



Status of the seafood industry and investment opportunities in the Kingdom of Saudi Arabia

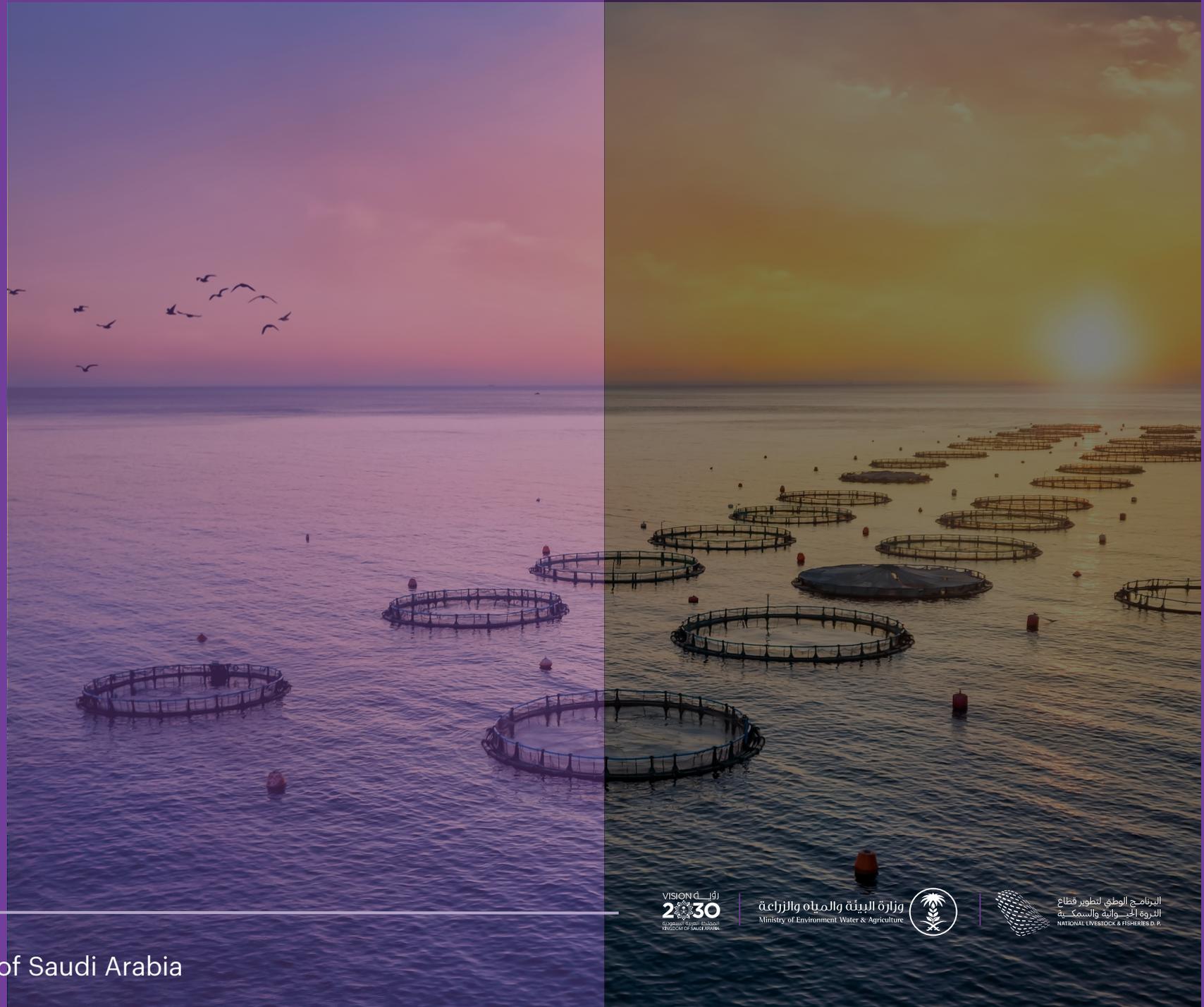
NLFDP



01

NLFDP Strategy

Status of the seafood industry and investment opportunities in the Kingdom of Saudi Arabia



