

Date: May 24, 2022

Environmental and Social Considerations in Detailed Planning Survey  
Technical Cooperation for Development Planning

1. Full title of the Project: The Project for Updating ASEZ Master Plan

2. Type of the study: Master Plan

3. Categorization and its reason:

The project is not likely to have significant adverse impact on the environment under the JICA guidelines for environmental and social considerations April 2010 in terms of its sectors, characteristics and areas.

4. Agency or institution responsible for the implementation of the project

Aqaba Special Economic Zone Authority

5. Outline of the Project objectives, justification, location, proposed activities, and scope of the study

(1) Project Purpose

The ASEZ Master Plan is reviewed and updated.

(2) Project Site/Area

Aqaba Special Economic Zone (ASEZ), approximately 651.5km<sup>2</sup>

(3) Survey Scope

1) Current Status Assessment and Analysis of Challenges in ASEZ

2) Vision and Strategy for ASEZ Development

3) Land Use Plan and Zoning

4) Review and Update of Sector and Development Policy

5) Propose Key Priority Projects and Implementing Strategy

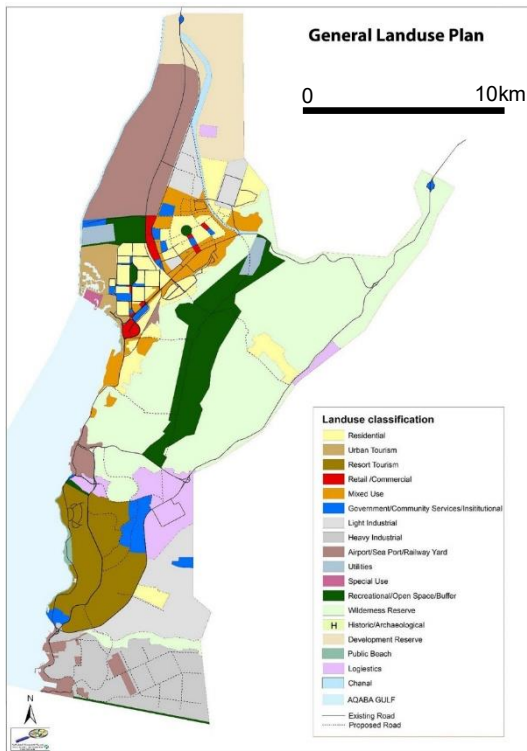
6) Capacity Development at personal and institutional levels

6. Description of the project site

(1) Map

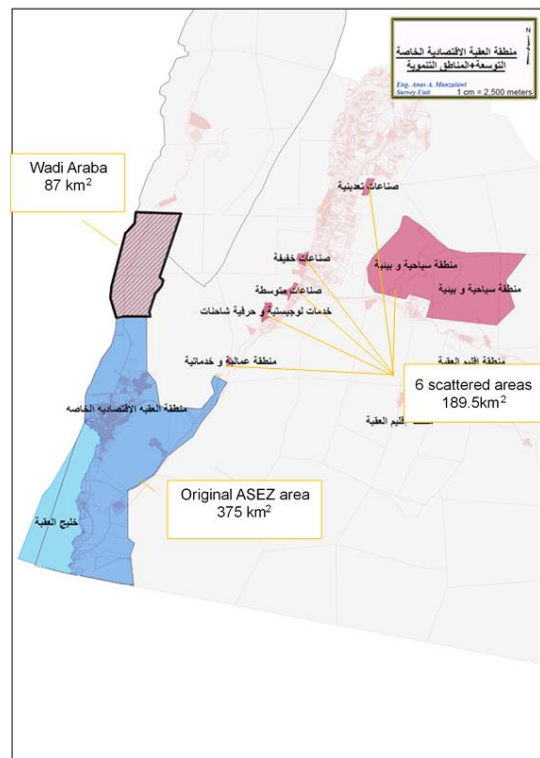
Aqaba is located about 350km south of the capital of the Kingdom, Amman, facing Red Sea with 27km coastal line and surrounded by borders between

Saudi Arabia and Israel. Aqaba Special Economic Zone (ASEZ) is located in Aqaba Governorate, and its boundary is announced based on the Aqaba Special Economic Zone Authority Law. Recently, Wadi Araba and 6 scattered industrial areas are incorporated to ASEZ.



