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Bahrain Centre for Studies and Research: Objectives and Programmes

Prepared By

Bahrain Centre for Studies and Research

Bahrain

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Introducation

What is certain in our time is that science and the technology associated with it have gradually acquired decisive influence over all that constitutes the socioeconomic, political, cultural and educational aspects of different nations. Science and technology have a pivotal role to play in the problems of development in Bahrain.

Advances in science and technology will require human, financial, institutional and legislative resources. As the influence of technology permeates society, imporved infrastructure for science and technology systems becomes of pivotal importance also.

A central component of indigenous capacity in science and technology is the institutional base. This relates both to the mechanisms and machinery that are responsible for science and technology policymaking and to the institutions that actually promote, finance and execute scientific and technological activities.

Having realize the importance of establishing a national scientific and technological base, Bahrain Centre for Studies and Research (BCSR) was established in 1981, BCSR is a government scientific institution having a corporate body. Its policies and plans are drawn up by a Board of Trustes chaired by H.E. Sheikh Sulman Bin Hamad Bin Isa Al Khalifa.

Objectives and Responsibilities:

The main goals of the Center are to undertake scientific studies and research in all spheres, particularly in the technological and cultural fields, with the intention of developing scientific research to go side by side with the development of science to serve Bahrain, the society of the Arabian Gulf and the Arab World. BCSR is seeking to achieve its objectives through the following methods:

- 1 Co-ordinating, supporting and encouraging scientific research activities and extending help and assistance to researchers in scientific and technological areas.
- 2 Conducting local and comparative economic studies, examining the experiences of other countries and exploring the reasons of success of these experiences or the porgress they have achieved and studying the possibility of implementing them in Bahrain in view of the factors of local environment and economic infrastructure in the Gulf.
- 3 Carrying out theoretical and applied studies and research in everything related to the preservation of energy and other natural resources and the ideal utilisation of these resources to achieve social and economic development, tackle environmental impact and the prevailing natural factors in Bahrain.
- 4 Conducting research and studies related to the transfer of know-how and benefiting from its factors in developing the human and economic resources of Bahrain.
- 5 Carrying social studies and research to enhance the potential of citizens to prepare generations able to assimilate modern know-how and benefit from its results.
- 6 Promoting and encouraging national skills and cadres in scientific research areas with all branches and specialisations to suit the needs and priorities of economic and social development programs.
- 7 Publishing scientific research and facilitating the use of their results by all methods.

- 8 Co-operating with local, regional and international scientific centres, societies, associations and organisations.
- 9 Prompting national policies and the necessary strategies to plan scientific and technological research activities and identify their priorities in the manufacturing and services sectors in order to achieve the goals of economic and social development.

Science and Technology Policy in Bahrain

Bahrain has no formal arrangement for deciding S&T policies. However, in 1988 a proposal was submitted to the Board of Trustees of Bahrain Center for Studies and Research to look into the creation of a Supreme Council for the preparation of a national science policy, the decision was that it was very difficult to establish and effective Supreme Council at the time. Instead, it was recommended that the organisational strucure of BCSR should be developed, its resources modestly expanded and utilised by the Board as its instrument for the development of a S&T system. Also, it was recommended that the proposal concerning the estalishment of a Supreme Council be reconsidered in four years.

In 1991 a legislative decree was issued to broaden the tasks of BCSR. The center was commissioned with the task of 'suggesting national policies and the required strategies for planning scientific research activities and technology, and setting their priorities in the production and service sectors wherewith to fulfil the objective of the socioeconomic development'.

Organisational Structure of BCSR

1 - Board of Trustees:

The Board of Trustees supervises the general policy of the Centre.

2 - General Secretariat:

It is the executive body of BCSR and is headed by a Secretary General who is selected from amongst the science personalities by the Board of trustees for a term of five years. Subject to renewal.

3 - Scientific Research Department:

The scientific Research Department extends scientific and financial support to the activities and initiatives which aim to encourage and enhance scientific research and development in Bahrain. It also increases co-ordination and integration between the Centre and scientific institutions in selecting the studies and research and determining their priorities. The Department also undertakes scientific research related to the development requirements in Bahrain.

4 - Economic and Social Research Department:

The Economic and Social Research Department seeks to promote scientific resarch activities in the economic and social spheres in Bahrain and co-ordinate these activities on national level and gear them to the service of Bahrain's society and economy.