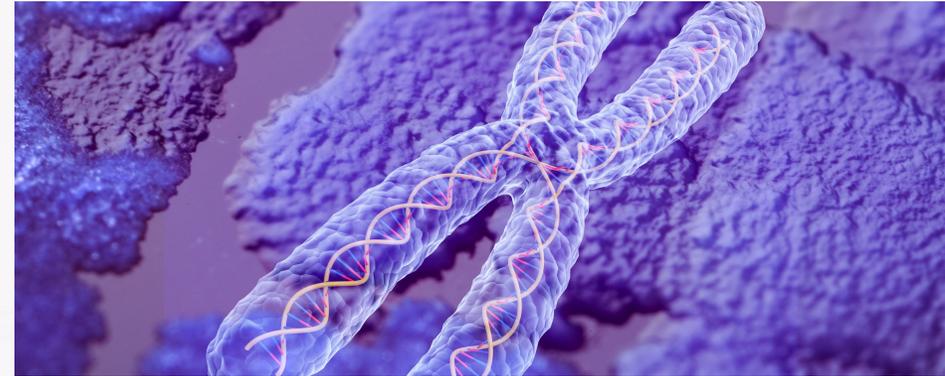
NLFDP contributes directly to achieving:

Agriculture Strategy



- Promoting effective plant and animal protection according to One Health approach
- Improving and enhancing agricultural productivity

Biotechnology Strategy



- Enhancing integrated manufacturing capabilities and supporting vaccine R&D.
- Empowering vital industries locally to achieve self-sufficiency and increase quality exports.
- Enhancing health prevention and innovation to improve life quality of citizens.

NLFDP's strategy has been developed to leverage biotechnology to develop the sector

Biotechnology

Developing genomic technologies to improve breeds and prevent disease

Development of vaccines and laboratory technologies

Business Development & Investments

Capacity Building and Business Empowerment in Biotechnology

Enhancing biomanufacturing and localization of vaccines and laboratory technologies

Enhancing production efficiency in the sector

AQUACULTURE SECTOR TARGETS FOR 2030

Global competitiveness



As part of a larger drive to further develop the Saudi non-oil economic growth under Vision 2030, MEWA has set a strategic goal to develop a globally competitive aquaculture sector



Increase local seafood consumption

100 %

Increase in seafood consumption per capita



Enhance food security

600K tons

Total seafood production



Reduce local production costs

-30%

Production costs reduction (economies of scale and improved efficiency)

