



PUNTLAND STATE OF SOMALIA

Ministry of Fisheries and Marine Resources

PUNTLAND MARINE AND FISHERIES RESEARCH INSTITUTE

P M A F R I

INSTITUTIONAL PROFILE

*A centre of excellence for marine and fisheries research, scientific knowledge,
education, technical training, innovation and sustainable marine resource management*



MARINE RESEARCH • FISHERIES SCIENCE • MARINE EDUCATION • TRAINING • INNOVATION

Bosaso • Bari Region • Puntland State of Somalia

Prepared for the Governing Board, government institutions, development partners, universities, research institutions and investors



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About this profile

This profile presents the identity, mandate, governance, scientific programme, delivery record and institutional positioning of the Puntland Marine and Fisheries Research Institute (PMAFRI). It is issued for the information of the Governing Board, the Ministry of Fisheries and Marine Resources, and the Institute's academic, development and investment partners.

The Institute has operated in Bosaso since 2014 and appears in earlier programme records, agreements, certificates and signage under its former identity as the Somali Marine & Fisheries Science Institute (SMAFSI / SMFSI). PMAFRI is the same institution under a name that reflects its research-led mandate; all past works, qualifications awarded and partnership commitments recorded in this profile are those of that continuing institution.



01

THE INSTITUTE AT A GLANCE

PMAFRI is the marine and fisheries research institution of Puntland State, integrating scientific research, marine science education, Diploma-level training, vocational skills development, scientific data, laboratories, technical services, conservation and blue-economy innovation.

Official name	Puntland Marine and Fisheries Research Institute
Acronym	PMAFRI
Institutional nature	Marine and fisheries research, scientific, education and training institution
Established	2014, in Bosaso, Bari Region, Puntland State of Somalia
Former identity	Somali Marine & Fisheries Science Institute (SMAFSI / SMFSI)
Location	Bosaso, Bari Region, Puntland State of Somalia
Sectoral coordination	Ministry of Fisheries and Marine Resources, Puntland State of Somalia
Governing instrument	By-Laws (Internal Regulations) of the Institute
Highest governing body	PMAFRI Governing Board
Chief executive	Director General
Institutional positioning	A centre of excellence for marine and fisheries research, scientific knowledge, education, technical training, innovation and sustainable marine resource management
Core domains	Marine research • Fisheries science • Marine education • Vocational training • Scientific data • Laboratory services (in establishment) • Conservation • Blue economy
Delivery record	Eight Diploma cohorts and eleven vocational skills cohorts graduated; implementation partner to FAO, UNDP and internationally funded fisheries programmes

Why PMAFRI matters

Puntland has the longest coastline in Somalia and the potential to support a robust and productive fishing industry. That potential is constrained by low domestic market demand, insufficient fishing gear and technology, and inconsistent approaches to management. Two of those three constraints are, at root, knowledge constraints: fishing technology does not improve without technical training and applied research, and management does not become consistent without stock assessment, catch and effort data, and scientific advice that managers can act on.

PMAFRI is the institutional answer to that gap — the body that generates the evidence on which fisheries management,



marine conservation and blue-economy investment can defensibly rest, and that trains the people who work the resource.



02

INSTITUTIONAL IDENTITY AND BACKGROUND

The Puntland Marine and Fisheries Research Institute is the marine and fisheries science institution of Puntland State of Somalia, based in the port city of Bosaso, Bari Region. It brings together within one governed institutional framework the three functions on which a marine economy depends: scientific research into the condition of marine ecosystems and fisheries resources; education and technical training for the people who work in the sector; and scientific advice to the authorities responsible for managing it.

It is a professional scientific and educational body committed to academic excellence and ethical integrity in the management of the marine, maritime and fisheries sector, working to ensure that planning and policy decisions result in oceans and coastlines that are managed sustainably.

The development context

The Institute's origins lie in the consequences of state collapse and the years of conflict, famine and displacement that followed: interrupted education, loss of parents, displacement from home areas, and migration from rural areas in search of a better life. The resulting vulnerability of a generation of young Somalis — to recruitment by armed groups, to delinquency, and to irregular migration and human trafficking — made clear that recovery assistance alone would have limited durable effect unless the country's human resources were addressed.

Skills development, in this reading, is a stabilisation and economic strategy rather than a welfare activity, and the marine and fisheries sector is its natural vehicle: a long and productive coastline, an underperforming domestic sector, and a large young population without marketable skills.

What distinguishes the Institute

- **It is research-led, not training-led.** Training institutions transmit existing knowledge. PMAFRI generates new knowledge about Puntland's own marine and fisheries resources and then teaches it. The Diploma curriculum, the vocational catalogue and the advisory function all draw on the Institute's own research and field experience.
- **It is integrated across the skills ladder.** A working fisherman attending an evening course in engine maintenance and a Diploma student conducting a length-frequency analysis are served by the same institution, in the same place, from the same technical base. Few institutions in the region combine artisanal skills training with post-secondary marine science education and applied research.
- **It is proven in delivery.** The Institute has implemented fisheries training, assessment and value-chain programmes for government ministries and international partners in Bosaso and along the Bari coast, and has graduated eight Diploma cohorts and eleven vocational skills cohorts.
- **It is institutionally governed.** The Institute operates under By-Laws providing for a Governing Board, a chief executive and accounting officer, a departmental structure, research ethics, data governance, financial accountability, internal audit and a monitoring and evaluation framework. That architecture is what allows a scientific institution to hold public funds, enter research agreements and be relied upon by Government and partners.



03

ESTABLISHMENT AND INSTITUTIONAL EVOLUTION

The Institute was established in 2014 in Bosaso by a group of qualified and experienced marine and fisheries professionals as a pioneer marine science educational institute, created to provide marine science academic services to post-secondary students together with marine, maritime and fisheries management and capacity-building services to corporate organizations, the private and public sectors and other institutions. It was organised from the outset into three academic departments — Navigational, Fishing Technology and Marine Environment — each headed by a principal and an Institute Council, and it established a reputation as the premiere academic institute in the field of marine sciences in Puntland. The Institute was formally registered with the Puntland Ministry of Higher Education on 13 September 2015.

In 2016 the institution extended its reach into fisheries skills development through the establishment of the Fil-Fil Fishing Vocational Training Center in Bosaso, funded and supported by the Institute on a voluntary basis. The centre was created to provide marketable fisheries skills, aligned with the goal of youth poverty eradication, and specifically intended to increase the employment opportunities of the youth population of Puntland State.



The Fil-Fil Fishing Vocational Training Center, Bosaso — established 2016 for practical fisheries skills training.



The Institute's training premises in Bosaso, showing the earlier institutional signage.

From 2017 the Institute began delivering contracted training, assessment and value-chain development services to international development programmes, beginning with the Promoting Inclusive Markets in Somalia (PIMS) programme and continuing through Food and Agriculture Organization and United Nations Development Programme engagements. That period converted an academic institution into an implementing institution with a field delivery record along the Bari coast.

