Foreword

Agriculture plays a vital role in Philippine economy. Thus, the sector needs to be assisted with improved and innovative services and interventions such as research and development (R&D) to increase productivity and enhance income generation. To help attain these, the agriculture and fisheries R&D sectors are continuously developing and generating technologies geared towards sustainable and stable growth of the agricultural sector.

The Department of Agriculture-Bureau of Agricultural Research (DA-BAR), being the mandated coordinating agency for agriculture and fisheries R&D, is concentrating its efforts in delivering results for the betterment of the Filipino people particularly the farmers and fisherfolk.

In pursuit for excellence in agriculture and fisheries R&D, the Bureau supports and coordinates R&D programs and projects being implemented by its partner R&D institutions and agencies, which are in line with the programs and DA’s thrusts and priorities and the Bureau’s R&D agenda. From its conceptualization and adoption in September 2005, the Bureau presents the integration of the Quality Management System Policy Manual as a guide and reference documented information for R&D stakeholders in establishing, implementing, maintaining and continually improving the Bureau’s Quality Management System, including the processes in packaging of proposals under the different R&D programs of the Bureau. This QMS Policy Manual ensures an overview of the streamlined systems and procedures for the implementation, monitoring and evaluation of all DA-BAR-supported R&D projects in accordance with the requirements of the ISO 9001:2015 standard.

This Quality Management System (QMS) Policy Manual supplements the operational procedures of each division and sections that contain the guidelines and formats in packaging proposals, the process of proposal screening and evaluation, as well as the process of monitoring and evaluation for specific major R&D programs namely Basic and Applied Research, [i.e. Community-based Participatory Action Research (CPAR)], National Technology Commercialization Program (NTCP), Institutional Development Program (including Research Facilities Development Grant and Human Resource Development Program) and Scientific Publication Grant (SPG).

I hope that this QMS Policy Manual would properly guide us on the integration of the requirements of ISO 9001:2015 with the processes of research and development grants of DA-BAR, which are all geared towards the attainment of an improved and satisfactory life for the farmers and fisherfolk.

Original Signed

DR. NICOMEDES P. ELEAZAR, CESO IV
Director, Bureau of Agricultural Research
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**APPENDICES**

ELEMENTS OF ISO 9001:2015 STANDARD AND CORRESPONDING DOCUMENTED INFORMATION OF BUREAU OF AGRICULTURAL RESEARCH (BAR) 71
1.0 USER’S GUIDE AND CONTROL OF THE QMS MANUAL

1.1 Introduction

1.1.1 This QMS Policy Manual is authorized for use in Bureau of Agricultural Research (BAR). The manual describes the Quality Management System (QMS) of BAR for its services of coordinating and providing grants to agriculture and fisheries researches.

1.1.2 The manual defines the overall scope, design, functional structure and responsibilities, documentation structure and the core elements of the Quality Management System. It also provides a brief description of BAR, its business processes and services. It provides a description of how the elements of the ISO 9001:2015 Standard are integrated into its business processes and services. Where appropriate, it also provides referencing to detailed action plans, programs, procedures, best practices, work instructions and other documented information that relate to how BAR intends to satisfy the requirements of the different elements of ISO 9001:2015 Standard.

1.1.3 In whole, the manual defines BAR’s overall planning, implementation and operation, performance evaluation, and continual improvement of its QMS. It serves as the primary reference of BAR in managing its business processes and services that have or can have adverse impacts in the continuity of its operations, fulfilling compliance obligations, and in improving its image and reputation.

1.1.4 This QMS Policy Manual applies to all BAR interested parties that can affect, be affected by, or perceive itself to be affected by its processes and services.

1.2 Purposes of the QMS Policy Manual

1.2.1 The QMS Policy Manual is developed and used by BAR for purposes including but not limited to the following:

1.2.1.1 Describing the core elements of the management system and as framework in its effective establishment, implementation, maintenance and continual improvement;

1.2.1.2 Communicating BAR’s quality policy, objectives (Major Functional Output) and the key requirements of its QMS to employees, customers, visitors, suppliers and service providers, stakeholders and other interested parties;

1.2.1.3 Providing improved and best practices, and in facilitating controls in BAR’s operations to continually improve its performance;

1.2.1.4 Providing continuity of BAR’s QMS and its requirements during changing circumstances;

1.2.1.5 Training BAR employees and external providers on the QMS requirements, thereby enabling them to understand their respective roles and responsibilities in achieving the intended results of the management system;
1.2.1.6 Providing a documented management system, which serves as a basis in evaluating the continuing suitability, adequacy and effectiveness of the QMS; and

1.2.1.7 Demonstrating compliance with the requirements of ISO 9001:2015 Standard, to which this QMS is based.

1.3 Control of the QMS Policy Manual

1.3.1 The preparation and revision of this manual is the main responsibility of the Document Controller (DC). The review of its appropriateness and adequacy is the responsibility of the Quality Management Representative (QMR) while its approval and authorization for use is with the Director. The DC is responsible for uploading in BAR’s intranet/ website the appropriately reviewed and approved copy of the Policy Manual, including keeping the master (original) copy of the document.

1.3.2 All pages of the manual shall have the same format, except for the first page where the header will include name and signature of the functions for the preparation, review, notation and approval of the document. The header contains the following information:

- Official logo of BAR
- Title of manual
- Document title and number
- Page number
- Effective Date
- Revision number

The footer in every page reflects the following:

Authorised printed copy of this document must have the Controlled Stamp and distributed only to approved Copyholders. This document must not be reproduced or photocopied without prior approval of the Director and/or QMR.

1.3.3 The Effective Date is the date when the document becomes officially implementable. The Revision Number shows the document has been prepared or revised, with 0 as the initial revision. The status and description of the revision are detailed in the Revision History.

1.3.4 The manual is subject to regular review, and where applicable, revision once every three (3) years. Should there be changes to any part of the manual during the year, the revision is carried out based on the established procedure on control of documented information of BAR.

1.4 Confidentiality and Distribution

1.4.1 This QMS Policy Manual is confidential and propriety of BAR. Current and approved copy of the policy manual in PDF format marked “Original Signed” shall be uploaded in the designated shared folder in BAR’s intranet/ website and shall be maintained by the DC. Uploaded documents shall be watermarked as CONTROLLED. Uploaded documents are accessible to all BAR employees with defined viewing rights. BAR employees shall use only the “CONTROLLED” copies as reference in the performance of their work.
1.4.2 Any employee shall not reproduce controlled and uncontrolled copies. When requested and approved by the Quality Management Representative or the Director, copies of the Policy Manual will be provided to clients to meet contractual obligations or for other purposes. Unless specifically requested, these uncontrolled copies will not be subjected to revision servicing and will be marked with:

**UNCONTROLLED COPY**

Bureau of Agricultural Research

1.4.3 This manual is maintained on a controlled basis. A Master Copy (hard copy) is maintained by the DC. Only the controlled copies are considered as official documents. Where need arises, reproduction of controlled copies is done from the Master Copy only and with the permission of the Director and/or QMR. Printing or e-copying of uploaded documents is restricted and must be appropriately permitted. The DC shall ensure that the policy manual is available to relevant employees in their respective areas. Controlled hardcopies shall be provided to work stations at strategic locations where there is no or limited access to the electronic management system documentation.

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1.4.4 The manual may be distributed to external interested parties when deemed mutually beneficial or when required contractually or obligatory, i.e., regulatory bodies, certification body, customers, etc. Any external distribution of the manual is subject to the approval of the Director and/or QMR and are considered uncontrolled. Uncontrolled copies are not updated when the document is revised.

1.5 Amendments

1.5.1 The introduction of new processes and/or services or a change in the management structure may necessitate amendment or addition to policies described in this policy manual. Any comments, suggestions, or questions regarding the QMS and this QMS Policy Manual may be forwarded to the QMR.

1.5.2 Only the QMR is authorized to effect revision on the policy manual and for the DC to upload appropriately reviewed and approved document. When any part of the policy manual is revised, the uploaded policy manual shall be replaced with the current version and the master copy of the revised page or document shall be marked OBSOLETE.
1.5.3 Obsolete documents shall be removed from the shared folder permanently. The DC is tasked to ensure that obsolete electronic copies are securely deleted from the server. The e-copy of the superseded document shall be kept in the designated “Obsolete” folder for reference. The editable e-copy of the document shall be filed accordingly. Only the e-copies kept by the DC shall be considered official.
2.0 TERMS AND DEFINITIONS

2.1 Definition of Terms

The following terms are used in this manual and other QMS documentation, using the ISO 9001:2015 Standard definition and as being popularly practiced and understood in BAR:

2.1.1 Audit – systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

2.1.2 Audit Conclusion – outcome of an audit provided by the auditor or team of auditors, after consideration of the audit objectives and all audit findings.

2.1.3 Audit Criteria – set of policies, procedures or requirements used as reference in the audit.

2.1.4 Audit Findings – results of the evaluation of the collected evidence against audit criteria.

2.1.5 Audit Program – set of one or more audits planned for specific time frame and directed towards a specific purpose. This is also referred to as Annual QMS Audit Program.

2.1.6 Auditor – person with the competence to conduct an audit.

2.1.7 Competency – should be understood as the application of knowledge, understanding, proficiency, skills, confidence and, where appropriate, the qualities of leadership necessary for an individual to perform a specified task, duty or responsibility.

2.1.8 Continual Improvement – a recurring activity to enhance performance.

2.1.9 Compliance Obligation – legal requirements that an organization should comply with and other requirements that an organization chooses to comply with.

2.1.10 Conformity – fulfilment of a requirement.

2.1.11 Contractor – refers to an individual or an entity engaged by BAR to provide service for its operations (see “Supplier”), i.e., haulers, security services, construction, repairs and maintenance contractor. Also, referred to as external provider.

2.1.12 Context of the Organization – combination of internal and external issues that can have an effect on an organization’s approach to developing and achieving its objectives.

2.1.13 Continual – activity occurs over a period but with potential intervals of interruption, while ‘Continuous’ means duration without interruption.

2.1.14 Control Measure – any action and activity that can be used to prevent or eliminate, environmental aspect.

2.1.15 Correction – action taken to correct or stop or mitigate the impacts of a detected nonconformity or other undesirable and substandard condition.
2.1.16 **Corrective Action** – action to eliminate the cause of a nonconformity and to prevent recurrence or occurrence.

2.1.17 **Customer** – person or organization that could or does receive a product or a service that is intended for or required by this person or organization. Recipient of the services provided by BAR.

2.1.18 **Customer Satisfaction** – customer's perception of the degree to which customer's expectations have been fulfilled.

2.1.19 **Design and Development** – set or processes that transform requirements for an object into more detailed requirements for that object.

2.1.20 **Document** – meaningful data and other information and its supporting medium, i.e., procedure, specification, drawing, report, standard, records, etc. The medium can be paper, magnetic, electronic or optical disc photograph, or master sample, or a combination thereof. Also, referred to as documented information to be maintained.

2.1.21 **Documentation** – a set of documents and records containing meaningful information, i.e., policies, specifications, procedures, guidelines, work instructions and records.

2.1.22 **Documented Information** – information required to be controlled and maintained by an organization and the medium which it is contained.

2.1.23 **Effectiveness** – extent to which planned activities are realized and planned results achieved.

2.1.24 **Engagement** – involvement in, and contribution to, activities to achieve shared objectives.

2.1.25 **External Provider** – refers to an individual or business entity engaged by BAR to provide products and services. As used in this Policy Manual, this can be the Suppliers and/or Service Providers.

2.1.26 **Feedback** – opinions, comments and expressions of interest in a product, a service or a complaints-handling process.

2.1.27 **Indicator** – measurable representation of the condition or status of operations, management or conditions.

2.1.28 **Infrastructure** – system of facilities, equipment and services needed for the operation of an organization.

2.1.29 **Interested Party** – person organization that can affect, be affected by or perceive itself to be affected by a decision of activity.

2.1.30 **Involvement** – taking part in an activity, event or situation.

2.1.31 **Local Government Unit (LGU)** – government entities that visit BAR regularly to check on its compliance to applicable laws, regulations and requirements, i.e., Barangay Representatives, Municipal Officials, etc.

2.1.32 **Management** – coordinated activities to direct and control an organization.
2.1.33 **Measurement** – process to determine a value.

2.1.34 **Mission** – organization’s purpose for existing as expressed by top management.

2.1.35 **Monitoring** – determining the status of a system, a process, product, service or an activity.

2.1.36 **Nonconformity** – non-fulfillment of a requirement. Any deviation from work standards, practices, procedures, regulations, and other management system requirements, that could either directly lead to customer complaints, damage to goods and services, injury or illness, property damage, damage to the workplace environment or combination of these. This may also be referred to as non-conformance.

2.1.37 **Objective** – results to be achieved. An objective can be strategic, tactical or operational.

2.1.38 **Output** – result of a process.

2.1.39 **Outsource** – an arrangement where an external organization performs part of a Bureaus' function or process.

2.1.40 **Performance** – measurable result. Can relate either to quantitative or qualitative findings.

2.1.41 **Procedure** – specified way to carry out an activity or a process. Procedures can be documented or not.

2.1.42 **Process** – set of interrelated or interacting activities that use inputs to deliver an intended result. Whether the “intended result” of a process is called output, product or service depends on the context of the reference.

2.1.43 **QMS Performance** – measurable results of the QMS associated to BAR’s products and services based on its quality policy and objectives.

2.1.44 **Quality** – degree to which a set of inherent characteristics of an object fulfils requirements.

2.1.45 **Quality Assurance** – part of the quality management focused on providing confidence that quality requirements will be fulfilled.

2.1.46 **Quality Control** – part of the quality management focused on fulfilling quality requirements.

2.1.47 **Quality Improvement** – part of quality management focused on increasing the ability to fulfil quality requirements.

2.1.48 **Quality Management System** – the part of the overall management system used to develop and implement its quality policy.