†Targets set by NIDL investor attraction - source : MEWA, Vision 2030, NIDL

رؤية 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

National Industrial Development & Logistics Program

National Transformation Program

National Aquaculture Development Strategic Plan

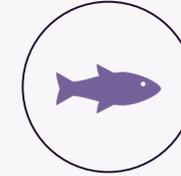
6 Strategic Objectives



Increase total production output to achieve self sufficiency target



Support industry & enhance domestic competitiveness



Develop a thriving domestic seafood market



Invest in training to build capacity



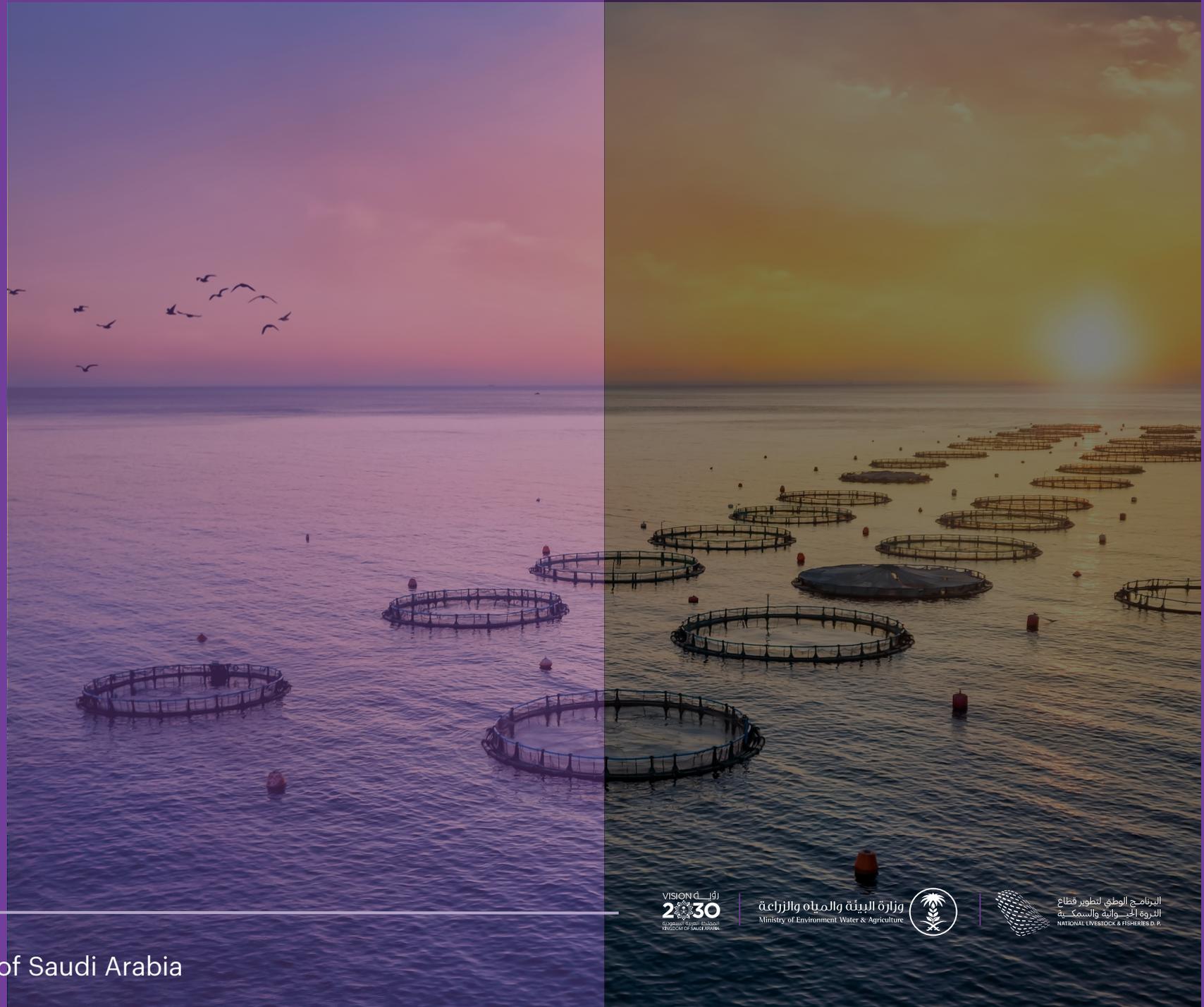
Drive government led interventions



Attract investors & foreign players

02

Current Industry Status



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Significant Investment in Infrastructure & Know-how

Shrimp farming

White Shrimp (*Litopenaeus vannamei*)



Marine fish farming

Asian Seabass
Lates calcarifer

Sobaity
Sparidentex hasta

Mediterranean Seabream
Sparus aurata

Marine Tilapia
Oreochromis spilurus



Fresh water fish farming

Tilapia
Oreochromis niloticus

Salmon trout
Oncorhynchus mykiss



Significant Investment in Infrastructure & Know-how

RAS or Aquaponics



RA High food-hygiene standards



Aqua feed mills-Supporting industries

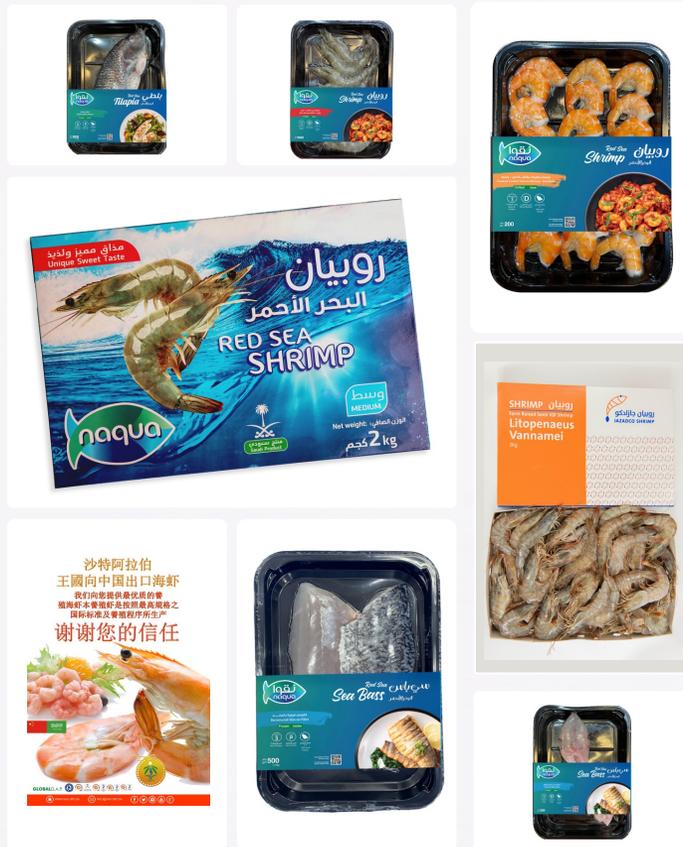


Current Production

From 2015 to 2018, total aquaculture production increased by 200%, from around 25 thousand tons to almost 75 thousand tons, and in 2024 surpassed 161 thousand tons