5 - Library and Information Department:

The Library and Information Department aims at providing modern library services catering to the needs of scientific researchers from the Centre and outside, by using modern technological means available.

6 - GIS and Computing Systems Department:

It aims at conducting contractual studies and research by using remote sensing and GIS applications and offer these services to various government institutions and also develope and promote computing services inside the Centre.

7 - Finance and Administration Department:

This Department handles personnel and general services and the management of the Centre's funds.

Scientific Programs and Activities

BCSR carries out a number of programmes and activities which all aim at promoting scientific and technological activities in Bahrain. The most important of these scientific programmes and activities are the following:

1 - The Crown Prince Award for Scientific Research (Appendix 1);

The scheme aims to attract national scientific talents and direct them towards serious and distinguished scientific studies which serve the local environment. The scheme consists of five prizes awarded biennially to Bahraini researchers who complete distinguished scientific research or accomplish a technological achievement in one of the following spheres: engineering sciences, natural sciences, health sciences, economic sciences and social sciences.

2 -Supporting scientific Research (Appendix 2):

Since its introduction in 1984, this scheme has been able to encourage recongnition among a large sector of Bahraini researchers and those concerned with scientific research of the significance of adopting scientific research as an advanced method of treating social issues. The scheme has also attracted a substantial group of Bahraini researchers and provided them with scientific and material support that will enable them to conduct their research to be judged by specialists and publish them in scientific periodicals and highlight the outcome of these researchers in public seminars to maximise benefit. The scheme has benefited a large number of researchers (appendix 3) and the outcome and recommendations adopted on most of these studies were implemented by the concerned parties.

3 -Scientific Scholarships (Appendix 4):

Under this programme, Bahraini researchers from outside the Centre are sent on short-term scientific scholarships, ranging in time from one month to one year, to enable them to promote their abilities and skills in scientific research and rub shoulders with scientific talents in advanced countries or obtain training on sophisticated equipment and instruments not available in the country in a manner that benefits the Bahrain's society.

4 - Youth Science Delegations:

This annual scheme provides the opportunity to youth science delegations, whose members are selected from outeranding University of Bahrain, Arabian Gulf University and the College of Health sciences to familiarise themselves with the experiences of fraternal and friendly countries in various economic and social development areas.

5 -Series of Scientific Studies and Research (Appendix 5):

Under this programme the BCSR publishes series of scientific studies and research that aim at spreading and disseminate scientific knowledge, promote scientific culture in Bahrain and attract scientists and researchers from Bahrain and abroad to investigate and tackle issues of vital significance to Bahrain's society or theoretical studies which confirm the role of the Centre in promoting and enriching the scientific activities on local and internationl levels.

6 -Training and Qualifying Research Personnel:

The BCSR pays due attention to the development of human resources to suit its future programmes and plans. The programme aims at qualifying Bahraini researchers at the Centre by sending them on scholarships of academic studies to obtain higher qualifications (i.e. M.Sc. and Ph.D. degrees) in specialisations needed for the Centre's activities in addition to continuous en-job training to cope with the developments taking place in the scientific fields.

7 -Scientific Conferences and Seminars (Appendix 6):

This programme concentrates on organising scientific conferences and seminars on various topics aiming to attract specialised research talents and provide a suitable research environment to exchange experiences and experiments for the purpose of enhancing scientific research. The BCSR also holds a series of continuous scientific seminars which highlight the results of scientific research and studies undertaken by the Centre's research team. Government officials and specialists are normally invited to these seminars.

Nature of BCSR's Activities

BCSR's activities are diverse and they employ flexible techniques and mechanism which aim at realizing tow objectives:

- First: Promoting co-operation relationship and interaction between the Centre and government ministries and institutions.
- Second: Striving to improve scientific services rendered by the centre to reach higher standards and laying down quality controls.

BCSR has started to find its way to realise these objectives through the following policies and methods:

- BCSR adopted the role of catalyst for scientific research activities whether on the level of individual activities and projects undertaken by science researchers or the level of national research projects.
- 2 BCSR dissociated itself from conducting free unilateral research as is the practice in most research centres in the Arab countries. In this area, it opted for conducting contract research, taking initiatives and establishing contacts with government ministries and other institutions to identify their needs for research.
- 3 The centre uses the method of participation and optimum utilisation of scientific and human potential in the society and its various scientific and administrative institutions by using them on a partial basis in order to participate and take part in its various research activities.
- 4 BCSR in always keen to involve the scientific community in Bahrain to participate in the discussion of results and outcomes of scientific studies and research. To fulfill this objective BSCR conduct a continuous series of seminars, whereas officials.

experis and researchers from the government and the private sector are invited to participate to give their opinion in regard to the findings of the studies and research.

