



**COMPETENCY BASED FRAMEWORK
FOR
AGRICULTURE OFFICER**



DEPARTMENT OF AGRICULTURE
Ministry of Agriculture and Forests
Royal Government of Bhutan
March 2021

Taskforce Members and Authors

Sl.#	Name	Designation	Agency
1	Mr. Deepak Rai	Specialist-III	National Seed Centre (NSC), Paro, DoA
2	Mr. Suraj Chhetri	Principal Soil Fertility and Nutrition Officer	National Soil Service Centre (NSSC), Semtokha, DoA
3	Mr. Tshering Tobgay	Deputy Chief Agriculture Officer	Agriculture Research and Extension Division (ARED), Thimphu, DoA
4	Mr. Sangay Dendup	Deputy Chief Horticulture Officer	Agriculture Production Division (APD), Thimphu, DoA
5	Mr. Yenten Namgay	Agriculture Officer	National Centre for Organic Agriculture (NCOA), Yusipang, DoA

Contributors

Sl.#	Name	Designation	Agency
1	Dr. Tayan Raj Gurung	Advisor	Department of Agriculture
2	Dr. Yadunath Bajgai	Specialist III	National Centre for Organic Agriculture (NCOA), Yusipang, DoA
3	Dr. Dorjee	Specialist III	National Plant Protection Centre (NPPC), Semtokha, DoA
4	Mr. Wangda Dukpa	Chief Agriculture Officer	Agriculture Research and Extension Division (ARED), Thimphu, DoA
5	Mr. Tashi Wangdi	Program Director	National Soil Service Centre (NSSC), Semtokha, DoA
6	Mr. Lakey	Principal Agriculture Officer	Agriculture Research and Extension Division (ARED), Thimphu, DoA
7	Dr. Kiran Mahat	Deputy Chief Plant Protection Officer	National Plant Protection Centre (NPPC), Semtokha, DoA
8	Mr. Tshetrim	Deputy Chief Horticulture Officer	Agriculture Production Division (APD), Thimphu, DoA
9	Mr. Domang	Deputy Chief Horticulture Officer	Agriculture Production Division (APD), Thimphu, DoA

10	Mr. Jimba Rabgyel	Senior Officer	Agriculture	National Centre for Organic Agriculture (NCOA), Yusipang, DoA
11	Mrs. Tashi Gyelmo	Senior Officer	Horticulture	National Centre for Organic Agriculture (NCOA), Yusipang, DoA
12	Mr. Dorji	Senior Mushroom Officer		National Mushroom Centre, Thimphu, DoA
13	Mr. Norbu	Senior Supervisor	Mushroom	National Mushroom Centre, Thimphu, DoA
14	Mr. Chedup	Human Assistant	Resource	Human Resource Division, MoAF

Copyright © Department of Agriculture

Published by:

Department of Agriculture,
Ministry of Agriculture and Forests,
Thimphu, Bhutan.

FOREWORD

The Department of Agriculture is pleased to publish the Competency Based Framework (CBF) for the Agriculture Officers.

The CBF is introduced by the RCSC to enhance service delivery of the civil servants through different competency development interventions based on the assessment of the existing performance gaps. Such initiatives will not only help in recognizing the key knowledge, skills and abilities required to perform duties and responsibilities effectively in an organization but also guide them in enhancing their performance and behaviors at work place.

The taskforce consisting of five members from different agencies under the Department of Agriculture has completed the development of CBF for the Agriculture Officers as per the CBF guideline. The team has performed their assignment with full commitment through a series of consultation, meetings, online surveys, workshops and focused group discussions with all the relevant stakeholders to validate their findings to come up with an effective and comprehensive document. In total, 3 Key Roles, 9 Competency Areas, 27 Key Competencies and 81 Behavioral Indicators were identified for the Agriculture Officers. They also have carried out the training needs analysis to assess the performance gaps and also identified both short-term and long-term competency development interventions required at different proficiency levels.

Therefore, the Department is confident that introduction of CBF for the Agriculture Officers will greatly benefit in enhancing service delivery through a consistent professional and personal development.

With Best regards,



Kinlay Tshering (Ms)

DIRECTOR

ABBREVIATIONS & ACRONYMS

AED	Agriculture Engineer Division
APD	Agriculture Production Division
ARED	Agriculture Research and Extension Division
BI	Behavioral Indicator
CA	Competency Area
CBF	Competency Based Framework
CDI	Competency Development Intervention
DoA	Department of Agriculture
GIS	Geographic Information System
GNH	Gross National Happiness
HR	Human Resource
ICT	Information and Communication Technology
KC	Key Competencies
KR	Key Roles
KSA	Knowledge, Skills and Abilities
M&E	Monitoring and Evaluation
NCOA	National Centre for Organic Agriculture
NMC	National Mushroom Center
NPHC	National Post Harvest Center
NPPC	National Plant Protection Center
NSC	National Seed Center
NSSC	National Soil Services Center
R&D	Research and Development
RCSC	Royal Civil Service Commission
SLM	Soil and Land Management

TABLE OF CONTENTS

FOREWORD	iv
ABBREVIATIONS & ACRONYMS	v
1. Background	1
<i>1.1 About the Department of Agriculture</i>	<i>1</i>
<i>1.2. Vision, Mission and Core Values of the Department.....</i>	<i>2</i>
<i>1.3 Core Functions</i>	<i>2</i>
2. Competency Based Framework for Agriculture Officer.....	3
<i>2.1. Introduction</i>	<i>3</i>
<i>2.2. Purpose.....</i>	<i>5</i>
<i>2.3. Aim</i>	<i>5</i>
<i>2.4. Objectives</i>	<i>5</i>
<i>2.5. CBF Framework Development Processes</i>	<i>6</i>
<i>2.6. Overview of CBF Structure</i>	<i>7</i>
3. Identification of Role Profile	8
4. Identification of Competency Areas	10
5. Identification of Key Competencies.....	11
6. Identification of Behavioral Indicators	12
7. Classification of proficiency levels.....	16
8. Training Needs Analysis.....	30
9. Competency Development Interventions and its Learning Objectives	51
10. Implementation of Competency-Based Framework.....	57
11. Recommendations	58
12. Conclusion	58
Bibliography	60

Tables and Figures

FIGURE 1. VISION, MISSION AND CORE VALUES OF THE DEPARTMENT OF AGRICULTURE.....	2
FIGURE 2. CBF IN KEY HR SYSTEM	3
FIGURE 3. KEY ROLES, COMPETENCY AREAS AND BEHAVIORAL INDICATORS	4
FIGURE 4. CBF FRAMEWORK DEVELOPMENT PROCESS	6
FIGURE 5. DIAGRAMMATIC OVERVIEW OF CBF FOR AGRICULTURE OFFICER.....	7
FIGURE 6. KEY ROLES OF AGRICULTURE OFFICER.....	8
TABLE 1. ROLE PROFILE OF AGRICULTURE OFFICER	9
TABLE 2. COMPETENCY AREAS FOR THE AGRICULTURE OFFICERS	10
TABLE 3. KEY COMPETENCIES FOR THE AGRICULTURE OFFICERS	11
TABLE 4. BEHAVIORAL INDICATORS OF THE AGRICULTURE OFFICERS	12
TABLE 5. PROFICIENCY LEVELS OF THE AGRICULTURE OFFICERS	17
TABLE 6. ASSESSMENT OF THE PERFORMANCE GAPS FOR FOUNDATION LEVEL (P5-P4)	31
TABLE 7. ASSESSMENT OF THE PERFORMANCE GAPS FOR EXPERIENCED LEVEL (P3)	36
TABLE 8. ASSESSMENT OF PERFORMANCE GAPS FOR MID-ADVANCED LEVEL(P2)	41
TABLE 9. ASSESSMENT OF PERFORMANCE GAPS FOR ADVANCED LEVEL(P1)	46
TABLE 10. MANDATORY SHORT-TERM TRAINING PROGRAMS	51
TABLE 11. MANDATORY LONG-TERM TRAINING PROGRAMS	56

1. Background

1.1 About the Department of Agriculture

The Department of Agriculture (DoA) is one of the oldest government departments in the country. It was established with the start of first five-year plan in 1961.

Initial activities focused mainly on agriculture development and establishment of research stations at Yusipang and Samtenling (formerly Bhur). During 1990's and 2000's, the department has undergone numerous institutional reorganizations. The names of the institutes and mandates therefore never remained consistent. However, over the period of time the human resource and institutional capacity of the department has been greatly strengthened.

The agriculture development initiatives in Bhutan are guided by the development philosophy of Gross National Happiness (GNH) emphasizing on enhancement of rural livelihood through promotion of sustainable agricultural technologies, implementation of bottom-up self-reliant farming systems and equitable distribution of resources and support services.

The Research and Development(R&D) programs of the Department of Agriculture is implemented through three divisions namely Agriculture Research and Extension Division (ARED), Agriculture Production Division (APD) and Agriculture Engineering Division (AED) under the current organizational set up. The divisions are further supported by three Agriculture Research and Development Centers (ARDCs), National Centre for Organic Agriculture (NCOA) and six support-service oriented central programs strategically located across the country. These branches of the department provide technical support services and guidance to the dzongkhags and the gewogs who are the frontline implementing the agricultural development plans and activities in the field.

1.2. Vision, Mission and Core Values of the Department



Figure 1. Vision, Mission and Core Values of the Department of Agriculture

2. Competency Based Framework for Agriculture Officer

2.1. Introduction

The Royal Civil Service Commission (RCSC) has introduced Competency Based Framework (CBF) with the objective of enhancing service delivery of the civil servants through providing platform for desired professional development. In absence of a relevant framework to guide the professional development of the civil servants in the country, competency and efficiency at work place have always been a concern to realize the national goals and objectives. The RCSC has recognized the need to enhance service delivery of civil servants through professional and personal development which will have sustainable impact in the system. With introduction of CBF across all the major occupational groups, civil servants will be guided by the principles of knowledge, skills and ability and is expected to enhance performance and service delivery.



Figure 2. CBF in key HR system

The CBF for the Agriculture Officers is aligned to the Department of Agriculture’s vision, mission and objectives with common understanding of critical success factors and desired behaviors within the organization. The CBF as a key HR approach, establishes a strong link between the organization and an individual on performance and behavioral aspects. Therefore, different occupational groups in the civil service will have a distinct framework to guide them.

The CBF for the Agriculture Officers is developed as per the directive of the Royal Civil Service Commission following the CBF guidelines. A taskforce team comprising five officials from different agencies under the Department of Agriculture were trained on CBF development. Series of open consultation and meetings with different stakeholders were held besides online surveys to validate the Key roles (KR), Competency areas (CA), Key Competencies Areas (KCA) and Behavioral Indicators (BI’s) of the Agriculture Officer.

This framework is designed to guide the agriculture officers not only in strengthening their competency but also in improving their behaviors at work place. In total, 3 Key Roles, 9 Competency Areas, 27 Key Competencies and 81 Behavioral Indicators were identified for agriculture officers. CBF will provide platform for them to become a good leader at work place with required professional and behavioral competencies.



Figure 3. Key roles, competency areas and behavioral indicators

The term "Agriculture Officer" will include officials from P5 to P1 position levels working under the Department of Agriculture under different agencies (Research and Development Centers, Central Programs, Divisions and the Dzongkhags) in multi-disciplinary fields such as Field Crops, Agronomy, Horticulture, Medicinal and Aromatic Plants, Agriculture Economics, Seed Science, Mushroom, Microbiology, Biotechnology, Agriculture Chemistry, Soil Science, Plant Protection, Organic Agriculture, Post-Harvest, Protected Cultivation, Water Management, Biometrics, Nutrition Science, Agro-ecology, Climate and Environmental Sciences, Floriculture and Landscaping, Agro-meteorology, Agriculture Extension, Agriculture Research and Management.

2.2. Purpose

The CBF highlights the knowledge, skills and abilities required by the Agriculture Officers to achieve high level of professional competence and deliver the highest standard services. The framework is developed with the following aim and objectives.