2.1.49 **Quality Policy** – statement of commitments, intentions and principles in related to BAR’s overall goals and direction as formally expressed by the top management. It can be aligned with the organization’s vision and mission and provides framework for the setting of quality objectives.
2.1.50 **Quality Objective** – overall quality goals, arising from the quality policy, that BAR sets itself to achieve, and which is measurable where practicable.

2.1.51 **Record** – special type of document stating results achieved or providing evidence of activities performed. Also, referred to as documented information to be retained.

2.1.52 **Regulatory Requirement** – obligatory requirement specified by an authority mandated by a legislative body.

2.1.53 **Requirement** – need or expectation that is stated, generally implied or obligatory.

2.1.54 **Risk** – effect of uncertainty. An effect is a deviation from the expected – positive or negative.

2.1.55 **Risks and Opportunities** – potential adverse effects (threats) and potential beneficial effects (opportunities).

2.1.56 **Service Provider** – refers to an individual or business entity that provides services to BAR for its operations and services. Also, referred to as external provider.

2.1.57 **Statutory Requirement** – obligatory requirement specified by a legislative body.

2.1.58 **Supplier** – refers to an individual or business entity that supplies BAR with supplies, materials and equipment for its operations and processes. Also, referred to as external provider.

2.1.59 **Top Management** – person or group of people who directs and controls and organization at the highest level. For BAR, this refers to the Director.

2.1.60 **Traceability** – ability to trace the history, application or location of an object.

2.1.61 **Uncertainty** – the state, even partial, of deficiency of information related to, understanding or knowledge of an event, consequence, or likelihood.

2.1.62 **Validation** – confirmation through the provision of objective evidence that the requirements for a specific intended use or application have been fulfilled.

2.1.63 **Verification** – confirmation, through the provision of objective evidence that specified requirements have been fulfilled.

2.1.64 **Vision** – aspiration of what an organization would like to become as expressed by top management.

2.1.65 **Work Environment** – set of conditions under which work is performed.
2.2 Acronyms

ACD – Applied Communication Division
A&F – Agriculture and Fisheries
AFMA – Agriculture and Fisheries Modernization Act
AFR – Audited Financial Report
BAR – Bureau of Agricultural Research
BAR-TEC – BAR Technical Evaluation Committee
BFAR – Bureau of Fisheries and Aquatic Resources
BIR – Bureau of Internal Revenue
CA – College of Agriculture
CERDAF – Council for Extension, Research and Development in Agriculture and Fisheries
CHED – Commission on Higher Education
COA – Commission on Audit
COE – Center of Excellence
CPAR – Community-based Participatory Action Research
CSC – Civil Service Commission
DA – Department of Agriculture
DBM – Department of Budget and Management
DC – Document Controller
DOST – Department of Science and Technology
DPCR – Division Performance Commitment Review
DRC – Document and Record Custodian
DSP – Degree Scholarship Program
EO – Executive Order
HRD – Human Resource Development
IAU – Internal Audit Unit
IDD – Institutional Development Division
IEC – Information, Education and Communication
IPCR – Individual Performance Commitment Review
IPRO – Intellectual Property Rights Office
IQA – Internal Quality Audit
ISO – International Organization for Standardization
IT – Information Technology
LGU – Local Government Unit
LIB – Line Item Budget
M&E – Monitoring and Evaluation
MET – Monitoring and Evaluation Team
MLGU – Municipal Local Government Unit
MOA – Memorandum of Agreement
MOOE – Maintenance and Other Operating Expenses
MOV – Means of Verification
MR – Memorandum Receipts
MR – Management Review
MS – Master of Science
NaRDSAF – National Research and Development System in Agriculture and Fisheries
NCCAP – National Climate Change Action Plan
NDAP – Non-Degree Assistance Program
NGO – Non-Government Organization
NOV – Notice of Violation
NSRI – Natural Science Research Institute
NTCP – National Technology Commercialization Program
OAD – Office of the Assistant Director
OD – Office of the Director
OPCR – Office Performance Commitment Review
OPs – Operational Procedures
OS – Obligation Slip
OVC1 – Office of the Vice Chancellor for Instruction
OVI – Objectively Verifiable Indicators
PDCA – Plan-Do-Check-Act
PDD – Project Development Division
PhD – Doctor of Philosophy
PLGU – Provincial Local Government Unit
PMED – Program Monitoring and Evaluation Division
PO – People’s Organization
PS – Personnel Services
PTIAF – Provincial Technological Institutes for Agriculture and Fisheries
QCPs – Quality Control Plans
QMR – Quality Management Representative
QMS – Quality Management System
R&D – Research and Development
RA – Republic Act
RAMRO – Revised Accounting Manual for Research Operation
RDE – Research, Development and Extension
RDEAP – Research, Development and Extension Agenda and Programs
RFRDC – Regional Fisheries Research and Development Center
RFU – Regional Field Unit
RIARC – Regional Integrated Agricultural Research Center
ROA – Risks and Opportunities Assessment
ROI – Return on Investment
ROS – Research-Outreach Station
RRDEN – Regional Research, Development and Extension Network
RTAP – Risk Treatment Action Plan
SEC – Securities and Exchange Commission
SDG – Sustainable Development Goals
SIR – System Improvement Request
SPG – Scientific Publication Grant
SPs – System Procedures
SUCs – State Universities and Colleges
TAG – Technical Advisory Group
TCD – Technology Commercialization Division
TCG – True Copy of Grades
TDAP – Thesis/Dissertation Assistance Program
TEV – Travel Expense Voucher
ToR – Transcript of Records
TWG – Technical Working Group
3.0 PROFILE OF THE BUREAU OF AGRICULTURAL RESEARCH (BAR)

3.1 Legal Mandate of BAR

3.1.1 BAR was created by virtue of Executive Order 116 signed in 1987 by then President Corazon C. Aquino. Under this EO, the government addressed the lack of coordination and integration of agriculture research and development among the existing Bureaus, councils, and agencies by creating BAR under the Research, Training, and Extension Group.

3.1.2 EO 292 otherwise known as the Administrative Code of 1987 stated the mandate of BAR as:

"to ensure that all agricultural research is coordinated and undertaken for maximum utility to agriculture. It shall tap farmers, farmer organizations, and research institutions, especially the State Colleges and Universities, in the conduct of research for the use of the Ministry and its clientele, particularly the farmers/fishermen and other rural workers (Section 22)"

3.1.3 In 1997, Republic Act 8435, also known as the Agriculture and Fisheries Modernization Act (AFMA), was enacted. This law, together with Executive Orders 127 & 338 affirmed the leading role of BAR in coordinating and managing agriculture and fisheries research and development (R&D).

"Further expanded and strengthened the mandate of BAR by providing leadership in enhancing, consolidating and unifying the national and regional agriculture and fisheries research and development programs of the National Research and Development System in Agriculture and Fisheries (NaRDSAF)"

3.2 Core Functions

3.2.1 As the DA central coordinating agency for research and development, it undertakes the following strategic and priority R&D thrusts, programs, and functions, to wit:

3.2.1.1 Promote the integration of research and development functions and enhance the participation of farmers, fisherfolk, the industry, and the private sector in the development of the national research, development and agenda;

3.2.1.2 Prepare and oversee the implementation of a comprehensive program of R&D to enhance, support, consolidate, and make full use of the capabilities of the interlinked National Research and Development System for Agriculture and Fisheries, including the review and rationalization of the roles, functions, and organization of the various agriculture and fisheries national research, development and extension institutions;

3.2.1.3 Set policies in agriculture and fishery national research and development in order to ensure sustainable food security, alleviate poverty, promote people empowerment, agricultural productivity and development and promote internationally competitive agribusiness and fishery sector;
3.2.1.4 Formulate policies for the operationalization and continued strengthening of the institutional capacities, efficiency, effectiveness and integration of the national research and development system, including the setting up of M&E system for the effectiveness and efficiency of its various components;

3.2.1.5 Create committees, TWGs and Commodity Teams to facilitate the accomplishments of its objectives;

3.2.1.6 Take the lead in drafting national research and development plans and programs for the NaRDSAF; and

3.2.1.7 Set policies on the relations and exchange between Philippine and international institutions on agriculture and fisheries national research and development, and approve the allocation of funds from national as well as foreign sources for national research and development programs.

3.3 Formulation of RDE Agenda and Programs

3.3.1 The Bureau takes the lead in the drafting and development of an integrated Research, Development and Extension Agenda and Programs (RDEAP) for Agriculture and Fisheries. The RDEAP is formulated through consultation meetings with different stakeholders and partners from the NaRDSAF, namely the R&D centers and institutes under the DA, State Universities and Colleges (SUCs), private R&D organizations, NGOs and other specialized agencies. The RDEAP is created to be demand-driven and participative. In this manner, complementation of R&D activities is achieved and the use of R&D resources is maximized to create value and foster knowledge.

Note: The RDE Agenda and Programs (RDEAP) is a set of R&D priority areas which serves as the Bureau’s main criteria or reference in supporting programs/projects. It contains the identified researchable areas of priority commodities and thematic thrusts of the DA.

3.3.2 The formulated RDE Agenda and Programs is validated by stakeholders (e.g., NaRDSAF member agencies, private sector, and others) and thereby adopted as the five-year RDE Agenda for agriculture and fisheries. The implementation of RDE is coordinated by DA-BAR. Timely meetings and consultations are conducted to update the identified problems affecting priority commodities (Figure 3.1).
3.4 **BAR Services: The RDE Grant System**

3.4.1 DA-BAR, by virtue of its mandate, institutionalized its grant system anchored and contributory to the thrusts of the DA (Figure 3.2). The framework is operationalized and detailed in each operational procedure of the Bureaus’ divisions and sections to ensure effective and efficient management of R&D resources. An overview of appropriate allocation of R&D funds is provided for programs and projects on:

3.4.1.1 Basic and Applied Research (i.e. Community-based Participatory Action Research (CPAR));

3.4.1.2 Technology Commercialization; and

3.4.1.3 Institutional Development including Research Facilities Development and Human Resource Development, and knowledge management particularly the Scientific Publication Grant, which are encompassing areas recognized as support to R&D.
3.4.2 Specifically, the grant system is directed towards:

3.4.2.1 Addressing national and sectoral/commodity concerns in accordance with the problems and needs of the clientele, industry, farmers and fisherfolk.

3.4.2.2 Addressing specific R&D needs of the regions and designed to transform agriculture from a resource-based to a technology-based industry with focus on agribusiness development to increase the productivity and profitability of farming and fishing communities.

3.4.2.3 Addressing urgent problems and/or special RDE activities not lined up under the various medium-term R&D programs developed by the National RDE Networks to ensure continuity of efforts and rational allocation of funds for RDE in agriculture and fisheries.

3.4.2.4 Developing and transferring agricultural technologies which are market-oriented and user-driven to support agri-business and agri-industry development.

3.4.3 Moreover, to ensure orderly management of the grants system, the Bureau organized the In-House R&D Proposal Screening and Review Committee and created a Pool of Experts information.
3.5 Vision

“The Department of Agriculture-Bureau of Agricultural Research is the lead research for development (R4D) coordinating agency towards a technology-empowered agriculture and fisheries sector contributory to inclusive growth.”

3.6 Mission

“We coordinate, integrated, and manage R4D system to ensure its optimum utility for the agriculture and fisheries sector.”

3.7 R&D Goals

3.7.1 With the agriculture and food system being greatly vulnerable to events outside of agriculture, the DA Food Systems Policy Shifts likewise emphasizes the scaling of innovations to help modernize, industrialize and hence transform Philippine agriculture to that which strongly ensures secure and resilient food systems. This focus on the food system enunciates that gains in improving agriculture will redound to the benefit of the Filipino farmers in terms of higher income and that Filipino consumers will have available, affordable, safe and nutritious food supply all year round.

3.7.2 The Bureau, in view of all these contexts will be pursuing the following seven strategic goals that is in coherence with and supportive of the holistic food system approach that the Department of Agriculture upholds in this New Normal:

3.7.2.1 Strengthened public R4D financial management;
3.7.2.2 Increased availability and access to knowledge in R4D;
3.7.2.3 Strengthened partnerships with key stakeholders;
3.7.2.4 Increased resilience of natural ecosystems;
3.7.2.5 Empowered farmers and fisherfolks;
3.7.2.6 Modernized agri-fishery value chain systems; and
3.7.2.7 Enhanced competitiveness of agri-fishery industries

3.8 Research and Development Thrusts

- Increasing food sufficiency levels of basic food and other commodities
- Focusing on production and consumption value chain, empowering the marginalized sector and supporting diverse distribution efforts with good logistics
- Harmonizing the food systems with other related sectors (economy, energy, water and natural resources, environment, manufacturing and health) to build resilience
- Addressing hunger and all forms of malnutrition, such as obesity and micronutrient deficiencies through the production and consumption of nutritious foods
- Adopting context-specific policies, recognizing differences between urban and rural settings
4.0 CONTEXT OF THE ORGANIZATION

4.1 Understanding the Organization and Its Context

4.1.1 The internal and external issues associated to BAR that are relevant to its purpose and that can affect the ability to achieve the intended results of its QMS shall be determined, reviewed and updated taking into consideration the following:

4.1.1.1 External issues arising from legal, technological, competitive, market, cultural, social and economic environments whether international, national, regional or local; and

4.1.1.2 Internal issues related values, culture, knowledge and performance of the organization.

4.1.2 The internal and external issues which can result in risks and opportunities shall be addressed in the established procedure on risks and opportunities assessment.

4.2 Understanding the Needs and Expectations of Interested Parties

4.2.1 Relevant internal and external interested parties and their corresponding needs and expectations that relate to the quality performance of BAR and the effectiveness of its QMS shall be determined, updated and reviewed. Interested parties shall include among others the customers, shareholders, competitors, external providers, nearby community, and relevant regulatory bodies.