- 5 The center gives priority to applied research and studies in all disciplined since this research deals with topics and problems which are closely related to the development in many sectors.
- 6 BCSR is always keen to involve the beneficiary parties in managing the projects of contractual/joint research it undertakes in order to ensure dynamic interaction between the centre and officials in the beneficiary institutions, considering that these projects primarily concern the parties requesting such studies. The success of a project and gaining benefit from the results of the research findings depends mainly on the conviction of officials of its viability and importance to improved performance in their establishments. In order to ensure this involvement, the centre always strives to form joint committees to supervise the implementation of research projects and it gives the opportunity of chairing them to representatives of the beneficiary parties.

The Crown Prince's Scientific Research Award Scheme

This Scheme aims at attracting and motivating national scientific talents by motivating them to undertake serious and distinctive scientific studies seeking to serve the local community in research fields. The programme seeks to honour prize winning researchers and giving them moral and material encouragement. Following are the details of this Scheme:

- Article1 : An award to be called the Crown Prince's Scientific Research Award Scheme will be introduced to encourage national skills and competence in the following scientific resarch areas:
 - 1 Natural sciences.
 - 2 Engineering sciences.
 - 3 Health sciences.
 - 4 Economic sciences.
 - 5 Social sciences.
- Articel 2: An annual sum of BD 25,000 is allocated for the Award. This is to be obtained from the BCSR's budget at the rate of BD 5,000 for each winning research work in the above areas of scientific research. The winner shall be presented with a gold medal and a certificate of merit indicating his name and address and the significance of his research work from the scientific and practical aspects.
- Article 3 : An applicant of the Award must fulfil the following conditions:
 - 1 He shall be a Bahraini national.
 - 2 His scientific work shall be of a creative nature and specialised in a relevant are of research.
 - 3 He shall not have received a previous award in the same subject of the research from any other body.

- Article 4 : A scientific or technological research work with which an applicant may participate to obtain the Awad is defined as any outstanding scientific or technological achievement in one of the areas specified in Article (1) of this Order, if it takes one of the following forms:
 - Rresearch published in scientific magazines, periodicals or books within a period of no more than 3 years prior to nomination for the Award.
 - 2 Technological research projects which were presented at specialised conferences or seminars or scientific forums within no more than 3 years prior to nomination.
 - 3 technological research works or projects that were presented to the BCSR and had been completed according to its approved scheme for supporting scientific research activities in Bahrain and achieved scientific results and applications.
 - 4 Patents that were registered or accepted for registration in one of the recognised patent contres.
 - 5 Any outstanding scientific or technological achievement helping in improving work methods, enhancing performance, boosting productivity or saving costs in the organisation where the nominee is employed.
- Article 5: The Award shall be advertised in January of every year. Applications must be submitted to the General Secretariat no later than 31st May of the same year. The application shall be accompanied by 4 copies of the candidate's scientific work along with all the documents relevant to the subject of research.
- Article 6: a committee shall be formed by an order of the BCSR's Secretary General to assess the applications presented for obtaining the Award and examining the scientific studies submitted. The committee members may be from amongst specialists in the BCSR or outside it.

The order must nominate the Committee Chairman and the period required for discharging its duties.

The committee shall meet at the time and place designated in the order at the summons of the Chairman, and its meeting shall only by validly convened in the presence of a majority of its members. Its resolutions must be passed by a majority vote of the members present. In case of an equality of votes, the Chairman shall have a casting vote. Its recommendations for nominations shall be approved by the Board of Trustees upon the submission of the General Secretariat.

The committee may in the discharge of its duties seek the assistance of experienced and specialised persons involved in the sujbject of the research work, either from Bahrain or abroad.

- Article 7: The value of the cash award for a single subject may be divided between two persons or more when equal results are achieved. Similarly, the Award may not be granted in any of the aforesaid scientific scientific areas if the Committee decides that none of the research presented is worthy of the Award.
- Article 8: Any person who previously received the Award shall not apply for obtaining it for the second time in respect of a new scientific work except after three years from the date of awarding it to him.
- Article 9: The BCSR's General Secretariat shall announce the names of the Award winners in the manner it deems appropriate. It shall give notices to the winners at their addresses indicated in their applications by registered mail delivery notes, and shall advise them of the date and place of the award presentation.