Strong Exports- Over 35 countries

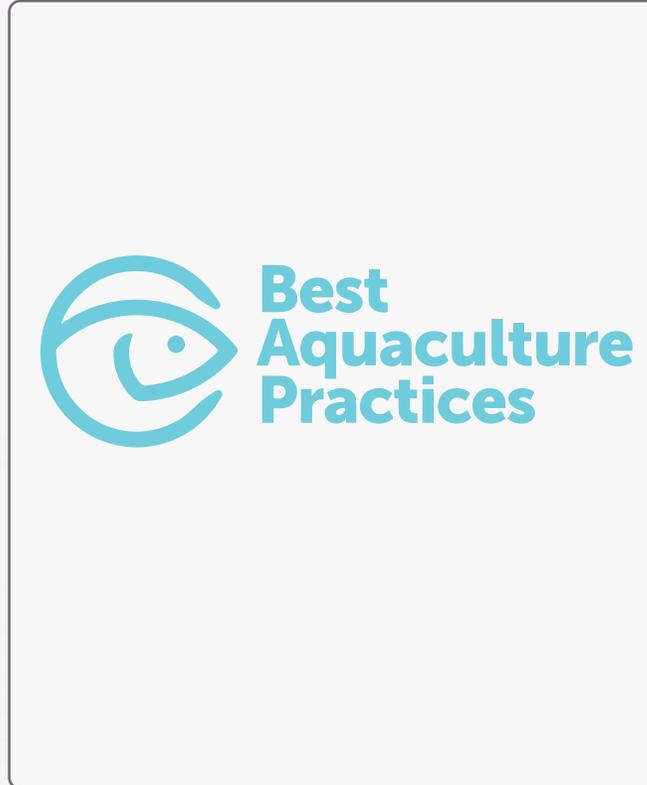


3 Process and product quality drivers

NATIONAL BIOSECURITY PROGRAM



INTERNATIONAL CERTIFICATION GSA/BAP



NATIONAL CERTIFICATION SAMAQ



Local product awareness increase and market development

SAMAQ B2C Labelling



Regional Aquaculture Center of Excellence

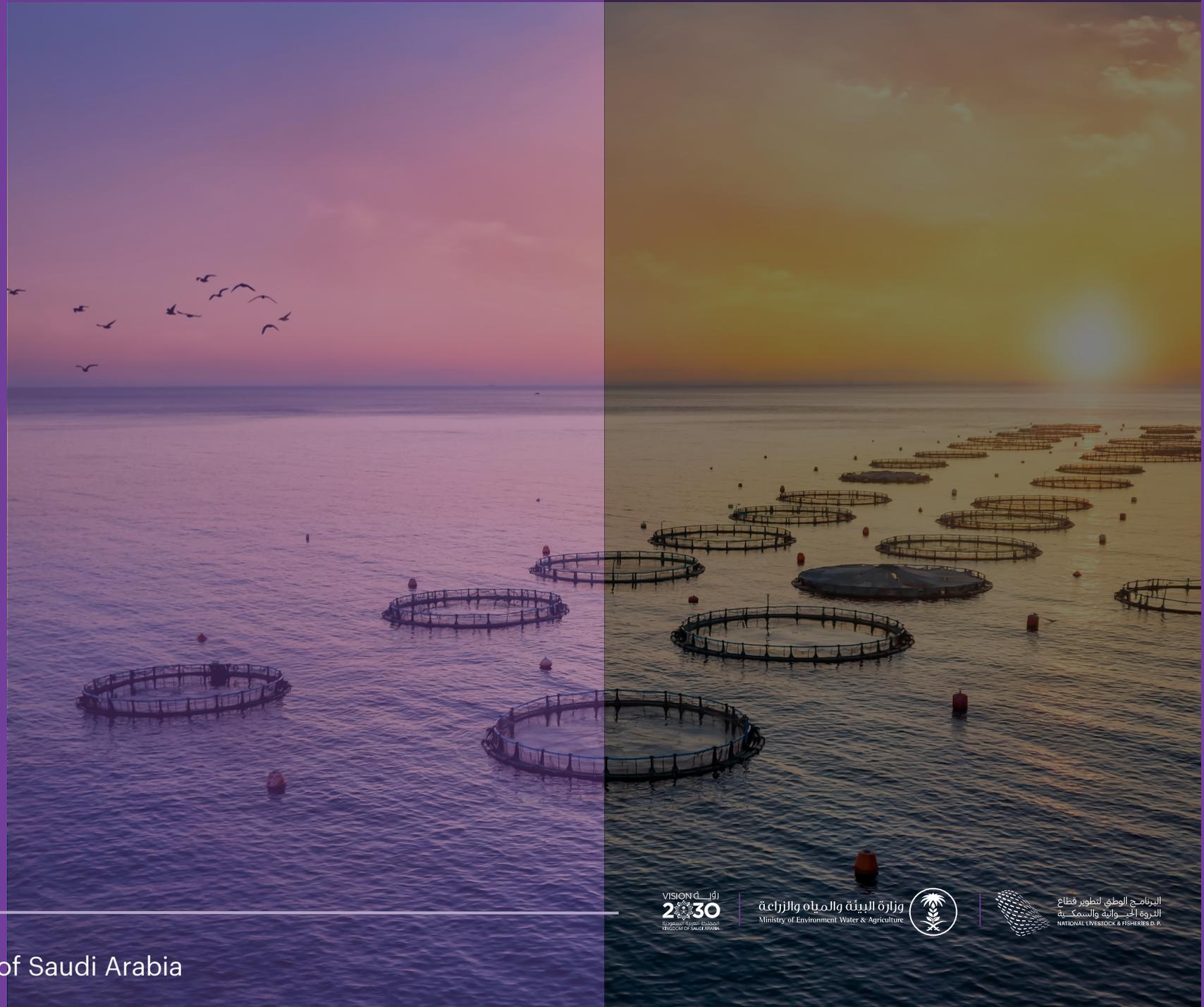
Key Differentiators



-  Largest Center with the most comprehensive aquaculture R&D and aquatic animal health offering in the Red Sea and in the region
-  Extensive focus on developing and promoting local and regional species
-  Dedicated programs to develop local and regional capabilities across all aquaculture activities
-  Environmentally sustainable through renewable energy usage, extensive water treatment, and mangrove plantation

03

Aquaculture Investment Opportunities



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Investment Opportunities

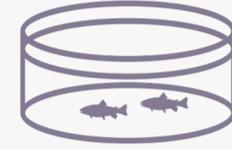
Attract investors & foreign players



Investment opportunities in lined ponds



Investment opportunities in sea cages



Investment opportunities in RAS (Recirculating Aquaculture System)



Investment Opportunities # 3,4,5



| Specie | Sobaity (Sparidentex hasta) | Production Method | Floating Sea Cages |
|-------------------|--------------------------------|-------------------|---------------------------------------|
| Location | Red Sea Coast | Licensed Areas | 100 Ha Offshore 10 Ha Coastal land |
| Production period | 13 months | Avg harvest size | 800 grams |