Source: Edited by JICA based on information from ASEZA

**Fig 1 General Land Use of ASEZ**



Source: Edited by JICA based on information from ASEZA

**Fig 2 Whole Area of ASEZ**

## (2) Environmental and Social Condition

In the Aqaba Governorate has 213,000 population and Aqaba District has 180,010, Aqaba Sub-District has 169,250 population are estimated in accordance with the Statistics Yearbook 2020. ASEZ population is said to be around 200,000. Most of the population in the Governorate can be said in Aqaba District.

Unemployment rate in Aqaba Governorate is 20.9%, which is less than national average of 23.2%. While female unemployment rate, 32.2%, is higher than the average of 30.7%, male rate, 18.2% is better than the one 21.2%.

There are approximately 50,000 student in 151 schools and 4 hospitals and health centers are located in Aqaba.

Table1 : Aqaba Estimated Population at the End of 2020

Aqaba Governorate
-------------------

213,000			
Aqaba (Qasabah) District		Quairah District	
180,010		32,990	
Aqaba Sub-District	Wadi Araba Sub-District	Quairah Sub-District	Diesah Sub-District
169,250	10,760	25,790	7,200

Source: Department of Statistics, Statistics Yearbook of Jordan 2020

Table 2: Unemployment Rates by Sex, 2020

Governorate	Total (%)	Female (%)	Male (%)
Amman	24.9	29.5	23.5
Aqaba	20.9	32.2	18.2
The Kingdom	23.2	30.7	21.2

Source: Department of Statistics, Statistics Yearbook of Jordan 2020

Table 3: Number of Schools and Student in Aqaba, 2019/2020

Governorate	Student			Schools			
	Total	Female	Male	Total	Co-edu	Female	Male
Aqaba	50378	24877	25501	151	107	8	36

Source: Department of Statistics, Statistics Yearbook of Jordan 2020

Table 4: Ministry of Health's Centers and Clinics in Aqaba Directorate, 2020

Directorate	Dental Clinics	T.B. Centers	MCH Centers	Village Centers	Health Centers(1)
Aqaba	12	1	18	11	13

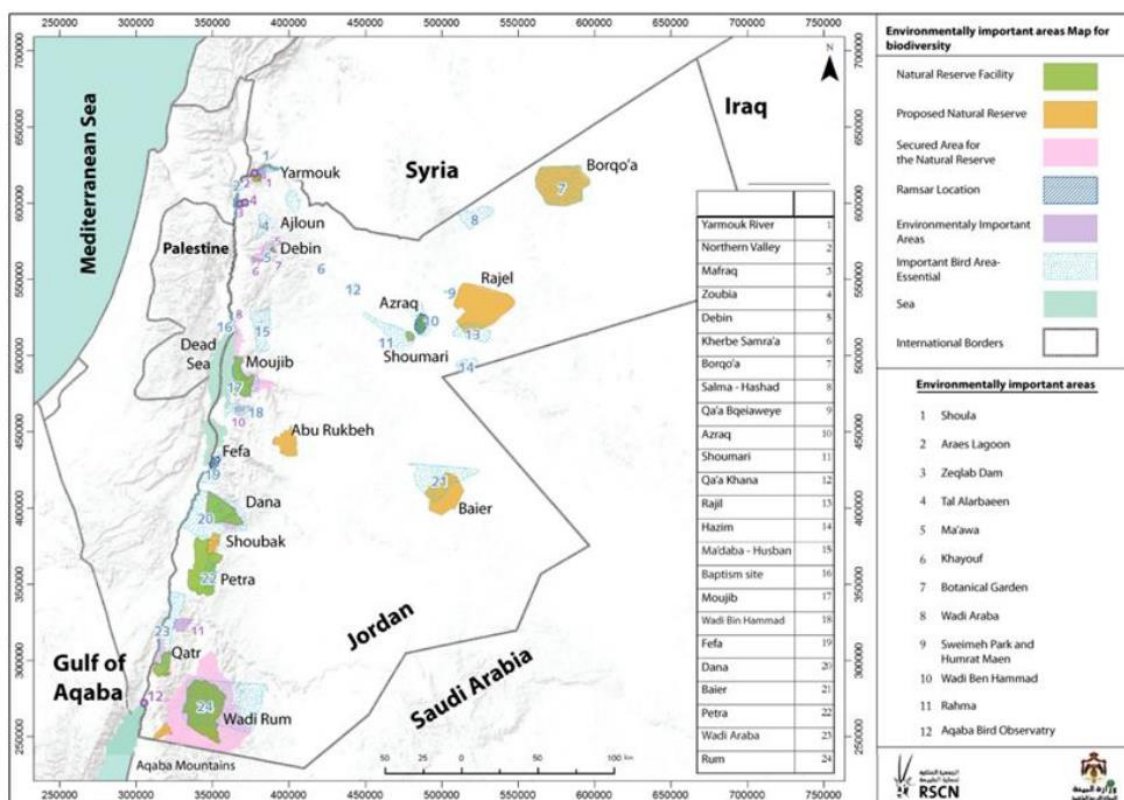
Source: Department of Statistics, Statistics Yearbook of Jordan 2020