Bahrain Scientific Research Support Scheme

For the realisation of the BCSR's aims in supporting scientific research in Bahrain and encouraging Bahraini researchers and scientists in conducting scientific research concerning the Bahrain environment and community, and in order to give the necessary assistance for financing such studies, the Board of Trustees has approved a scheme for supporting scientific research efforts according to the following provisions:

- Article 1 : The Board of Trustees will, at the recommendation of the Secretary General, determine the allocation of an annual sum from the BCSR's budget for supporting scientific research efforts undertaken by Bahraini scientists and researchers form outside the BCSR.
- Article 2: Payment of the recommended amount for supporting a research project or a study will be approved by a decision of the BCSR Secretary General.
- Article 3 : A research project shall fulfil the following terms and conditions:
 - (a) The scientist or researcher who conducts the research project must be a Bahraini national.
 - (b) The subject of the research work must be of significance to the Bahrain community and economy.
 - (c) The subject of the research work should not have been already listed in the research programme of the BCSR or any other official agency in Bahrain.
 - (d) The research work should not have previously undertaken by another organisation.
- Article 4 : The researcher must prepare a detailed research proposal of the research project intended to be undertaken indicating the following:

The aim of the research work, its significance for Bahrain, its expected results, method of research, subjects to be covered, a detailed budget of the research work, a timetable for conducting the research work, and the relevant agency to which the research is to be submitted.

- Article 5 : A specialised committee in the BCSR to be formed by the Secretary General must in collaboration with the applicant review the research proposal; and its recommendations must be referred to the Secretary General. In certain cases, the Secretary General may seek the assistance of experienced persons from outside the BCSR for assessing the submitted research proposal and its economic and social feasibility.
- Article 6: The researcher should sign a contract with the BCSR containing the following conditions:
 - (a) Submitting a periodical progress report to the Centre on the research work.
 - (b) Completing the project within the period indicated in the proposal and in case of any delay he will be required to provide justifiable reasons to the General Secretariat.
 - (c) Making a refund of the support amount in the event of failure to conduct the research project.
 - (d) Undertaking not to seek financial support for the project from any other research body except with the BCSR's written consent.
 - (e) In cases where the research yields financial returns, the BCSR is entitled to a percentage of such returns to be agreed upon with the researcher.
- Article 7 : The financial support will be paid by instalments.
- Article 8: A clear statement must be made that the research work has been conducted with the support of the BCSR.

Title of Research Executed under the Scheme of Supporting Scientific Research in Bahrain

- 1 Effect of drainage water from the oil refinery on Safi (rabbit)fish.
- 2 Measuring lead quantities in Bahrain air.
- 3 G6PD in red blood cells and the insufficiency of hemoglobin in newly-born babies in Bahrain.
- 4 Pearling in waters close to Bahrain.
- 5 Solid waste of the Water Treatment Plant (Toobli) for using as an organic fertiliser in agriculture.
- 6 Level of the flouride element in drinking water in Bahrain.
- 7 Enviromental study on distribution and animal geography of coral reefs fish in Bahrain.
- 8 Dyes used in domestic purposes and public utilities to determine their contents of toxic lead compounds.
- 9 Determining immunity of Bahrain's inhabitants against the legionnaires' disease.
- 10 Calculating & measuring the quantitiy of sunshine in Bahrain throughout the year.
- 11 Toxic and hazardous industrial waste in Bahrain.
- 12 Feasibility of using solar heaters for domestic purposes in Bahrain.
- 13 Survey of marine algae in Bahrain.
- 14 Factors leading to heart and arteriosclerosis diseases in Bahrain.
- 15 The loaf of bread in Bahrain.
- 16 Potential scientific methods to conserve energy and rationalise its consumption in Bahrain.
- 17 Reasons for inefficiency of vaccination in some areas in Bahrain.
- 18 Rare minerals in drinking water in Bahrain.
- 19 Scheme of preparing a book about rare birds in Bahrain and the Arabian Gulf.
- 20 Bahrain's pearls-their forms, types and methods of evaluation.
- 21 Measuring latent energy in wind blowing on Bahrain and its potential uses.