| | | Avg FCR(e) | 2.0 |

| AVG production cost /kg* | 4.82 USD | Cost breakdown /kg | | | |
|--------------------------|----------|--------------------|----------|-------|----------|
| | | Juveniles | 0.16 USD | Feed | 2.67 USD |
| | | Labour | 0.42 USD | Other | 0.58 USD |

*Ex-farm cost

| Total Investment | 19.964.601 USD | CAPEX | 4.521.272 USD | OPEX | 5.461.028 USD | TOTAL | 9.982.300 USD |
|------------------|----------------|-------|---------------|------|---------------|-------|----------------|
| Equity | 4.521.272 USD | | | | | | 9.982.300 USD |
| Loan | 4.521.272 USD | | | | | | 9.982.300 USD |
| TOTAL | 9.042.544 USD | | | | | | 19.964.601 USD |

| NPV | 9.962.370 USD | IRR | 7.81 % | Pay back | 6 years 2 months |
|-----|---------------|-----|--------|----------|------------------|
|-----|---------------|-----|--------|----------|------------------|

Other Investment Opportunities (Upstream)



Hatcheries

For the national production of around 260,000 tons of marine fish, the aquaculture farms will require 840 million fish juveniles

AquaFeed mills

For the national production of around 530,000 tons of aquaculture products, the aquaculture farms will require 926,000 tons of aquafeed.



Seafood processing

Seafood processing and product value adding, based on the constant supply of high quality raw material (fish and shrimp) from the local farms, in order to satisfy the ever growing market demand for more convenient seafood products by the modern generation of consumers.