The most significant development in the institution's trajectory is the establishment of By-Laws under the authority of the Ministry of Fisheries and Marine Resources. These define the institution as a public marine and fisheries research, training and scientific institution with an explicitly research-led mandate, and provide for research programmes under an approved research agenda, scientific ethics and ethical clearance, intellectual property and publication, data governance and national marine and fisheries databases, the operation of laboratories, research vessels, hatcheries and field stations, and collaboration with universities and research institutions nationally and internationally.

This is the institutional architecture of a research institute. The identity of the Puntland Marine and Fisheries Research Institute aligns the name of the institution with the mandate its By-Laws articulate, and consolidates its three strands — academic education, vocational training and scientific research — into a single marine and fisheries research institute for Puntland State.



Phase	Institutional development
2014	Establishment in Bosaso as a post-secondary marine science institute: Diploma provision, three academic departments and a catalogue of short mandatory and professional courses.
2015	Formal registration of the Institute with the Puntland Ministry of Higher Education (13 September 2015).
2016	Establishment of the Fil-Fil Fishing Vocational Training Center in Bosaso, delivering eight fisheries trades to youth and working fishermen.
2017–2018	Partnership under the Promoting Inclusive Markets in Somalia (PIMS) programme: institutional capacity development and the first structured training and demonstration services for Puntland fishing companies and fisherfolk.
2024	Implementation partner for the FAO-supported RAAISE Growth in Somalia programme and the UNDP SAAMEYNTA programme: training of trainers, community fisheries skills training and fish-handling and processing training along the Bari coast.
By-Laws	Definition of the institution as a public marine and fisheries research, training and scientific institution, with a Governing Board, a Director General, a departmental structure, and data and laboratory functions.
PMAFRI	Consolidation and renaming as an integrated marine and fisheries research institute: research, education to Diploma level, vocational training, data, laboratories, conservation and blue economy.

The institutional logic

A long and productive coastline; an underperforming domestic sector constrained partly by technology and partly by management; and a large young population without marketable skills. An institution that can simultaneously train the workforce, improve the technology and generate the science that management requires addresses all three at once.



04 VISION, MISSION AND CORE VALUES

Vision

A centre of excellence for marine and fisheries science that supports the sustainable development of Puntland's blue economy.

Mission

To advance scientific knowledge, build national capacity and provide evidence-based advice for the responsible management and conservation of marine and fisheries resources.

Mission element	What it obliges the Institute to do
Advance scientific knowledge	Design and conduct research on fish stocks, marine biodiversity, water quality, aquaculture and climate-related impacts; publish findings; maintain scientific records.
Build national capacity	Educate marine science graduates and technicians; train working fishermen; develop the skills of sector professionals; strengthen the scientific workforce.
Provide evidence-based advice	Convert research and data into management advice, policy briefs, stock assessments and technical guidance usable by Government, industry and communities.

The order matters. Advice that is not grounded in knowledge is opinion; knowledge that is not transmitted through capacity development leaves with the individual who holds it.

Core values

The following values are the guiding principles of the Institute and govern the conduct of its research, its teaching and its administration.

Value	What it means in practice at PMAFRI
Scientific Integrity	Honesty, objectivity and rigour in all research. Fabrication, falsification and plagiarism are prohibited and are grounds for disciplinary action.
Research Independence	Scientific findings are reported as they are found. Donor support is accepted only where it is consistent with the independence and integrity of the Institute.
Transparency	Admission criteria published in advance; procurement conducted competitively; records, data and decisions properly documented and available to oversight authorities.
Accountability	A named accounting officer, internal controls, external audit by the State audit authority, and annual reporting.



Value	What it means in practice at PMAFRI
Gender Equity	Equal opportunity in recruitment and admission, and the deliberate inclusion of women in training and in the scientific workforce.
Environmental Sustainability	Research and advice directed at the responsible use of marine resources, with ethical clearance required for work involving sensitive ecosystems or protected species.
Value for Money	Economy and efficiency in the use of public and donor resources; procurement on the principles of competition, fairness and economy.
Rule of Law	Operation within the laws of Puntland State of Somalia.
Professional Excellence	High academic and professional standards across all programmes, with alignment to national and international qualification frameworks.
Evidence-Based Decision Making	Institutional decisions, like the advice the Institute gives, rest on data and analysis rather than assertion.
Innovation	Active development of improved fishing technology, aquaculture practice and post-harvest methods appropriate to Puntland conditions.
Collaboration	Joint research, data sharing, staff exchange and capacity building with universities, research centres and scientific bodies nationally and internationally.
Public Service	The Institute exists to serve Puntland's coastal communities, its fisheries sector and its people, including those who are most marginalised.



05

INSTITUTIONAL MANDATE AND CORE FUNCTIONS

Mandate

The mandate of the Institute is established in its By-Laws:

1. To conduct scientific research on marine ecosystems, fisheries resources, oceanography, aquaculture and the coastal environment of Puntland;
2. To generate, analyse and disseminate reliable scientific data to inform fisheries policy, management and conservation;
3. To provide training, education and capacity development for the marine and fisheries sectors; and
4. To advise the Ministry on scientific and technical matters relating to the sustainable use of marine and fisheries resources.

Core functions

In furtherance of that mandate, the Institute discharges the following core functions and responsibilities.

- Design and implement research programmes on fish stocks, marine biodiversity, water quality, aquaculture and climate-related impacts.
- Operate laboratories, research vessels, hatcheries and field stations to the extent of available resources.
- Collect, manage and safeguard scientific data and maintain national marine and fisheries databases.
- Deliver certified training, short courses, internships and professional development programmes.
- Publish scientific findings and produce technical reports, manuals and policy briefs.
- Collaborate with universities, research institutions, government agencies and development partners.
- Perform any other function assigned by the Minister consistent with the mandate.

The mandate in operation

Mandate cluster	Components
Scientific research	Marine scientific research; fisheries research; fisheries stock assessment; oceanographic research; marine ecosystem research; marine biodiversity research; aquaculture research; coastal environmental research; marine conservation research.
Data and information	Scientific data generation, analysis and dissemination; national fisheries databases; national marine databases; data quality assurance, storage, security, sharing and archiving under an institutional data-management policy.
Education and training	Education; Diploma-level education; vocational training; professional and short-course training; internships; capacity development for the marine and fisheries sectors.
Knowledge products	Scientific publications; technical reports; training and technical manuals; policy briefs; species identification resources.
Advice and partnership	Technical and scientific advice to the Ministry; research partnerships with universities, research institutions, government agencies and development partners; knowledge dissemination to industry, communities and the public.



06 STRATEGIC AREAS OF WORK

The Institute's functions are organised under ten strategic pillars. Each has a defined purpose, a defined output and identified users of that output. Together they translate the mandate into an operating programme and map directly onto the Institute's departmental structure.

Pillars 1–5 generate knowledge. Pillars 6–7 transmit it. Pillars 8–10 manage, service and apply it. No pillar stands alone: the education pillars teach what the research pillars discover, and the data and laboratory pillars serve both.