- 22 Hypertension among Bahrain's inhabitants and its effect on heart diseases.
- 23 Relationship between flouride level in drinking water and urinary flouride excretion.
- 24 Urinary tracts stones in Bahrain.
- 25 Preliminary study on the noise level in Bahrain.
- 26 Ecoloygy of physical, chemical and biological factors in Bahrain's territorial waters.
- 27 Incidents of horizontal transmission of the virus of the hepatitis disease.
- 28 Crimca Tree.
- 29 Mechanical and chemical features of children's toys.
- 30 Analysis of salts, cholesterol and acide in popular foods in Bahrain.
- 31 Recycling of industrial waste of the Arab Shipbuilding & Repair Yard (ASRY) for use as building materials.
- 32 Status of co-operative work in the State of Bahrain.
- 33 Transplant of truffle (mushrooms).
- 34 Improving concrete mixtures to resist cracks and deformities in Bahrain's roads.
- 35 Quality of waters made available in Bahrain by Sitra Water Desalination Plant.
- 36 The Association between the presence of helicobacter pylori bacteria and Gastric and Duapenal ulceration patients in Bahrain.
- 37 Enivronmental effects of re-using sewage water and effluents after treatment for agriculture.
- 38 Regulating the preparedness test to read for first primary class pupils.
- 39 Irregular heart beats in cases of severa angina.
- 40 Measuring actual consumption of electricity by using solar heaters.
- 41 Improving and reducing costs of combined wooden-concrete roofs.
- 42 Problems of concrete corrosion in Bahrain.

- 43 Improving local blocks to make them more heat and humidity resistant.
- 44 preliminary bioligical study of hamour fish in Bahrian.
- 45 Bahrain's fish from an environmental and experimental aspect.
- 46 Shrimps in the south of Fasht Al Azm area and their significance and source.
- 47 Change in occupational performance and conduct of graduates from training programmes among ministry civil servants.
- 48 Chemical & microbiological study of drinking water and its association with infectious diseases in Bahrain.
- 49 Spread of factors causing lower back pain among Bahrainis in the 20-59 age group.

Short-Term Scientific Scholarship Scheme

In compliance with the BCSR's aims of supporting scientific research and extending encouragement to scientists and researchers, the BCSR has introduced a creative scheme allowing Bahraini researchers opportunities for going on short-term overseas scholarships for conducting scientific research that would be useful for the Bahrain community or for training on advanced equipment not available in country. Following are details of this Scheme:

Article 1 : The BCSR shall undertake on an annual basis to meet the costs of five short-term scientific scholarships with a view to encouraging scientific and theoretical research activites.

Article 2 : The purpose of a scholarship shall be :

- Completing scientific research projects relevant to the Bahrain environment and community, so as to allow a researcher the possibility of using sophisticated equipment and appliances and getting acquainted with expertise that is not readily available in Bahrain.
- 2 Attending specialised scientific or technological courses on specific subjects with a view to improving methods of work, enhancing performance or saving costs in the establishment where the candidate is employed.
- 3 Getting acquainted with advanced technology in a specific field and acquiring new scientific experience and new skills to be employed in Bahrain.
- 4 compiling information or data about specialised scientific or technological subjects of specific significance to scientific, cultural and technological progress in Bahrain.

- 5 In all the aforesaid cases, the purpose of the scholarship should be related to the subject of the candidate's research work in Bahrain.
- Article 3: The term of the scholarship shall not exceed one year. The board of Trustees may approve an extension when necessary.
- Article 4: The BCSR shall cover the costs of the scholarship for the researcher but not the costs of travel for his family, if the term of the scholarship is less than six months. If the term of the scholarship exceeds six months, the BCSR shall meet the costs of the researcher in addition to those of his wife and three minor children.
- Article 5 : A scholarship candidate shall fulfil the following conditions:
 - (a) He shall be a Bahraini national.
 - (b) He shall have undertaken scientific research during the three years immediately preceding the candidature for the scholarship.
 - (c) The subject of the scholarship should be closely linked to his research or job.
 - (d) Researchers who have already reveived academic scholarships from the BCSR should not re-apply except after three years from the date of the previous scholarship.
- Article 6: The BCSR shall announce scholarships in January of every year and applications for nomination must be filed using the prescribed forms to be intended by the BCSR for this purpose. An application must be accompanied by the approval of the applicant's employer.
- Article 7: The BCSR Secretary General shall form a technical committee of specialists at the BCSR and from outside it to examine and evaluate the applications and to select candidates.