4.2.2 The risks and opportunities resulting from the identified needs and expectations of interested parties shall be addressed in the established procedure on risks and opportunities assessment.

4.3 Determining the Scope of the Quality Management System

4.3.1 The QMS of BAR covers all its process, products and services and associated facilities at it is described as follows:

Scope: Coordination and Provision of Grants to Agriculture and Fisheries Researches

Location: RDMIC Building, Elliptical Road cor Visayas Avenue, Diliman Quezon City – 1104, Metro Manila, Philippines

4.3.2 The business processes and services of BAR to external customers are performed mainly by its divisions, sections and units as indicated in organizational structure of BAR (Figure 5.1).

4.3.3 The QMS is established to provide order and consistency in BAR’s effort in managing and controlling its processes and services. It is an essential management tool in enhancing the
ability of BAR to meet customer’s selective decisions. It also provides a framework for BAR to continually improve its performance in all stages of its operations. These include among others the following:

4.3.3.1 To consistently provide leadership and coordination to National Agriculture and Fisheries Research and Development in the Philippines;

4.3.3.2 To enhance customer satisfaction;

4.3.3.3 To achieve major functional objectives; and

4.3.3.4 To continually improve BAR’s operation and services.

4.4 The QMS and its Process

4.4.1 The Quality Management System (QMS) of BAR is based on the requirements of ISO 9001:2015 Standard. The QMS is established, implemented, maintained and continually improved following closely the principle of “Plan-Do-Check-Act”, as described below (See Figure 4.1):

4.4.2 PLAN (Determining and Planning What to Manage in the QMS) – Specifically, this involves:

4.4.2.1 Establishing the Quality Policy by the Bureau Director which provides BAR the overall direction as to its quality performance;

4.4.2.2 Determining and updating internal and external issues that are relevant to the purposes of BAR, and that can affect its ability to achieve the intended results of the QMS;

4.4.2.3 Determining and updating the needs and expectations of relevant interested parties relevant to the effective implementation of the QMS;

4.4.2.4 Identifying, accessing and updating compliance obligations related to products and services and planning actions to ensure compliance;

4.4.2.5 Mapping the QMS and its application to the BAR’s processes (core and support) including outsourced processes. This also includes determining the criteria and monitoring and measuring requirements of inputs, process and outputs for each process by establishing quality control plans; (Refer to BAR-PM-QMS-01F1, Quality Control Plan).

4.4.2.6 Identifying and evaluating risks and opportunities associated to BAR’s internal and external issues, needs and expectations of relevant interested parties and business processes, and planning actions to address them; and

4.4.2.7 Setting-up quality objectives to identified improvement areas and establishing programs and action plans to achieve these.
4.4.3 **DO (Strengthening the Support Mechanism and Operating the QMS)** – Specifically involves:

- **4.4.3.1** Defining the organizational structure, responsibilities and authorities in the QMS;

- **4.4.3.2** Determining and providing adequate resources (e.g., people, infrastructure, environment for the operation of processes, monitoring and measuring resources and organizational knowledge) necessary for the effective implementation of the management system. This also includes provision of specialized training necessary to ensure competency of persons doing work for BAR that affects the performance and effectiveness of the QMS;

- **4.4.3.3** Documenting the QMS and its processes considering the identified actions and control measures to meet customer requirements, address identified risks and opportunities, achieve quality objectives and fulfill compliance obligations;

- **4.4.3.4** Conduct general orientation among employees and external providers, especially those on-site on BAR's QMS and its key requirements to engage each one within the Bureau for the effective implementation of the management system;

- **4.4.3.5** Establishing effective communication with the employees, customers and other relevant internal and external interested parties such as the regulatory bodies, external providers especially those on-site; and

- **4.4.3.6** Operating the QMS and carrying out BAR's business processes in accordance with the defined quality control plans, operational procedures and improvement plans and programs.

4.4.4 **CHECK (Evaluating the performance of the QMS)** – Specifically, involves:

- **4.4.4.1** Monitoring, measuring, analyzing and evaluating regularly the key characteristics of the BAR's processes and services including its performance against set quality objectives and programs;

- **4.4.4.2** Evaluating periodically BAR's compliance obligations;

- **4.4.4.3** Ensuring that the monitoring and measuring resources being used are calibrated and/or verified;

- **4.4.4.4** Conducting internal audits to provide information on whether the QMS conforms to the requirements of the standard to which it is based, and to BAR's own requirements, and to determine if it is effectively implemented and maintained; and

- **4.4.4.5** Conducting periodic review of the management system to ensure its continuing suitability, adequacy and effectiveness.
Figure 4.1 – QMS Processes of BAR following the PDCA Framework

**ACT (Take action to improve)**
- Determine opportunities for improvement and implement necessary actions
- Where necessary, take corrective action to identify nonconformity and other weaknesses of the QMS identified in the **CHECK Phase**
- Continually improve the QMS to enhance performance and effectiveness of the QMS
  - Suitability
  - Adequacy
  - Effectiveness

**CHECK (Evaluate performance)**
- Monitor, measure, analyze & evaluate performance and the effectiveness of the QMS, against **PLAN** and **DO** Phases:
  - Quality objectives & programs
  - Performance against set operating criteria for products and services including externally provided processes, products and services
  - Compliance obligations
  - Control monitoring and measuring resources
  - Evaluate effectiveness of the QMS
  - Conduct internal QMS audits
  - Conduct management review

**PLAN (Determine and plan what to manage)**
- Determine internal and external issues
- Determine the needs and expectations of interested parties
- Determine compliance obligations
- Map QMS and business processes including outsourced, and determine criteria and monitoring and measuring requirements of inputs, process and outputs for each process (Quality Control Plans)
- Conduct risk and opportunities assessment (ROA) and plan actions to address:
  - Internal and external issues
  - Needs and expectations of interested parties
  - Business processes
  - Set-up quality objectives and programs

**DO (Strengthen support mechanism and operate)**
- Define organizational/functional structure, responsibilities and authorities and provide resources
- Document the QMS and communicate requirements within BAR and to relevant interested parties
- Provide specialized training necessary for the QMS and its processes
- Implement the QMS including plans, procedures & other controls determined/planned in **PLAN** Phase
  - To achieve quality objectives
  - To fulfill compliance obligations
  - To address critical risks and pursue feasible opportunities
  - To control service provision including externally provided processes, products and services

**LEADERSHIP (Management)**
- Determine system boundaries and scope
- Organize QMS Technical Working Team and assign roles, responsibilities and authorities in the QMS
- Define Quality Policy and establish quality objectives and define actions to achieve them
- Determine and allocate resources needed for the QMS

**RESULTS OF THE QMS**
- Customer satisfaction
- CUSTOMER REQUIREMENTS
- Organization and its context

**PRODUCTS AND SERVICES**
- Needs and expectations of relevant interested parties
4.4.5 **ACT (Improving the QMS)** – Specifically, involves:

4.4.5.1 Assessing opportunities for improvement and the need for changes, including the quality policy, objectives, and other elements of the management system;

4.4.5.2 Handling of management system nonconformities and taking actions to mitigate their impacts to BAR’s processes and services, including its quality performance; and

4.4.5.3 Driving continual improvement of the management system considering the quality policy and objectives, analysis of data from monitoring and measurement activities, results of management system audits and management reviews, and where necessary, applying corrective action processes to identified weaknesses.

4.5 **Applicability of ISO 9001:2015 Standard Requirements**

4.5.1 **Clause 8.5.1 (f) Control of Production and Service Provision.** BAR does not have any process where the resulting outputs cannot be verified by subsequent monitoring and measurement or where deficiencies become apparent only after provision of its services. Core processes and outputs of the processes shall be monitored and/or measured in the proposed Quality Control Plans;

4.5.2 **Clause 8.3 Design and Development.** Being a funding Bureau under the Department of Agriculture, BAR coordinates and provides grants to agriculture and fisheries researches only; it has no design and development functions; and

4.5.3 **Clause 7.1.5 Monitoring and Measuring Resources.** BAR does not use any monitoring and measuring equipment/resources to measure the quality and effectiveness of the services it provides.
5.0 LEADERSHIP

5.1 Leadership and Commitment

5.1.1 BAR's Management demonstrates their leadership and commitment in the establishment, implementation, maintenance and continual improvement of the QMS by:

5.1.1.1 Taking accountability for the effectiveness of the QMS including the evaluation of its effectiveness;

5.1.1.2 Establishing, implementing and maintaining an appropriate quality policy within the defined scope of the management system;

5.1.1.3 Determining, understanding and satisfying customer requirements;

5.1.1.4 Ensuring that quality objectives and programs are set, maintained and achieved and are compatible with the strategic direction and the context of BAR;

5.1.1.5 Integrating the QMS requirements into BAR's processes;

5.1.1.6 Making the resources needed for the QMS to achieve its intended results available;

5.1.1.7 Communicating the importance of effective quality management and of conforming to the QMS requirements;

5.1.1.8 Directing and supporting persons to contribute to the effectiveness of the QMS and in promoting continual improvement throughout BAR;

5.1.1.9 Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility;

5.1.1.10 Conducting meaningful reviews for the continuing suitability, adequacy and effectiveness of the QMS;

5.1.1.11 Carrying out the plans of the QMS to meet the requirements specified in the ISO 9001:2015 Standards;

5.1.1.12 Maintaining the integrity of the QMS when planned changes to BAR are implemented; and

5.1.1.13 Recognizing, controlling and managing quality issues appropriately when necessary.

5.1.2 Where applicable, the Director may delegate responsibility for the above actions to others, but he retains accountability for the actions performed.
5.1.3 Customer Focus

5.1.3.1 The focus of the QMS shall be enhancing customer satisfaction, which is well reflected in the quality policy, objectives and programs, as well as the built-in controls in BAR’s operations and processes, monitoring activities, and processes for continual improvement in the management system. The QMS shall include a system to determine and understand customer requirements, as well as proactively monitoring the same, to ensure their requirements are continuously met with the aim of enhancing their satisfaction.

5.2 Quality Policy

5.2.1 To provide overall direction of its performance, the Management of BAR, headed by the Director, have established a quality policy that shall reflect the work attitude and values of every employee and member at the workplace, that is – quality of operations and processes is everybody’s responsibility!

5.2.2 The overall direction of BAR with respect to its quality performance shall be aligned and maintained consistent with the quality policy.

5.2.3 BAR shall initiate a review of the policy once every three years or as necessary to ensure that it shall continuously provide an overall direction and commitment regarding its quality performance, including providing framework for setting and reviewing its objectives.

5.2.4 The review shall ensure that the policy remains appropriate to the purposes of BAR, and to continually improve the effectiveness of the management systems established.

5.2.5 Should major changes in the operations of BAR occur and necessitate changes in the quality policy, any member of the QMS Working Committee shall initiate the revision. The proposed revision shall be reviewed by the Quality Management Representative (QMR) and shall be approved by the Director. The revision process shall be in accordance with the established control of documented information procedure.

5.2.6 To ensure that the policy shall be understood, implemented and maintained in BAR, the approved policy shall be posted in strategic locations. This shall be communicated and promoted among employees, customers and other relevant stakeholders, suppliers, service providers and other members through orientation, meetings and other means deemed appropriate. A copy of the policy shall be provided to all employees, suppliers, service providers and to any other interested member of the public.
QUALITY POLICY

We at Bureau of Agricultural Research (BAR) are committed to provide excellent leadership and coordination to the National Agricultural Research and Development in the Philippines.

We shall implement an internationally recognized management system in all aspects of our operations, processes and services in line with our commitment and in achieving our objectives.

To continually improve our quality performance and the effectiveness and suitability of our quality management system, we shall:

• Comply with applicable laws and regulations, the requirements of our stakeholders, industry initiatives and other requirements we subscribe to;

• Assess the needs of our customers and strive to exceed their expectations;

• Provide assurance to our researchers, proponents and other stakeholders to quality services by offering excellent leadership and coordination to the National Agricultural Research and Development in the Philippines including other responsive engagements;

• Establish quality objectives aimed at improving the efficiency of our operations, processes and procedures for sustainable growth; and

• Capacitate our employees and staff to maintain a highly competent, motivated and reliable workforce, thereby ensuring work is performed with excellence.

This quality policy shall be communicated throughout BAR and made available to interested parties, to ensure that it continuously provide us overall direction in improving customer satisfaction and efficient services.

Original Signed

DR. NICOMEDES P. ELEAZAR, CESO IV
BAR- Director
5.3 Structures, Roles, Responsibilities, Authorities and Accountabilities

5.3.1 BAR shall ensure that the responsibilities and authorities of BAR personnel and the entire workforce, particularly those functions whose work may affect its QMS performance are clearly defined and documented.

5.3.2 Management representatives (QMR, Deputy QMRs) and members of the QMS Technical Working Team are known by the employees.

5.3.3 Responsibilities and authorities shall be assigned to individuals to ensure that quality control and assurance are integrated with their respective functions. More specific descriptions of the responsibilities and authorities of personnel whose work affect the QMS performance of BAR shall be described in related procedures. The organizational structure of BAR and the functional structure of its QMS are shown in Figures 5.1 and 5.2.

