognizing that globally, millions of children are not reaching their full potential and that investing in Early Child Development is a fundamental step in achieving health equity across the lifespan, and in line with the United Nations Millennium Declaration, the Millennium Development Goals and the goals of "A World Fit for Children", ISESCO encourage the Member States to address Early Child Development as one of the most crucial determinants of health and to develop effective strategies, policies and programs. ISESCO is regularly calling the Islamic Ministerial Conference on the Child biennially since 2005, which emphasized all Member States to allocate adequate resources and take all necessary measures to ensure the right of the child, without discrimination, to enjoy the highest possible standards of health; to develop sustainable health systems and social services; to ensure access to such systems and services; to provide adequate food and nutrition to prevent diseases and malnutrition; to secure health services for mothers, newborn infants and children; to dedicate a special care for adolescents while protecting them from drugs and smoking; and to promote reproductive and sexual health.

Controlling and eradicating communicable diseases in the Member States was always strived by ISESCO in its short and long term planning. The AIDS epidemic is a major threat which is hampering the achievement of the Agenda for sustainable development. HIV/AIDS is a major health problem in many parts of the world, and is considered a epidemic which is still expanding. In 2009, the World Health Organization (WHO) estimated that there are 33.4 million people worldwide living with HIV/AIDS, with 2.7 million new HIV infections per year and 2.0 million annual deaths due to AIDS. ISESCO launched awareness raising campaigns and organized a number of workshops to fight against AIDS and sexually transmitted diseases and prevent people from dangerous of AIDS and other infectious diseases. These workshops provided an opportunity to the participants to share information and expertise on the prevention of AIDS and other infectious diseases. ISESCO also break the silence of religious leaders on the HIV and AIDS epidemic, and collaborated with religious leaders through working together so that greater actions could be taken with a view to combating this epidemic. Such actions helped in correcting misconception about AIDS and sexually transmitted diseases, raised awareness of the imams and preachers of the importance of medical care related to immunodeficiency, capacity building of organizations and associations for Islamic public awareness of ways of treating people living with human immunodeficiency virus.

As part of efforts in raising awareness of public health and training individuals in Member states to assist in preventing and curing various diseases, ISESCO also organized the medical caravan on Tuberculosis, for refugees which was very helpful in raising awareness in these communities. Under this programme a large amount of Tuberculosis medications were distributed. The medical caravan was composed of mobile clinics, medical laboratories and equipment of spraying pesticides in ponds and swamps, benefited a large number of poor people in the region. ISESCO also worked and encouraged the Member States, the international community and civil society, particularly in the Member States, to provide

the resources necessary to eradicate polio in all OIC Member States so that they can contribute effectively to the goal of Global Polio Eradication.

Noting the serious threat of Malaria in many of our Member States particularly in Africa, and in line of follow up of the United Nations Declaration of the Millennium Development Goal No. 6 which addresses the need to halt and begin to reverse the incidence of malaria and other major diseases, ISESCO concentrated on advocacy, leadership and resource mobilization to address in implementing national malaria control program. Since, malaria is preventable, curable and treatable, concentration were devoted to training and skill development and introduction of better and economically feasible measures. Taking note of the economic and social impact in the face of influenza pandemic, ISESCO published books and also raised awareness through organizing various events in the Member States.

ISESCO also promoted utilization of ICTs in the application of healthcare especially via the Internet. Such activities provided an opportunity for participants to share information and expertise on the Internet use in the field of healthcare. It also helped them understand how to use the Internet in healthcare applications using scientifically-witnessed cases; and highlighted the importance of developing preventive measures in healthcare applications.

Due to the advancement of technologies and expansion of research activities, bio-security and bio-safety threat has emerged as more daunting than ever in the past. Since, most of the Member States lack effective bio-security and bio-safety policies and guidelines, and are more prone to both natural and man-made health security threats and disasters, ISESCO pays attention to promote commitment to threat surveillance, prevention, diagnostics and mitigation for ensuring security of the people in the member States. It was necessary to improve awareness of the Member States and develop skills and in-depth knowledge of the various process, regulations, guidance, legal requirements and methods of monitoring to protect humans from the hazardous effects of biological products. ISESCO's efforts helped to raise awareness on precautionary measures to protect and safeguard people from any natural or manmade bio-disaster, which uncontrolled scientific research may create due to negligence or mismanagement. Attention was devoted to strengthen national and regional bio-security and bio-safety policies and guidelines, and assisted those Member States lacking such guidelines, to prepare guidelines and also develop preparatory measure to ensure more security from any mishaps or disasters in the future, or to cope in a better manner.

Under various cross cutting areas, ISESCO also addressed health issues. Frontline of which was water pollution which takes a large number of human lives in the Member States. Various measures were taken and policy guidance was developed to assist the Member States in addressing water quality challenges for sustainable water resources management. Best sanitation practices were introduced and skills were developed in identifying critical problems related to water quality and water pollution, assessing their causes and trends to tackle the water quality challenges in the member States.