Other Investment Opportunities (Downstream)



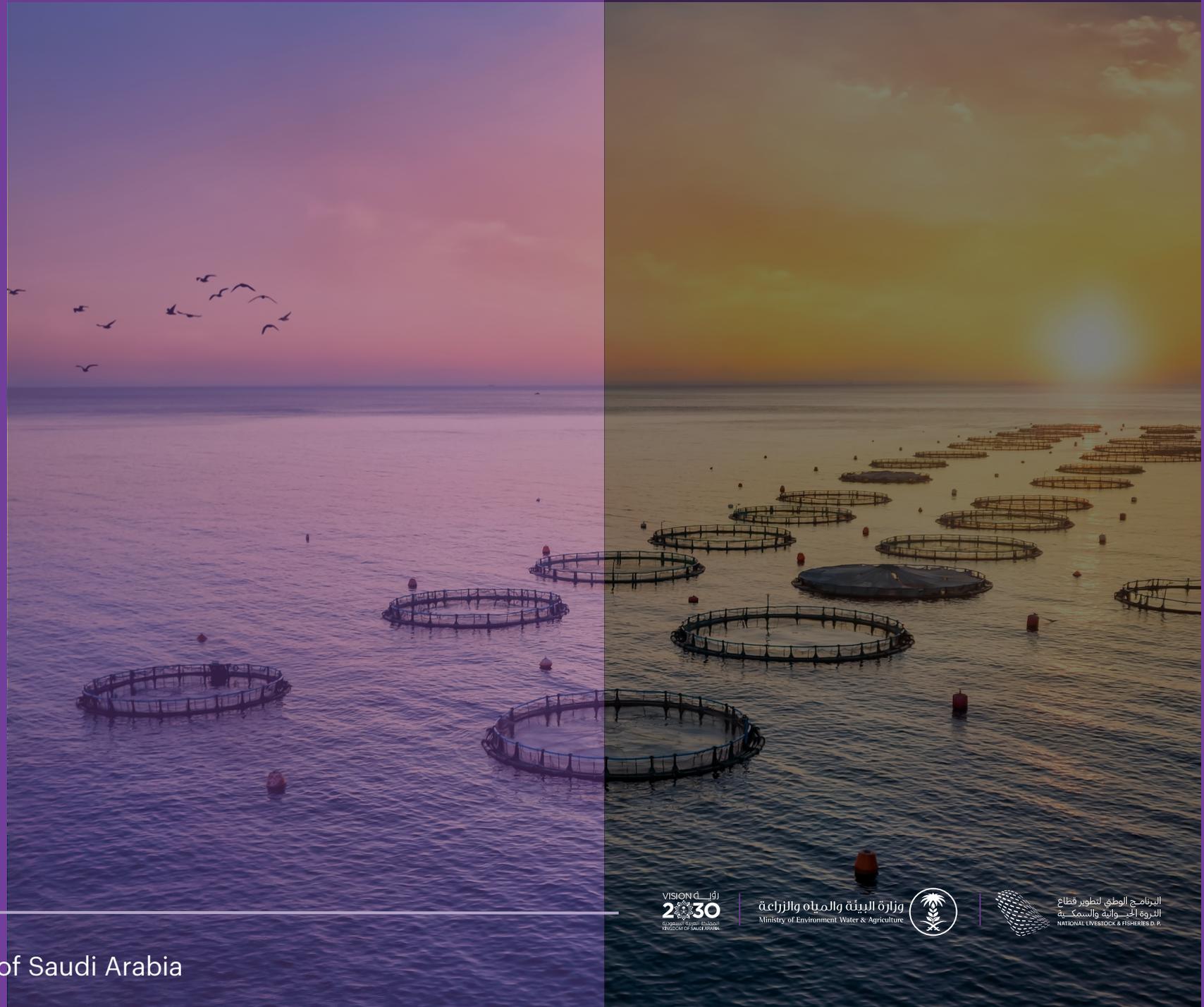
Seafood processing



04

Seafood Processing Investment Opportunities

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All regions of KSA contribute to Vision 2030, with one of the mega projects located in the Jazan Region

Key Regions, Projects and Special Economic Zones (SEZ)



- 1 JCPDI / Jazan SEZ
Jazan Region, KSA
- 2 NEOM
Tabuk, KSA
- 3 AL ULA
Madinah, KSA
- 4 Red Sea Project
Western Coast, KSA
- 5 Ras Al-Khair SEZ
Ras Al-Khair, KSA
- 6 King Abdullah Economic City SEZ
KSA
- 7 Riyadh Integrated Special Logistics Zone
Riyadh, KSA
- 8 Cloud Computing SEZ
Riyadh, KSA

JCPDI Key insights

- Jazan City for Primary and Downstream Industries (JCPDI) is one of the megaprojects with Special Economic Zone status.
- JCPDI is the only SEZ in the Kingdom dedicated to food processing.