2.3. Aim

Build a fraternity of agriculture officers who are highly knowledgeable, skillful and competent in delivering efficient and effective services of the highest standard.

2.4. Objectives

- Introduce Competency Based Framework and approach in the Department of Agriculture.
- Enhance and strengthen the capacity of the agriculture officer by implementing Competency based-framework HR development initiatives.
- Identify major performance gaps and competency development interventions for the agriculture officers.

2.5.CBF Framework Development Processes

The development of Competency Based Framework for the Agriculture Officers involved identifying Role Profiles, Competency Areas, Key Competencies, Behavioral Indicators, Proficiency Levels and Training Needs Analysis through a rigorous, consultative and inclusive process with key stakeholders. After attending the CBF development training from the RCSC, the taskforce members of the Department of Agriculture have organized a series of consultations, meetings, workshops, online surveys and focused group discussions before its finalization and endorsement as shown below;

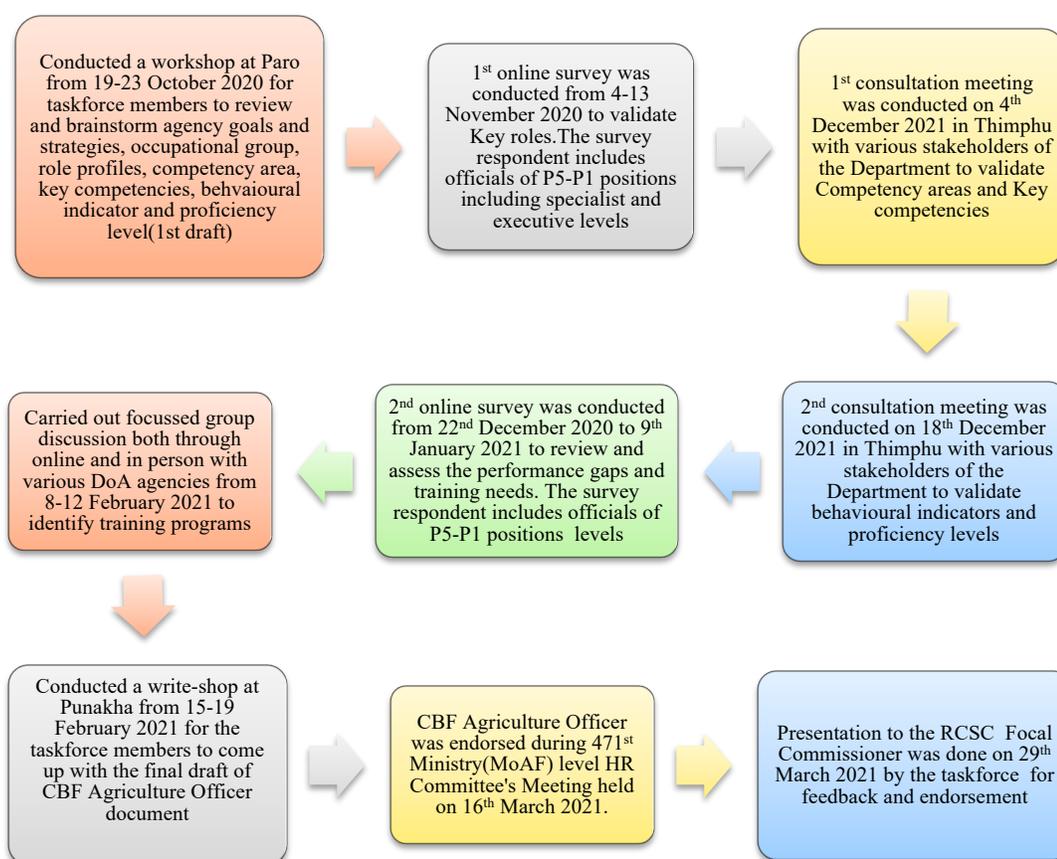


Figure 4. CBF framework development process

2.6. Diagrammatic overview of CBF Agriculture Officer

The CBF structure is diagrammatic overview of the key roles and competency areas required for the Agriculture Officers. The pie diagram shows that each Key Role of an Agriculture Officer is sub-divided into 3 Competency Areas and each Competency Area is further sub-divided into 3 Key Competencies. In total, 3 Key Roles, 9 Competency Areas, 27 Key Competencies were identified.



Figure 5. Diagrammatic overview of CBF for Agriculture Officer

3. Identification of Role Profile

The key role is an organized set of behaviors that are crucial to achieve the current and future goals of the Department of Agriculture. Following are the key roles expected to be performed by the Agriculture Officers.



Figure 6. Key roles of Agriculture Officer

3.1 Description of Role Profile

The role profile is the description of roles that Agriculture Officers are expected to demonstrate in achieving the outcomes of the Department. It defines outcomes and competencies for an individual role. It concentrates on outcomes rather than duties, which provides better guidance than a job description on expectations. It does not constrain Agriculture Officer to carry out a prescribed set of tasks.

Table 1. Role Profile of Agriculture Officer

Sl.#	Key Role	Role Description
1	Technical Expert	<ul style="list-style-type: none"> • Provide technical leadership and advice on agriculture plans and programs • Review and suggest/recommend/advice changes on the existing agricultural policies, rules and regulations and technologies for effective implementation • Conduct research and development on agriculture for sustainable agriculture development • Conduct agriculture data analysis and publication of research reports for effective economic decision making and implementation • Supervise, guide and advice sub-ordinates, entrepreneurs and farmers on improved agriculture technologies and innovations for enhancing production • Manage and exchange knowledge and information • Integrate ICT in agriculture research
2	Production Facilitator	<ul style="list-style-type: none"> • Analyze and develop commodity specific production strategies and plans • Mobilize inputs for agriculture production • Facilitate transfer and adoption of appropriate technologies in the field. • Supervise, guide and advice sub-ordinates, entrepreneurs and farmers on improved agriculture technologies and innovations for enhancing production • Train farmers and entrepreneurs on improved agriculture technologies • Provide counselling and advisory services to farmers and entrepreneurs on production issues • Function as the bridge between the Department of Agriculture/Ministry of Agriculture & Forests and the Local Government • Sensitize and advice local government on agriculture development policies, plans and programs • Facilitate, foster and develop linkages with farming communities and relevant agencies • Facilitate and implement on-farm research and development for sustainable agriculture production • Manage and exchange knowledge and information • Integrate ICT in agriculture production and development

3	Strategic Planner	<ul style="list-style-type: none"> • Lead, oversee and coordinate development of agricultural policies, strategies and plans • Sensitize and advice local government on agriculture development plans, programs and priorities • Coordinate and collaborate with partner agencies for financial and technical supports • Mobilize resources for effective implementation of agriculture development • Design and implement effective monitoring and evaluation of agriculture development programs • Coordinate and carry out impact assessment on important development policies and programs • Manage and exchange knowledge and information • Integrate ICT in agriculture planning

4. Identification of Competency Areas

The competency area is the clustering of key competencies by related behavior and functions of each role. It comprises a set of Knowledge, Skills and Abilities (KSA) that result in essential behaviors expected from Agriculture Officer. The framework has identified **9 Competency Areas** for the Agriculture Officer as follows:

Table 2. Competency Areas for the Agriculture Officers

Sl.#	Key Role	Competency Area
1	1. Technical Expert	1.1 Specialization
		1.2 Research and analytical skills
		1.3 Training/Mentoring
2	2. Production Facilitator	2.1 Production and value chain
		2.2 Extension and communication
		2.3 Professional networking

3	3. Strategic Planner	3.1 Strategic planning
		3.2 Leadership and management
		3.3 Problem solving and analytical skills

5. Identification of Key Competencies

The key competency area is an observable behavior that indicates the presence of the particular competency. Generally, it is broadly divided as core competency, leadership competency and technical or functional competency. The framework has identified **27 Key Competencies** for the Agriculture Officer which are presented as below:

Table 3. Key Competencies for the Agriculture Officers

Sl.#	Key Role	Competency Area	Key Competencies
1	1. Technical Expert	1.1 Specialization	1.1.1 Advanced subject knowledge and skills
			1.1.2 Technology innovation and dissemination
			1.1.3 Professional integrity
		1.2 Research and Analytical skills	1.2.1 Research design and planning
			1.2.2 Data analysis and interpretation skills
			1.2.3 Research aptitude
		1.3 Training/Mentoring	1.3.1 Domain knowledge and skills
			1.3.2 Need and impact assessment
			1.3.3 Inter-personal and communication skills
2	2. Production Facilitator	2.1 Production and value chain	2.1.1 Production and value chain knowledge
			2.1.2 Demand analysis
			2.1.3 Promotional skill
		2.2 Extension and communication skills	2.2.1 Knowledge assimilation and dissemination
			2.2.2 Community mobilization
			2.2.3 Delegation and empowerment
		2.3 Professional networking	2.3.1 Stakeholder engagement

			2.3.2 Resource mobilization
			2.3.3 Digital/ICT proficiency
3	3. Strategic Planner	3.1 Strategic Planning	3.1.1 Prioritization and planning
			3.1.2 Resource mobilization
			3.1.3 Analytical skill
		3.2 Leadership and management	3.2.1 Domain expertise
			3.2.2 Work ethics and integrity
			3.2.3 Systems thinking
		3.3 Problem solving and analytical skills	3.3.1 Problem analysis
			3.3.2 Conflict management
			3.3.3 Good governance

6. Identification of Behavioral Indicators

The Behavioral Indicators is the description of competencies based on various proficiency levels. It outlines a collection of desired and observable motives, traits and behaviors when executing or carrying out the assigned task. It serves as a tool to guide evaluations of employee performance. The framework has identified **81 behavioral indicators**.

Table 4. Behavioral Indicators of the Agriculture Officers

Competency Area	Key Competency Area	Behavioral Indicators
Key Role 1: Technical Expert		
1.1 Specialization	1.1.1 Advanced subject knowledge and skills	1.1.1.1 Possesses in-depth research skills and knowledge in related agriculture field
		1.1.1.2 Displays in-depth knowledge and skills in agriculture subjects
		1.1.1.3 Supervises and mentors' sub-ordinates on appropriate research methodologies
	1.1.2 Technology innovation and creativity	1.1.2.1 Applies diagnostic tools in technology innovation
		1.1.2.2 Participates in technology innovation and release
		1.1.2.3 Communicates research findings and innovative ideas

	1.1.3 Professional integrity	1.1.3.1 Adheres to sectoral research and extension frameworks, guidelines, protocols and strategies
		1.1.3.2 Integrates and aligns to the larger sectoral programs and objectives
		1.1.3.3 Displays professional leadership
1.2 Research and analytical skills	1.2.1 Research design and planning	1.2.1.1 Identifies research problems and opportunities and develop appropriate research design
		1.2.1.2 Applies digital tools in agriculture research programs
		1.2.1.3 Exhibits exploratory skills in research designs and planning
	1.2.2 Data analysis and interpretation skills	1.2.2.1 Displays ability to apply appropriate analytical tools and approaches in data analysis and interpretation
		1.2.2.2 Interprets research findings for evidence-based policy making
		1.2.2.3 Publishes and communicates research findings
	1.2.3 Research aptitude	1.2.3.1 Demonstrates curiosity for learning
		1.2.3.2 Displays ability to conduct research independently
		1.2.3.3 Demonstrates research ethics and integrity
1.3 Training/Mentoring	1.3.1 Domain knowledge and skills	1.3.1.1 Possesses domain expertise in training and mentoring
		1.3.1.2 Possesses ability to design appropriate training modules
		1.3.1.3 Demonstrates ability to deliver training effectively
	1.3.2 Need and impact assessment	1.3.2.1 Demonstrates research and analytical skills
		1.3.2.2 Possesses ability to identify training needs
		1.3.2.3 Possesses ability to conduct impact assessment of the training programs
	1.3.3 Inter-personal and communication skills	1.3.3.1 Displays appropriate social attributes, manners and disposition
		1.3.3.2 Possesses ability to work with diverse stakeholders and engages them
		1.3.3.3 Exhibits interactive and effective communication skills