ERADICATION OF ILLITERACY AND ACHIEVEMENT TOWARDS UNIVERSAL, PRIMARY EDUCATION

The Rio Conference (1992), with its "Agenda 21", constituted a major stride toward promoting education for environmental protection and harmonious development. A new concept of sustainable development was then promoted and adopted. Ten years later, following the recommendations of the World Summit on Sustainable Development (Johannesburg, South Africa, 2002), and the second Islamic Conference of Environment Ministers, and under the General Framework of the "Islamic Agenda for Sustainable Development", ISESCO made environment protection and environment management a key part of its efforts to assist Member States to better sensitize the large public and ensure their commitment to concrete actions in this area. ISESCO also contributes to achieving the Millennium Development Goals (MDGs), notably "Environment and Sustainable Development", and it fully subscribes to the "Decade of Education for Sustainable Development (2009-2014)".

In Muslim countries, like in other parts of the world, there are complex development and environment problems. Resources are being scarce because of degradation affecting both ecosystem resilience and human health.

The various Islamic conferences of environment ministers, organized by ISESCO and its partners, have made important recommendations on the environment for sustainable development in Islamic countries. Special focus has been on quality education through a holistic interdisciplinary approach involving all segments of society. Problem solving requires the development of education and outreach programmes to raise public awareness, among the youth and adults, about the importance of sustainable management of environment and natural resources and the improvement of peoples' living conditions. To this end, ISESCO has implemented several programmes jointly with national, regional and international organizations, such as WHO, UNEP, the Arab Union for Youth and Environment, the Technical Secretariat of the Council of Arab Ministers Responsible for the Environment (CAMRE), the World Organization of the Scouting Movement (Arab Regional Office), Mohammed VI Foundation for Environmental Protection, and other institutions in the Member States.

In accordance with the Islamic vision, which makes of knowledge acquisition a religious and moral duty for all Muslims, from cradle to grave, ISESCO in its effort to expand cooperation between the Member States in education, science, culture and communication pays particular attention to generalizing basic education in Muslim countries, through coordinated action to universalize literacy and primary education.

For this purpose, ISESCO conducted the following major actions:

1- Literacy

ISESCO is contributing to the global effort to reduce to 50% the levels of literacy in the world, by 2015, before finally eradicating it. Several activities geared to adult literacy and primary education, including among non-schooled and dropout children, have been implemented in the Member States.

In this field, ISESCO implemented activities such as setting up regional literacy and adult education centers: namely, in the Arab world (Egypt), Africa (Niger) and Asia (Bangladesh). These regional centers will provide training in literacy and adult education for the benefit of the Member States.

In order to promote use of IT in struggling against illiteracy and offer innovative programmes in computer literacy, ISESCO implemented a wide range of activities on computer literacy. Training workshops were organized for literacy staff in the areas of curriculum development, use of computers as a literacy teaching tool, as well as computer-based literacy data processing and archiving techniques.

To assist Member States to develop sustained literacy and adult education approaches, strategies and programmes adapted to their socioeconomic specificities, ISESCO implemented activities to build capacity in designing and producing literacy and post-literacy programmes, manuals and teaching tools for lifelong learning. Furthermore, ISESCO is assisting the Member States and Islamic communities in their effort to develop comprehensive literacy and adult education strategies responsive to the socio-cultural specificities and expectations of learners and trainers. Activities by ISESCO also included developing programmes and plans and holding courses, conferences and meetings toward Islamic jurisprudence literacy, through the teaching of the Quran, Quranic readings, jurisprudence, Prophetic Tradition and other jurisprudential sciences, and the Arabic language.

With the aim of diversifying work tools and mechanisms for literacy, and considering the eagerness by Muslim peoples to acquire literacy skills using the standardized Quranic script, ISESCO organized training courses in the transcription of national languages in the standardized Quranic script in the interest of Quran education teachers, Arab Islamic schools and counselors of literacy centers. ISESCO also conducted training workshops in the digitization of the Quranic script.

Realizing that developing new policies and strategies requires more reliable data stream regarding progress of literacy programmes, ISESCO organized several capacity building activities for the benefit of literacy executives in programme follow-up and assessment. Similarly, it provided support to Member States to conduct studies to identify and engage with literacy challenges.

2- Universal primary education

Concerning this stage of education, ISESCO is joining in the global effort to activate the recommendations and principles called upon by the Declaration on Education for All (Jomtien, 1990) and the World Forum on Education (Dakar, 2000). This supportive stance by ISESCO of declarations and other instruments on education hails from its adherence to the Islamic values of equity, dignity, and earnest devotion.

ISESCO pays special attention to spreading basic education to all children of school age, particularly in remote areas and among refugees, legal and illegal migrants, nomads, victims of armed conflicts and natural disasters, large-scale human migration communities, street children and minority children.

Indeed, ISESCO strives to expand access to primary education in the Member States and reduce gaps in equity and social justice, with due focus on quality. It aims to equip learners with understanding and creative thinking skills, knowledge and common human values to help them develop sound habits and attitudes. The ultimate objective is to promote quality both at the level of learners' output and performance and at the level of the education system and teaching methods.

Besides, in order to improve primary education in the Member States, both in number and quality, ISESCO carried out activities to update teaching strategies; ensure quality of training courses for teachers and students; develop teaching material and tools; and promote educational administration, supervision, technology and research.