Pillars 1–5 — knowledge generation

Pillar	Purpose	Principal outputs
1 Marine & Fisheries Research	Generate original scientific knowledge on the marine ecosystems and fisheries resources of Puntland, sufficient to support management, conservation and development decisions.	Research reports; stock assessment reports; scientific publications; datasets; the annual research agenda
2 Marine Science & Oceanography	Characterise the physical, chemical and biological oceanography of Puntland's coastal and shelf waters and relate oceanographic conditions to fisheries productivity.	Oceanographic datasets and time series; water quality reports; seasonal condition assessments; environmental baselines
3 Fisheries Science & Management	Determine the status of exploited stocks and convert that determination into management advice that fisheries authorities can act upon.	Stock assessment reports; management advice notes; fisheries indicator series; policy briefs
4 Marine Conservation & Environmental Science	Assess and support the protection of marine biodiversity, critical habitats and vulnerable species, and monitor pressures on the coastal environment.	Habitat and biodiversity assessments; species status reports; pollution monitoring reports; conservation recommendations
5 Aquaculture & Fisheries Technology	Develop and test aquaculture systems and fishing and post-harvest technologies appropriate to Puntland conditions.	Technical manuals; gear and technology trial reports; aquaculture protocols; demonstration and extension materials

Pillars 6–10 — transmission, management and application

Pillar	Purpose	Principal outputs
6 Marine Science Education	Educate a cadre of marine and fisheries professionals to Diploma level, meeting the sector's technical workforce needs.	Diploma and certificate graduates; student research projects; curricula and teaching materials
7 Vocational & Professional Training	Equip young people, women and working fishermen with marketable fisheries skills, and raise the technical standard and safety of the artisanal fleet.	Certified skilled workers; trained working fishermen; improved vessel safety practice; employment placements



Pillar	Purpose	Principal outputs
8 Fisheries Data, Statistics & Information	Establish and maintain the national marine and fisheries data resource and make it usable for management, research and planning.	National fisheries databases; species database; statistical bulletins and data reports; curated research datasets
9 Laboratory & Scientific Services	Provide the analytical capability on which research, teaching, and regulatory and commercial service delivery depend.	Analytical results and certificates; laboratory reports; teaching laboratory sessions; technical service revenue
10 Innovation, Partnerships & Knowledge Transfer	Connect the Institute to the national, regional and international scientific system and ensure its knowledge reaches those who can use it.	Partnership agreements; joint research outputs; the PMAFRI publication series; extension and outreach materials



07

PAST WORKS AND INSTITUTIONAL EXPERIENCE

PMAFRI has built substantial experience through research, technical support, training, assessments and the implementation of fisheries and marine development initiatives in Puntland and Somalia. The engagements set out below have been delivered for Government ministries, United Nations agencies and internationally funded development programmes. Together they constitute the Institute's demonstrated capacity to design, staff, deliver, document and account for technical programmes along the Puntland coast — including in remote coastal districts where few institutions are able to operate.

Programmes and institutional engagements

Engagement	Partner and role	Scope of work delivered
RAAISE Growth in Somalia Support to the Implementation of Resilient Fisheries and Livestock Value Chains for Inclusive and Sustainable Growth in Somalia (OSRO/SOM/006/EC and UTF/SOM/069/SOM)	Implementation partner; funded by the Food and Agriculture Organization of the United Nations (FAO). Bosaso and the Bari coast, Puntland.	Training of the Institute's training-of-trainers staff in fisheries co-management practices and seamanship and sea-survival methods (Bosaso, May–June 2024); targeted community training in safe fish handling, processing and value addition delivered to beneficiaries in Bandarbeyla (June 2024) and Bargaal (28 June – 2 July 2024), including practical instruction in hygienic handling, filleting, preservation and the supply of processing materials to trainees.
SAAMEYNTA	Implementation partner with the United Nations Development Programme (UNDP), under the Somalia Joint Fund.	Fisheries, fishing and fish-processing skills development programme for internally displaced persons in Girible, Bosaso: recruitment and training of participants in fishing, fish handling and fish processing, concluding with a certification ceremony for graduating trainees.
Ministry of Fisheries and Marine Resources (MoFMR)	Technical support and implementation partner to the sectoral ministry.	Implementation of fisheries research, surveys, assessments and data-collection activities in support of the Ministry's management, planning and policy functions.
Ministry of Ports	Implementation partner.	Support to marine and fisheries-related initiatives falling within the Institute's technical competence.
PIMS — Promoting Inclusive Markets in Somalia	Partner to the PIMS programme, implemented by Development Alternatives Inc. (DAI) with DFID and DANIDA funding (2017–2018).	Institutional capacity development of the Institute as a specialised fisheries training service provider; residential training for senior staff of lead and champion fishing firms in improved catch, handling and processing, transportation, quality control and marketing; supervised practical demonstrations for sourcing agents and fisherfolk; and development of standard training and demonstration modules for the ocean fisheries sub-sector.
Oxford and KAALLO Netherlands	Collaborating partners.	Collaboration in fisheries training and skills-development programmes.
Education and skills development	Delivered under the Institute's own academic and vocational programmes.	Eight cohorts of Diploma students and eleven cohorts of vocational skills trainees graduated, contributing trained human resources to Somalia's fisheries and marine sector.



“SUPPORT TO THE IMPLEMENTATION OF “RESILIENT FISHERIES AND LIVESTOCK VALUE CHAIN FOR INCLUSIVE AND SUSTAINABLE GROWTH IN SOMALIA – (RAAISE GROWTH IN SOMALIA) BOSSASO,

Training to SMAFSI’s TOT staff fisheries co-management practices and seamanship/sea survival methods

FUNDED BY: FAO

ORGANIZED AND IMPLEMENTED: SMFSI

DATE : MAY-JUN 2024

VENUE: REDSEA HOTEL

Training of the Institute’s training-of-trainers staff in fisheries co-management practices and seamanship and sea-survival methods, delivered under the FAO-supported RAAISE Growth in Somalia programme, Bosaso, May-June 2024.

Field delivery along the Bari coast

The Institute’s field programme reaches coastal districts beyond Bosaso. Under the RAAISE Growth in Somalia programme it delivered targeted training in safe fish handling, processing and value addition to fishing communities in Bandarbeyla and Bargaal, working with mixed groups of men and women drawn from the local fishery and its associated processing activity. Instruction combined classroom sessions with supervised practical work on landed fish, and participants received the materials required to apply the practice they had been taught.



Participants in fish handling and processing training, Bandarbeyla, June 2024.



Trainees and instructors, safe fish handling and value-addition training, Bargaal, June-July 2024.



Supervised practical instruction in hygienic handling and processing of landed tuna, Bargaal.



Trainees demonstrating filleting and product preparation under instruction, Bargaal.

Delivery of this kind requires more than technical content. It requires the ability to mobilise participants in remote districts, to supervise practical work safely, to distribute and account for equipment and materials, and to document activity to the standard that public and donor funding demands. That operational capability is one of the Institute's principal institutional assets.



Handover of processing materials and equipment to trainees, Bandarbeyla.