- Article 8: The recommendations of the committee referred to in Article 7 must be presented to the Board of Trustees for approval and the selected candidates shall be notified of the award of scholarships thereto and of the travel dates.
- Article 9: Upon his return, the scholarship candidate should present to the BCSR a detailed report about the academic results attained, and will be asked to deliver a lecture on the subject of this research project at a special seminar to be organised by the BCSR.

Appendix 5 Scientific Studies and Research Publications Series Scheme

In compliance with the BCSR's aims in supporting theoretical applied research and the publications of their results, it has adopted a scheme for issuning a series of scientific studies and research works in addition to the studies and research papers incorporated in its annual plans. The scheme aims at attracting Bahraini and overseas scientists and researchers to investigate issues of vital significance to the Bahrain community or to conduct theoretical research affirming the role played by the BCSR in enriching and boosting scientific activities on the local and international levels. Details of this Scheme are as follows:

- The BCSR will publish a series of studies on matters of relevance to the requirements of the Bahrain community and economy. These studies may be conducted by BCSR researchers or in collaboration with outside researchers. The preparation of such studies or research papers may also be assigned to an external body and to other persons on a contractual basis. Such publications will be issued at least twice in every year.
- 2 The series of publications may cover the following:
 - (a) Studies and research papers suggested by the BCSR on subjects of signifance and of high standards for fulfilling the BCSR's aims and objectives and the priorities of its department.
 - (b) Original studies and research works tackling significant issues in the economic, scientific and technological fields not previously published and providing that such studies do not cover a very limited specialisation.

- (c) Valuable scientific papers tackling major environmental and social issues of concern to Bahrain to be delivered at local or international seminars, but not published previously elsewhere.
- 3 Each of the BCSR's department will decide the topics to be covered by the series of publications, which topics must be approved at a meeting of department heads.
- 4 Preparation and Supervision:
 - (a) The BCSR Secretary General is responsible for overall guidance and giving directions for the series of publications.
 - (b) A committee consisting of the representatives of the concerned departments in the BCSR will supervise the issue of such publications.
 - (c) The author of the study or research work, not the BCSR, is responsible for the material published as part of this series.
 - (d) No study or research work will be published except after scrutinising it by a specialised juged or panel of judges from the BCSR or outside it to be elected by the Secretary General and the Supervisory Committee.
- 5. The author who conducts the study will have to make the necessary alterations recommended by the Supervisory Committee.
- 6 The study must be presented in typed form and all its copy material, illustrations and drawings must be suitable for printing and enlargement. All references used for preparing the text of the study must be appended according to the prevailing practice.
- 7 None of the contents of the studies published as part of the series may be reproduced or reprinted except with the prior written consent of the BCSR.

8 - Remunerations:

- (a) A cash payment will be made to the author of the study or research if he is not a BCSR staff member after final approval is given for publication of the study.
- (b) A cash remuneration will be paid to the expert who evaluates the study.
- (c) The value of cash remunerations will be determined in view of the criteria applied by similar organisations in the region.

Appendix 6 Scientific Seminars

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1- Higher Education and its Role in Development.	20-21 October 1982
2 - Development and Workforce in Bahrain.	4-5 May 1983
3 - Incentives for Industrial Development in Bahrain.	15 February 1986
4 - Workshop on Problems Facing Bahrain's Industries.	26-17 April 1986
5 - survey of University Graduates Working in Bahrain.	8 March 1987
6 - Heart Artery diseases.	22 April 1987
7 - Scientific Education of Youth.	24-26 November 1987
8 - Survey of Marine Moss in Bahrain.	14 September 1988
9 - Towards an Ideal System of Marine Control.	23 February 1989
10-Researches in renewable energy.	23 February 1989
11-Economic and Social Specifics of work Productivity in the Industrial Sector in Bahrain.	17 May 1989
12-Occupational Development Opportunities Available to Bahrainis in the Public and Private Sectors.	23 January 1990

- 13-Shrimp grounds in Bahrain: their 12 November 1990 evaluation and regulation options.
- 14-Evaluation of industrial projects in 7 January 1991 developing countries Bahraini's experiment.
- 15-Profile of the Bahraini citizen as depicted 10 January 1991 in books of national education, history and geography of the primary stage.
- 16-Industrialisation through Joint Ventures. 3 December 1991
- 17-Improving and Reducing costs of Building 20 January 1992 concrete Roofs.
- 18-Marine culture known-how transfer 9-10 May 1992 and Investment.

19-Bahrain in 2010.

29-30 July 1992