Key Role 2: Production facilitator		
2.1 Production and value chain	2.1.1 Production and value chain knowledge	2.1.1.1 Demonstrates specialized technical knowledge and skills on production and value chain management
		2.1.1.2 Possesses production planning and coordination skills
		2.1.1.3 Possesses knowledge on regional, national and global value chains
	2.1.2 Demand analysis	2.1.2.1 Demonstrates ability to analyze commodity demand and opportunities
		2.1.2.2 Demonstrates ability to adopt demand-based production planning
		2.1.2.3 Demonstrates ability to link producers with consumers
	2.1.3 Promotional skills	2.1.3.1 Demonstrates effective communication and extension skills
		2.1.3.2 Exhibits ability to facilitate agriculture enterprise development
		2.1.3.3 Displays ability to organize market promotional programs
2.2 Extension and communication skills	2.2.1 Knowledge assimilation and dissemination	2.2.1.1 Possesses knowledge on extension methods and approaches
		2.2.1.2 Exhibits highest level of knowledge management skills
		2.2.1.3 Demonstrates ability to organize and implement outreach programs
	2.2.2 Community mobilization	2.2.2.1 Demonstrates communication and social networking skills for community mobilization
		2.2.2.2 Displays effective participatory planning and implementation skills
		2.2.2.3 Exhibits understanding of community and cultural sensitivity
	2.2.3 Delegation and empowerment	2.2.3.1 Displays ability to delegate tasks
		2.2.3.2 Encourages team work for inclusive participation
		2.2.3.3 Empowers team members in achieving organizational goals
2.3 Professional networking	2.3.1 Stakeholder engagement	2.3.1.1 Displays excellent interpersonal relationship
		2.3.1.2 Demonstrates proficiency in stakeholder engagement and prioritization

		2.3.1.3 Demonstrates negotiation and conflict resolution skills
	2.3.2 Communication skills	2.3.2.1 Demonstrate effective communication skills
		2.3.2.2 Displays empathy, respect, confidence, friendliness and responsiveness to audiences
		2.3.2.3 Demonstrates active listening ability and responds to feedbacks
	2.3.3 Digital/ICT proficiency	2.3.3.1 Possesses functional ICT knowledge and skills
		2.3.3.2 Demonstrates ability to apply appropriate digital tools
		2.3.3.3 Contributes to sectoral information hub for data and knowledge sharing
Key Role 3: Strategic planner		
3.1 Strategic Planning	3.1.1 Planning and prioritization	3.1.1.1 Possesses advanced planning knowledge and skills
		3.1.1.2 Exhibits ability to prioritize plans and programs
		3.1.1.3 Demonstrates ability to adapt to sectoral plans and priorities
	3.1.2 Resource mobilization	3.1.2.1 Displays ability to identify potential funding sources
		3.1.2.2 Demonstrates ability to develop competitive project proposals for resource mobilization
		3.1.2.3 Displays ability for effective allocation and utilization of resources
	3.1.3 Analytical skills	3.3.1.1 Possess analytical and problem-solving skills
		3.3.1.2 Displays ability to analyze and interpret information for decision making
		3.3.1.3 Displays ability to assess organizational plans and programs
3.2 Leadership and management	3.2.1 Domain expertise	3.2.1.1 Possesses ability to lead and formulate organizational vision, mission and objectives
		3.2.1.2 Exhibits organizational management skills
		3.2.1.3 Possesses professional skills and experience
	3.2.2 Work ethics and integrity	3.2.2.1 Exhibits high level of responsibility and accountability
		3.2.2.2 Displays consistency in learning and professional development

		3.2.2.3 Promotes trust and confidence in an organization
	3.2.3 Systems thinking	3.2.3.1 Demonstrates advance skills and knowledge on systems thinking tools and approaches
		3.2.3.2 Possesses ability to identify critical relationships and interdependency among the multi-disciplinary stakeholders
		3.2.3.3 Demonstrates holistic approaches of governing the organization
3.3 Problem solving and analytical skills	3.1.3 Problem analysis	3.1.3.1 Demonstrates ability to identify issues and challenges
		3.1.3.2 Possesses analytical and problem-solving skills
		3.1.3.3 Displays ability to mitigate problems
	3.3.2 Conflict management	3.3.2.1 Demonstrates effective communication and negotiation skills
		3.3.2.2 Possesses ability to apply holistic conflict management approaches
		3.3.2.3 Exhibits resilience to embrace diverse opinions and views
	3.3.3 Good governance	3.3.3.1 Exhibits sense of responsibility accountability and integrity
		3.3.3.2 Demonstrates efficient and effective decision-making skills
		3.3.3.3 Exhibits ability to embrace fair and inclusive participation

7. Classification of proficiency levels

The proficiency level is categorized based on the level of expertise. It describes the levels of a competency required to perform a specific job successfully. There is a progression of proficiencies at each level. The proficiency level of the Agriculture Officers is categorized into four levels as i) Foundation (P5-P4), ii) Experienced (P3) and iii) Mid-advanced (P2) and iv) Advanced (P1). The framework has identified 81 behavioral indicators across four levels of proficiency.

The proficiency will enable individual officials to distinguish the type of competencies expected in their career path, which will give them an opportunity to enhance competency in achieving current as well future career goals. As the officials in position levels of P5 and P4 play similar

roles, their proficiency levels are merged together. Further, the proficiency level will set a benchmark for the recruitment and deployment. The proficiency levels of each key competency are detailed below:

Table 5. Proficiency levels of the Agriculture Officers

Key Role 1: Technical expert			
Competency Area: 1.1 Specialization			
Key Competency: 1.1.1 Advanced subject knowledge and skills			
Behavioral Indicator: 1.1.1.1 Possesses highest level of research skills and knowledge in related agriculture field			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Understands basic concept of research methodologies and conducts research under supervision	Understands all the important concepts of research and performs research with little or no supervision	Conducts more complex research works independently	Possesses highest level of research knowledge and skills and provide guidance, supervision and advice
Behavioral Indicator: 1.1.1.2 Displays in-depth knowledge and skills in agriculture subjects			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic concepts and knowledge on wider agriculture subjects	Possesses all the concepts and knowledge on specific agriculture subjects	Possesses high level of knowledge and skills on specific agriculture subjects	Possess advanced knowledge and skills on specific agriculture subject
Behavioral Indicator: 1.1.1.3 Supervises and mentors' sub-ordinates on appropriate research methodologies			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses limited experience and skills to supervise and mentor	Supervises and guides on basic concepts of research methodologies to sub-ordinates	Supervises and guides on more complex concepts of research methodologies to sub-ordinates	Exhibits highest mentoring skills in research methodologies and provide expert guidance to sub-ordinates
Key Competency: 1.1.2 Technology innovation and creativity			
Behavioral Indicator: 1.1.2.1 Applies diagnostic tools in technology innovation			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic knowledge and skills in application of diagnostic tools	Applies diagnostic tools for technology innovation with less or no supervision	Possesses advanced level of knowledge and skills in the application of diagnostic tools	Provides expert advises and overall guidance on the use of appropriate diagnostic tools for innovation

Behavioral Indicator: 1.1.2.2 Participates in technology innovation and release			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic concepts on technology innovation and release	Prepares reports for technology innovation and release following the standard protocols	Guides and supervises sub-ordinates on the preparation and documentation of technologies innovation and facilitates further improvement and dissemination	
Behavioral Indicator: 1.1.2.3 Communicates research findings and innovative ideas			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic communication skills and knowledge	Efficiently communicates and documents research findings with guidance	Efficiently communicates and documents research findings independently	Efficiently communicates and documents research findings and provide expert guidance
Key Competency: 1.1.3 Professional integrity			
Behavioral Indicator: 1.1.3.1 Adheres to sectoral research and extension frameworks			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic concept of sectoral research and extension frameworks	Integrates sectoral research and extension frameworks in service delivery	Provides guidance and supervises the development of sectoral research and extension frameworks	Provides guidance and directives on research and extension frameworks, policies and strategies
Behavioral Indicator: 1.1.3.2 Integrates and aligns to the larger sectoral programs and objectives			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic ideas and knowledge on overall sectoral programs, objectives and priorities	Integrates and aligns activities and plans to the overall sectoral programs and objectives		Provides guidance and advices on the review of sectoral programs and objectives
Behavioral Indicator: 1.1.3.3 Displays professional leadership			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic leadership skills and carry out tasks with guidance	Applies leadership skills and fulfils the responsibilities with less guidance	Applies advance level of leadership skills and solves complex problems	Motivates sub-ordinates and guide them to accomplish tasks effectively
Competency Area: 1.2 Research and analytical skills			
Key Competency: 1.2.1 Research design and planning			
Behavioral Indicator: 1.2.1.1 Identifies research problems and opportunities and develop appropriate research design			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)

Identifies basic research problems and opportunities	Possesses adequate skills and experience to identify research problems and develops appropriate research designs	Possesses advanced skills and experience to identify research problems and recommend appropriate design and solutions	
Behavioral Indicator: 1.2.1.2 Applies digital tools in agriculture research programs			
Foundation(P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills on application of digital tools	Possesses experiences and skills on the application of digital tools	Possesses advanced skills on application of digital tools	Design and applies advanced digital tools in research and development
Behavioral Indicator: 1.2.1.3 Exhibits exploratory skills in research design and planning			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays keen interest and learning aptitude	Possesses adequate skills and experience in research design and planning	Displays advanced knowledge to compare and assess and recommends appropriate research design and planning	
Key Competency: 1.2.2 Data analysis and interpretation skills			
Behavioral Indicator: 1.2.2.1 Displays ability to apply appropriate analytical tools and approaches in data analysis and interpretation			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills on the use of appropriate analytical tools and software	Displays confidence in applying analytical tools and software with less guidance and supervision		Possesses advanced knowledge and skills on data analysis and interpretation
Behavioral Indicator: 1.2.2.2 Interprets research findings for evidence-based policy making			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic skills to interpret research findings	Displays adequate skills and experience to interpret research findings	Provides effective policy recommendations based on research findings	
Behavioral Indicator: 1.2.2.3 Publishes and communicates research findings			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possess skills to write and publish basic research reports	Publishes and communicates research findings with less guidance	Precisely communicates and publishes the high-quality research findings	Publishes and reviews advanced research findings
Key Competency: 1.2.3 Research aptitude			
Behavioral Indicator: 1.2.3.1 Demonstrates curiosity for learning			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)

Displays curiosity to learn and explores different areas of research	Displays curiosity to learn and remain focused on specific area of research	Provides expert advice on research and innovation and motivates colleagues for professional development.	
Behavioral Indicator: 1.2.3.2 Displays ability to conduct research independently			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Conducts basic research with supervision and guidance	Conducts research with less guidance	Conducts complex researches independently	Provides expert advice on research protocols and methodologies
Behavioral Indicator: 1.2.3.3 Demonstrates research ethics and integrity			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Adheres to research ethics and integrity with supervision	Displays high level of research ethics and integrity	Provides advice on research and ensures highest level of research ethics and integrity	Provides expert advice on advanced research and ensures highest level of research ethics and integrity
Competency Area: 1.3 Training/Mentoring			
Key Competency: 1.3.1 Domain knowledge and skills			
Behavioral Indicator: 1.3.1.1 Possesses domain expertise in training and mentoring			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possess basic domain knowledge on training	Possesses adequate domain knowledge on training and mentoring		Possesses advanced domain knowledge and develops need-based training modules
Behavioral Indicator: 1.3.1.2 Possesses ability to design appropriate training modules			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills to design training modules	Possesses knowledge and skills to design advanced training modules		Displays advanced knowledge and skills to design appropriate training modules and provides expert advice
Behavioral Indicator: 1.3.1.3 Demonstrates ability to deliver training effectively			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses ability to conduct training with guidance	Possesses confidence to conduct trainings independently and guides the sub-ordinates		Possesses advanced knowledge on training
Key Competency: 1.3.2 Need and impact assessment			
Behavioral Indicator: 1.3.2.1 Demonstrates research and analytical skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)