Practical gear and net demonstration at the Institute's Bosaso training facility during a partner visit.

Skills development for displaced and vulnerable groups

Under the SAAMEYNTA programme, funded by UNDP through the Somalia Joint Fund, the Institute delivered a fisheries, fishing and fish-processing skills development programme for internally displaced persons in Girible, Bosaso. The programme combined instruction in fishing and fish handling with fish-processing skills intended to generate income within the coastal economy, and concluded with the award of certificates to participants who completed the course.



Award of certificates on completion of the fisheries and fish-processing skills development programme for internally displaced persons, Girible, Bosaso.

The PIMS partnership

Between 2017 and 2018 the Institute partnered with the Promoting Inclusive Markets in Somalia (PIMS) programme, implemented by Development Alternatives Inc. (DAI) with DFID and DANIDA funding, in an intervention designed to develop a commercial training service capability for the ocean fisheries sub-sector in Puntland. The partnership was built on four objectives.

- Create linkages between international experts on ocean fisheries and local training service providers and fishing companies.
- Initiate high-quality training support for the fishing companies of Puntland.
- Establish demonstration models for imparting knowledge on fish catch, storage, transportation and marketing to fisherfolk.
- Develop standard training and demonstration modules for fishing companies and fisherfolk in Puntland.

Under the partnership the Institute engaged international technical expertise in institutional development and in fisheries quality control from capture to consumption, undertook an institutional capacity assessment and acted upon its recommendations, delivered residential training to senior staff of the programme's lead and champion fishing firms, oversaw and supervised cascade training and demonstrations by those firms for their sourcing agents and fisherfolk, and produced standard training and demonstration modules for continued use after the programme closed.

An institution the sector already relies on

The PIMS intervention was designed around a finding recorded in the partnership documentation itself: that there was a shortage of local capacity to provide training and capacity-building support to fishing companies and fisherfolk in Puntland, and that this Institute was the organization available and consulted by the leading fishing companies with which the programme worked.

That position — the specialised marine and fisheries training and technical institution of the State — is the foundation on which PMAFRI's research mandate is now being built.



Institutional capabilities demonstrated

Taken together, these engagements evidence the following institutional capabilities, each of which is directly relevant to partners considering the Institute as a research, training or implementation counterpart.

Capability	Evidence from delivered work
Programme implementation	Delivery as implementation partner for FAO-supported, UNDP-supported and DFID/DANIDA-funded programmes, against agreed objectives, deliverables and reporting requirements.
Training design and delivery	Residential, classroom, workshop and field-based training for institutional staff, company personnel, fisherfolk, women and displaced persons, from short courses to two-year Diploma provision.
Training of trainers	Development of the Institute's own trainer cadre in fisheries co-management practice and seamanship and sea survival, enabling cascade delivery to communities.
Remote coastal operations	Mobilisation, instruction, equipment distribution and documentation in coastal districts including Bandarbeyla and Bargaal.
Value chain and post-harvest work	Practical instruction in safe fish handling, processing, preservation, quality control and value addition across the chain from capture to market.
Assessment and data collection	Fisheries research, surveys, assessments and data-collection activities undertaken in support of the Ministry of Fisheries and Marine Resources.
Institutional development	Capacity assessment and organisational strengthening under the PIMS partnership, including curriculum, delivery, quality assurance and human resource development.
Curriculum and module development	Production of standard training and demonstration modules and course materials for continued use by the sector.
Inclusion of women and displaced persons	Programmes delivered specifically for women in fish processing and for internally displaced persons in Girible, Bosaso.
Partner and donor reporting	Narrative and financial reporting, procurement in accordance with partner financial guidelines, and verification and audit provision under signed partnership agreements.

A research mandate is credible where an institution has already shown it can deliver in the field, account for what it spends and document what it did.

08 RESEARCH AREAS

Research is the function around which the Institute is organised. It is governed by an approved annual research agenda and a register of approved and ongoing projects. Every project proceeds on a written proposal setting out objectives, methodology, budget, timeline and expected outcomes, and ethical clearance is required where research involves human participants, sensitive ecosystems or protected species.



Marine field work: at-sea sampling and examination of catch.

Fisheries research and stock assessment

Fisheries research addresses the biology, population dynamics, exploitation and economics of the species on which Puntland's fishing sector depends, and produces the quantitative basis for management decisions.

Domain	Scope
Fisheries biology	Species identification and taxonomy; age and growth; length-weight relationships; reproductive biology, maturity and spawning seasonality; feeding ecology; distribution and migration.
Population dynamics	Growth, mortality and recruitment; population structure; stock identification; yield per recruit and spawning stock biomass per recruit relationships.
Fishery monitoring	Catch composition, catch rates, fishing effort, gear use, vessel activity, seasonality and spatial distribution of fishing, through landing site sampling and logbook or interview systems.
Fisheries socioeconomics	Household dependence on fishing; income, costs and returns; value chains and market access; employment; the economic consequences of management measures.
Coastal community research	Livelihood structure, vulnerability, resource access, local knowledge and community-based management practice along the Puntland coast.



Domain	Scope
Post-harvest research	Handling, preservation, cold chain, processing, quality and safety, and the quantification and reduction of post-harvest loss.

Stock assessment is the function that most directly discharges the Institute's mandate to inform fisheries policy. It rests on landing site catch sampling, biological sampling, effort data and total catch estimation, and produces biological reference points, fisheries indicators and management advice. Every assessment is accompanied by a management advice note stating what the assessment implies for decisions, what confidence attaches to that implication, and what would change the conclusion.

Marine science and oceanography

Fisheries in the north-western Indian Ocean are strongly seasonal, and that seasonality is oceanographically driven. The Institute's oceanographic programme covers coastal and shelf observation; water quality assessment; monitoring of temperature, salinity, currents and upwelling; and analysis of the relationship between oceanographic variability and fisheries productivity, including monsoon-driven seasonality.

Marine biology, ecology and biodiversity

Work in this area covers survey and monitoring of species richness and community composition, taxonomy and species identification, ecological relationships within coastal and shelf systems, and the development and maintenance of a national marine species database recording occurrence, distribution, identification characters and reference material.

Aquaculture

Applied aquaculture research covers species suitability for Puntland conditions, hatchery technique, feed and nutrition, and production systems, developing capacity that supplements capture fisheries rather than competing for the same stocks.

Fisheries technology and post-harvest science

This programme addresses the technology constraint on the domestic sector directly: fishing gear and gear selectivity research; boat and engine technology; and fish handling, preservation, cold chain and processing research, including the assessment and reduction of post-harvest loss. Its outputs are technical manuals, trial reports and demonstration materials that pass into the Institute's vocational catalogue and reach the fleet — as they have done in the community training the Institute has delivered along the Bari coast.

From research to decision

An assessment that is not translated into usable advice has not discharged the mandate. The Institute's research outputs are therefore specified to include, alongside technical reports and scientific publications, the stock assessment reports, policy briefs and management advice notes on which fisheries authorities, conservation planners and investors can act.