5.3.4 Description of roles, responsibilities, authorities and accountabilities

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<tr>
<th>KEY POSITION</th>
<th>ROLES, RESPONSIBILITIES, AUTHORITIES AND ACCOUNTABILITIES</th>
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<tr>
<td>DIRECTOR</td>
<td>In addition to having the executive responsibility in directing BAR, the Director is responsible in:</td>
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<td>• Chairing the Management Committee;</td>
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<td></td>
<td>• Defining the organization’s quality policy which provides the overall directions and commitment of BAR on the quality of its operations and services;</td>
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<td>• Ensuring that the QMS is systematically and effectively executed;</td>
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<td>• Appointing the Quality Management Representative (QMR), Deputy QMRs and other key functions in the QMS Technical Working Team; and</td>
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<td></td>
<td>• Approving the provision of the necessary resources for the effective establishment, implementation, maintenance, and continual improvement of the QMS.</td>
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| EXECUTIVE COMMITTEE/ CORE GROUP   | Has the main function of providing the Director advice on Bureau governance including matters relating to the implementation and continual improvement of the QMS in the whole organization. The Director is the permanent Chairman of the Top Management. |
|                                   | Executive Committee comprises the Director, Division Heads and QMR. |
Figure 5.1 - Organizational Structure of BAR
Figure 5.2 – Functional Structure of the QMS of BAR

MANAGEMENT REVIEW TEAM

DIRECTOR

EXECOM

DEPUTY QMRs
[Division/Unit Heads]

QUALITY MANAGEMENT REPRESENTATIVE (QMR)

DOCUMENT CONTROLLER

QMS TECHNICAL WORKING GROUP

QUALIFICATION CONTROL OFFICER/ SAFETY OFFICER

DOCUMENT & RECORD CUSTOMERS
[Division/Unit]

REPRESENTATIVES FROM DIFFERENT DIVISIONS/ UNITS
- Internal & External Issues
- Needs and Expectations of Interested Parties
- Compliance Obligations
- Risks and Opportunities Assessment (ROA)
- Objectives & Programs
- Documentation and Implementation of the QMS
- Training, Promotion and Communication
- Monitoring, Measurement, Analysis & Evaluation (MMAE)
- Internal QMS Audit
- Correction and Corrective Action

DOCUMENT & RECORD CUSTOMERS
[Division/Unit]

OTHER EMPLOYEES, EXTERNAL PROVIDERS AND OTHER PERSONNEL

INTERNAL QMS AUDIT TEAM

This is a controlled documented information and must not be printed or photocopied without prior permission from the Director and/ or QMR.
<table>
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<tr>
<th>KEY POSITION</th>
<th>ROLES, RESPONSIBILITIES, AUTHORITIES AND ACCOUNTABILITIES</th>
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| MANAGEMENT REVIEW TEAM               | The team is responsible in conducting the second-tier periodic review of the QMS, particularly in:  
                                          • Reviewing the continuing suitability, adequacy and effectiveness of the QMS including the need for changes in the Quality Policy and the intended results of the QMS;  
                                          • Defining the directions and areas of QMS-related policies, objectives, programs and standards; and  
                                          • Review and where applicable, approve QMS-related final deliverables.  
                                          
                                          The Management Review Team comprises at minimum the Director, Division Heads, QMR, Lead Internal Auditor and Document Controller. Where need arises, other key functions shall be invited.                                                                                                                                                                                                             |
| QUALITY MANAGEMENT REPRESENTATIVE (QMR) | Has the overall responsibility in ensuring that the QMS is systematically established, implemented, maintained and continually improved. Specifically, responsible for:  
                                          • Managing the QMS Technical Working Team;  
                                          • Responsible in the review of the QMS Policy Manual and in the initiation of revision, where need arises.  
                                          • Managing the implementation of QMS policies, objectives, plans and programs, procedures and guidelines to ensure that the management system is established, implemented and maintained compliant to the requirements of ISO 9001:2015 Standard;  
                                          • Reporting to the Management on the performance of the QMS, including areas for improvement;  
                                          • Acting as liaison with external parties on matters relating to the QMS, such as technical assistance, certification, etc;  
                                          • Coordinating QMS activities with other departments, including consolidating information/data generated by the QMS Technical Working Team, such as QMS performances, status against set objectives, compliance obligations, training needs and provision, etc; and  
                                          • Providing logistics to facilitate the conduct of the management review meetings, including availability of information on the QMS performance and status of implementation for review and as basis for its improvement.                                                                                                         |
| DIVISION HEADS (Deputy QMRs)         | In addition to being the Division Heads, Deputy QMRs are mainly responsible in assisting the QMR in the establishment, day-to-day implementation and maintenance of the QMS, particularly those that relate to their respective Divisions, including among others the following:  
                                          • Assisting the QMR in all identified responsibilities including review of documents pertaining to QMS particularly the auditable ones;                                                                                                                                                                                                                     |
### Key Position

**Roles, Responsibilities, Authorities and Accountabilities**

- Ensuring critical processes (those that can have impact on quality performance of BAR) are executed under controlled conditions;
- Managing the implementation of relevant management system policies, objectives, plans & programs, procedures, work instructions and guidelines in their area;
- Initiating, identifying and recording any problem in the department relating to the QMS policies, objectives, plans & programs, procedures, work instructions and guidelines, and ensuring timely and adequate actions to management system nonconformities;
- Ensuring that the quality policy and objectives are established and are compatible with the strategic direction and the context of the organization; and
- Communicating the importance of effective quality management and of conforming to the QMS requirements to ensure that the QMS achieves its intended results.

**QMS Technical Working Group**

Composed of the QMR, Deputy QMRs, DC, Lead Internal QMS Auditor, ROA Team Leader and Division representatives. Mainly responsible in spearheading the establishment, implementation, maintenance and continual improvement of the QMS in their respective department/areas, compliant with the requirements of ISO 9001:2015 Standard.

Each representative shall be in-charge in their respective area regarding:

**Documentation and Implementation of QMS**

- Preparation and review and where necessary, revision of management system documentation including implementation in their respective areas

**Objectives and Programs**

- Formulation and documentation of action plans and programs to achieve set quality objectives, and in monitoring their implementation and progress.

**Training and Communication**

- Conduct of general QMS orientation among employees, service providers and other personnel; and
- Communication of the QMS and its initiatives to internal and external interested parties including employees, customers, visitors, external providers, surrounding communities and related government agencies.
### KEY POSITION

<table>
<thead>
<tr>
<th>ROLE</th>
<th>RESPONSIBILITIES, AUTHORITIES AND ACCOUNTABILITIES</th>
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<tbody>
<tr>
<td><strong>Monitoring, Measurement, Analysis and Evaluation</strong></td>
<td>Monitoring, measurement, analysis and evaluation of data relevant to QMS performance; and Ensuring calibration and/or verification of monitoring and measuring equipment owned and used in their area, if any.</td>
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<tr>
<td><strong>Corrective Action</strong></td>
<td>Taking correction and corrective action to identified/detected QMS nonconformities.</td>
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<tr>
<td><strong>Aside from the above tasks, the ROA Team Leader spearheads the following with the assistance of the QMS Technical Working Group:</strong></td>
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<tr>
<td><strong>Internal and External Issues and Interested Parties</strong></td>
<td>Determination and updating of internal and external issues and needs and expectations of relevant interested parties</td>
</tr>
<tr>
<td><strong>Risks and Opportunities Assessment (ROA)</strong></td>
<td>Identification and evaluation of risks and opportunities, and planning actions to address them</td>
</tr>
<tr>
<td><strong>DOCUMENT CONTROLLER</strong></td>
<td>Mainly responsible for: Evaluating, maintaining, and improving document and data control system and procedure. Coordinating with division/section representatives in implementation of related programs; Monitoring and updating of QMS compliance obligations and implementation, management and administration of documents and records management system in the Bureau; Ensuring conformance to defined capabilities of the system. Participating in internal audits regularly to ensure that the established procedures and work instructions are updated. Ensuring that controlled copies of the latest approved documents are issued or distributed to authorized copyholders in a timely manner, retrieving the old/superseded documents to avoid confusion. Division Documents and Records Custodians shall be checked and inspected by the DC to ensure documents are updated and monitoring are being complied as required by the standard. Taking and preparing minutes during Management Reviews and QMS Committee meetings. Providing support for QMS during certification audits and actively participate in division documentation activities. Effectively follow BAR standard operating procedures in submission of documents; Coordinating with Lead Internal QMS Auditor for the Annual Audit Plans and Matrix, and Audit Checklists; and implementation of the management system procedure; and</td>
</tr>
<tr>
<td>KEY POSITION</td>
<td>ROLES, RESPONSIBILITIES, AUTHORITIES AND ACCOUNTABILITIES</td>
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<tr>
<td>Coordinating with the QMR on QMS implementation, documentation, monitoring, update of the status of compliance obligations and notifies responsible divisions to address active concerns.</td>
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</table>
| DOCUMENTS AND RECORDS CUSTODIAN | Mainly responsible in the control of documented information (documents) issued to and/or printed by the division, including documented information (records) generated to evidence implementation of the QMS, such as follows:  
  - Maintaining, securing, and caring for records in accordance with BAR’s guidelines in his/her Division where he/she belongs.  
  - Monitoring and updating QMS compliance obligations and implementation;  
  - Management and administration of documents and records in the division or section assigned.  
  - Ensuring conformance to defined capabilities of the system.  
  - Ensuring that the established procedures and work instructions are updated in the Division where he/she reports to.  
  - Ensuring that controlled copies of the latest approved documents are issued or distributed to authorized copyholders in a timely manner, retrieving the old/superseded documents to avoid confusion;  
  - Coordinating with DC for documents and records relevant to the QMS.  
  - Providing support for DC during certification audits and actively participate in department documentation activities. Effectively follow BAR standard operating procedures in submission of documents;  
  - Coordinating with the DC on QMS implementation, documentation, monitoring, update of the status of compliance obligations and notifies Division head to address active concerns. |
| LEAD INTERNAL QMS AUDITOR | Mainly responsible in managing the internal audit system of BAR, including:  
  - Preparing and updating the procedure for Internal QMS Audit, Annual Internal QMS Audit Plans and Matrix, and Internal QMS Audit Checklists;  
  - Implementing the internal QMS audit system; and  
  - Evaluating the performance of Internal QMS Auditors |
| INTERNAL QMS AUDITORS | Mainly responsible in:  
  - Conducting and reporting the results of internal Quality Management System Audits including where necessary, making follow-up audits to verify actions taken to audit findings. |
<table>
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<tr>
<th>KEY POSITION</th>
<th>ROLES, RESPONSIBILITIES, AUTHORITIES AND ACCOUNTABILITIES</th>
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| POLLUTION CONTROL OFFICER (PCO) | Mainly responsible for:  
* Identifying, updating and accessing environment-related laws, regulations and other requirements applicable to the operations and services of the Bureau, including obtaining copies of the same;  
* Periodically evaluating the Bureau's compliance to applicable environment-related legal and other requirements;  
* Performing other applicable responsibilities of PCO as defined in DAO 14-02, Revised Guidelines for PCO Accreditation; and  
* Handling other matters of environmental concerns as required by the Bureau.                                                                                                                       |
| OTHER EMPLOYEES/PERSONNEL | Mainly responsible in:  
* Understanding the Quality Policy and following relevant operational procedures;  
* Implementing QMS-specific procedures, guidelines and instructions in accordance to set standards of BAR; and  
* Communicating through relevant channels any concern or suggestion for the effective implementation, maintenance and continual improvement of the QMS;  
* Participate in any consultation arrangements of BAR on matters related to QMS; and  
* Respond appropriately to both internal and external audits.                                                                                                                                   |

5.3.5 A more specific description of the responsibilities and authorities of BAR personnel whose work affect the QMS performance of the Bureau shall be reflected in related procedures and work instructions.
6.0 PLANNING OF THE QMS

6.1 Actions to Address Risks and Opportunities

6.1.1 Risks and opportunities associated to the business processes, internal and external issues and needs and expectations of relevant interested parties shall be identified and evaluated through the Risk and Opportunities Assessment (ROA) procedure. The ROA includes criteria for determining which risks need to be acted upon and which opportunities need to be pursued by the Bureau. The ROA shall be performed by the QMS Technical Working Team members, guided by the appointed Team Leader.

6.1.2 Identified risks and opportunities shall be recorded in the ROA Worksheet. Risks and opportunities are color-coded, depending on their assessed ratings, which are as follows:

6.1.2.1 Risk Rating

- **Green – Low Risk**: Risk is acceptable; no further action is needed (Note: The risk maybe retained by informed decision or take the risk to pursue an opportunity).

- **Yellow – Moderate Risk**: Risk can be tolerated but needs risk treatment action plan (RTAP) aimed at at least to reduce likelihood of the risk event occurring and/ or mitigate the adverse impact (Note: The risk maybe transferred or shared, i.e., outsourced or insured).

- **Red – High Risk**: Risk is not acceptable; needs RTAP aimed at avoiding the risk/ eliminating the risk source (Note: Stop or suspend work/ operation where the risk event may occur until an RTAP has been implemented).

6.1.2.2 Opportunity Rating

- **Green – Excellent Opportunity**: Opportunity shall be pursued immediately.

- **Yellow – Fair Opportunity**: Management should decide whether to pursue the opportunity.

- **Red – Poor Opportunity**: Opportunity shall not be pursued.

6.1.3 The ROA Worksheets shall be reviewed at least annually or considering significant changes in BAR, such as but not limited to the following:

6.1.3.1 New processes/ products/ services/ program

6.1.3.2 Modification/ relay outing/ renovation

6.1.3.3 Occurrence of incident or emergency

6.1.3.4 Management directive
6.1.3.5 Changes to management system requirements or scope

6.1.3.6 Changes to business processes, internal/external issues and needs and expectations of interested parties

6.1.4 The results of review shall be presented to the Management during their periodic review of the continuing suitability, adequacy and effectiveness of the QMS.

6.2 Quality Objectives and Programs

6.2.1 BAR shall develop a major functional output in line with quality policy and set objectives. The objectives shall be aimed at continual improvement of the overall performance of BAR. Improvement areas considered in setting-up quality objectives include among others the following organizational goals of BAR in support to the 2018-2023 Agriculture and Fisheries Modernization Plan (AFMP) Policy Framework.

6.2.1.1 Policy Framework

The AFMP of the DA for the period 2018-2023 represents a segment of the long-term effort towards food security, poverty alleviation and social equity, income enhancement and profitability, global competitiveness, and sustainability – the goals that are mandated by the AFMA of 1997. It substantiates the agriculture chapter of both the Philippine Development Plan 2017-2022 and the National Climate Change Action Plan (NCCAP).