Possesses basic research and analytical skills	Understands and applies analytical and research skills to conduct appropriate research	Demonstrates advanced research knowledge and analytical skills to provide expert advises	
Behavioral Indicator: 1.3.2.2 Possesses ability to identify training needs			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills to identify training needs	Applies different methodologies to analyze training needs	Applies advanced tools and approaches to identify training needs and prioritization	
Behavioral Indicator: 1.3.2.3 Possesses ability to conduct impact assessment of the training programs			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills and knowledge to carry out impact assessment	Possesses ability to carry out impact assessments using appropriate tools with less supervision	Displays advanced knowledge and skills to conduct impact assessment	
Key Competency: 1.3.3 Inter-personal and communication skills			
Behavioral Indicator: 1.3.3.1 Displays appropriate social attributes, manners and disposition			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays adequate social attributes and manners	Displays appropriate interpersonal skills	communication and	Displays effective interpersonal skills
Behavioral Indicator: 1.3.3.2 Possesses ability to work with diverse stakeholders and engages them			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays ability to work with diverse stakeholders	Displays ability to work with different stakeholders and engages them efficiently	Displays ability to work and engage different stakeholders effectively	
Behavioral Indicator: 1.3.3.3 Exhibits interactive and effective communication skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Demonstrates ability to interact and communicate with different stakeholders	Demonstrates ability and skills to communicate and interact effectively with different stakeholders	Creates conducive organizational platform to promote effective communication	
Key Role 2: Production facilitator			
Competency Area:2.1 Production and value chain			
Key Competency: 2.1.1 Production and value chain knowledge			
Behavioral Indicator: 2.1.1.1 Demonstrates specialized technical knowledge and skills on production and value chain management			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)

Understands and applies basic concepts and practices	Possesses adequate practical skills and knowledge in developing value chain	Demonstrates and applies higher level of skills and knowledge of value chain	Possesses advanced skills and experience and provides expert advice on value chain development
Behavioral Indicator: 2.1.1.2 Possesses production planning and coordination skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Display basic production planning and coordination skills	Display advanced production planning and coordination skills		Displays advanced skills to develop production plans
Behavioral Indicator: 2.1.1.3 Possesses knowledge on regional, national and global value chains			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic knowledge on value chain	Displays adequate knowledge on value chain		Displays advanced knowledge on value chain
Key Competency: 2.1.2 Demand analysis			
Behavioral Indicator: 2.1.2.1 Demonstrates ability to analyze commodity demand and opportunities			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic skills to analyze commodity demanded in the market	Displays adequate knowledge and skills to analyze commodity demand and opportunity	Displays advance skills to analyze commodity demand and opportunity	Displays advance skills to analyze commodity demand and opportunity
Behavioral Indicator: 2.1.2.2 Demonstrates ability to adopt demand-based production planning			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills on production planning	Displays adequate knowledge to develop demand-based production planning		Provide expert guidance demand-based production plans and strategies
Behavioral Indicator: 2.1.2.3 Demonstrates ability to link producers with consumers			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills in linking producers with the consumers	Possesses experience and skills in linking producers with the consumers		Possesses advanced skills in linking producers with the consumers
Key Competency: 2.1.3 Promotional skills			
Behavioral Indicator: 2.1.3.1 Demonstrates effective communication and extension skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills and knowledge and needs guidance	Possesses experience and skills for effective communication and extension works		Possesses advanced skills for effective communication and extension works
Behavioral Indicator: 2.1.3.2 Exhibits ability to facilitate agriculture enterprise development			

Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic knowledge and skills on enterprise development	Displays adequate knowledge and skills on enterprise development	Displays adequate experience and skills to facilitate enterprise development	Possesses in-depth knowledge on agriculture enterprise development and analysis of market
Behavioral Indicator: 2.1.3.3 Displays ability to organize market promotional programs			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays ability to organize promotional programs with guidance	Identifies and organizes appropriate market promotional programs and develops strategies to facilitate market expansion		Displays in-depth knowledge to develop market promotional strategies
Competency Area:2.2 Extension and communication skills			
Key Competency: 2.2.1 Knowledge assimilation and dissemination			
Behavioral Indicator: 2.2.1.1 Possesses knowledge on extension methods and approaches			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possess basic knowledge and skills on extension strategies and methodologies	Possesses sound knowledge on national extension policies and applies appropriate extension methodologies and approaches		Possess advanced skills and has ability to guide and develop relevant strategies and policies
Behavioral Indicator: 2.2.1.2 Exhibits highest level of knowledge management skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge management skills	Exhibits high level of knowledge management skills		Exhibits advanced level of knowledge management skills
Behavioral Indicator: 2.2.1.3 Demonstrates ability to organize and implement outreach programs			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Seeks guidance and supervision to organize outreach programs	Demonstrates ability to establish outreach programs and activities independently		Possesses advanced skills to establish outreach programs
Key Competency: 2.2.2 Community mobilization			
Behavioral Indicator: 2.2.2.1 Demonstrates communication and social networking skills for community mobilization			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Demonstrates basic communication and social networking skills	Demonstrates high level of communication and social networking skills		Demonstrates advanced level of communication and social networking skills
Behavioral Indicator: 2.2.2.2 Displays effective participatory planning and implementation skills			

Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic participatory planning and implementation skills	Displays ability to develop appropriate plans to foster inclusive participation		Possesses high level of knowledge and skills on application of planning tools
Behavioral Indicator: 2.2.2.3 Exhibits understanding of community and cultural sensitivity			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge on social and cultural sensitivity	Displays ability to develop plans and programs adhering to social and cultural sensitivity		Ensures plans and programs adheres to social and cultural sensitivity
Key Competency: 2.2.3 Delegation and empowerment			
Behavioral Indicator: 2.2.3.1 Displays ability to delegate tasks efficiently			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills to delegate tasks	Displays ability to delegate the responsibilities effectively		Ensures fair and equal distribution of tasks in the work place
Behavioral Indicator: 2.2.3.2 Encourages team work for inclusive participation			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills on team management	Creates a conducive working environment for inclusive participation		Strengthens team spirit through exemplary work ethics and integrity
Behavioral Indicator: 2.2.3.3 Empowers team members in achieving organizational goals			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills and knowledge to work and contribute in team work	Possesses experience and skills to work in team and creates conducive environment		Motivates and empowers team members to achieve organizational goals
Competency Area:2.3 Professional networking			
Key Competency: 2.3.1 Stakeholder engagement			
Behavioral Indicator: 2.3.1.1 Displays excellent interpersonal relationship			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic interpersonal skills to engage multi-stakeholders	Displays experience and adequate interpersonal skills for effective service delivery		Displays highest level of interpersonal skills to enhance professional networking
Behavioral Indicator: 2.3.1.2 Demonstrates proficiency in stakeholder engagement and prioritization			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)

Displays basic skills of stakeholder engagement	Possesses sound skills and knowledge to engage stakeholders to encourage inclusive participation.	Demonstrates advanced skills and knowledge on participatory planning and prioritization	
Behavioral Indicator: 2.3.1.3 Demonstrates negotiation and conflict resolution skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Demonstrate basic negotiation and conflict management skills	Displays sound knowledge on problem solving and negotiation	Displays highest level of negotiation and conflict management skills	
Key Competency: 2.3.2 Communication skills			
Behavioral Indicator: 2.3.2.1 Demonstrates effective communication skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic communication skills	Displays appropriate communication skills	Displays advanced interpersonal and communication skills	
Behavioral Indicator: 2.3.2.2 Displays empathy, respect, confidence, friendliness and responsiveness to audiences			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic skills	Displays experience and adequate skills	Displays advanced knowledge and skills	
Behavioral Indicator: 2.3.2.3 Demonstrates active listening ability and responds to feedbacks			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic skills and abilities	Critically analyses the feedback and provide responds professionally to ensure all issues are well addressed	Possesses advanced analytical skills to provide professional responses	
Key Competency: 2.3.3 Digital/ICT proficiency			
Behavioral Indicator: 2.3.3.1 Possesses functional ICT knowledge and skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses functional ICT knowledge and skills	Displays ability to apply ICT knowledge and skills in research and development	Possesses advanced knowledge and skills to apply ICT in research and development	
Behavioral Indicator: 2.3.3.2 Demonstrates ability to apply appropriate digital tools			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Demonstrates basic ability to apply appropriate digital tools	Possesses high level of knowledge and skills on application of digital tools in research and development	Possesses advanced knowledge and skills on application of digital tools	
Behavioral Indicator: 2.3.3.3 Contributes to sectoral information hub for data and knowledge sharing			

Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Actively participates in information collection and knowledge sharing	Coordinates and facilitates collection of information to generate sectoral information hub		Advises and facilitates collection of information to generate sectoral information hub
Key Role 3: Strategic planner			
Competency Area:3.1 Planning specialization			
Key Competency: 3.1.1 Planning and prioritization			
Behavioral Indicator: 3.1.1.1 Possesses advanced planning knowledge and skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits basic planning knowledge and skills	Applies advance planning tools and methodologies		Reviews organizational plans and provide expert advises
Behavioral Indicator: 3.1.1.2 Exhibits ability to prioritize plans and programs			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic skills and knowledge	Possesses sound knowledge on prioritization of organizational plans and programs		Displays advanced knowledge and skills to prioritize organizational plans and programs
Behavioral Indicator: 3.1.1.3 Demonstrates ability to adapt to sectoral plans and priorities			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits ability to understand basic sectoral plans and priorities	Possesses sound knowledge on sectoral plans and priorities		Possesses high level of awareness on sectoral plans and priorities
Key Competency: 3.1.2 Resource mobilization			
Behavioral Indicator: 3.1.2.1 Displays ability to identify potential funding sources			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge on potential funding sources	Demonstrates ability to secure funds from various potential funding agencies		Displays advanced skills to identify and secure funds from various sources
Behavioral Indicator: 3.1.2.2 Demonstrates ability to develop competitive project proposals for resource mobilization			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills to write project proposal and require guidance	Possesses sound knowledge and skills to develop competitive project proposals		Possesses advanced skills to develop competitive project proposals

Behavioral Indicator: 3.1.2.3 Displays ability for effective allocation and utilization of resources			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possess basic knowledge on effective resource allocation and utilization	Displays ability to allocate resources judiciously		Exhibits advanced knowledge and skills on prioritization and allocation of resources
Key Competency: 3.1.3 Analytical skills			
Behavioral Indicator: 3.1.3.1 Possesses sound analytical and problem-solving skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic analytical and problem-solving skills	Possesses adequate analytical and problem-solving skills	Possesses advanced analytical and problem-solving skills	Possesses advanced skills to analyze and solves problems effectively
Behavioral Indicator: 3.1.3.2 Displays ability to analyze and interpret information for decision making			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge to analyze and interpret information	Displays adequate skills to critically analyze and interpret information		Possesses advanced analytical and interpretation skills
Behavioral Indicator: 3.1.3.3 Displays ability to assess organizational plans and programs			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic ability to assess organizational plans and programs	Displays high level of knowledge, skills and ability to assess organizational plans and programs		Guides on proper assessment of organizational plans and programs
Competency Area: 3.2 Leadership and management			
Key Competency: 3.2.1 Domain expertise			
Behavioral Indicator: 3.2.1.1 Possesses ability to lead and formulate organizational vision, mission and objectives			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills	Possesses adequate experience and skills to formulate and lead		Reviews and provides expert advice
Behavioral Indicator: 3.2.1.2 Exhibits organizational management skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic management skills	Displays sound management skills for effective organizational development		Displays advanced knowledge and skills to manage the organization effectively
Behavioral Indicator: 3.2.1.3 Possesses professional skills and experience			

Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic professional skills and knowledge	Possesses sound professional knowledge and skills and guides sub-ordinates on professional development		Possesses advanced professional knowledge and skills and provides expert advises
Key Competency: 3.2.2 Work ethics and integrity			
Behavioral Indicator: 3.2.2.1 Exhibits high level of responsibility and accountability			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays enthusiasm to carry out assigned tasks	Performs assigned tasks professionally and ensures high level of accountability		Exhibits exemplary sense of accountability and promotes ethics and integrity at workplace
Behavioral Indicator: 3.2.2.2 Displays consistency in learning and professional development			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits curiosity in professional development	Exhibits high level of curiosity for learning and keeps abreast with emerging technologies		Guides and provides expert advice on professional development
Behavioral Indicator: 3.2.2.3 Promotes trust and confidence in an organization			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays enthusiasm to promote trust and confidence in an organization	Displays high level of trust and confidence in service delivery and professional development		Creates conducive working environment in an organization
Key Competency: 3.2.3 Systems thinking			
Behavioral Indicator: 3.2.3.1 Demonstrates advance skills and knowledge on systems thinking tools and approaches			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge on systems thinking tools and approaches	Possesses sound knowledge and skills on systems thinking tools and approaches		Implements and promotes systems thinking tools and approaches
Behavioral Indicator: 3.2.3.2 Possesses ability to identify critical relationships and interdependencies among multi-disciplinary stakeholders			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses limited knowledge and skills	Identifies critical relationships and interdependencies among different stakeholders for effective implementation of plans and programs		Provides expert advice on identifying critical relationships and professional networking
Behavioral Indicator: 3.2.3.3 Demonstrates holistic approaches of governing the organization			

Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits basic knowledge and skills in governance	Possesses adequate skills to develop strategies and approaches of governance		Applies holistic approaches of governance through high level of skills and experiences
Competency Area: 3.3 Problem solving & analytical skills			
Key Competency: 3.3.1 Problem analysis			
Behavioral Indicator: 3.3.1.1 Demonstrates ability to identify issues and challenges			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits basic ability to identify issues and challenges	Exhibits sound knowledge and skills to identify challenges and proposes effective solutions		Exhibits advanced skills to identify complex challenges
Behavioral Indicator: 3.3.1.2 Possesses analytical and problem-solving skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic problem solving and analytical skills	Possesses sound analytical and problem-solving skills		Possesses advanced analytical and problem-solving skills
Behavioral Indicator: 3.3.1.3 Displays ability to mitigate problems			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Displays basic skills to mitigate problems	Displays adequate skills to identify problems and proposes mitigation measures		Recommends and implements effective mitigation measures
Key Competency: 3.3.2 Conflict management			
Behavioral Indicator: 3.3.2.1 Demonstrates effective communication and negotiation skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits basic communication and negotiation skills	Exhibits sound communication and negotiation skills to resolve conflicts effectively		Possesses effective communication and negotiation skills to solve complex issues
Behavioral Indicator: 3.3.2.2 Possesses ability to apply holistic conflict management approaches			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge on approaches of conflict management	Possesses sound knowledge and skills to resolve conflicts		Implements holistic approaches and resolves conflicts effectively
Behavioral Indicator: 3.3.2.3 Exhibits resilience to embrace diverse opinions and views			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)

Demonstrate ability to accommodate different opinions and views	Demonstrates adequate skills and experience to embrace diverse opinion and views	Exhibits high level of skills and experience to embrace diverse opinions and views	
Key Competency: 3.3.3 Good governance			
Behavioral Indicator: 3.3.3.1 Exhibits sense of responsibility, accountability and integrity			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits sense of responsibility, accountability and integrity	Exhibits higher degree of responsibility, accountability and integrity in performing duties	Promotes and ensures responsibility, accountability and integrity for effective organizational growth	
Behavioral Indicator: 3.3.3.2 Demonstrates efficient and effective decision-making skills			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Possesses basic knowledge and skills for effective decision-making processes	Possesses high level of knowledge and skills and applies different decision-making tools and methodologies	Possesses and implements advanced knowledge and approaches to make effective decisions	
Behavioral Indicator: 3.3.3.3 Exhibits ability to embrace fair and inclusive participation			
Foundation (P5-P4)	Experienced (P3)	Mid-advanced(P2)	Advanced(P1)
Exhibits enthusiasm to participate in planning process	Exhibits sound knowledge and skills on inclusive participation and implements the principles of good governance	Exhibits advanced knowledge and skills to promote inclusive participation	

8. Training Needs Analysis

The training need is difference between desired capability and current capability. The training needs analysis is a process of recognizing the skills gap and needs of training. It is the procedure to determine whether the training will bring about the solution to the problem. It ensures that training is targeting the correct competencies, the correct employees and the needs of the department. The training can reduce, if not eliminate, the gap by equipping the agriculture officer with knowledge and skills. It should be the shared responsibility of the employees and the DoA to build and enhance their capabilities and competencies.

The training needs analysis is carried out in consultation with different stakeholders through interviews, surveys and focused group discussions. The questionnaire consists of both closed and

open-ended questions. The questionnaire is based on 81 behavioral indicators of four proficiency levels on the Likert Scale of “Competent” and “Not Competent” followed by open ended questions asking the likely reasons for grading ‘Not Competent’ and possible interventions to address the gap. The behavioral indicators were assessed by proficiency level to identify the performance gaps. The assessment is consolidated as **NOT COMPETENT** when more than **70%** (as per the RCSC guideline) of the respondents does not possess the particular behavioral indicator.

Table 6. Assessment of the Performance Gaps for Foundation Level (P5-P4)

Key Role: Technical Expert			
Key Competencies	Behavioral Indicators	Performance (Competent/Not competent)	Likely reason for performance gap
1.1.1 Advanced subject knowledge and skills	1.1.1.1 Possesses highest level of research skills and knowledge in related agriculture field	Not competent	Limited experience, skills and knowledge on advanced research tools and methodologies
	1.1.1.2 Displays in-depth knowledge and skills in agriculture subjects	Not competent	Inadequate knowledge and skills on specific subjects for specialization
	1.1.1.3 Supervises and mentors’ subordinates on appropriate research methodologies	Not competent	Limited experience and confidence on subject matter for conducting training program
1.1.2 Technology innovation and creativity	1.1.2.1 Applies diagnostic tools in technology innovation	Not competent	Inadequate experience in research and innovation of technology
	1.1.2.2 Participates effectively in technology innovation and release	Not competent	Inadequate work experience
	1.1.2.3 Communicates research findings and new knowledge	Not competent	Limited capacity in research communication and publication skills
1.1.3 Professional integrity	1.1.3.1 Adheres to sectoral research and extension frameworks	Competent	NA
	1.1.3.2 Integrates and aligns to the larger sectoral programs and objectives	Competent	NA
	1.1.3.3 Displays professional leaderships	Competent	NA
1.2.1 Research design and planning	1.2.1.1 Identifies research problems and opportunities and develop appropriate research designs	Not competent	Limited experience and mentoring

	1.2.1.2 Applies digital tools in Agriculture research programs	Not competent	Lack curiosity and Inadequate skills
	1.2.1.3 Exhibits exploratory skills in research design and planning	Competent	NA
1.2.2 Data analysis and interpretation skills	1.2.2.1 Displays ability to apply appropriate analytical tools and approaches in data analysis and interpretation	Not competent	Limited knowledge on application of research-based statistical software and ICT tools
	1.2.2.2 Interprets research findings for evidence-based policy making	Not competent	limited experience and knowledge
	1.2.2.3 Publishes and communicates research findings	Not competent	Limited capacity building in research communication skills
1.2.3 Research aptitude	1.2.3.1 Demonstrates curiosity for learning	Competent	NA
	1.2.3.2 Displays ability to conduct research independently	Not competent	Limited research experience, skills and knowledge to conduct research independently
	1.2.3.3 Demonstrates research ethics and integrity	Competent	NA
1.3.1 Domain knowledge and skills	1.3.1.1 Possesses domain expertise in training and mentoring	Not competent	Limited subject knowledge and training experience
	1.3.1.2 Possesses ability to design appropriate training modules	Not competent	Inadequate experience and skills
	1.3.1.3 Demonstrates ability to deliver training effectively	Not competent	Inadequate training experience and skills
1.3.2 Need and impact assessment	1.3.2.1 Demonstrates research and analytical skills	Not competent	Inadequate research and analytical skills
	1.3.2.2 Possesses ability to identify training needs	Competent	NA
	1.3.2.3 Possesses ability to conduct impact assessment of the training programs	Not competent	Lack of specific skills and knowledge
1.3.3 Interpersonal and communication skills	1.3.3.1 Displays appropriate social attributes, manners and disposition	Competent	NA
	1.3.3.2 Possesses ability to work with diverse stakeholders and engages them	Competent	NA
	1.3.3.3 Exhibits interactive and effective communication skills	Competent	NA

Key Role: Production Facilitator			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
2.1.1 Production and value chain knowledge	2.1.1.1 Demonstrates specialized technical knowledge and skills on production and value chain management	Not competent	Limited experience and skills on value chain development and management
	2.1.1.2 Possesses production planning and coordination skills	Competent	NA
	2.1.1.3 Possesses knowledge on regional, national and global value chains	Competent	NA
2.1.2 Demand analysis	2.1.2.1 Demonstrates ability to analyze commodity demand and opportunities	Not competent	Limited capacity and knowledge on market intelligence and analysis
	2.1.2.2 Demonstrates ability to adopt commodity-based production planning	Not competent	Limited experience and planning and skills
	2.1.2.3 Demonstrates ability to link producers with consumers	Competent	NA
2.1.3 Promotional skills	2.1.3.1 Demonstrates effective communication and extension skills	Not competent	Inadequate experience and extension skills
	2.1.3.2 Exhibits ability to facilitate agriculture enterprise development	Not competent	Limited experience and skills
	2.1.3.3 Displays ability to organize market promotional programs	Competent	NA
2.2.1 Knowledge assimilation and dissemination	2.2.1.1 Possesses knowledge on extension methods and approaches	Not competent	Inadequate experience and skills on application of extension methods and approaches
	2.2.1.2 Exhibits highest level of knowledge management skills	Not competent	Limited data management skills and knowledge
	2.2.1.3 Demonstrates ability to organize and implement outreach programs	Not competent	Limited work experience and skills
2.2.2 Community mobilization	2.2.2.1 Demonstrates communication and social networking skills for community mobilization	Competent	NA
	2.2.2.2 Displays effective participatory planning and implementation skills	Not competent	Inadequate knowledge on participatory planning
	2.2.2.3 Exhibits understanding of community and cultural sensitivity	Competent	NA
	2.2.3.1 Displays ability to delegate tasks	Not competent	Limited work experience

2.2.3 Delegation and empowerment	2.2.3.2 Encourages team work for inclusive participation	Competent	NA
	2.2.3.3 Empowers team members in achieving organizational goals	Competent	NA
2.3.1 Stakeholder engagement	2.3.1.1 Displays excellent interpersonal relationship	Not competent	Limited work experience
	2.3.1.2 Demonstrates proficiency in stakeholder engagement and prioritization	Not competent	Limited work experience and communication skills
	2.3.1.3 Demonstrates negotiation and conflict resolution skills	Not competent	Inadequate experience and skills in conflict resolution
2.3.2 Communication skills	2.3.2.1 Demonstrate effective communication skills in verbal, non-verbal, written and visual.	Not competent	Inadequate communication skills and work experience
	2.3.2.2 Displays empathy, respect, confidence, friendliness and responsiveness to audiences	Competent	NA
	2.3.2.3 Demonstrates active listening ability and responds to feedbacks	Competent	NA
2.3.3 Digital/ICT proficiency	2.3.3.1 Possesses functional ICT knowledge and skills	Competent	NA
	2.3.3.2 Demonstrates ability to apply appropriate digital tools	Not competent	Limited skills on application of digital tools
	2.3.3.3 Contributes to sectoral information hub for data and knowledge sharing	Not competent	Limited knowledge and skills on application of ICT
Key Role: Strategic Planner			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
3.1.1 Planning and prioritization	3.1.1.1 Possesses advanced planning knowledge and skills	Not competent	Limited work experience in planning
	3.1.1.2 Exhibits ability to prioritize plans and programs	Not competent	Limited work experience
	3.1.1.3 Demonstrates ability to adapt to sectoral plans and priorities	Competent	NA
3.1.2 Resource mobilization	3.1.2.1 Displays ability to identify potential funding sources	Not competent	Inadequate professional networking skills
	3.1.2.2 Demonstrates ability to develop competitive project proposals for resource mobilization	Not competent	Inadequate skills on developing project proposal