Note: Jazan SEZ focus sectors: food processing, metal conversion, logistics, KAEC SEZ focus: automotive, consumer goods, ICT, pharmaceuticals, medtech, logistics; Ras Al-Khair SEZ focus: shipbuilding, rig platforms, MRO; Cloud computing SEZ focus: cloud computing services; RIZLS focus: consumer products, computer parts, pharmaceuticals, medical supplies, luxury goods.

Source: Team analysis.

JCPDI is an industrial city hosting a SEZ and developing the Food Park

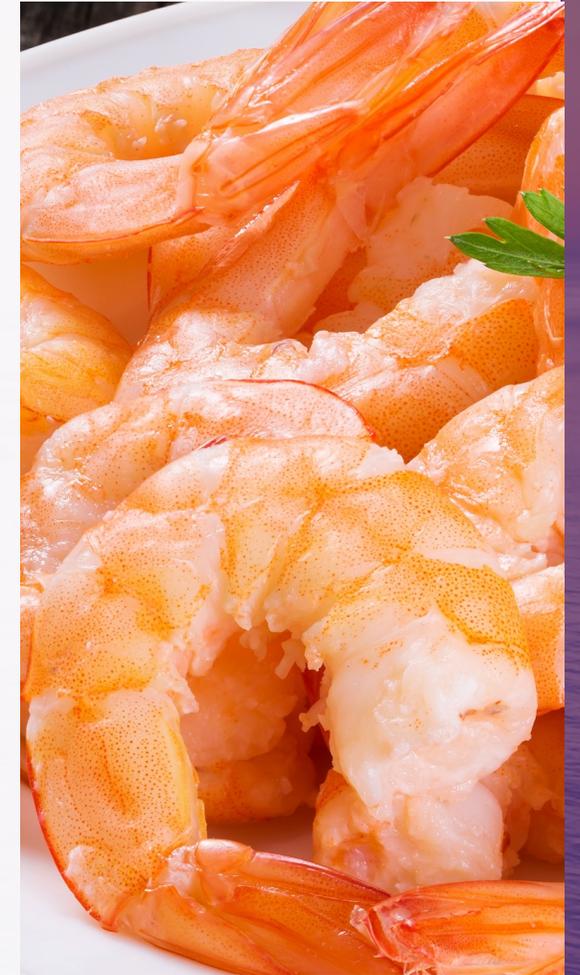
JCPDI Snapshot

| | |
|---------------------|---|
| ~110Km ² | Total JCPDI land area |
| ~30Km ² | Community Zone and Downtown City Precinct |
| ~80Km ² | Total Industrial Area (e.g., food processing, metals, petrochemicals) |
| ~21Km ² | Special Economic Zone area |
| -3Km ² | Jazan Food Park Area |



