







وزارة التعليم العالي والبحث العلمي

Egyptian Strategy and Achievements in BLUEMED Initiative







The Egyptian National strategy for research and Innovation 2030

Energy

Building a model for forecasting Egypt's energy needs and securing those resources Development of technologies for the energy production from biomass with zero waste

Development of energy generation systems using Tidal energy

Fisheries and Aquaculture

1- Establishing and developing semi-industrial experimental hatcheries for research and development

2- Needed actions for Illegal fishing, overfishing and destructive fishing tools

3-improving the productivity of Egyptian lakes

4- Aquaculture technologies through international partnerships

5- Protecting Biological Diversity in Egyptian Sea and Northern Lakes

Maritime transport

1- Technologies improvement of Egypt's maritime transport fleet

2-Working for analysis, governance of the interrelationship and integration between seaports, ministries and state sectors

3- Capacity building for Egyptian maritime labor to meet the requirements of the global market.

4-Applying modern logistics systems to the activities of Egyptian port authorities



1- future predictions of the potential impacts of climate change on the delta and the northern coast of Egypt.

2- biodiversity and the socio-economic impact of climate change.

3- mitigation and adaptation plans



1- Improve the efficiency of energy recovery equipment in desalination plants.

2- Development of new technologies for water desalination using nanotubes and graphene, electrodialysis Reverse technique, Nanofilteration etc...

3- Supporting research and studies on direct osmosis technology









Union for the Mediterranean Union pour la Méditerranée الإتحاد من أجل المتوسط

وزارة اللعليم العالي والبحث العلمي

bluemed

BLUEMED Strategic Research and Innovation Agenda

-National Meeting for Non-EU Countries-BLUEMED Workshop: National Consultation Day Egypt

Agenda

Date: Thursday 19th July 2018 Venue: Arab Academy for Science, Technology and Maritime Transport, Abu Kir, Alexandria



- The following issues are of high importance to be considered and upgraded;
- 1- Enquiry for capacity building and SOP's to have good quality assured data system, data management and data analysis.
- 2- Develop new technologies and robotics for pollution monitoring 3-Special interest was in assessment of mitigation of coastal cities (C1).
- 4-Special needs for new technologies in green biotechnology of different marine substrate for biomedical application, agricultural application, and industrial aspects in paints and antifouling products.
- 5- Regarding deep water resource exploration (D3), monitoring for large animal is needed, in addition to application of new technologies and available tools to assure high quality exploration.
 5- Marine spatial planning.

Technology Pillar

Actions in SRIA that of highest priorities:

- A2.5 Develop innovative ship inspection technologies,
- A3.1 Towards autonomous ships and digital shipping (i.e. from sensors to big data analytics)
- B1.4 Standardize and expand coastline monitoring systems across the Mediterranean region to maintain updated data and information on erosion and coastal risks.
- B2.1 Develop Autonomous Vehicles and related infrastructure to extend actions on deep sea environments.
- B2.2 Develop submarine networks using sensors fiber optic arrays -B3.4 Develop integrated solutions based on autonomous and unmanned (marine and air) drones/robots for surveillance around the vessel and in port areas, enhanced by advanced (surface and underwater) target detection and tracking systems

D1.1 Develop systems for monitoring of cultural heritage in coastal areas (underwater or partially emerged assets), based on the integration of multi-sensing and multi-observation platforms (satellite, ROV, UAV, on-ground, underwater)

- D1.3 Technologies and innovations to strengthen sustainable development policies, more efficient use of natural resources and cultural heritage in coastal and marine areas

b) New proposed actions to be added to the SRIA:

- B1 - Implementation of a regional database system for related raw data, previous projects, and establish a researcher's network.

- B1 - Development of a coastal line monitoring system to monitor and measure coastal erosion

Economy pillar

-The integration of the maritime clusters (D1) from an economic and productive point of view within the broader supply chain (not only under the technological – innovation pillar as pointed out in the SRIA)

- the consideration of the port development within the framework of all its related economic activities: commerce, transport, logistic, infrastructures, (not only as "green" and "smart" as pointed out in the SRIA)

- the crucial role of marine aquaculture (B2) as an emerging economic sector

- promote cultural heritage awareness, protection and conservation through tailor made training and capacity building.