	3.1.2.3 Displays ability for effective allocation and utilization of resources	Not competent	Limited work experience
3.1.3 Analytical skills	3.3.1.1 Possess analytical and problem-solving skills	Not competent	Limited work experience and skills
	3.3.1.2 Displays ability to analyze and interpret data for decision making	Not competent	Limited work experience and skills
	3.3.1.3 Displays ability to assess organizational plans and programs	Not competent	Limited work experience and skills
3.2.1 Domain expertise	3.2.1.1 Possesses ability to lead and formulate organizational vision, mission and objectives	Not competent	Limited knowledge on organizational plans and priorities
	3.2.1.2 Exhibits organizational management skills	Not competent	Limited leadership skills
	3.2.1.3 Possesses professional skills and experience	Not competent	Inadequate work experience and subject knowledge
3.2.2 Work ethics and integrity	3.2.2.1 Exhibits high level of responsibility and accountability	Competent	NA
	3.2.2.2 Displays consistency in learning and professional development	Competent	NA
	3.2.2.3 Promotes trust and confidence in an organization	Competent	NA
3.2.3 Systems thinking	3.2.3.1 Demonstrates advance skills and knowledge on systems thinking tools and approaches	Not competent	Limited work experience and skills
	3.2.3.2 Possesses ability to identify critical relationships and interdependencies among the multi-disciplinary stakeholders	Not competent	Inadequate work experience and skills
	3.2.3.3 Demonstrates holistic approaches of governing the organization	Not competent	Inadequate leadership skills and knowledge
3.1.3 Problem analysis	3.1.3.1 Demonstrates ability to identify issues and challenges	Competent	NA
	3.1.3.2 Possesses analytical and problem-solving skills	Not competent	Inadequate work experience and skills
	3.1.3.3 Displays ability to mitigate problems	Not competent	Inadequate work experience and skills
3.3.2 Conflict management	3.3.2.1 Demonstrates effective communication and negotiation skills	Not competent	Limited communication and interpersonal skills
	3.3.2.2 Possesses ability to apply holistic conflict management approaches	Not competent	Inadequate conflict management skills

	3.3.2.3 Exhibits resilience to embrace diverse opinion and views	Competent	NA
3.3.3 Good governance	3.3.3.1 Exhibits sense of responsibility accountability and integrity	Competent	NA
	3.3.3.2 Demonstrates efficient and effective decision-making skills	Not competent	Inadequate experience and skills
	3.3.3.3 Exhibits ability to embrace fair and inclusive participation	Competent	NA

Table 7. Assessment of the Performance Gaps for Experienced Level (P3)

Role 1: Technical Expert			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
1.1.1 Advanced subject knowledge & skills	1.1.1.1 Possesses highest level of research skills and knowledge in related agriculture field	Not Competent	Limited skills and knowledge on advanced research tools and methodologies
	1.1.1.2 Displays in-depth knowledge and skills in agriculture subjects	Not Competent	Inadequate knowledge and skills on specific subjects for specialization
	1.1.1.3 Supervises and mentors' subordinates on appropriate diagnostic and analytical skills	Not Competent	Limited skills and confidence on subject matter for conducting training program
1.1.2 Technology innovation and creativity	1.1.2.1 Applies diagnostic tools in technology innovation	Not Competent	Inadequate experience in research and innovation of technology
	1.1.2.2 Participates effectively in technology innovation and release	Not Competent	Inadequate work experience
	1.1.2.3 Communicates research findings and new knowledge	Not Competent	Limited capacity in research communication and publication skills
1.1.3 Professional integrity	1.1.3.1 Adheres to sectoral research and extension frameworks	Competent	NA
	1.1.3.2 Integrates and aligns to the larger sectoral programs and objectives	Competent	NA
	1.1.3.3 Displays professional leaderships	Competent	NA

1.2.1 Research design and planning	1.2.1.1 Identifies research problems and opportunities and develop appropriate research designs	Not competent	Limited skills and mentoring
	1.2.1.2 Applies digital tools in Agriculture research programs	Competent	NA
	1.2.1.3 Exhibits exploratory skills in research designs and planning	Competent	NA
1.2.2 Data analysis and interpretation skills	1.2.2.1 Displays ability to apply appropriate analytical tools and approaches in data analysis and interpretation	Not Competent	Limited knowledge on application of research-based statistical software
	1.2.2.2 Interprets research findings for evidence-based policy making	Not Competent	Limited experience and knowledge
	1.2.2.3 Publishes and communicates research findings	Competent	NA
1.2.3 Research aptitude	1.2.3.1 Demonstrates curiosity for learning	Competent	NA
	1.2.3.2 Displays ability to conduct research independently	Not Competent	Limited research experience and skills to conduct research independently
	1.2.3.3 Demonstrate research ethics and integrity	Competent	NA
1.3.1 Domain knowledge and skills	1.3.1.1 Possesses domain expertise in training and mentoring	Competent	NA
	1.3.1.2 Possesses ability to design appropriate training modules	Competent	NA
	1.3.1.3 Demonstrates ability to deliver training effectively	Not competent	Inadequate training experience and skills
1.3.2 Needs and impact assessment	1.3.2.1 Demonstrates research and analytical skills	Competent	NA
	1.3.2.2 Possesses ability to identify training needs	Competent	NA
	1.3.2.3 Possesses ability to conduct impact assessment of the training programs	Not Competent	Lack experience and skills
1.3.3 Inter-personal and communication skills	1.3.3.1 Displays appropriate social attributes, manners and disposition	Competent	NA
	1.3.3.2 Possesses ability to work with diverse stakeholders and engages them	Competent	NA
	1.3.3.3 Exhibits interactive and effective communication skills	Competent	NA

Key Role: Production Facilitator			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
2.1.1 Production and value chain knowledge	2.1.1.1 Demonstrates specialized technical knowledge and skills on production and value chain management	Not Competent	Limited experience and skills on value chain development and management
	2.1.1.2 Possesses production planning and coordination skills	Competent	NA
	2.1.1.3 Possesses knowledge on regional, national and global value chains	Competent	NA
2.1.2 Demand analysis	2.1.2.1 Demonstrates ability to analyze commodity demand and opportunities	Not Competent	Limited capacity and knowledge on market intelligence and analysis
	2.1.2.2 Demonstrates ability to adopt commodity-based production planning	Competent	NA
	2.1.2.3 Demonstrates ability to link producers with consumers	Competent	NA
2.1.3 Promotional skills	2.1.3.1 Demonstrates effective communication and extension skills	Not Competent	Limited experience and skills
	2.1.3.2 Exhibits ability to facilitate agriculture enterprise development	Not Competent	Limited experience and skills
	2.1.3.3 Displays ability to organize market promotional programs	Competent	NA
2.2.1 Knowledge assimilation and dissemination	2.2.1.1 Possesses knowledge on extension methods and approaches	Not competent	Inadequate experience and skills on application of extension methods
	2.2.1.2 Exhibits highest level of knowledge management skills	Not Competent	Limited data management skills and knowledge
	2.2.1.3 Demonstrates ability to organize and implement outreach programs	Competent	NA
2.2.2 Community mobilization	2.2.2.1 Demonstrates communication and social networking skills for community mobilization	Competent	NA
	2.2.2.2 Displays effective participatory planning and implementation skills	Competent	NA
	2.2.2.3 Exhibits understanding of community and cultural sensitivity	Competent	NA
	2.2.3.1 Displays ability to delegate tasks	Competent	NA

2.2.3 Delegation and empowerment	2.2.3.2 Encourages team work for inclusive participation	Competent	NA
	2.2.3.3 Empowers team members in achieving organizational goals	Competent	NA
2.3.1 Stakeholder engagement	2.3.1.1 Displays excellent interpersonal relationship	Competent	NA
	2.3.1.2 Demonstrates proficiency in stakeholder engagement and prioritization	Competent	NA
	2.3.1.3 Demonstrates negotiation and conflict resolution skills	Not Competent	Inadequate experience and skills in conflict resolution
2.3.2 Communication skills	2.3.2.1 Demonstrate effective communication skills in verbal, non-verbal, written and visual.	Competent	
	2.3.2.2 Displays empathy, respect, confidence, friendliness and responsiveness to audiences	Competent	NA
	2.3.2.3 Demonstrates active listening ability and responds to feedbacks	Competent	NA
2.3.3 Digital/ICT proficiency	2.3.3.1 Possesses functional ICT knowledge and skills	Competent	NA
	2.3.3.2 Demonstrates ability to apply appropriate digital tools	Not Competent	Limited skills on application of digital tools
	2.3.3.3 Contributes to sectoral information hub for data and knowledge sharing	Not Competent	Limited knowledge and skills on application of ICT
Key Role: Strategic Planner			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
3.1.1 Planning and prioritization	3.1.1.1 Possesses advanced planning knowledge and skills	Not competent	Limited skills and knowledge in proper planning
	3.1.1.2 Exhibits ability to prioritize plans and programs	Competent	NA
	3.1.1.3 Demonstrates ability to adapt to sectoral plans and priorities	Competent	NA
3.1.2 Resource mobilization	3.1.2.1 Displays awareness of potential funding sources	Competent	NA
	3.1.2.2 Demonstrates ability to develop competitive project proposals for resource mobilization	Not competent	Inadequate skills on developing project proposal

	3.1.2.3 Displays ability for effective allocation and utilization of resources	Not competent	Limited skills and work experience
3.1.3 Analytical skills	3.3.1.1 Possess analytical and problem-solving skills	Not competent	Limited work experience and skills
	3.3.1.2 Displays ability to analyze and interpret information for decision making	Not competent	Limited work experience and skills
	3.3.1.3 Displays ability to assess organizational plans and programs	Competent	NA
3.2.1 Domain expertise	3.2.1.1 Possesses ability to leads and formulate organizational vision, mission and objectives	Not competent	Limited knowledge on organizational plans and priorities
	3.2.1.2 Exhibits organizational management skills	Not competent	Limited leadership skills
	3.2.1.3 Possesses professional skills and experience	Not competent	Inadequate skills and subject knowledge
3.2.2 Work ethics and integrity	3.2.2.1 Exhibits high level of responsibility and accountability	Competent	NA
	3.2.2.2 Displays consistency in learning and professional development	Competent	NA
	3.2.2.3 Promotes trust and confidence in an organization	Competent	NA
3.2.3 Systems thinking	3.2.3.1 Demonstrates advance skills and knowledge on systems thinking tools and approaches	Not competent	Limited work experience and skills
	3.2.3.2 Possesses ability to identify critical relationships and interdependencies among the multi-disciplinary stakeholders	Not competent	Inadequate work experience and skills
	3.2.3.3 Demonstrates holistic approaches of governing the organization	Not competent	Inadequate leadership skills and knowledge
3.1.3 Problem analysis	3.1.3.1 Demonstrates ability to identify issues and challenges	Competent	NA
	3.1.3.2 Possesses analytical and problem-solving skills	Competent	NA
	3.1.3.3 Displays ability to mitigate problems	Not competent	Inadequate skills and knowledge
3.3.2 Conflict management	3.3.2.1 Demonstrates effective communication and negotiation skills	Not competent	Limited communication and interpersonal skills
	3.3.2.2 Possesses ability to apply holistic conflict management approaches	Not competent	Inadequate conflict management skills