(1) includes comprehensive and Primary Health Centers

Table 5: Number of Hospitals and Pharmacies in Aqaba 2020

Governorate	Hospitals		Pharmacies
	Number	Beds	
Aqaba	4	285	58

Source: Department of Statistics, Statistics Yearbook of Jordan 2020



Source: World Bank

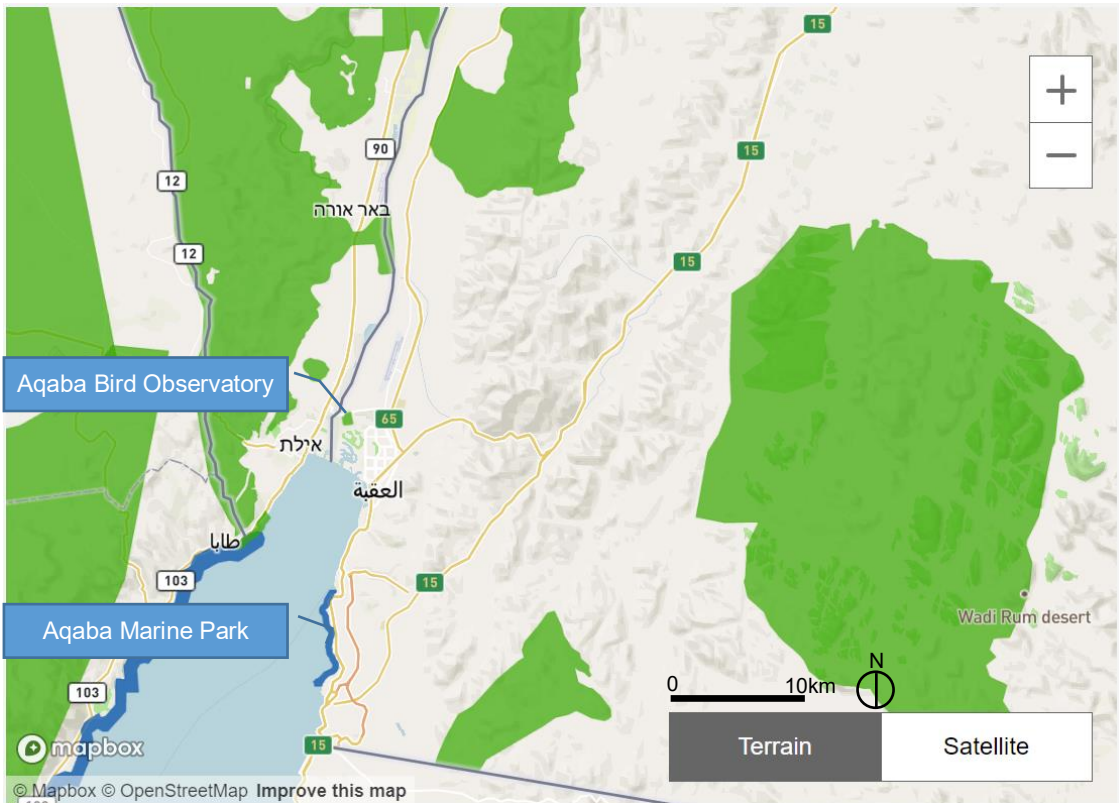
Figure 3: Location Map of Protected Areas