09

EDUCATION AND TRAINING

Education and training are the functions the institution has performed since 2014 and the route by which its science reaches the sector. Eight cohorts of Diploma students and eleven cohorts of vocational skills trainees have graduated from its programmes. Provision is structured into three levels, so that a learner can enter at the level that matches their preparation and progress upward.

Level	Provision	Entry	Award
Level 1 Short professional courses	Focused professional and technical instruction for people already working in, or entering, the marine and fisheries sector; safety and certification-type courses. Days to a few weeks.	Open; determined by course. No formal academic prerequisite for most courses.	Certificate of completion or attendance
Level 2 Certificate programmes	Technical and vocational qualifications giving a recognised occupational competence in a defined trade or technical area. Several weeks to one year.	Determined by trade; accessible to school leavers and those with incomplete formal education.	Certificate on satisfactory completion and assessment
Level 3 Diploma in Marine Science	Structured post-secondary marine science education producing technically competent professionals capable of technical employment or progression to degree-level study. Two years, four semesters, plus a supervised field attachment.	High school certificate or equivalent from a recognised school.	Diploma in Marine Science

Each level is a genuine entry point and a genuine exit point. A working fisherman may take a single short course and return to sea; a school leaver may complete a certificate in engine repair and enter employment; a certificate holder with the necessary academic preparation may progress to the Diploma; a Diploma graduate may enter technical employment or seek admission to degree study.



Graduation ceremony, Bosaso.

Marine science education

Academic provision is organised into three departments — Navigational, Fishing Technology and Marine Environment — each headed by a principal and an Institute Council. The disciplinary scope covers navigation, fish technology, craft technology, seamanship and sea survival, the marine environment, and integrated coastal zone management. Teaching is supported by field assessment work conducted by lecturers and students in the coastal villages of Bari Region and on marine and coastal ecosystems.

The Diploma in Marine Science is delivered over two years and four semesters through lectures, laboratory practicals, marine fieldwork, a supervised attachment and an individual research project. Admission requires an application form, a curriculum vitae, a high school certificate or equivalent from a recognised school, and an interview.

Vocational training

Why a research institute retains a vocational function

The people who catch, handle and process Puntland's fish are the people whose practice determines whether the resource is used well. Research that identifies a better handling method or a more selective gear achieves nothing until that practice reaches the fleet. The vocational function is the Institute's delivery mechanism into the sector, and it is also its listening post: instructors working with fishermen learn what the real constraints are. Separating the two would weaken both.

The Institute's vocational catalogue is built on eight core fisheries trades, delivered through practical, workshop and field-based instruction.

Trade	Content
Fishing Technology	Fishing systems and methods; gear types and their application; matching gear to target species and conditions; efficiency and selectivity.
Fishing Techniques	Practical operation of fishing methods; shooting, setting and hauling; handling of catch on board; techniques new to the area.
Fish Processing and Preservation	Chilling, freezing, drying, salting and smoking; process control; product quality and shelf life.
Fish Handling	Handling from capture to first sale; hygiene; icing and temperature control; damage avoidance; landing practice.
Net Repairing	Net construction, mending, rigging and maintenance; materials, twines and knots; repair of damage at sea and ashore.
Sea Safety and Survival	Safety at sea; personal survival technique; use of life-saving appliances; emergency procedures; distress signalling; first aid at sea.
Boat Repairing	Hull maintenance and repair; materials; fitting-out; routine and preventive maintenance of small fishing craft.
Engine Repairing	Outboard and inboard engine operation, servicing, fault diagnosis and repair; fuel systems; preventive maintenance.



Outboard engine strip-down and repair training in the Institute's workshop.



Net-making and net-repair instruction for women trainees, Bosaso.

Working fishermen training



Sea safety and survival training — practical instruction on the shore.

The Working Fishermen Professional Development Programme provides structured short-course training designed around the working fisherman's calendar. Its purpose is to enable fishermen to increase their technical skills and knowledge, to keep abreast of improved fishing and navigation techniques, and to qualify for promotion. It complements, rather than replaces, the Institute's longer training programmes: it extends provision to advanced specialised training for promotion, to techniques new to the area, to the operation, maintenance and repair of outboard engines and gear, to those unable to attend a basic long-term course, and to accelerated training.

Delivery mode	Provision
Evening courses	Instruction outside fishing hours, allowing attendance without loss of a working day.
Seasonal courses	Courses concentrated in the south-west monsoon period or other slack fishing periods when the fleet is not operating.
Daytime release courses	Short daytime courses for which fishermen temporarily leave their work for short periods.
Mobile training	Instructors and demonstration equipment travel to fishing centres, extending provision to isolated areas.
Practical demonstration	Instruction built on demonstration and supervised practice with real equipment rather than classroom exposition.



Supervised practical work: launching and handling of a training craft.



Sea safety theory session preceding practical instruction, Bosaso.

Professional and short courses

The Institute delivers a catalogue of short mandatory and professional courses for sector personnel: personal survival techniques; basic firefighting; advanced fish inspection and quality assurance; extension and information services training; shipping and cargo handling; port management; and clearing and forwarding.



10

FISHERIES AND MARINE SCIENTIFIC SERVICES

Beyond its own research and teaching, the Institute provides scientific and technical services to Government, to industry and to partner institutions. These services are the practical expression of its advisory mandate and a route to institutional sustainability through cost recovery.

Service	Description	Principal users
Scientific and technical advice	Technical and scientific advice to the Ministry on matters relating to the sustainable use of marine and fisheries resources.	Ministry of Fisheries and Marine Resources
Stock assessment and management advice	Assessment of the condition of exploited stocks, biological reference points, fisheries indicators, and management advice notes stating the implications for decisions.	Fisheries management authorities; regional bodies
Fisheries statistics and reporting	Catch, effort and landing statistics; statistical bulletins; data supporting national, regional and international reporting obligations.	Ministry; planners; regional and international bodies
Species identification and verification	Taxonomic identification and verification of marine species, supported by the reference collection and the national species database.	Government; industry; researchers; conservation bodies
Fish quality and safety analysis	Analytical support to fish inspection, quality assurance and product safety.	Fish processors and exporters; regulators
Water quality and environmental analysis	Analysis of marine water quality, contaminants and environmental condition.	Environmental regulators; developers; conservation programmes
Marine spatial analysis	GIS and remote sensing products: coastline, habitat, landing site, fishing ground and managed area layers.	Spatial planners; conservation and management authorities
Technical publication and extension	Technical reports, manuals, policy briefs and species identification resources, and extension to coastal communities.	Ministry; industry; communities; the public
Applied research on contract	Co-designed and co-funded applied research addressing defined sectoral or commercial questions.	Fisheries companies; development partners; NGOs
Contracted training and demonstration	Design and delivery of training and practical demonstration programmes for companies, projects and development partners, with curricula, materials and completion reporting.	Fishing companies; ministries; UN agencies; NGOs

Fish quality and safety analysis and water quality and environmental analysis depend on the Institute's laboratory platform, which is not yet operational (see Section 11). These two services will be delivered once the laboratories are commissioned; all other services listed above are delivered from the Institute's existing scientific, field and training capability.