	3.3.2.3 Exhibits resilience to embrace diverse opinions and views	Competent	NA
3.3.3 Good governance	3.3.3.1 Exhibits sense of responsibility accountability and integrity	Competent	NA
	3.3.3.2 Demonstrates efficient and effective decision-making skills	Not competent	Inadequate experience and skills
	3.3.3.3 Exhibits ability to embrace fair and inclusive participation	Competent	NA

Table 8. Assessment of Performance Gaps for Mid-advanced Level(P2)

Key Role: Technical Expert			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
1.1.1 Advanced subject knowledge & skills	1.1.1.1 Possesses highest level of research skills and knowledge in related agriculture field	Not competent	Inadequate skills on advanced research tools and methodologies
	1.1.1.2 Displays in-depth knowledge and skills in agriculture subjects	Not competent	Inadequate knowledge and skills on specialized agriculture subject
	1.1.1.3 Supervises and mentors' subordinates on appropriate research methodologies, diagnostic and analytical skills	Competent	NA
1.1.2 Technology innovation and creativity	1.1.2.1 Applies diagnostic tools in technology innovation	Not competent	Inadequate skills and experiences on application of appropriate tools and approaches for technology innovation
	1.1.2.2 Participates effectively in technology innovations and release	Not competent	Limited skills and experience
	1.1.2.3 Communicates research findings and new knowledge	Competent	NA
1.1.3 Professional integrity	1.1.3.1 Adheres to sectoral research and extension frameworks	Competent	NA
	1.1.3.2 Integrates and aligns to the larger sectoral programs and objectives	Competent	NA
	1.1.3.3 Displays professional leaderships	Competent	NA

1.2.1 Research design and planning	1.2.1.1 Identifies research problems and opportunities and develop appropriate research designs	Competent	NA
	1.2.1.2 Applies digital tools in Agriculture research programs	Competent	NA
	1.2.1.3 Exhibits exploratory skills in research designs and planning	Competent	NA
1.2.2 Data analysis and interpretation skills	1.2.2.1 Displays ability to apply appropriate analytical tools and approaches in data analysis and interpretation	Not competent	Inadequate in-depth skills and knowledge on application of emerging data analysis tools and approaches
	1.2.2.2 Interprets research findings for evidence-based policy making	Not competent	Inadequate skills and experience to interpret research findings in effective policy making
	1.2.2.3 Publishes and communicates research findings	Competent	NA
1.2.3 Research aptitude	1.2.3.1 Demonstrates curiosity for learning	Competent	NA
	1.2.3.2 Displays ability to conduct research independently	Not competent	Inadequate research skills and experience to conduct research independently
	1.2.3.3 Demonstrate research ethics and integrity	Competent	NA
1.3.1 Domain knowledge and skills	1.3.1.1 Possesses domain expertise in training and mentoring	Competent	NA
	1.3.1.2 Possesses ability to design appropriate training modules	Not competent	Limited experience and skills
	1.3.1.3 Demonstrates ability to deliver training effectively	Competent	NA
1.3.2 Need and impact assessment	1.3.2.1 Demonstrates research and analytical skills	Competent	NA
	1.3.2.2 Possesses ability to identify training needs	Competent	NA
	1.3.2.3 Possesses ability to conduct impact assessment of the training programs	Competent	NA
1.3.3 Inter-personal and communication skills	1.3.3.1 Displays appropriate social attributes, manners and disposition	Competent	NA
	1.3.3.2 Possesses ability to work with diverse stakeholders and engages them	Competent	NA

	1.3.3.3 Exhibits interactive and effective communication skills	Competent	NA
Key Role: Production Facilitator			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
2.1.1 Production and value chain knowledge	2.1.1.1 Demonstrates specialized technical knowledge and skills on production and value chain management	Not Competent	Inadequate practical skills and experience on value chain development
	2.1.1.2 Possesses production planning and coordination skills	Competent	NA
	2.1.1.3 Possesses knowledge on regional, national and global value chains	Competent	NA
2.1.2 Demand analysis	2.1.2.1 Demonstrates ability to analyze commodity demand and opportunities	Not competent	Inadequate skills and knowledge on market assessment
	2.1.2.2 Demonstrates ability to adopt commodity-based production planning	Competent	NA
	2.1.2.3 Demonstrates ability to link producers with consumers	Competent	NA
2.1.3 Promotional skills	2.1.3.1 Demonstrates effective communication and extension skills	Competent	NA
	2.1.3.2 Exhibits ability to facilitate agriculture enterprise development	Not Competent	Limited knowledge and experiences
	2.1.3.3 Displays ability to organize market promotional programs	Competent	NA
2.2.1 Knowledge assimilation and dissemination	2.2.1.1 Possesses knowledge on extension methods and approaches	Competent	NA
	2.2.1.2 Exhibits highest level of knowledge management skills	Competent	NA
	2.2.1.3 Demonstrates ability to organize and implement outreach programs	Competent	NA
2.2.2 Community mobilization	2.2.2.1 Demonstrates communication and social networking skills for community mobilization	Competent	NA
	2.2.2.2 Displays effective participatory planning and implementation skills	Not competent	Limited skills and experience
	2.2.2.3 Exhibits understanding of community and cultural sensitivity	Competent	NA
	2.2.3.1 Displays ability to delegate tasks	Competent	NA

2.2.3 Delegation and empowerment	2.2.3.2 Encourages team work for inclusive participation	Competent	NA
	2.2.3.3 Empowers team members in achieving organizational goals	Competent	NA
2.3.1 Stakeholder engagement	2.3.1.1 Displays excellent interpersonal relationship	Competent	NA
	2.3.1.2 Demonstrates proficiency in stakeholder engagement and prioritization	Competent	NA
	2.3.1.3 Demonstrates negotiation and conflict resolution skills	Not competent	Inadequate skills to analysis conflict and address it effectively
2.3.2 Communication skills	2.3.2.1 Demonstrate effective communication skills in verbal, non-verbal, written and visual.	Competent	NA
	2.3.2.2 Displays empathy, respect, confidence, friendliness and responsiveness to audiences	Competent	NA
	2.3.2.3. Demonstrates active listening ability and responds to feedbacks	Competent	NA
2.3.3 Digital/ICT proficiency	2.3.3.1 Possesses functional ICT knowledge and skills	Competent	NA
	2.3.3.2 Demonstrates ability to apply appropriate digital tools	Competent	NA
	2.3.3.3 Contributes to sectoral information hub for data and knowledge sharing	Competent	NA
Key Role: Strategic Planner			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
3.1.1 Planning and prioritization	3.1.1.1 Possesses advanced planning knowledge and skills	Competent	Inadequate skills and knowledge on specific tools and approach for effective planning
	3.1.1.2 Exhibits ability to prioritize plans and programs	Competent	NA
	3.1.1.3 Demonstrates ability to adapt to sectoral plans and priorities	Competent	NA
3.1.2 Resource mobilization	3.1.2.1 Displays awareness of potential funding sources	Competent	NA

	3.1.2.2 Demonstrates ability to develop competitive project proposals for resource mobilization	Not Competent	Inadequate skills and knowledge to apply specific tools and approaches
	3.1.2.3 Displays ability for effective allocation and utilization of resources	Competent	NA
3.1.3 Analytical skills	3.3.1.1 Possess analytical and problem-solving skills	Competent	NA
	3.3.1.2 Displays ability to analyze and interpret information for decision making	Competent	NA
	3.3.1.3 Displays ability to assess organizational plans and programs	Competent	NA
3.2.1 Domain expertise	3.2.1.1 Possesses ability to leads and formulate organizational vision, mission and objectives	Not competent	Lack experience and skills
	3.2.1.2 Exhibits organizational management skills	Competent	NA
	3.2.1. Possesses professional skills and experience	Competent	NA
3.2.2 Work ethics and integrity	3.2.2.1 Exhibits high level of responsibility and accountability	Competent	NA
	3.2.2.2 Displays consistency in learning and professional development	Competent	NA
	3.2.2.3 Promotes trust and confidence in an organization	Competent	NA
3.2.3 Systems thinking	3.2.3.1 Demonstrates advance skills and knowledge on systems thinking tools and approaches	Not competent	Inadequate skills and knowledge to apply advance tools and approaches of systems thinking
	3.2.3.2 Possesses ability to identify critical relationships and interdependencies among the multi-disciplinary stakeholders	Not competent	Inadequate skills and experiences to assess critical interdependencies among stakeholders
	3.2.3.3 Demonstrates holistic approaches of governing the organization	Competent	Inadequate skills to assess holistic organizational development and management
3.1.3 Problem analysis	3.1.3.1 Demonstrates ability to identify issues and challenges	Competent	NA
	3.1.3.2 Possesses analytical and problem-solving skills	Not competent	NA

	3.1.3.3 Displays ability to mitigate problems	Not competent	NA
3.3.2 Conflict management	3.3.2.1 Demonstrates effective communication and negotiation skills	Not competent	NA
	3.3.2.2 Possesses ability to apply holistic conflict management approaches	Not competent	Inadequate experience and skills to analysis conflict and address it effectively
	3.3.2.3 Exhibits resilience to embrace diverse opinions and views	Competent	NA
3.3.3 Good governance	3.3.3.1 Exhibits sense of responsibility accountability and integrity	Competent	NA
	3.3.3.2 Demonstrates efficient and effective decision-making skills	Not competent	Inadequate leadership and management skills
	3.3.3.3 Exhibits ability to embrace fair and inclusive participation	Competent	NA

Table 9. Assessment of Performance Gaps for Advanced Level(P1)

Key Role: Technical Expert			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
1.1.1 Advanced subject knowledge & skills	1.1.1.1 Possesses highest level of research skills and knowledge in related agriculture field	Competent	NA
	1.1.1.2 Displays in-depth knowledge and skills in agriculture subjects	Competent	NA
	1.1.1.3 Supervises and mentors' subordinates on appropriate research methodologies, diagnostic and analytical skills	Competent	NA
1.1.2 Technology innovation and creativity	1.1.2.1 Applies diagnostic tools in technology innovation	Not competent	Inadequate skills on application of appropriate tools and approaches for technology innovation
	1.1.2.2 Participates in technology innovations and release	Competent	NA
	1.1.2.3 Communicates research findings and new knowledge	Competent	NA