The AFMP 2018-2023 recognizes the Philippines’ commitments in achieving the United Nations Sustainable Development Goals (SDGs) and ASEAN Integrated Food Security Framework and Strategic Plan of Action – Food Security. It supports the thrusts and priorities set in Ambisyon Natin 2040, AFMA (RA 8435), and Fisheries Code of the Philippines (RA 8550 as amended by RA 10654). The Plan further aligns with policies espoused in various other agriculture- and fisheries-related legislations.

6.2.1.2 Agriculture and Fisheries Sectoral Outcomes

Outcome 1: Enhanced competitiveness of agri-fishery products (import and export)

- Outcome 2: Broadened access and participation in value chain development
- Outcome 3: Increased adaptive capacities of fishing and farming communities and resilience of ecosystems

6.2.1.3 R&D Functional Outputs

- Output 1: AFF research, development, and extension (R&D) activities conducted
- Output 2: Community-based technology development, validation, and commercialization intensified

This is a controlled documented information and must not be printed or photocopied without prior permission from the Director and/or QMR.
• Output 3: R&D facilities and infrastructure upgraded and modernized
• Output 4: Access to innovative R&D knowledge products and services

6.2.1.4 R&D Functional Inputs

• Input 1: Provision of grants in support of the conduct of R&D interventions
• Input 2: Capacity building of A&F stakeholders
• Input 3: Capacity building of A&F implementers
• Input 4: Partnership-building and collaboration
• Input 5: Policies and Plans for Effective and Efficient R&D governance
• Input 6: Program accountability

6.3 Planning of Changes

6.3.1 The Management ensures that the planning of the QMS is carried out to meet the requirements of BAR business, processes and services including associated risks and opportunities and the BAR’s commitment to continual improvement of its quality performance and the management system.

6.3.2 Changes in BAR that may affect its performance and the integrity of the QMS, either caused by internal or external factors, shall be planned and carried out in a planned manner. BAR plans changes that may affect the integrity of the QMS and its processes to ensure:

6.3.2.1 The integrity of the QMS is maintained;
6.3.2.2 Necessary resources shall be made available; and
6.3.2.3 Where necessary, responsibilities and authorities shall be allocated or reallocated.
7.0 STRENGTHENING THE SUPPORT MECHANISM OF THE QMS

7.1 Resources for the QMS

A. General

7.1.1 The Management of BAR determines and ensures the availability of resources necessary to enhance customer satisfaction and continually improve the effectiveness of the QMS. To ensure the effective establishment, implementation, maintenance and continual improvement of the QMS, such resources of BAR shall be properly managed and other support mechanism of the management system are strengthened. This includes among others the following:

7.1.1.1 Clear definition and documentation of the responsibilities and authorities of BAR personnel, particularly those functions whose work may affect the quality performance of BAR;

7.1.1.2 Provision of adequate resources, including competent personnel for the effective establishment, implementation, maintenance and improvement of the management system, and

7.1.1.3 Provision and maintenance of infrastructure and suitable working environment needed to achieve conformity to QMS requirements.

B. People

7.1.2 The Management of BAR determines and provide the persons necessary for the effective implementation of its management system and for the operation and control of its business processes. This include defining and documenting clearly the responsibilities, authorities and accountabilities of employees, external providers and other personnel, particularly those functions whose work may affect the quality performance of BAR and the effectiveness of its QMS.

C. Infrastructure

7.1.3 The infrastructure needed to achieve conformity to the operational requirements of BAR aimed at satisfying its customer requirements shall be determined, provided and maintained. This shall also include the infrastructure necessary to control BAR processes and services.

7.1.4 Organizational and operational infrastructure such as offices, library, conference rooms, and other associated facilities shall be regularly maintained, in accordance with preventive maintenance plans established by the respective Divisions.

7.1.5 General housekeeping, building maintenance, maintenance of equipment, hardware and software, transportation and communication facilities, and infrastructure shall be provided by BAR.

7.1.6 Documented information of the maintenance activities conducted shall be retained.
D. Environment for the Operation of Processes

7.1.7 Work environment necessary to ensure conformity to operations and services of BAR shall be determined and provided/complied with where practicable. These shall include safe conditions in the Bureau premises and facilities including offices, library, grounds, conference rooms, etc. Further, these can be a combination of human and physical factors such as the following:

7.1.7.1 Social [non-discriminatory, calm and non-confrontational working environment];

7.1.7.2 Psychological [stress-reducing, burn-out prevention, emotionally protective working environment]; and

7.1.7.3 Physical [suitable temperature, heat, humidity, light, airflow, hygiene, noise].

7.1.8 More specific description of the work environment requirements where necessary shall be included in the operational procedure. Where appropriate, these shall be further described in relevant guidelines and work instructions.

E. Monitoring and Measuring Resources

7.1.9 As indicated in Section 4.5 Applicability of ISO 9001:2015 Standard Requirements, BAR does not use any monitoring and measuring equipment/resources to demonstrate conformity of materials and services to a specified requirement.

F. Organizational Knowledge

7.1.10 BAR shall determine, maintain and make it available to relevant personnel the knowledge necessary for the operation of its business processes and provision of its services. Organizational knowledge includes personnel’s education, experiences, skills and documented information of the Bureau.

7.1.11 The documentation of the QMS which include the QMS policy manual, management system procedures, operational procedures and work instructions form part of the Bureau’s organizational knowledge.

7.1.12 BAR shall also determine how to acquire or access any additional knowledge considering changing needs and trends such as from:

7.1.12.1 Internal sources, e.g., intellectual property; best practices, etc; and

7.1.12.2 External sources, e.g., standards, academe, forums, conferences, benchmarking, consultants, external providers, etc

7.2 Competence

7.2.1 Personnel performing task that can affect service conformity is ensured competent based on appropriate education, training, skills and experience.
7.2.2 The Personnel Section, in conjunction with the relevant divisions, is responsible in conducting training needs analysis among employees, service providers and other members who can potentially affect the quality of the services of the Bureau. This also include the competence requirements of personnel spearheading the effective establishment, implementation, maintenance and continual improvement of the QMS.

Note: The responsibility of providing necessary training or taking action to ensure competence among on-site service providers will depend on the Bureau’s contractual arrangements with them.

7.2.3 Training requirements prescribed by the Department of Agriculture, regulatory bodies and partner institutions (e.g., DBM, CSC, COA, DOST, etc.) and trainings identified during performance evaluation of employees and other personnel performing work for the Bureau shall form part of this training needs analysis. The results of the training needs analysis shall be used as a basis in developing the yearly Learning and Development Program of BAR and/or as basis in taking other actions to address the competency requirements of BAR employees and other on-site personnel.

7.2.4 The Learning and Development Program includes general awareness campaigns on the QMS and its requirements. A more specialized training is provided to personnel who shall be operating specialized equipment/software or working in areas that can affect the quality and performance of BAR.

7.2.5 Effectiveness of the training conducted and other actions taken shall be evaluated through a performance evaluation of the personnel and/or application of other performance indicators specified in BAR procedures. Documented information to demonstrate competence of employees and other personnel including records of effectiveness evaluation shall be maintained and retained.

7.3 Awareness

7.3.1 Employees, external providers and other members who have access to the operational areas and/or could affect the quality performance of BAR shall undergo an orientation of its QMS and its requirements. The orientation includes provisions to make them aware of the following:

7.3.1.1 BAR quality policy, objectives and programs, and the need to understand and comply with BAR’s QMS requirements;

7.3.1.2 Their responsibilities and contribution to the effectiveness of the QMS, including achieving quality objectives and the benefits of enhanced quality performance; and;

7.3.1.3 The implications of not conforming to established rules and regulations including the consequences of not fulfilling BAR’s compliance obligations.

7.3.2 New employees and members shall be likewise required to undergo the same training to ensure that they carry out their work properly and responsibly and promote a quality conscious workforce.
7.4 Communication

7.4.1 The requirements of the QMS and other pertinent information, including the defined roles and responsibilities of each employee and other stakeholders are communicated throughout the Bureau and to other relevant interested parties based on the approved Communication Plan. The Communication Plan consist of:

7.4.1.1 What information about the Bureau's QMS and its processes that need to be communicated internally and externally;

7.4.1.2 When to communicate the information;

7.4.1.3 With whom to communication the information internally and externally;

7.4.1.4 How to communicate the information internally and externally; and

7.4.1.5 Who is responsible in communicating the information.

7.4.2 The management of BAR shall ensure that QMS requirements and other pertinent information shall be communicated to BAR employees and other relevant parties, in accordance with the established procedure for internal and external communication.

7.4.3 Processes and arrangements needed for internal and external communications relevant to the QMS shall be established, implemented and maintained by BAR to ensure that:

7.4.3.1 QMS requirements and other pertinent information shall be communicated to employees and other personnel working in behalf of BAR or under its control, including external providers and visitors; and

7.4.3.2 Processes of handling external communication shall be established throughout the Bureau, including where necessary, communication with external providers and other interested parties' information that relate to its quality performance and the QMS.

7.4.4 BAR also ensures that communication arrangements shall be in line with relevant policies, and includes determining what information to communicate, including when, with whom and how the information shall be communicated.

A. Internal Communication

7.4.5 The QMS and its requirements shall be communicated throughout BAR and to other interested parties, in accordance with established internal communication procedure. Information for communication include, but not limited to:

7.4.5.1 Quality policy, objectives and programs;

7.4.5.2 Performance and achievements of the QMS including highlights of management system audits and periodic management reviews; and
7.4.5.3 Key functions responsible in the establishment, implementation, maintenance and continual improvement of the QMS, such as the QMR and Deputy QMRs, members of the QMS Technical Working Team, etc.

7.4.6 BAR Management ensures that appropriate communication processes shall be established – from management to staff and staff to management. Communication that relate to the quality performance of BAR and the implementation and effectiveness of the QMS may be received through memos and special orders from the management; announcements posted in the bulletin boards, discussions/updates during meetings, verbal instructions from superiors, etc. Communication involving employee concerns on QMS-related issues may also be received through their immediate superiors, meetings, trainings, suggestion boxes, and other means that may be established.

7.4.7 Valid concerns or suggestions for the improvement of the Bureau’s quality performance and the effectiveness of the QMS shall be recorded and where appropriate, shall be integrated in the QMS.

B. External Communication

7.4.8 External providers shall be oriented by the designated functions of BAR before the start of their activities on-site.

7.4.9 Communications from external interested parties that relate to the Bureau’s quality performance and/or QMS effectiveness shall be received, documented and responded. External communication may include concerns and suggestions on BAR’s quality performance from customers, SUCs, private organizations, non-governmental organizations, regulatory bodies, local government units (LGUs), external providers and other interested parties.

7.4.10 Selected information above may also be communicated proactively to external interested parties during QMS Orientation of visitors, external providers and during its participation to relevant conferences, forums and conventions. Such initiative would be useful for BAR in:

7.4.10.1 Demonstrating its management commitment

7.4.10.2 Raising awareness among employees, external providers and other interested parties of BAR’s quality policy, objectives, programs and initiatives; and

7.4.10.3 “Walking the talk” to its external providers and other stakeholders in the industry.

7.5 Management System Documentation

A. Documentation Requirements

7.5.1 The documentation of BAR’s management system shall be structured following the pyramid hierarchy, as illustrated in Figure 7.1, The Hierarchy of QMS Documentation following the Pyramid Model. The QMS documentation shall include at minimum the following:
7.5.1.1 Quality policy, objectives and programs;
7.5.1.2 Description of the scope of the QMS;
7.5.1.3 Description of the main elements of the management system, the processes involved and their interactions, and references to related documents;
7.5.1.4 Documented information (documents and records) required by ISO 9001:2015 standard; to which the management system is based; and
7.5.1.5 Documented information (documents and records) determined by BAR to be necessary to ensure the effective planning, operation and control of processes that relate to its provision of operations and services

B. Documentation Structure

7.5.2 The QMS documentation is structured following the pyramid hierarchy, as illustrated below:

Figure 7.1 – Documentation Structure of the QMS of BAR

7.5.3 The above QMS documentation is prepared and organized in 4 parts as follows:

Level 1 – QMS Policy Manual

7.5.3.1 This manual shall provide an overview of the processes and services of the Bureau including the scope of its QMS. The manual serves as the primary reference of BAR in the overall planning, implementation and operation, performance assessment, review and continual improvement of the QMS.
7.5.3.2 The QMS Policy Manual contains policies, commitments and how the Bureau intends to satisfy the requirements of the different elements of ISO 9001:2015 Standards, and the Quality Policy. It provides a description of the core elements of the QMS and their interaction, and signposting to the other documents (system procedures, operational control procedures and operating instructions) that form part of BAR’s QMS documentation.

Level 2 – System Procedures Manual

7.5.3.3 This Manual contains the documented system procedures (SPs) required by the standard that relate to the effective establishment, implementation, maintenance and continual improvement of the QMS. These include among others, procedures for risks and opportunities assessment, setting-up and monitoring of objectives and programs; internal and external communication; control of documented information; service performance analysis; conduct of internal audits; nonconformity and corrective actions; and management review.

Level 3 – Operational Procedures Manual

7.5.3.4 This Manual contains procedures, work instructions and guidelines aimed at controlling the quality aspects specific to the departments/ units/ sections of BAR. The said documents shall describe how the different operations and processes shall be to be carried out taking into consideration their associated impacts to the quality performance of BAR. The work instructions shall provide a detailed description of how an activity or task defined in the procedure is to be carried out.

Note: Where practicable, system and operational procedures should consist of process flowcharts, description of the responsibilities, authorities and interrelationships of functions that manage, perform, verify or review works affecting the Bureau’s quality and environmental performance.

