### III- PhD and Post-Doctoral Research Programme

#### Introduction

The Programme was launched with the objective to produce technically qualified human resources in the IsDB member countries and Muslim Communities in non-member countries by providing scholarships to promising and outstanding scholars and researchers to undertake PhD studies and Post-Doctoral research in development related fields with a special focus on "Sustainability Science" and to achieve Sustainable Development Goals (SDGs) and the Presidency 5-Year Plan (P5P).

#### Concept

The concept of the Programme is based on the following:

- The Programme is designed to strengthen and enhance the scientific, technological and research capability and the potential of scholars, researchers, institutions and countries in order to meet the national needs in the area of science and technology to improve their socio-economic conditions.
- It is a scholarship programme and a development programme at the same time, since the scholars are required to play a leading role in assisting the development of their communities and countries after completion of their studies.
- The Programme offers scholarships leading to a full-time Ph.D. degree (three years maximum) and Post-doctoral research (one year maximum).
- The scholarship is awarded as an interest-free loan (Qard Hasan) to the scholars but grant
  to their communities/countries. The beneficiaries are required to refund 50% of the loan
  after graduation and securing gainful employment, to a Local Education Trust Fund (LETF)
  established in each member country benefiting from the Programme. The collected
  amounts are to be recycled in new scholarships offered to students from the same country.
- After completion of research, the scholars are required to take part in the development of their communities/countries, through their respective professions, while the community development services rendered by the graduates will contribute to the overall development of their communities/countries.

## **Eligibility Criteria**

The Programme is designed to help promising and outstanding scholars from member countries and Muslim communities in non-member countries who meet the following criteria:

### 1) PhD study

- Have Master's degree in one of the fields of study of the programme.
- Have minimum ("Very Good") academic standing;
- Preferably have work and/or research experience.
- Have a research proposal in one of the fields of study of the programme stating its scientific and development relevance to the community / country.
- Be medically fit and be willing to undergo medical tests after selection.

## Post-doctoral research

- Have PhD degree in one of approved fields of the programme.
- Have minimum ("Very Good") academic standing.
- Have not less than two (2) years of experience in the field of research.
- Must have a record of publications/research in the same field.
- Have a research proposal in one of the fields of study of the programme stating its scientific and development relevance to the community / country.
- Be medically fit and be willing to undergo medical tests after selection

# Fields of study

The eligible candidates may apply to study one of the following fields of study only:

Sustainable Agriculture	- Food Security
	- Resilient Crops
	- Postharvest Technologies
Education	- Quality of Teaching
	- Pupil/Teacher Ratio
	- High Level Training
Education for Sustainable	- Integration of Sustainability-related issues into national
Development	curricula and teaching syllabus documents
Climate Change	- Strategies for Reductions of CO2 Emissions
_	- Climate Mitigation
	- Carbon Sequestration Methods
Energy	- Renewable Energy and Green Technologies
	<ul> <li>Solar Potential and Hydrogen Fuel Cells</li> </ul>
	- Biogas and Biodiesel
Sustainable Cities	- Insulation Technologies
	- Transportation
	- Urban Planning
Responsible Growth	- Reduction of Waste
	- Serving Communities
	- Ethics of Growth
Waste Management	- Recycling
	- Carbon Footprint Reduction
	- Waste to Energy Technologies
Population Growth	- Urban Sprawl
	- Density and Epidemics
	- Overshoot
Green Chemistry	- Alternative Technologies
	- Cutting-edge Research
	- Limitation of Pollution

Biodiversity	- Loss of Biodiversity
,	- Ecosystem Services
	- Mass Extinction, Agrobiodiversity
Plastic pollution and	- Plastic Incorporation into the Food Chain
Micro-plastics	- Biodegradable Plastics
,	- Recycling Possibilities
Water and Hygiene	- Water Purity and Availability
	- Sanitation and Quality
Health	- Medicine
	- Pharmacy
	- Nutrition.
ICT for Development	- Computer Science,
-	- Laser and Fiber Optics
	- Telecommunication
	- Electronics
Innovation &	- Build Resilient Infrastructure,
Infrastructure	<ul> <li>Innovation and Industrial Development</li> </ul>
Development	- Technological Infrastructure
•	- Product Innovation
Islamic Economics,	- Mode & Services of Islamic Banking and Finance,
Finance and Banking	- Sharia Standards for IFIs,
_	- Islamic Insurance & Takaful,
	- Islamic Capital Market
	- Sharia & Operational Aspects of Sukuk,
	- Islamic Micro-Finance,
	- Zakat Management,
	- Awqaf & Zakat Management.
Development-related	- International economics,
Social Sciences	- Journalism
	- Law
	- Intellectual Property (IP)
	- Political Sciences
	- Entrepreneurships.

## **Benefits and Facilities**

The programme covers the following items:

- Monthly stipend commensurate with the cost of living of the country of study;
- Tuition fees, if any, subject to IsDB's approval;
- Cost of medical treatment at university/government hospital.
- Economy class return air tickets (once at the time of joining and on completion of study) and installation and equipment allowance for the students selected to study abroad at partnered universities/countries.
- Thesis preparation allowance
- Scientific papers' preparation allowance

# Place of Study

Consistent with the concept of the Programme, selected scholars must obtain admission/invitation from one of the reputable public universities in their own countries listed among the top (10) universities as per the Shanghai and Times Higher Education University ranking.

Admission may also be sought at one of the universities having agreement with the IsDB, i.e. Cambridge University, Queen Mary University of London and Oxford in UK, McGill University in Canada, Copenhagen University in Denmark, National University of Uzbekistan and Tashkent University of Information Technology in Uzbekistan and Top universities in Malaysia, Turkey, Tunisia and Morocco.

Note: Getting admission does not mean automatic selection and is not a requirement for application. The final decision on place of study is made by the selection committee.

## **Obligations**

Candidates granted the Scholarship are expected to:

- 1. Sign the IsDB's prescribed Scholarship Agreement stating their commitment to their studies and serve their communities and countries upon graduation;
- 2. Devote themselves to their studies on a full-time basis and without interruption and provide the IsDB with progress reports on their studies on a regular basis;
- 3. Not to seek or accept other scholarship or remunerated work during their study under the Programme:
- 4. Respect the laws of the country of study and maintain good personal and professional conduct consistent with the rules, regulations and objectives of the Programme and the overall mission of the IsDB;
- 5. Register and join the IsDB Alumni after graduation to network with other alumnus and keep updating the IsDB about their progress and achievements in their communities/countries.
- 6. Refund 50% of the loan after graduation and securing gainful employment, in easy installments, to Local Education Trust Fund (LETF) established by the IsDB in their countries.

### **Selection Process**

The review and selection process are undertaken by an independent International Selection Committee, composed of academicians and chaired by the Senior Advisor to the IsDB President for Science, Technology and Innovation.

The Selection Committee assesses the applicants' qualifications and eligibility requirements and ascertains the scientific and development relevance of the proposed fields of study. Recommendation for final selection is made by the committee and final selection is approved by the IsDB management whose decision is final.