Table 6: Updated National List of Protected Area according to the IUCN guidelines

No	Name of Protected Area	Date of Establishment	Area (km <sup>2</sup> )
1	Shomari Wildlife Reserve	1975	21
2	Azraq Wetland Reserve	1978	12
3	Mujeb Biosphere Reserve	1985	212
4	Ajloun Forest Reserve	1987	12
5	Dana Biosphere Reserve	1989	292
6	Wadi Rum World Heritage Site	1997	129
7	Aqaba Marine Park	1997	205
8	Dibbin Forest Reserve	2004	805
9	Yarmouk Forest Reserve	2010	21
10	Qatar Nature Reserve	2011	110
11	Fifa Nature Reserve	2011	26
12	Aqaba Bird Observatory	2004	0.5

Total	1,420
-------	-------

Source: Edited by JICA based on the information from The National Biodiversity Strategy and Action Plan 2015-2020 and ASEZA



Source: Edited by JICA based on information from World Database on Protected Areas (WDPA: <https://www.protectedplanet.net/en>)

Figure 4: Protected Areas around Aqaba

In terms of environmental aspect, Government of Jordan has declared 12 Protected Areas and 2 of them located in ASEZ jurisdiction, one is Aqaba Marine Park and the other is Aqaba Bird Observatory. Qatr and Aqaba Mountain Area are not so far and in Governorate of Aqaba but are not inside ASEZ area. Aqaba Mountain Area is not an established Protected Area but still in a proposed status. Beyond the boarder with Israel, Massive Eilat is touching ASEZ boundary.

### (3) Current Issues

Since the establishment of the Aqaba Special Economic Zone Authority (ASEZA) in 2001 in accordance with Aqaba Special Economic Zone (ASEZ) law, ASEZA has been playing a leading role in planning and development of ASEZ with Aqaba

Development Corporation (ADC) that was established in 2004 and taking role of holding public assets and development agency.

ASEZA, since its establishment, confirmed the total investment amount of USD 26 billion in commitment basis for urban and industrial development projects. Tourism sector has been receiving the most, but the sector is now facing tough situation because of COVID19.

In addition, while global agendas such as climate change, SDGs, decarbonization, digitalization are of incremental importance it is necessary to review and update the current ASEZ development policy.

In this context, ASEZA recognized it an urgent task to update the outdated Master Plan showing a future vision and strategy for ASEZ.

## 7. Legal Framework of Environmental and Social Considerations

(1) Laws, regulations and standards related to environmental and social issues including requirements and procedures of Environmental Impact Assessment (EIA), stakeholder participation, and information disclosure.

In 2017, Environmental Protection Law was amended and decree 69 was set in 2020. The Law stipulates that environmental licensing for establishments is done through: i) screening the establishments according to the environmental risks of its activities; ii) preparing an Environmental Impact Assessment (EIA), or Preliminary Environmental Impact Assessment (PEIA), by one of the accredited consultants; iii) requiring having MOEnv approval of any modification or expansion of the activities; iv) conducting an environmental audit for existing establishments that could cause environmental impacts or that was established without having an EIA.

The Decree stipulates classification of environmental assessment, licensing and inspection.

The Law 6/2017 and the decree 69/2020 will be applied to whole Kingdom except Aqaba Special Economic Zone (ASEZ) where governed by its own law and regulation based on the "Regulation No. (21) for the Year 2001, Regulation for the Protection of the Environment in the Aqaba Special Economic Zone Issued in Accordance with Articles (52) and (56) of the Aqaba Special Economic Zone Law No. (32) for the Year 2000 (Decree 21/2001)".

EIA system in ASEZ is classified into 3 categories, and Category 1 requires full

EIA, Category 2 requires PEIA and Category 3 is not required any assessment. The consultation requires only in Category 1 projects and it requires to involve stakeholders. Environment audit is stipulated to be carried out when having a complaint or pollution incident from a certain facility. The audit will be held by a third party approved by the designated Directorate of ASEZA. Strategic Environmental Assessment (SEA) is not mandated to conduct in Jordan.