The advisory relationship

A fisheries administration without a research institute is obliged to manage its most valuable renewable natural resource without knowing its condition. The Institute supplies the assessments, datasets and technical advice on which management decisions can be made and defended — and it does so as a scientific institution with its own research agenda, reporting findings as they are found.



11

DATA, LABORATORY AND TECHNICAL SERVICES

The national marine and fisheries information system

Collecting, managing and safeguarding scientific data and maintaining national marine and fisheries databases is a core responsibility of the Institute. The information system holds the following components.

Component	Content	Primary use
Fisheries databases	Integrated repository of catch, effort, landing, vessel and gear records.	Management; assessment; reporting
Species database	National record of marine species: occurrence, distribution, identification characters, reference material.	Identification; conservation; teaching
Fish landing data	Landings by site, species, gear, date and quantity.	Production statistics; assessment inputs
Catch and effort data	Catch composition and fishing effort by fleet segment, season and area.	CPUE; stock assessment; management
Biological datasets	Length, weight, sex, maturity and age records from biological sampling.	Growth, mortality and maturity estimation
Oceanographic data	Physical and chemical measurements and time series.	Environmental interpretation; climate analysis
Marine environmental data	Water quality, pollution, habitat condition and biodiversity records.	Conservation; environmental reporting
GIS databases	Spatial layers: coastline, habitats, landing sites, fishing grounds, managed areas.	Spatial planning; mapping; area management
Research datasets	Curated datasets from completed and ongoing research projects, linked to the research register.	Reanalysis; verification; collaboration

Data are held under an institutional data-management policy governing collection protocols and enumerator training, quality assurance, secure storage, controlled sharing, archiving and custody.

Laboratory and scientific services

Current status of the laboratory platform

The Institute's laboratories are **not yet operational**. The laboratory platform has been designed and its structure, functions and priority order established, but the facilities, equipment and analytical staffing required to bring it into service have not yet been put in place. No analytical service is therefore offered or performed at present, and no result reported in this profile derives from laboratory analysis.

Commissioning the platform is the Institute's most immediate development priority, and it is expected to enter service as soon as the necessary facilities, equipment and trained analytical personnel are secured. The laboratories are to be established in the priority order set out below, beginning with marine biology and fisheries biology, which serve the stock assessment function directly. Partner and donor investment in this platform is accordingly the single intervention that



would most rapidly extend the Institute's scientific capability.

The laboratory platform, once commissioned, will provide the analytical capability on which research, teaching and technical service delivery depend. It is structured into the following laboratories, each with its intended function.

Laboratory (planned)	Intended function on commissioning
Marine Biology Laboratory	Examination, dissection, preservation and identification of marine organisms; morphometric measurement; specimen preparation and curation; the marine reference collection; practical teaching in marine biology, ecology and taxonomy.
Fisheries Biology Laboratory	Biological analysis of sampled fish and invertebrates in support of stock assessment: length and weight measurement, sex determination, maturity staging, gonad and stomach analysis, and age structure preparation and reading.
Water Quality Laboratory	Analysis of marine and coastal water quality in support of environmental assessment, aquaculture and conservation research.
Marine Environmental Laboratory	Analysis of contaminants, marine litter and environmental condition in support of pollution monitoring and environmental reporting.
Aquaculture Laboratory	Analytical and experimental support to aquaculture research, including species suitability, hatchery technique, and feed and nutrition work.
Fish Taxonomy & Identification Laboratory	Taxonomic determination and verification; development of identification keys and reference resources; support to the national species database.
GIS & Remote Sensing Laboratory	Spatial data capture, mapping and analysis; habitat mapping; marine spatial analysis in support of management and conservation planning.
Computer & Data Laboratory	Database administration, statistical analysis and scientific computing; teaching of data collection, management and analysis.

On commissioning, laboratory operations will be governed by documented quality assurance and safety procedures, and analytical services will be offered to external clients on a cost-recovery basis. Until that point, work requiring laboratory analysis is undertaken through partner and external laboratories where a programme requires it.

Field operations

Field capability — landing site sampling, coastal survey, biological sampling and at-sea observation — underpins every research programme the Institute runs. It is developed in stages: shore-based and landing-site sampling first, then chartered and small-craft coastal operations, and thereafter dedicated research vessel and field station capability as resources permit. The Institute's established presence in coastal districts including Bandarbeyla and Bargaal provides the operational base on which that sampling network can be built.



12

MARINE CONSERVATION AND THE BLUE ECONOMY

Marine conservation

Conservation at the Institute is scientific rather than advocacy work: PMAFRI provides the evidence on which protection decisions are made and monitors whether protection is achieving its purpose.

Focus area	Scientific activity	Application
Marine biodiversity	Survey and monitoring of species richness and community composition; maintenance of biodiversity records.	Conservation planning; national and international reporting
Vulnerable and endangered species	Assessment of occurrence, distribution and status; assessment of fishing gear interactions and incidental capture.	Species protection measures; gear modification advice
Marine protected areas	Scientific input to site identification, boundary definition, objectives and monitoring design; assessment of ecological and fishery effects.	MPA planning and evaluation
Habitat protection	Mapping and condition assessment of critical habitats; identification of nursery and spawning areas requiring protection.	Area-based management; spatial planning
Coral reefs	Reef extent, condition and community composition; bleaching and disturbance monitoring.	Reef management; climate impact assessment
Mangroves	Mangrove extent, condition, regeneration and nursery function; assessment of pressures from cutting and coastal development.	Restoration; coastal protection planning
Seagrass	Seagrass distribution, condition and ecological function, including support to associated fisheries and sediment stabilisation.	Habitat protection; blue carbon assessment
Coastal ecosystems	Integrated assessment of intertidal, estuarine and nearshore systems and the pressures acting on them.	Integrated coastal zone management
Marine pollution	Monitoring of contaminants, marine litter and land-based discharges; assessment of effects on resources and human health.	Pollution control; food safety
Climate impacts	Assessment of warming, acidification, sea level and storm regime effects on habitats, resources and coastal communities.	Adaptation planning; resilience programming

Conservation and fisheries science are treated as complementary rather than opposed: habitat degradation reduces fishery productivity, and the same evidence base serves both protection and production.



The blue economy

Supporting the sustainable development of Puntland's blue economy is the Institute's ultimate purpose. Each of its functions contributes to that outcome.

Contribution	The Institute's role
Sustainable fisheries	Determine stock status and sustainable harvest levels; provide management advice.
Marine research	Generate the scientific knowledge base for all marine economic activity.
Marine conservation	Protect the habitats and biodiversity on which productivity depends.
Aquaculture	Develop production capacity that supplements capture fisheries rather than competing for the same stocks.
Fisheries value chains	Raise the value realised from each unit of catch through improved handling, preservation and processing.
Marine technology	Address the sector's technology constraint through gear, vessel and engine improvement.
Coastal employment	Supply skilled workers to the sector and improve the earning capacity of those already in it.
Youth skills	Convert an unemployed young population into a skilled sector workforce.
Marine innovation	Develop and test technologies and practices suited to local conditions and capacities.
Climate resilience	Assess climate impacts on marine resources and coastal communities and inform adaptation.
Scientific policy advice	Give Government the evidence base for marine and fisheries policy.
Blue economy development	Provide the data, the trained workforce and the scientific credibility that marine investment requires.