Level 4 – Records, Worksheets, Lists, Plans/ Programs and Other Data

7.5.3.5 Records provide evidence of the implementation and compliance of the Bureau with its QMS requirements, while worksheets, lists, plans/ programs and other references complement the first three levels of documentation. Documents and records belonging to this level include, but shall be not limited to, the following:

− ROA Worksheets (Organization’s Context, Needs and Expectations of Interested Parties and Business Process)
− Division Performance Commitment Review (DPCR)
− Quality Control Plans
− Communication Plan
− Office Orders/ Special Orders
− Reports and Minutes
− Logbooks
Other Documentation

7.5.3.6 Other Bureau policies, procedures and guidelines – are documents from the Bureau that are relevant to the processes and services of BAR, hence are expected to be complied with.

7.5.3.7 External documents such as copies of equipment manual, laws and regulations, and other requirements applicable to the operations and processes of BAR shall also form part of the QMS documentation.

7.5.3.8 Note: The requirements of applicable laws and other regulations shall prevail over the requirements of the QMS internal documentation.

C. Control of Documented Information (Documents and Records)

7.5.4 The control, authorization, issuance and amendments of QMS documents shall be in accordance with the Bureau’s document control procedure. The procedure includes provisions such that:

7.5.4.1 QMS documents are legible, dated and bear a unique identification and description, e.g., title, author or reference number, including the use of appropriate format (e.g., language, software version, graphics) and media (e.g., paper, electronic);

7.5.4.2 Current versions of QMS documents can be located and are available for use, where and when it is needed;

7.5.4.3 QMS documents are adequately protected from loss of confidentiality, improper use or loss of integrity;

7.5.4.4 QMS documents are periodically reviewed and where necessary, revised and approved for suitability and adequacy;

7.5.4.5 The nature of revision in the document is clearly identified; and

7.5.4.6 Obsolete documents are promptly removed from all points of issue to prevent unintended use, and when retained for future reference, these are suitably identified as such.

7.5.5 The DC shall maintain a set of Master Copies which are the set of documents originally signed by the designated signatories. Controlled hardcopies, which shall be reproduced from the Master Copy, shall be appropriately marked, initial affixed and then distributed to the approved copy holders. Superseded controlled copies shall be retrieved by the DC to prevent unintended use of the obsolete copies. The master obsolete copy shall be stamped by the DC as Obsolete on every page and filed for reference.

7.5.6 Copies of QMS documents may be provided by the DC to requesting parties, upon approval of the QMR. The copies shall likewise be reproduced from the Master Copy, but these shall be uncontrolled, i.e., the copy provided shall not be replaced shall it be superseded.
7.5.7 The revision number of, and changes to, internal QMS documents (those which are authored by BAR) shall be indicated in the Revision History. Revised documents shall bear the same code as the document they replace, but the revision numbers shall be updated, unless the management system documentation is re-structured.

7.5.8 Except for Quality policy, which shall be reviewed at least annually as part of the QMS management review, internal QMS documents shall be reviewed and revised, where necessary, at least every three (3) years. Review may also be prompted by changes to the management system scope and/or requirements, audit findings, management directive, among others. Records of reviews shall be maintained.

7.5.9 Documents of external origin affecting the QMS shall be identified and their distribution controlled. The process owners shall periodically revisit the sources of these documents to ensure that the documents are updated.

7.5.10 QMS records shall be controlled in accordance with the established procedure on records control. The procedure shall include identification, maintenance, storage, and retrieval, protection from damage and/or loss, and disposal of QMS records.

7.5.11 Adequate records shall be maintained to demonstrate conformity to the requirements of ISO 9001:2015 standard, and to the needs of BAR’s QMS. Records relevant to the QMS include, but shall be not limited to, records of requests and services provided, monitoring and measurement activities, monitoring of quality performance indicators, results of audits, and reviews done on the management system.

7.5.12 Master lists of records per division/unit/section shall be prepared for immediate reference on the implementation of the management system.
8.0 OPERATING THE QMS

8.1 Operational Planning and Control of BAR's Business Processes

8.1.1 BAR plans, implements and controls its processes to consistently:

8.1.1.1 Meet customer requirements and enhance customer satisfaction;
8.1.1.2 Comply with applicable statutory and regulatory requirements;
8.1.1.3 Control and address risks and opportunities; and
8.1.1.4 Achieve set quality objectives.

8.1.2 BAR also control planned changes and review the consequences of unintended changes, acting to mitigate any adverse effects, as necessary. Further, BAR ensures that outsourced processes shall be controlled or influenced.

8.2 Requirements for Products and Services

8.2.1 Customer Communication

8.2.1.1 BAR establishes, defines and arranges clear and effective communication systems for interfacing between BAR personnel and their counterparts in the customer's organization at the start of the contract review mainly for verification, inquiries and customer feedback.

8.2.2 Determining and Reviewing Requirements and Changes for Products and Services

8.2.2.1 BAR, through its relevant divisions/ units/ sections and key functions, shall ensure that customer requirements related to their specific services shall be determined. These include among others the following:

a) Requirements specified by the customer, including the requirements for delivery and post-delivery activities;
b) Requirements not stated by the customer but necessary for specified or intended use, where known;
c) Statutory and regulatory requirements applicable to the services; and
d) Any additional requirements considered necessary by BAR.

8.2.2.2 Further, relevant divisions/ units/ sections and key functions shall review customer requirements prior to confirming the provision of their services and ensure that:

a) Needed services are defined;
b) Service requirements differing from those previously expressed are resolved;
c) Relevant divisions/ units/ sections and key functions can meet the defined service requirements;
8.3 Design and Development of Products and Services

8.3.1 The requirements of the design and development of products and services is not applicable to the defined scope of the QMS of BAR. The Bureau coordinates and provides grants to agriculture and fisheries researches, it has no design and development functions.

8.4 Purchasing and Control of Externally Provided Processes, Products and Services

8.4.1 BAR ensures that externally provided processes, products and services conform to its requirements. BAR determines and applies controls to externally provided processes, products and services when:

8.4.1.1 Products and services from external providers are intended for incorporation into BAR’s own services;

8.4.1.2 Products and services are provided directly to the customer(s) by external providers on behalf of BAR; and

8.4.1.3 A process or part of a process, is provided by an external provider as a result of a decision by the BAR.

8.4.2 Selection and Evaluation of Suppliers and Service Providers

8.4.2.1 Purchases of goods (e.g., supplies, materials and equipment) and important services (contractors or Job Orders, technical experts, security and general utility services) shall be made only from suppliers and service providers included in the “List of Approved Suppliers and Contractors” and “Pool of External R&D Experts.”

8.4.2.2 Existing suppliers and service providers of the Bureau are automatically included in the List/Pool. New suppliers and service providers shall be selected based on established criteria. Where practicable, site inspection is conducted to verify the information from the submitted Supplier/External Provider Information Form.

8.4.2.3 The Pool of External R&D Experts is composed of specialists from the Department of Agriculture (DA), State Universities and Colleges (SUCs), non-governmental organizations (NGOs) and private sectors and other government institutions who are technically equipped and actively involved in R&D. The Pool is created through a Special Order aimed to assist the Bureau in technical
evaluation of proposals and in monitoring and evaluation of R&D programs/projects.

8.4.2.4 Suppliers and service providers shall be selected and maintained in the List of Approved Suppliers and Pool of External R&D Experts based on their demonstrated satisfactory performances during their periodic performance evaluation.

8.4.2.5 Suppliers and service providers’ capability to comply with applicable legal requirements and the BAR’s policies and regulations shall be considered during their selection and performance evaluation. End users of the purchased goods and services provide feedback on their quality performance. Suppliers and service providers with unsatisfactory performance may be de-listed from their respective List and Pools when they fail to take appropriate corrective action accordingly. Table 8.1 below shows control matrix for the suppliers and service providers of the Bureau.

Table 8.1 Control Matrix for Suppliers and External Providers

<table>
<thead>
<tr>
<th>SERVICES/ PRODUCTS</th>
<th>FORM OF CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONTRACT</td>
</tr>
<tr>
<td></td>
<td>Contract of Service</td>
</tr>
<tr>
<td>Supplies &amp; Materials, Equipment and Printing Press Services [Printed Information, Education and Communication Materials, e.g., BAR Digest and BAR Chronicles, etc.]</td>
<td></td>
</tr>
<tr>
<td>Legal, Security &amp; Janitorial Services [Provision of security and housekeeping services within BAR premises]</td>
<td>Contract of Service</td>
</tr>
</tbody>
</table>

Note: Review of SO of the Pool of External R&D Experts shall be done annually.
### FORM OF CONTROL

<table>
<thead>
<tr>
<th>SERVICES/ PRODUCTS</th>
<th>CONTRACT</th>
<th>SELECTION/ ACCREDITATION</th>
<th>PERFORMANCE EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract of Service Personnel</td>
<td>Contract of Service</td>
<td>Existing: automatic accreditation and inclusion in approved List of Contract of Service Personnel</td>
<td>Every renewal of Contract of Service</td>
</tr>
<tr>
<td>Maintenance services</td>
<td>Invoices/ Official Receipt</td>
<td>Not needed</td>
<td>After completion of services</td>
</tr>
<tr>
<td>• Vehicles</td>
<td></td>
<td>• All vehicles are maintained and serviced by respective workshop</td>
<td></td>
</tr>
<tr>
<td>• Photocopiers</td>
<td></td>
<td>• Photocopiers are maintained and serviced by respective suppliers</td>
<td>Note: Performance evaluation is made through their customer satisfaction systems</td>
</tr>
</tbody>
</table>

### 8.4.3 Purchasing data

**8.4.3.1** Purchases shall be made via purchase orders or purchasing contracts. In both cases, requirements shall be detailed in the purchasing documents such as code, technical specification, price, condition, delivery date, etc.

**8.4.3.2** Procurement documents shall be reviewed by the Procurement personnel and appropriately approved. Purchasing personnel shall be responsible for placing orders, maintaining records of purchases data, supplier performance evaluation and follow-up of order status.

### 8.4.4 Verification of Purchased Products and Services (Incoming Inspection)

**8.4.4.1** Purchased supplies, materials and equipment shall be verified against purchasing documents (purchase orders) as to their condition, quantity and quality, mainly by the end users upon receipt or delivery. Purchased products failing to meet acceptance criteria shall be physically identified, segregated and handled and/ or disposed in accordance with the procedure on Control of Nonconforming Outputs.

**8.4.4.2** Service providers shall be engaged through Special Order and/ or Contract of Service. Performances of service providers shall be evaluated usually after the provision of their services for short term engagement (R & D Experts, printing services, maintenance, etc) and semi-annual for long term engagement (janitorial, security, etc).

**8.4.4.3** Where the purchasing function requires verification of the purchased products or services at the premises of suppliers and services providers, it shall define...
verification arrangements and methods of release with the suppliers and service providers in the purchasing documents.

8.5 Production and Service Provision

8.5.1 Control of Production and Service Provision

8.5.1.1 Operations and processes of BAR that could affect the quality of its services shall be identified, planned, maintained and carried out under specified conditions to meet customer requirements and enhance customer satisfaction.

8.5.1.2 Specified conditions shall include among others, the following:

a) Preparation of documented operational procedures or work instructions on how the different core and support processes shall be performed. The procedure or work instruction shall include where practicable, a clear definition of responsibilities and the minimum requirements for each processes and services, i.e., timetable for the processes, resources required, etc. Where applicable, the requirements of set objectives and targets shall also be incorporated in the documentation. Where practicable, a copy of relevant documentation shall be made available at each divisions and sections for immediate reference during the implementation of the service;

b) Use of qualified and competent personnel in performing the different core and support processes, as per Civil Service Commission (CSC) requirements for the item. Relevant personnel shall be qualified based on their education, training and experience;

c) Use of appropriate and adequate resources and facilities in providing the Bureau's services, and suitable work environment;

d) Suitable maintenance of relevant facilities to ensure continuing effectiveness of services;

e) Provision of adequate resources and processes to ensure compliance to applicable statutory and regulatory requirements, and accreditation requirements including international standards that the Bureau subscribes to; and

f) Implementation of appropriate release, delivery and post-delivery activities for services, i.e., seminars, forums, etc.

8.5.1.3 The service provision processes covered in the QMS that shall need to be carried out under controlled conditions are illustrated in Figure 8.1 – Business Processes of BAR and listed as follows:

A. Core Processes

8.5.1.4 The core processes and services of BAR to external customers are performed mainly by its divisions, namely:
a) Program Development Division
   • Policy and Planning Section
   • Project Evaluation

b) Institutional Development Division
   • Human Resource Development
   • Research Facilities Development
   • Institutional Linkages

c) Technology Commercialization Division
   • Technology Sourcing Section
   • Technology Development and Evaluation Section
   • Technology Promotion and Market Linkage Section
   • Intellectual Property Management Section

d) Applied Communications Division
   • Publication Section
   • Educational Communication Section
   • Scientific Literature Services Section

e) Program Monitoring & Evaluation Division

B. Support Processes

8.5.1.5 Other divisions and units of BAR provide the support processes for the coordination and provision of grants to agriculture and fisheries researches are as follows:

a) Administration Division
   • Property and Supply Section
   • Personnel Section
   • Records Section
   • General Services Section
   • Cashier Section

b) Finance
   • Budget Section
   • Accounting Section

The specific processes and services provided by the above divisions and sections shall be further defined in their respective QCPs and operational procedures.
This is a controlled documented information and must not be printed or photocopied without prior permission from the Director and/or QMR.
8.5.1.6 BAR coordinates the implementation of its major R&D programs through provision of the following grants:

A. Basic and Applied Research

- The basic or upstream research is directed towards increase in knowledge or understanding of the fundamental aspects of phenomena and observable facts without specific application or use in view. It is an original investigation for the advancement of scientific knowledge and does not have specific commercial objectives.