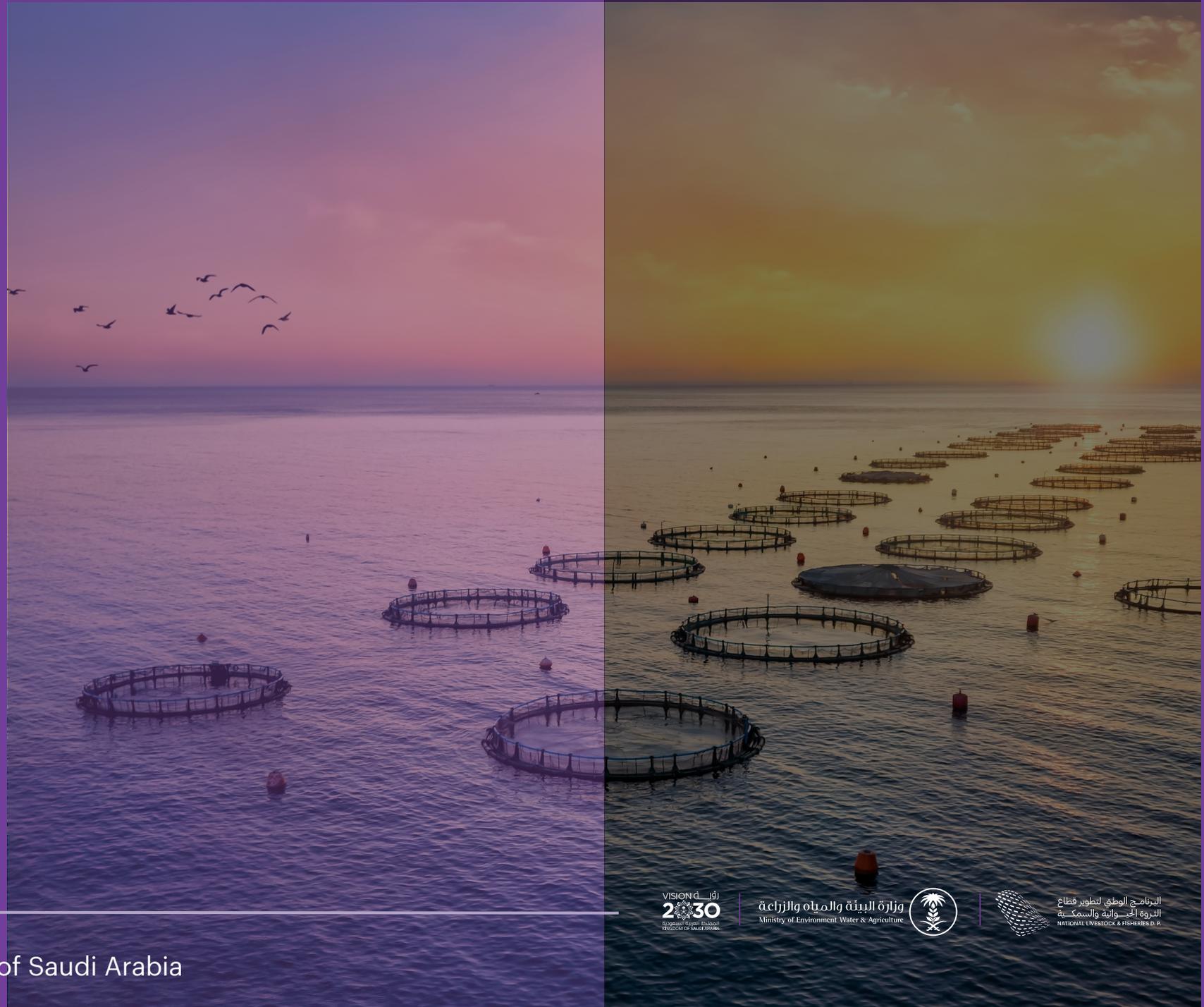
Six Reasons to Invest in Jazan Food Park

- | | | |
|----|---|--|
| 01 | High market prospects in Seafood | High market demand and production opportunities in Jazan for animal proteins and access to raw materials in Jazan. |
| 02 | Tailored solutions to jumpstart operations | Pre-built factories ranging from 500 to 1500 m2, tailored built-to-suit facilities, and available land plots available for tenants. |
| 03 | Food processing shared and support facilities | A variety of food-related shared and support facilities to streamline processes across the value chain, including advanced gutting, scaling, and filleting facilities, packaging facilities, cold storage, warehouses, and waste management. |
| 04 | Compelling pack of special economic zone incentiv | A variety of food-related shared and support facilities to streamline processes across the value chain, including advanced gutting, scaling, and filleting facilities, packaging facilities, cold storage, warehouses, and waste management. |
| 05 | Ease of doing business | One-stop shop with access to business and professional services including training. |
| 06 | Advantageous geography and strong connectivity | Highly strategic location along key sea trade routes, with proximity to the port unlocking export opportunities. |



05

Research and Development



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Extensive R&D in cooperation with universities and research centers



Algae technology Development

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King Abdullah University of
Science and Technology



Applied Research for Inland Aquaculture
Development

مركز
البحر
جامعة الملك عبد العزيز
دراسات - استشارات - تدريب



Applied Research for Marine Aquaculture
Development

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King Abdullah University of
Science and Technology



Evaluation of major fish stocks and essential
fisheries habitats

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Science and Technology



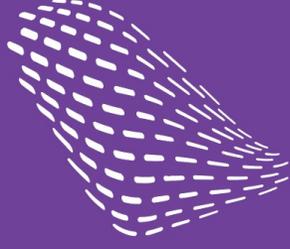
New Feed Formulations

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مركز
البحر
جامعة الملك عبد العزيز
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Thank you

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تطور...بشكل متسارع

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