The investment argument

Blue economy investment requires three things a state must supply for itself: knowledge of what the resource is and what it can sustain; a workforce able to operate the sector; and institutions credible enough that findings and certifications are accepted by markets and partners. Puntland has the coastline. PMAFRI is the institution that supplies the other three.



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GOVERNANCE AND INSTITUTIONAL STRUCTURE

The Institute is governed under By-Laws providing for a Governing Board as its highest governing and strategic oversight body, a Director General as chief executive and accounting officer, and a departmental structure with two assurance functions holding functional independence.

The Governing Board

Element	Provision
Size	Not fewer than five and not more than nine members.
Appointment	Appointed by the Minister of Fisheries and Marine Resources in accordance with the By-Laws and applicable law.
Expertise	Members include persons with expertise in marine science, fisheries, research, finance, law or public administration.
Director General	Ex-officio member and secretary to the Board, without a vote on matters concerning the Director General's own performance or conduct.
Term	Three years for members other than ex-officio members, renewable once.
Meetings	At least four times in each financial year, and at any other time convened by the Chairperson.
Quorum and decisions	A simple majority of members; decisions by majority of members present and voting, with a casting vote for the Chairperson.
Records	Minutes of every meeting recorded, confirmed and retained as official records of the Institute.

Functions of the Board

- Review and recommend the strategic plan, annual work plan and budget to the Minister.
- Oversee the financial management, risk management and performance of the Institute.
- Approve internal policies and procedures consistent with the By-Laws.
- Consider the internal audit and risk reports.
- Advise the Minister and the Director General on the development of the Institute.

The Director General

The Director General is the chief executive and accounting officer of the Institute, responsible for strategic leadership, implementation of policy, coordination of departments, external representation, and oversight of the assurance functions. All departments and units are accountable through the Director General, who is in turn accountable to the Governing Board.

Institutional relationship with the Ministry

The Institute works in close statutory coordination with the Ministry of Fisheries and Marine Resources. The Ministry approves the strategic plan and budget, appoints the Director General and members of the Governing Board, and receives the annual report and audited accounts. This is an institutional relationship rather than an internal reporting line: PMAFRI



is a scientific institution coordinating with Government, not a division within it, and its scientific findings are reported as they are found.

Organisational structure

The Office of the Director General is supported by two assurance functions with functional independence — Internal Audit & Compliance, reporting functionally to the Board, and Planning, Monitoring & Evaluation and Quality Assurance. The Institute's operating departments are organised in four groups.

Group	Departments and units
Research and scientific departments	Marine Research & Oceanography Fisheries Science & Stock Assessment Marine Biology, Ecology & Biodiversity Aquaculture & Fisheries Technology Marine Environmental Science & Conservation
Education and training departments	Marine Science Education — Diploma, certificates and the academic departments Vocational & Professional Training — the core trades, working fishermen and short courses
Scientific and technical services	Fisheries Data, Statistics & Information Marine & Fisheries Laboratory Services GIS, Remote Sensing & Spatial Analysis Research Vessel & Field Operations
Corporate services	Finance & Administration Human Resources Procurement & Logistics Partnerships, Resource Mobilization & External Relations Communications & Outreach

Organisational structure of the Puntland Marine and Fisheries Research Institute. The Governing Board is the highest body in the Institute's internal governance.

Governance in practice

Research at the Institute proceeds under an approved research agenda and a register of projects, with written proposals, ethical clearance where required, and defined rules on intellectual property and publication. Financial governance provides for a named accounting officer, internal controls, competitive procurement, internal audit and external audit by the State audit authority.

The Institute has operated under the financial guidelines, procurement rules, verification and audit provisions of international development partners in its implementation work, and has reported against agreed deliverables and timelines under signed partnership agreements.



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NATIONAL AND REGIONAL ROLE

PMAFRI is the scientific reference institution for Puntland's marine and fisheries sector: it supplies the stock assessments that underpin management decisions, the trained technicians and graduates the sector employs, the datasets that inform policy, and the laboratory and analytical capacity now being established, which neither the Ministry nor the private sector maintains independently.

National objective	PMAFRI contribution
Evidence-based fisheries management	Stock assessments, catch and effort analysis, biological reference points and fisheries indicators, converted into management advice that authorities can act on and defend.
Marine and fisheries policy	Technical and scientific advice to the Ministry, and policy briefs translating research findings into decision-relevant terms.
Fisheries stock assessment	A dedicated assessment function, without which the condition of the State's most valuable renewable natural resource is unknown.
Marine conservation	Scientific basis for habitat protection, species conservation and protected area planning, and monitoring of whether protection is achieving its purpose.
Scientific data	National marine and fisheries databases held under institutional custody, supporting management, planning, research and reporting obligations.
Human resource development	Diploma graduates, certificated technicians and trained fishermen entering the sector, the public service and further education.
Fisheries sector development	Improved technology, handling and post-harvest practice raising the value realised from the catch and the efficiency of the fleet.
Coastal communities	Skills, employment pathways and extension reaching coastal communities where they live.
Blue economy	The knowledge base, workforce and institutional credibility that marine economic development requires.
National research capacity	A governed scientific institution serving as the counterpart for regional and international research collaboration.



Institutional engagement with government and academic institutions.

Regional significance

Regionally, the Institute offers partners in the Western Indian Ocean a credible institutional counterpart for joint research, data exchange, student and staff mobility, and collaborative marine surveys. It contributes national data to regional assessments and reporting, and provides a scientific node in a part of the region where institutional coverage is thin and the coastline scientifically under-described.



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PARTNERSHIPS AND COLLABORATION

The Institute collaborates with universities, research centres, scientific bodies, government institutions, United Nations agencies and development programmes, nationally and internationally, in joint research, data sharing, staff exchange, training delivery and capacity building. Cooperative relationships with national and international institutions for research, training, data exchange and technical assistance are established with the approval of the Minister, and must serve the mandate of the Institute and comply with the laws and external-relations policies of Puntland and the applicable arrangements of the Federal Republic of Somalia.

Research agreements and memoranda of understanding are made in writing, reviewed for legal and financial soundness, and retained in the official records. Donor support is received where it is transparent, lawful and consistent with the independence and integrity of the Institute.

Established institutional relationships

The Institute has delivered work in partnership with, among others, the Ministry of Fisheries and Marine Resources and the Ministry of Ports of Puntland State; the Food and Agriculture Organization of the United Nations, under the RAAISE Growth in Somalia programme; the United Nations Development Programme, under the SAAMEYNTA programme; the Promoting Inclusive Markets in Somalia (PIMS) programme implemented by Development Alternatives Inc. with DFID and DANIDA funding; and Oxford and KAALLO Netherlands in fisheries training and skills development. Full particulars of these engagements are set out in Section 07.