- Applied research is either midstream or downstream research. Midstream research deals with technology generation and is done in research stations (controlled environment) geared towards gaining knowledge and understanding necessary to address a pressing problem or need. Technology generation in this context refers to the process of developing technologies that are for verification and are not yet ready for dissemination. On the other hand, downstream research deals with technology verification and dissemination and is done on farmer’s field, sites or locations. Downstream researches are usually directed towards fine-tuning and verification of newly-developed technologies to determine their feasibility on the ground level.

B. Technology Commercialization

- Technology Commercialization is the utilization, adoption, and promotion/marketing of mature technologies which were generated/developed and tested/verified by R&D institutions (government or private) with the potential to generate income through sustainable enterprise development. The grant supports projects in line with the following:
  - Production, processing, and packaging of agriculture and fisheries products;
  - Adoption, enhancement and improvement of existing production, processing and packaging technologies;
  - Promotion and marketing of agriculture and fisheries products;
  - Combination of either production, processing and packaging of agriculture and fisheries products; and promotion and marketing of agriculture and fisheries products.

C. Institutional Development Grant

- The Institutional Development Grant is a funding facility administered by DA-BAR to provide financial assistance to qualified R&D agencies/institutions. The program aims to enhance capabilities of NaRDSAF member institutions to efficiently and effectively implement and manage R&D programs/activities in agriculture and fisheries. Furthermore, the program aims to improve the quality of research outputs through the provision of
state-of-the-art laboratory equipment and facilities within international standards.

D. Human Resource Development (HRD) Program

- In view of the continuous competitive globalization, the Human Resource Development Program of the Bureau aims to increase the manpower capability of the agriculture and fisheries research system of the country. The program intends to increase the number of post-graduate degree holders for the improvement of efficiency in the conduct of agriculture and fisheries researches oriented towards the betterment of the lives of farmers and fisherfolk.

E. Scientific Publication Grant

- The Scientific Publication Grant (SPG) provides financial grant for the publication of books, journals, pamphlets, technical papers and proceedings in the field of agriculture and fisheries R&D. Proposed topics should be consistent and parallel with the national agricultural and fisheries development thrusts.

F. Project Monitoring and Evaluation

- Monitoring and evaluation provide better means for learning from past experiences, improving service delivery, planning and allocating resources, and demonstrating results as part of accountability to key stakeholders. Monitoring and evaluation of DA-BAR R&D projects is fundamental to ensure their smooth and effective implementation. In order to implement the monitoring and evaluation of RDE projects of DA-BAR, the Monitoring and Evaluation Team (MET) is created. Also, progress and completion reports are submitted by the proponent to DA-BAR for review to determine if the project achieved its objectives and accomplished the activities in accordance with the approved workplan of activities. In addition, on-site/field monitoring is also conducted to validate if the accomplishments written on the report are consistent with the actual output on-site/in the field. Monitoring of projects is also necessary to determine if the project is to be continued or terminated based on the recommendations of MET.

8.5.1.7 Proponents of the project grants must possess the required academic qualifications and track record to successfully implement research and/or development project. The proponent should be able to carry out the project with due diligence and efficiency, and in accordance with appropriate agricultural and fisheries practices that conform to sound environmental and social standards.

8.5.1.8 Awarding of grants is always based on the merits of the approved proposals. There is no limit as to the number of proposals a particular proponent may submit, but prioritization shall be implemented subject to availability of funds or as deemed appropriate and necessary, or given that the proponent has no outstanding balance with the Bureau in the form of uncompleted projects or unliquidated balances. Each proposal is treated separately and independently, in strict accordance with the established guidelines. Acceptance, approval and implementation of projects shall conform to the Revised Documentary

8.5.1.9 System and guidelines including the process flow for the acquisition of grants provided by the Bureau are detailed in the quality control plans (QCPs) and operational procedures (OPs) of each division and sections.

8.5.2 Identification and Traceability

8.5.2.1 BAR utilizes a Project Monitoring Database to identify the status of every on-going project of each project Coordinator. The database enables the Bureau to identify the status of the project throughout its whole duration. Individual files of each on-going project are properly kept and monitored for easy access.

8.5.2.2 The need for identification and traceability may also apply to the following:

a) Product status during verification of delivered purchases;
b) Status and capability of service provision processes, particularly resulting from monitoring and measurement activities; and

c) Relevant statutory and regulatory requirements, i.e., DA Memos, COA, etc.

8.5.2.3 The process or methods in the use of unique identification and traceability shall be built-in in the specific operational procedures, guidelines and work instruction for the different services of the Bureau.

8.5.3 Property Belonging to Customers or External Providers

8.5.3.1 Customer properties covered under this element of the standard include but not limited to the following:

a) Personal data of Proponents
b) Research proposals submitted by the proponents
c) Work Plan Schedule
d) Budget Summary
e) Worksheet Details for Equipment Outlay
f) Technology used and Logical Framework
g) Financial Viability
h) Business Plan and Progress Report
i) Terminal Report
j) Research outputs, i.e., information, new or improved technology, new or improved products, etc.

Note: Reports submitted to BAR become public documents. BAR, being the funding agency in the agriculture and fishery researches referred herein, shares ownership of the results of the researches including patent rights to new or improved technology and products.

8.5.3.2 Currently, there is no property by the suppliers and service providers that are entrusted to BAR except for their personal information, which the Bureau is
8.5.3.3 BAR shall ensure that customer properties which are mainly in the form of documented information entrusted to the Bureau shall be identified, verified, and reasonably protected from loss of confidentiality, loss of integrity and improper use. The control of customer properties shall be in accordance with the established procedure on the control of documented information.

8.5.4 **Preservation**

8.5.4.1 This element of the standard applies mainly to the following:

a) Proprietary information provided to BAR by its proponents  
b) Tangible products produced from researches.

8.5.4.2 BAR ensures proper identification, handling, packaging, storage and protection of documented information pertaining to on-going and completed projects in accordance with the guidelines of the National Archives of the Philippines.

8.5.4.3 Relevant divisions and sections shall maintain procedures to ensure preservation of their respective documented information described above through proper identification, handling, storage and protection during internal processing and delivery to the intended process or customers to maintain conformity to requirements.

8.5.5 **Post-delivery Activities**

8.5.5.1 BAR post-delivery activities for the funded researches including institutional development projects are explicitly defined in the Memorandum of Agreement with the Proponents and its affiliated organization. These post-delivery activities are ensured consistent with applicable statutory and regulatory requirements like rules and regulations of the Commission on Audit (COA) on disbursed funds, intellectual property rights on the results of researches as provided for in RA 8293, Philippine Intellectual Property Code; etc.

8.5.6 **Control of Changes**

8.5.6.1 BAR, through its relevant divisions/ sections/ units reviews and controls changes in its services including among others the following:

a) Changes in the allocation of R&D funds to approved and on-going researches including institutional developments projects;  
b) Changes in the research and development thrust of the Bureau including set R&D priority areas; and  
c) Organizational changes in the Bureau that may affect the continuing conformity of its service requirements.
8.5.6.2 BAR retains documented information describing the results of the review of changes, the person(s) authorizing the change, and any necessary actions arising from the review.

8.6 Release of Products and Services

8.6.1 BAR performs several stages of reviews, monitoring and evaluation to ensure grants are provided based on the merits of submitted research and development proposals and their alignment with the R&D thrusts of the Bureau. These include but not limited to the following reviews, monitoring and evaluation activities:

8.6.1.1 **Screening of R&D proposals** at the division level to determine the completeness of proposals to BAR prescribed format and attachments such as Endorsement Letter from partner agency, Workplan Schedule, Budget Summary and Logical Framework;

8.6.1.2 **En Banc Review of R&D proposals** to evaluate technical soundness, completeness and appropriateness to the identified researchable areas of RDEAP and to facilitate recommending approval of the proposal;

8.6.1.3 **Final Approval of the R&D proposals** to officially certify its approval and to facilitate funding and implementation of the newly-approved R&D proposal;

8.6.1.4 **Processing of Documents for Fund Releases** to determine completeness of documents of final detailed proposal;

8.6.1.5 **Monitoring & Evaluation of On-going R&D projects** to determine completeness and appropriateness of progress and financial reports including compliance to recommendations resulting from continuing monitoring, review and evaluation of progress and to facilitate the succeeding fund releases; and

8.6.1.6 **Terminal review and Project Completion** to determine completeness, appropriateness and acceptability of terminal and audited financial reports including results of the funded research and development projects.

8.6.2 Specific requirements to the above reviews, monitoring and evaluation activities or equivalent activities are detailed the QCPs of relevant divisions/ sections/ units of BAR. Results of reviews, monitoring and evaluation shall be complied by the proponents and their respective affiliation before any on-going R&D projects are continued and succeeding funds are released.

8.7 Control of Nonconforming Outputs

8.7.1 The identification of nonconforming processes, products and services, and determining subsequent actions shall be carried out in accordance with the established procedure on control of nonconforming outputs. These nonconformities maybe detected out of specification during monitoring and measurement of processes at different stages of the BAR operations and services. Nonconforming outputs in the coordination and provision of grants to agriculture and fisheries researches shall include, but are not limited to the following:
8.7.1 Nonconforming purchased supplies and materials, and equipment (by suppliers) – Deliveries of supplies and materials including equipment and other purchased goods failed to meet the required purchase specification, i.e., office supplies and materials, uniforms, equipment and parts, etc.

8.7.2 Nonconforming services (by service providers) – Include engaged services that are not conforming to purchase specifications and/ or deliverables specified in the contract of services or failing to meet acceptable performance during periodic performance evaluation. These shall include services like janitorial, security, printing, repair and maintenance, car rental, etc. Technical consultants and experts who are not meeting the acceptable performance level during engagement of their services shall be included, e.g., external R&D experts, technical consultants, etc.

8.7.3 Nonconforming employee and/ or staff – Personnel (BAR employee including contract of service personnel) whose performance rating is below the acceptable performance rating;

8.7.4 Nonconforming proposals, reports and other submissions by research proponents that are not acceptable to BAR;

8.7.5 Nonconforming services – Services evaluated by customers during customer/ visitor satisfaction survey to be below the acceptable performance level

8.7.6 Other nonconforming products and services are explicitly defined in the Quality Control Plans (QCPs) of each division, section and unit

8.7.7 Nonconforming outputs (defined above) shall be recorded in Logbook of Nonconforming Outputs by the designated function of the division/ section/ unit. The Logbook shall contain information describing the details of the nonconformity of the product or service, immediate and subsequent actions taken, including disposition. Responsibilities and authorities in the review and disposition of nonconforming outputs and maintenance of records shall be defined and performed in the specified procedures. Where nonconforming outputs are reworked or repeated, these shall be re-evaluated before use and/ or delivery to the next process. Records of re-evaluation shall be maintained.

8.7.8 Where practicable, nonconforming outputs shall be identified, segregated or marked to prevent them from being used by the next process or from being delivered to the external customer. Correction and where appropriate, corrective action shall be initiated to prevent their recurrence. The System Improvement Request (SIR) shall be initiated and processed in accordance with the procedure on corrective action.
9.0 PERFORMANCE ASSESSMENT OF THE QMS

9.1 General Requirements

9.1.1 As illustrated in the PDCA framework of the QMS, the performance of the management system shall be monitored, measured, analyzed and evaluated to:

9.1.1.1 Determine conformity of the QMS to planned arrangements and the requirements of the ISO 9001:2015 Standards; and

9.1.1.2 Identify areas for continually improving the quality performance of BAR and the effectiveness of the QMS.

9.1.2 BAR's QMS processes shall be monitored and measured at relevant stages and levels to determine their conformity to planned arrangements and the requirements of the ISO 9001:2015 Standard on which this management system is based. The monitoring and measurement of processes and services are aimed at identifying areas for continually improving the implementation and effectiveness of the management system.

9.1.3 Monitoring and measurement processes shall be appropriate to the Bureau's needs. Monitoring and measurement of performance quality include monitoring of BAR's progress with its set goals, specific objectives; conformity to its operational procedures, and the implementation of quality initiatives of BAR.

9.1.4 Results of monitoring and measurement shall be recorded and analyzed to facilitate the assessment of the management system's overall performance and to identify opportunities for continual improvement. Monitoring and measurement activities shall include the following:

A. Monitoring Customer Satisfaction

9.1.4.1 A Customer Satisfaction Survey (CSS) shall be conducted regularly to determine the overall perception of the customers as to how well BAR is meeting customer requirements. Consolidated results shall be presented during the management review.

9.1.4.2 Performance rating below the acceptable level shall be considered nonconforming service and shall require correction and corrective action in accordance with the established procedure on corrective action.

9.1.4.3 Relevant functions of the Bureau shall monitor and measure the satisfaction level of their customers (e.g., researchers, partner institutions and government agencies, LGUs and private sector, etc.) on the quality of services they provide. Customer satisfaction survey forms that are aimed to determine how well the different divisions/ sections/ units are meeting the requirements of their customers shall be developed.

9.1.4.4 The CSS shall be conducted by the divisions/ sections/ units for their respective customers once a year. The results of the survey shall be tabulated, summarized and analyzed using appropriate statistical tools. Consolidated results shall be presented during the management review.
9.1.4.5 Personnel and staff with performance rating below the acceptable performance level shall be considered nonconforming personnel and shall require intervention from the Head of their respective divisions/sections/unit. Any rating below the set acceptable rating for two consecutive semesters shall be addressed with appropriate corrective action. Appropriate action may also be initiated when the performance rating is still within an acceptable level but there is a decreasing trend in performance and/or when performance criteria not met. Records of the nonconforming personnel and action taken shall be maintained.

B. Monitoring Quality Objectives and Programs

9.1.4.6 Performance against set goals, objectives and performance indicators shall be monitored and measured at planned intervals.