(2) Relative agencies and institutions

The las 6/2017 identifies Ministry of Environment (MOEnv) as the entity responsible for protecting the environment in Jordan and gives MOEnv the authority of issuing environmental licensing, carrying out environmental inspections of establishments, take necessary actions in case of sever pollution incidents.

In accordance with Decree 21/2001, Environmental Regulation Directorate in ASEZA is designated to be responsible for environment management in ASEZ. All environmental and inspection activities in ASEZ are carried out by the Directorate.

MOEnv has assigned the Royal Society for the Conservation of Nature (RSCN), which is an independent national organization devoted for the conservation of Jordan’s natural resources, the management of 10, of the 12, protected areas through memorandum of understanding. For each of those protected areas, RSCN prepares a management plan (with span of 3-5 years) and submits it to MOEnv for approval. After MOEnv approval, RSNC sends periodic reports to MOEnv which monitors how well the management plans are being implemented. The management plans include the biodiversity features of the area, different sensitivities and threats, protection measures that are needed and the limitations on land use and activities. For the 2 protected areas in the ASEZ, ASEZA has signed a MOU with the MOEnv to strengthen the governance and reporting in the same manner done by RSCN and mentioned above.

8. Provisional Scoping (types and magnitudes of possible adverse impacts)

	Subject	Description	Possible Impacts
Social Environment			
1	Resettlement	Vast land is still available and not high	↳

		concentration is occurred currently, however potential profitable development area like coastal area and close to CBD area are limited and may require not large scale resettlement	
2	Economic Activities	Enhance economic activities by industrial diversification and promotion of investment through MP formulation and implementation is expected	↳
3	Transportation	reduce traffic congestion by bottleneck improvement and introduction of public transportation is expected but economic growth and population increase may cause	↳
4	Spatial Disruption	Not significant impact is expected at this stage	↳
5	Ethnic Minorities and Indigenous Peoples	There are some minorities and refugees in Jordan, but need further study how much are there in ASEZ and affected in urban development	↳
6	Heritage	Some heritage sites are existing in ASEZ but will not be affected much and to be preserved well	↳
7	Water Right	Not significant impact is expected at this stage	↳
8	Sanitation	Not significant impact is expected at this stage	↳
9	Waste	Not significant impact is expected at this stage	↳
10	Disaster Risk	Seismic and flood management are recognized frequent disaster in ASEZ and mitigation risk will be considered in the process of MP formulation	↳
Natural Environment			
11	Topography and Geology	large scale intervention on topography and geology is not expected	↳
12	Land Erosion	Not significant impact is expected at this	↳



		stage	
13	Underground Water	Not significant impact is expected at this stage	↳
14	Lake and River	No lake and river to be impacted is reported	↳
15	Coast	Aqaba Marine Park is located along the coast, which is registered Protected Area by law. Coast is well preserved so far while development of ASEZ, but development considering environmental risks are important and mitigation measures	↳
16	Ecosystem	Aqaba is locating is gulf valley where the many bird species are observed and Aqaba Bird Observatory and IBA/proposed protected area are in ASEZ and Protected Area locates near to ASEZ. Planning taking in to consideration of bird passage route is expected during the Project.	↳
17	Landscape	No significant impact is expected	↳
18	Climate Change	traffic improvement by bottleneck improvement and introduction of public transport, energy resource shift from fossil fuel to renewable energy may be promoted through MP formulation and implementation	↳
Pollution Control			
19	Air Pollution	No significant impact is expected	↳
20	Water Pollution	No significant impact is expected	↳
21	Soil Contamination	No significant impact is expected	↳
22	Noise and Vibration	tourism attracting site and housing development near residential area may cause noise and vibration to neighbors but will be controlled	↳
23	Land Subsidence	No significant impact is expected	↳
24	Odor	May happen in chemical plant in southern heavy industry zone but will be under	↳

		control	
25	Bottom Sediment	No significant impact is expected	✓

9. Result of the consultation with recipient government on environmental and social consideration including roles and responsibilities.