What partnership with PMAFRI offers

Partner category	What PMAFRI offers	What PMAFRI seeks
Universities	Field sites and access to a scientifically significant coastline; local knowledge and logistical capability; student and staff counterparts; an established teaching institution.	Curriculum development support; supervision of student research; staff development and postgraduate opportunities; programme validation pathways.
Research institutes	Access to Puntland waters and fisheries; sampling capability; co-authorship; institutional continuity for long-term data series.	Methodological support; analytical capability; joint assessment work; access to laboratories and research vessels.
Regional marine institutions	A counterpart institution for regional programmes; national data contribution; participation in regional assessments.	Regional data standards and protocols; training; participation in regional stock assessments and surveys.
International organizations and UN agencies	Proven implementation capacity for marine and fisheries programmes, including in remote coastal districts; a scientific counterpart; training delivery capability.	Technical assistance; equipment; standards and methods; access to international scientific networks.
Development partners and donors	A governed institution with an accounting officer, audit provision and reporting framework, and a record of delivery and reporting under partner financial guidelines.	Investment in laboratories, equipment, field capability, staffing and programme development.



Partner category	What PMAFRI offers	What PMAFRI seeks
Fisheries companies	Trained workforce; technical advice; product and process development; contracted training and demonstration; and laboratory and quality assurance services on commissioning of the laboratory platform.	Access to catch and landing data; attachment placements; equipment and facility support; co-funded applied research.
NGOs	Scientific credibility for conservation and livelihoods programming; monitoring and assessment capability; training delivery.	Community access and trust; co-funding; field programme partnership.
Coastal communities	Training, extension, employment pathways for young people and women, and scientific attention to the resources on which they depend.	Local ecological knowledge; access for sampling; participation in data collection and co-management.

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BENEFICIARIES AND STAKEHOLDERS

The Institute serves a defined set of beneficiaries, and that specification is one of the reasons its vocational function is not a peripheral activity but part of its purpose.

Group	How PMAFRI serves them
Youth	The youth population of Puntland State and of Somalia more widely: all vocational and certificate provision, and Diploma entry for those holding a high school certificate.
Women	All programmes, with active encouragement of applications and monitoring of gender balance under the Institute's gender equity principle, and dedicated training in fish handling, processing and net work.
School leavers	Certificate programmes and the core trades.
School dropouts	Certificate programmes and short courses, which carry no formal academic prerequisite.
Upper primary graduates	Practical, competence-based vocational training not dependent on advanced literacy.
Marginalized groups	Non-discriminatory admission and outreach through mobile training.
IDPs, returnees, rural migrants and the urban poor	Mobile and community-based delivery, with short-course entry points requiring no prior qualification, and dedicated skills programmes such as that delivered for internally displaced persons in Girible, Bosaso.
Working fishermen	The Working Fishermen Professional Development Programme: technical skills, updated technique and qualification for promotion.
Coastal fishing communities	Community training in safe fish handling, processing and value addition delivered in coastal districts including Bandarbeyla and Bargaal.



Women trainees at the Institute's Bosaso training facility.



Classroom demonstration session, Fil-Fil Fishing Vocational Training Center.



Institutional stakeholders

Stakeholder group	Composition
Government	Ministry of Fisheries and Marine Resources; Ministry of Ports; fisheries management authorities; environmental authorities; planning and policy institutions
Sector	Fishing companies and cooperatives; fish processors, traders and exporters; aquaculture entrepreneurs; boat and engine services
Academic and scientific	Universities; research institutions; regional marine bodies; scientific networks
Development	UN agencies; international organizations; development partners and donors; NGOs
Community	Coastal communities of Bari Region and the wider Puntland coast; fishing households; youth and women's groups
Learners	Diploma and certificate students; short-course participants; working fishermen; sector professionals

The PMAFRI proposition — scientific excellence, human capital development and community impact

These three are usually held by different institutions: a research institute, a training centre and a community programme. PMAFRI holds all three, and the combination is what distinguishes it. The research gives the training its technical content and currency. The training gives the research its route into practice and its relationship with the communities whose fisheries it studies. The community focus determines who benefits from both.



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STRATEGIC IMPORTANCE AND POSITIONING

PMAFRI occupies a position no other institution in Puntland occupies. It is the scientific institution for the marine and fisheries sector, and it is simultaneously the sector's principal source of trained people, with a delivery record built over more than a decade of academic, vocational and programme work. That combination — rare anywhere in the region — is the basis of its strategic value to Government, to partners and to investors.

To	The institutional value
Government	A scientific institution able to state the condition of the resource, advise on its management, and hold the national data on which policy and reporting depend — governed, audited and accountable.
Development partners	An institutional platform with a Governing Board, an accounting officer, audit provision and a reporting framework, and a demonstrated record of implementing and reporting on funded programmes: the conditions required to receive, deploy and account for programme funding.
Universities and research institutions	A resident counterpart on a scientifically significant and data-poor coastline, with sampling capability, local knowledge and institutional continuity for long-term data series.
Industry and investors	The knowledge base, the trained workforce and — on commissioning of the laboratory platform now being established — the analytical and quality assurance capability that marine and fisheries investment requires.
Coastal communities	Skills and employment pathways for young people and women, extension reaching isolated fishing centres, and scientific attention to the resources on which their livelihoods depend.

Institutional priorities

The Institute's development is directed at converting its mandate into full operating capability, in the following order of priority.

- **Scientific capability.** Establishing the landing site sampling, biological sampling and effort data systems on which stock assessment depends, and the trained personnel to run them.
- **Data systems.** Building the national marine and fisheries databases and the data governance under which they are held.
- **Laboratory platform.** Commissioning the laboratories, which are not yet operational, in priority order, beginning with marine biology and fisheries biology.
- **Education and training.** Consolidating the three-level education ladder and strengthening the quality assurance framework under which awards are made.
- **Partnerships and resources.** Establishing written research and education partnerships and mobilising the resources required for the scientific programme.

A fisheries administration without a research institute is obliged to manage its most valuable renewable natural resource without knowing its condition.



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LOCATION AND CONTACT

The Institute is located in the port city of Bosaso, Bari Region, Puntland State of Somalia, with field delivery along the Bari coast.

Facility	Location
Office of Academic Studies	East of Bosaso sea port, approximately 500 metres from Hiddig boat building, Bosaso, Bari Region, Puntland State of Somalia.
Vocational training facility	Seashore at Soweto, eastern side of Bosaso Port, near the OTP building, Bosaso, Bari Region, Puntland State of Somalia.
Fil-Fil Fishing Vocational Training Center	Bosaso, Bari Region, Puntland State of Somalia.
Sectoral coordination	Ministry of Fisheries and Marine Resources, Puntland State of Somalia.

Contact

Enquiries concerning research collaboration, training services, partnership and institutional matters may be directed to the following officers of the Institute.

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PUNTLAND MARINE AND FISHERIES RESEARCH INSTITUTE

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Marine Research • Fisheries Science • Marine Education • Training • Innovation

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