9.1.4.7 As discussed earlier, BAR’s objectives shall be established at each relevant divisions/sections/units during BAR periodic strategic planning. Management programs shall be formulated and implemented to achieve set objectives. The objectives and programs shall be further documented in the Office Performance Commitment and Review (OPCR) of the BAR Director, in the DPCR (Division/Unit Performance and Commitment and Review) for the different divisions and IPCRs (Individual Performance Commitment and Review) for the individual employees.

9.1.4.8 The progress of the Bureau against its OPCR, DPCRs and IPCRs shall be monitored and measured monthly and overall performance against set targets shall be evaluated every end of semester. Accomplishment Reports and other documented information to evidence fulfillment or non-fulfillment of the objectives/targets and programs in the OPCR, DPCRs and IPCRs shall be submitted to the respective Heads for consolidation and submission to the Director at the end of every semester (semi-annual). Objectives, which are not achieved or programs which are not implemented as planned shall be evaluated during the Strategic Planning and where found relevant, shall be carried over for the next calendar year.

9.1.4.9 Where practicable, and at the discretion of the QMS Technical Working Team, new and additional objectives and performance indicators may be set when objectives are met well in advance of the target schedule.

9.1.4.10 Additional objectives and programs may also be set upon recognition of other priority areas for improvement. These improvement areas may result from DA directives, the organization’s continuing review of its business processes and services; and/or considering relevant new information.

9.1.4.11 Objectives/Targets which are not achieved or programs which are not implemented as planned for the semester at the division level of responsibility shall be addressed in accordance with the established procedure on corrective action.
C. Monitoring and Measurement of Processes and Services

9.1.4.12 BAR shall monitor its QMS processes and service through audits and inspections at relevant stages of the business processes. To facilitate this activity, the processes are categorized as follows:

a) System-related processes, which address the system requirements of the ISO 9001:2015 Standard;

b) Service quality-related processes

9.1.4.13 Implementation and effectiveness of the system-related processes shall be monitored and measured mainly through internal QMS audit, as explained in the latter sections of this manual. Any deficiency or nonconformity detected during audit shall be addressed in accordance with the established procedure on corrective action. On the other hand, monitoring and measurement of BAR’s service quality-related processes shall be performed at relevant stages against the Quality Control Plan (QCP). In addition, the Customer Satisfaction Survey shall also be used to monitor and measure the effectiveness of the processes and services of BAR at the division level.

9.1.4.14 Core processes and support services with direct interaction with external customers that are rated below the acceptable performance level shall be considered nonconforming process or service and shall require intervention (correction) from the Head of their respective division/section/unit. Any rating below the set acceptable rating for two consecutive semesters shall be addressed with appropriate corrective action. Where practicable, comparative analysis of the results of monitoring and measurements activities shall be done to establish trends, which could be used in identifying the need for additional actions. Records of the nonconforming process or services, and any action taken shall be maintained.

D. Identification and Evaluation of Compliance Obligations

9.1.4.15 BAR shall establish, implement and maintain procedures for periodically monitoring and evaluating its compliance with applicable statutory and regulatory requirements to which it subscribes. The Bureau shall evaluate its compliance every end of the semester. Compliance shall also be evaluated in light of new and/or amendments of existing regulations, and other significant changes in the Bureau that could potentially affect its QMS performance.

9.1.4.16 Breaches with applicable laws and regulations, including timely application or renewal of required permits and licenses and/or submission of reports shall be closely monitored. The results of periodic evaluation shall be reflected on the Master List of Applicable Legal and Other Requirements.

9.1.4.17 The results of periodic compliance monitoring and evaluation shall be brought to the attention of the Director. Non-compliance issues are acted upon in accordance with the established procedure on corrective action.
9.1.5 Analysis and Evaluation of Monitoring and Measurement Data

9.1.5.1 The results of monitoring and measurement activities above shall be the main sources of data or information to be analyzed and evaluated as to the overall quality of the services provided by the Bureau and the effectiveness of its QMS. Hence, to ensure that the analysis and evaluation of data are comprehensive and meaningful, these must provide information relating to:

a) Conformity of BAR services to specified requirements;
b) Degree of customer satisfaction to the services provided by the Bureau;
c) Characteristics and trends of BAR processes, services and other defined parameters related to its services;
d) Effectiveness of actions to address associated risks and opportunities to the business;
e) Performance of suppliers and service providers to the Bureau’s specified requirements;
f) Level of compliance with the QMS requirements;
g) Performance and effectiveness of the QMS;
h) If planning has been implemented effectively; and
i) Need for improvements to the QMS.

9.1.5.2 The results of data analyses can also be used in identifying nonconformity or inadequacies of the QMS, including identifying additional training of personnel, and opportunities for further improvement in the management system.

9.2 Internal QMS Audit

9.2.1 Internal audit of the management system shall be carried out in accordance with the established procedure. Audit of the entire management system shall be conducted at planned intervals at least annually. Additional audits may be undertaken where there are identified problems that could seriously affect the integrity of the QMS. The purposes of the internal audits are as follows:

9.2.1.1 Determine whether the QMS conforms to planned arrangements such as those defined in the Quality policy, objectives, operational procedures, to the requirements of the ISO 9001:2015 Standard, and other requirements of the management systems, and BAR’s Policies;

9.2.1.2 Verify that the QMS is properly implemented and maintained; and

9.2.1.3 Provide information on the results of audits for management review.

9.2.2 The internal audit shall be undertaken by a team of qualified auditors. The team shall comprise auditors from different divisions/sections of BAR and shall be headed by the Lead Internal Auditor. The auditors shall be appropriately trained and must have completed at least the following trainings or their equivalents:

9.2.2.1 Appreciation Course on ISO 9001:2015 Standard or equivalent; and

9.2.2.2 Internal QMS Audit Course or equivalent.
9.2.3 The auditors must also be familiar with the BAR processes and QMS requirements. To ensure the objectivity and impartiality of the audit process, the internal auditors shall not audit their own work/ areas.

9.2.4 The Lead Internal Auditor shall maintain an audit program that takes into consideration the status and importance of the processes and areas to be audited, significant changes in the Bureau and results of previous audits.

9.2.5 An internal audit matrix shall be developed to determine the scope and focus of audit that shall be conducted for every area/ process/ function. Results of the audit shall be recorded in checklists and the nonconformities and observations shall be documented using the System Improvement Report and Monitoring Worksheet. Audit records shall be retained and controlled in accordance with the established procedure for control of documented information.

9.2.6 The process owner of the audited area/ function/ process shall ensure that correction and corrective actions are taken to address audit findings and to eliminate the detected nonconformities and their causes without undue delay. Follow-ups of corrections and corrective actions taken to address audit findings shall be performed in accordance with the established procedure on corrective action.

9.3 Management Review

9.3.1 Review Process

9.3.1.1 A two-tier review shall be adopted for the review of the QMS to ensure its continuing suitability, adequacy and effectiveness.

9.3.1.2 The first tier shall be in the division/ section/ unit level, which shall focus on day-to-day issues and implementation of the QMS. This review shall be chaired by the Deputy QMR. The Review Team at this level shall include at minimum, the Head (who is also the Deputy QMR), Working Team Representative(s) and the DRC.

9.3.1.3 The second tier shall be a dedicated review of the QMS which shall be conducted at least once a year. This periodic review shall be conducted by the defined Management Review (MR) Team (refer Figure 5.2 Functional Structure of the QMS of BAR) and chaired by the BAR Director. The MR Team comprises at minimum the Director, Executive Committee, QMR, Deputy QMRs, Lead Internal Auditor and the Document Controller. Other resource persons may be identified and invited as deemed necessary.

9.3.2 Review Inputs

9.3.2.1 The review inputs shall include but are not limited to the following:

a) Status of actions from previous Management Review;
b) Changes in:
   − External and internal issues that are relevant to the QMS;
   − The needs and expectations of interested parties including compliance obligations; and
Risk and opportunities

c) The extent to which quality objectives have been achieved;
d) Information on the performance of the QMS, including trends in:
   – Customer satisfaction and feedback from relevant interested parties;
   – Process performance and conformity of BAR services;
   – Nonconformities and corrective actions;
   – Monitoring and measurement results;
   – Fulfilment of compliance obligations;
   – Audit results; and
   – Performance of suppliers and service providers

e) The adequacy of resources;
f) The effectiveness of actions taken to address risks and opportunities; and
g) Relevant communication(s) from customers and other interested parties, including complaints; and
h) Opportunities for continual improvement.

9.3.2.2 The above agenda need not be covered in a single meeting, but these must be discussed within each second tier QMS review cycle, i.e., one year.

9.3.2.3 Review Outputs - Outputs shall include actions and decisions regarding:

a) Conclusions on the continuing suitability, adequacy and effectiveness of the QMS;
b) Commitments and recommendations for continual improvement;
c) Resource needs, i.e., training needs, technology upgrade, etc.;
d) Continuing suitability of the BAR quality policy, objectives and programs;
e) Opportunities to improve integration of the QMS with other business processes, if needed;
f) Any implications for the strategic direction of the organization; and
g) Other changes that could affect BAR's QMS.

9.3.2.4 The minutes of the meeting shall be maintained in accordance with the established procedure for the control of documented information. Copy of the minutes shall be distributed to all the members of the Management Review Team, who then are responsible in communicating relevant information in their respective departments. Records of management reviews, including decisions and actions taken shall be retained by the DC.

9.3.2.5 The QMR may post some highlights of the meeting and/ or relevant information about the performance of the management system for possible participation and consultation among their employees and members on-site.

9.3.2.6 Where appropriate, the management may initiate the issuance of corrective action for areas needing further investigation and immediate action, areas for improvement, or issues that could result to a potential nonconformity.
10.0 IMPROVEMENT OF THE QMS

10.1 General Requirements

10.1.1 The results from the analysis and evaluation of quality performance, internal audits and management reviews shall be considered by BAR when planning and acting to improve the QMS.

10.2 Nonconformity and Corrective Action

10.2.1 System nonconformity is defined as any deviation from specifications, operational criteria, procedures, regulations and other management system requirements. The following are the possible nonconformities requiring system improvement request (SIR) that may be encountered during the implementation and maintenance of the QMS:

10.2.1.1 Nonconformities detected during audits, i.e., internal and external audits;
10.2.1.2 Product/ Service nonconformity resulting from monitoring and measurements;
10.2.1.3 Noncompliance to legal requirements detected during periodic evaluation of compliance including notice of violation from the regulatory bodies;
10.2.1.4 Objectives or targets that are not achieved and/ or management programs that are not implemented as planned;
10.2.1.5 Recurring/ Repeated nonconformity to established procedures and work instruction;
10.2.1.6 Valid customer complaints and concerns/ views from relevant interested parties;
10.2.1.7 Low rating (below the acceptable performance level) in the Customer Satisfaction Survey;
10.2.1.8 Low rating (below the acceptable performance level) in the Performance Evaluation of Suppliers and Service Providers;
10.2.1.9 Problems identified by the Management Review Team during periodic review of the QMS; and
10.2.1.10 Other problems identified during the analysis of QMS performance data.

10.2.2 Relevant BAR personnel shall be guided in addressing actual and potential nonconformities and other system improvement requirements of the QMS through the established procedure on Nonconformity and Corrective Action. The procedure defines responsibilities and authorities for the above nonconformities and includes provisions for the following:

10.2.2.1 Documentation of the detected nonconformity, correction and corrective action processes through the SIR form containing the following fields:
a) Description of nonconformity, usually done by the function initiating the issuance of the SIR or function detecting the nonconformity;

b) Determination and initiation of correction or control measures for mitigating the consequences of the nonconformity;

c) Determination of the cause of nonconformity, usually done by the designated function to whom the SIR has been issued;

d) Determination if similar nonconformities exist, or could potentially occur elsewhere;

e) Determination and implementation of appropriate action(s) to prevent the recurrence of the nonconformity or occurrence of similar nonconformity elsewhere; and

f) Review and verification of the implementation and effectiveness of action(s) taken.

10.2.2.2 Corrective actions shall be appropriate to the nature and magnitude of the impact of the nonconformity to the Bureau’s quality performance and the effectiveness of the QMS.

10.2.2.3 Changes to documentation that may be prompted by corrective actions shall be incorporated following the established procedure on control of documented information. Relevant records shall be appropriately controlled.

10.3 Opportunities and Continual Improvement

10.3.1 BAR shall continually improve the suitability, adequacy and effectiveness of the QMS and to enhance customer satisfaction.
### ELEMENTS OF ISO 9001:2015 STANDARD AND CORRESPONDING DOCUMENTED INFORMATION OF BUREAU OF AGRICULTURAL RESEARCH (BAR)

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**PERFORMANCE EVALUATION**

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**IMPROVEMENT**

<p>| 10.1 General | BAR-QMS-PM-01 | 10.0 IMPROVEMENT OF THE QMS – Section 10.1, General Requirements |
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<td>0</td>
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<td>07/15/19</td>
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<td>Revision of the defined scope of the QMS in Section 4.3 into “Coordination and Provision of Grants for Agriculture and Fisheries Researches” Reformatted/Re-structured the whole Manual resulting to its repagination.</td>
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<td>09/04/20</td>
<td>2</td>
<td>1</td>
<td>Replaced Mr. Alexander G. Arizabal, Jr. with Ms. Marjorie M. Mosende as Quality Management Representative due to S.O. no. 150 series of 2019 dated September 9, 2019.</td>
<td>09/18/20</td>
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<td>09/04/20</td>
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<td>16-17, 20-21</td>
<td>Updated BAR’s Core Functions, Vision, Mission, R&amp;D Goals, and R&amp;D Thrusts based on the approved BAR’s Strategic Plan 2021-2021 as per memo dated August 26, 2020.</td>
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<td>Updated BAR’s Organization Structure as indicated in the approved BAR’s Strategic Plan 2021-2021 as per memo dated August 26, 2020.</td>
<td>09/18/20</td>
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<td>53</td>
<td>Included maintenance services for vehicles and photocopiers in the Control Matrix for Suppliers and External Providers</td>
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