Based on the discussion in the Detailed Planning Survey, to conduct SEA procedure in corresponding to the JICA Guideline during the Project was agreed.

#### 10. Terms of Reference for Environmental and Social Considerations

- (1) In the environmental and social considerations study of the Project, the concept of Strategic Environmental Assessment (hereinafter referred to as "SEA") shall be applied, based on JICA Guidelines for Environmental and Social Considerations (April 2010) (hereinafter referred to as "JICA Guidelines").
- (2) This document describes a draft framework of the terms of reference for SEA for the Project. The contents of the document are tentative and subject to change. The details of the SEA shall be discussed through the process of Project implementation.
- (3) The SEA is environmental assessment at Policy (P), Planning (P), and Program (P), (PPP) level. It has a profound significance in the plans for proactive environmental and social considerations into the higher levels of decision-making processes by early warning on environmental and social impacts, broad and long-term perspective.
- (4) Main items of the environmental and social considerations study are as follows, but not limited to, the followings.
  - 1) Review the existing development plans (upper level/related plans), development projects, studies, and policies.
  - 2) Conduct comparative analysis of alternatives to realize the goals/objectives
  - 3) Review the contents of the existing policies/plans/programs and examine the issues on environmental and social aspects for development planning;

- 4) Conduct scoping (clarify crucially important items on environmental and social impacts and its evaluation methods to be taken into account in the decision making such as policy, plan, and program levels)
- 5) Identify baseline data on existing environmental and social conditions of the target area (e.g. land use, environmental pollution, natural environment, socio-economic situation, socio-cultural environment, lifestyle of indigenous people and communities);
- 6) Identify legal framework and institutions of Jordan/ASEZA on environmental and social considerations, including
  - a) Laws, regulations, and standards related to environmental and social considerations (e.g. those related to strategic environment assessment, environmental and social impact assessment, resettlement, public participation, information disclosure);
  - b) Gaps between the JICA Guidelines and the legal framework of Jordan on environmental and social considerations and how they will be filled in the Project
  - c) Organizations responsible for implementation of environmental and social considerations including SEA and ESIA and division of their roles;
- 7) Predict likely environmental and social impacts of each alternative based on the results of scoping;
- 8) Evaluate likely impacts and compare alternatives at policy, plan, and program level. Options including “without project option” or “zero option” from technical, financial, and impacts of environmental and social points of view, and select the optimal plan;
- 9) Identify measures to mitigate the impacts in the optional plan (i.e. measures to avoid, minimize, or compensate the negative impacts)
- 10) Identify monitoring methods based on the mitigation measures
- 11) After the disclosure of the scoping drafts/draft reports, consultations with local stakeholders are conducted based on stakeholder analyses. The results of consultations should be reflected in the project plan.

11. Other relevant information

None

## Main Reference Documents:

The Hashemite Kingdom of Jordan, Jordan Inclusive, Transparent and Climate Responsive Investments Program For Result (P175662), Environmental and Social Systems Assessment (ESSA), FINAL, May 2021, World Bank (<https://documents1.worldbank.org/curated/en/651191621406378464/pdf/Final-Environmental-and-Social-Systems-Assessment-ESSA-Jordan-Inclusive-Transparent-and-Climate-Responsive-Investments-Program-For-Results-P175662.pdf>)

The Aqaba Special Economic Zone Law No. (32) for the Year 2000 and its amendments,  
[http://www.aqabazone.com/EchoBusV3.0/SystemAssets/AR/Laws\\_and\\_Regu/aw%20english.pdf](http://www.aqabazone.com/EchoBusV3.0/SystemAssets/AR/Laws_and_Regu/aw%20english.pdf)

Regulation No. (21) for the Year 2001 Regulation for the Protection of the Environment in the Aqaba Special Economic Zone Issued in Accordance with Articles (52) and (56) of the Aqaba Special Economic Zone Law No. (32) for the Year 2000  
[Regulation for the Protection of the Environment in the Aqaba Special Economic Zone .pdf \(aqabazone.com\)](#)

JORDAN STATISTICAL YEARBOOK 2020, Department of Statistics  
[Jordan Statistical Yearbook 2020 – Department of Statistics \(dos.gov.jo\)](#)