1.1.3 Professional integrity	1.1.3.1 Adheres to sectoral research and extension frameworks	Competent	NA
	1.1.3.2 Integrates and aligns to the larger sectoral programs and objectives	Competent	NA
	1.1.3.3 Displays professional leaderships	Competent	NA
1.2.1 Research design and planning	1.2.1.1 Identifies research problems and opportunities and develop appropriate research designs	Competent	NA
	1.2.1.2 Applies digital tools in Agriculture research programs	Competent	NA
	1.2.1.3 Exhibits exploratory skills in research designs and planning	Competent	NA
1.2.2 Data analysis and interpretation skills	1.2.2.1 Displays ability to apply appropriate analytical tools and approaches in data analysis and interpretation	Competent	
	1.2.2.2 Interprets research findings for evidence-based policy making	Not competent	Inadequate skills and experience to interpret research findings for policy making
	1.2.2.3 Publishes and communicates research findings	Competent	NA
1.2.3 Research aptitude	1.2.3.1 Demonstrates curiosity for learning	Competent	NA
	1.2.3.2 Displays ability to conduct research independently	Competent	NA
	1.2.3.3 Demonstrate research ethics and integrity	Competent	NA
1.3.1 Domain knowledge and skills	1.3.1.1 Possesses domain expertise in training and mentoring	Competent	NA
	1.3.1.2 Possesses ability to design appropriate training modules	Competent	NA
	1.3.1.3 Demonstrates ability to deliver training effectively	Competent	NA
1.3.2 Need and impact assessment	1.3.2.1 Demonstrates research and analytical skills	Competent	NA
	1.3.2.2 Possesses ability to identify training needs	Competent	NA
	1.3.2.3 Possesses ability to conduct impact assessment of the training programs	Competent	NA
1.3.3 Inter-personal and	1.3.3.1 Displays appropriate social attributes, manners and disposition	Competent	NA

communication skills	1.3.3.2 Possesses ability to work with diverse stakeholders and engages them	Competent	NA
	1.3.3.3 Exhibits interactive and effective communication skills	Competent	NA
Key Role: Production Facilitator			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
2.1.1 Production and value chain knowledge	2.1.1.1 Demonstrates specialized technical knowledge and skills on production and value chain management	Competent	NA
	2.1.1.2 Possesses production planning and coordination skills	Competent	NA
	2.1.1.3 Possesses knowledge on regional, national and global value chains	Competent	NA
2.1.2 Demand analysis	2.1.2.1 Demonstrates ability to analyze commodity demand and opportunities	Competent	NA
	2.1.2.2 Demonstrates ability to adopt commodity-based production planning	Competent	NA
	2.1.2.3 Demonstrates ability to link producers with consumers	Competent	NA
2.1.3 Promotional skills	2.1.3.1 Demonstrates effective communication and extension skills	Competent	NA
	2.1.3.2 Exhibits ability to facilitate agriculture enterprise development	Competent	NA
	2.1.3.3 Displays ability to organize market promotional programs	Competent	NA
2.2.1 Knowledge assimilation and dissemination	2.2.1.1 Possesses knowledge on extension methods and approaches	Competent	NA
	2.2.1.2 Exhibits highest level of knowledge management skills	Competent	NA
	2.2.1.3 Demonstrates ability to organize and implement outreach programs	Competent	NA
2.2.2 Community mobilization	2.2.2.1 Demonstrates communication and social networking skills for community mobilization	Competent	NA
	2.2.2.2 Displays effective participatory planning and implementation skills	Competent	NA
	2.2.2.3 Exhibits understanding of community and cultural sensitivity	Competent	NA

2.2.3 Delegation and empowerment	2.2.3.1 Displays ability to delegate tasks	Competent	NA
	2.2.3.2 Encourages team work for inclusive participation	Competent	NA
	2.2.3.3 Empowers team members in achieving organizational goals	Competent	NA
2.3.1 Stakeholder engagement	2.3.1.1 Displays excellent interpersonal relationship	Competent	NA
	2.3.1.2 Demonstrates proficiency in stakeholder engagement and prioritization	Competent	NA
	2.3.1.3 Demonstrates negotiation and conflict resolution skills	Competent	NA
2.3.2 Communication skills	2.3.2.1 Demonstrate effective communication skills in verbal, non-verbal, written and visual.	Competent	NA
	2.3.2.2 Displays empathy, respect, confidence, friendliness and responsiveness to audiences	Competent	NA
	2.3.2.3. Demonstrates active listening ability and responds to feedbacks	Competent	NA
2.3.3 Digital/ICT proficiency	2.3.3.1 Possesses functional ICT knowledge and skills	Competent	NA
	2.3.3.2 Demonstrates ability to apply appropriate digital tools	Competent	NA
	2.3.3.3 Contributes to sectoral information hub for data and knowledge sharing	Competent	NA
Key Role: Strategic Planner			
Key Competencies	Behavioral Indicators	Performance (competent/Not competent)	Likely reason for performance gap
3.1.1 Planning and prioritization	3.1.1.1 Possesses advanced planning knowledge and skills	Competent	NA
	3.1.1.2 Exhibits ability to prioritize plans and programs	Competent	NA
	3.1.1.3 Demonstrates ability to adapt to sectoral plans and priorities	Competent	NA
3.1.2 Resource mobilization	3.1.2.1 Displays awareness of potential funding sources	Competent	NA

	3.1.2.2 Demonstrates ability to develop competitive project proposals for resource mobilization	Not competent	Inadequate skills and knowledge to apply advanced tools and approaches of developing comprehensive financial/business project proposal
	3.1.2.3 Displays ability for effective allocation and utilization of resources	Competent	NA
3.1.3 Analytical skills	3.3.1.1 Possess analytical and problem-solving skills	Competent	NA
	3.3.1.2 Displays ability to analyze and interpret data for decision making	Competent	NA
	3.3.1.3 Displays ability to assess organizational plans and programs	Competent	NA
3.2.1 Domain expertise	3.2.1.1 Possesses ability to leads and formulate organizational vision, mission and objectives	Competent	NA
	3.2.1.2 Exhibits organizational management skills	Competent	NA
	3.2.1.3 Possesses professional skills and experience	Competent	NA
3.2.2 Work ethics and integrity	3.2.2.1 Exhibits high level of responsibility and accountability	Competent	NA
	3.2.2.2 Displays consistency in learning and professional development	Competent	NA
	3.2.2.3 Promotes trust and confidence in an organization	Competent	NA
3.2.3 Systems thinking	3.2.3.1 Demonstrates advance skills and knowledge on systems thinking tools and approaches	Not competent	Inadequate skills and knowledge to apply advance tools and approaches of systems thinking
	3.2.3.2 Possesses ability to identify critical relationships and interdependencies among the multi-disciplinary stakeholders	Competent	NA
	3.2.3.3 Demonstrates holistic approaches of governing the organization	Competent	NA
3.1.3 Problem analysis	3.1.3.1 Demonstrates ability to identify issues and challenges	Competent	NA
	3.1.3.2 Possesses analytical and problem-solving skills	Competent	NA

	3.1.3.3 Displays ability to mitigate problems	Competent	NA
3.3.2 Conflict management	3.3.2.1 Demonstrates effective communication and negotiation skills	Competent	NA
	3.3.2.2 Possesses ability to apply holistic conflict management approaches	Competent	NA
	3.3.2.3 Exhibits resilience to embrace diverse opinions and views	Competent	NA
3.3.3 Good governance	3.3.3.1 Exhibits sense of responsibility accountability and integrity	Competent	NA
	3.3.3.2 Demonstrates efficient and effective decision-making skills	Competent	NA
	3.3.3.3 Exhibits ability to embrace fair and inclusive participation	Competent	NA

9. Competency Development Interventions and its Learning Objectives

The framework has highlighted the likely reasons for performance gap and accordingly following competency development interventions are proposed to enhance competency of agriculture officers at different proficiency levels:

Table 10. Mandatory short-term training programs

Training types	Target group	Training description	Location	Learning outcomes
Specialization course in crop cultivation	P4-P2	Cereal crop breeding and cultivation	Ex-country	To enhance knowledge and skills on specific crop cultivation techniques for increasing food production
		Vegetable crop breeding and cultivation	Ex-country	
		Fruits and nuts breeding and cultivation	Ex-country	
		Pulses and legumes crop breeding and cultivation	Ex-country	
		Oilseed crop breeding and cultivation	Ex-country	
		MAPS crop breeding and cultivation	Ex-country	

Specialization course in Mushroom	P4-P2	Mushroom cultivation technique	Ex-country	To gain skills and knowledge on mushroom cultivation techniques
		Laboratory skills and techniques	Ex-country	To gain skills and knowledge on use of lab equipment
		Mushroom herbarium curating	Ex-country	To gain skills and knowledge on herbarium curating
		Mushroom spawn production	Ex-country	To gain skills and knowledge on mushroom spawn production
		Mushroom biotechnology	Ex-country	To gain skills and knowledge on tissue culture techniques
Floriculture and landscaping	P4-P2	Floriculture nursery management	Ex-country	To gain skills to promote floriculture enterprise and amenity landscaping in the country
		Amenity landscaping	Ex-country	
Specialization course in Seed Science	P4-P2	Capacity building on seed production technology and plant propagation	Ex-country	To gain skills and knowledge on seed production and plant propagation
		Fruit plants nursery operation and management	Ex-country	To gain skills and knowledge on nursery operation and management
		Seed processing and packaging training	Ex-country	To gain skills and knowledge on seed processing and packaging
		Seed quality testing and seed lab management	Ex-country	To gain skills and knowledge on seed quality testing and lab management
		Seed tissue culture and biotechnology	Ex-country	To gain skills and knowledge on tissue culture techniques and biotechnology
		Seed market and seed industry development	Ex-country	To gain skills and knowledge on seed market analysis and seed industry development
Specialization course in Post-harvest	P5-P2	Training on food microbiology	Ex-country	To gain skills and knowledge on food microbiology
		Training on use and operation of advanced post-harvest equipment for quality analysis	Ex-country	To gain skills and knowledge on operation of various post-harvest equipment
		Training on product development, value addition and post-harvest engineering	Ex-country	To gain skills and knowledge on product development, value addition and post-harvest engineering

		Training on refrigeration and cold store operation and maintenance.	Ex-country	To gain skills and knowledge on refrigeration and cold store operation and maintenance
		Training and certification course on ISO 22000 Food Safety Management System (FSMS)	In-country	To gain skills and knowledge on food certification processes
Specialization course in Soil Science	P4-P2	Training on soil, water and plant analysis	Ex-country	To gain skills and knowledge on carrying out analysis of soil, water and plants
		Training on Integrated Plant Nutrient Management (IPNM)	Ex-country	To gain skills and knowledge on different IPNM technologies
		Training on bio-fertilizer, organic manure production technology	Ex-country	To gain skills and knowledge on production techniques
		Training on soil survey/soil mapping/GIS/remote sensing for agriculture and horticulture use	Ex-country	To gain skills and knowledge on conducting soil survey/soil mapping/GIS/remote sensing
		Training on land management and bio-engineering technologies	Ex-country	To gain skills and knowledge on land management technologies
		Training on basics operation of soil microbiology equipment	Ex-country	To gain skills and knowledge on use of soil microbiology equipment
Specialization course in Plant Protection	P4-P2	Human wildlife conflict management	In-country	To gain skills and knowledge on promotion of technologies that management crop loss and damage by wildlife
		Weeds management	Ex-country	To gain skills and knowledge on weeds management techniques
		Agrochemicals and bio-pesticides	Ex-country	To know the use and effectiveness of various agrochemicals and bio-pesticides
		Insect identification and systematics	Ex-country	To gain skills and knowledge on identification of insect pest
		Biological control of pest and diseases	Ex-country	To gain skills and knowledge on promotion of biocontrol methods

		Taxonomic identification of weeds and herbarium preparation	Ex-country	To gain skills and knowledge on weed identification and herbarium management
		Laboratory skills and technique	Ex-country	To gain skills and knowledge on use of lab tools and equipment for analysis
Specialization course in organic farming	P4-P2	Training on emerging organic agriculture technologies	Ex-country	To gain skills and knowledge on promotion of organic technologies
		Specialized training on organic crops cultivation	Ex-country	To gain skills and knowledge on organic crop cultivation techniques
		Specialized training on organic certification process	Ex-country	To gain skills and knowledge on certification processes
Modern/Precision agriculture	P4-P1	Protected cultivation techniques (hydroponics, aeroponics)	Ex-country	To gain skills and knowledge on installation of protected agriculture technologies for promotion of intensive cultivation of crops
		Smart irrigation system (drip, sprinkler, automation)	Ex-country	To gain skills and knowledge on installation of different irrigation technologies for effective water use
		Farm mechanization	In-country	To gain skills and knowledge on various farm machineries and equipment's
Climate smart/resilient agriculture	P3-P1	Climate change adaptation and mitigation in agriculture	Ex-country	To gain skills and knowledge on climate smart agriculture practices
Agrometeorology	P4-P2	Weather forecasting & crop modelling	Ex-country	To gain skills and knowledge on application of tools for weather forecasting and modelling
Scientific paper writing and research methodologies	P5-P2	Short course on scientific paper writing and research methodologies	In-country	To gain skills to conduct basic research and publish research findings
Statistical analysis	P5-P1	Training on data analysis using software packages (R/STAR/SPSS/Python)	In-country	To gain skills and knowledge to apply ICT tools/software to analyze data for research
GIS, GPS and Crop modelling	P4-P1	Application of GIS, GPS and Crop modelling in agriculture	In-country	To gain skills and knowledge on basic application of GIS, GPS & crop modelling

Value chain and enterprise development	P3-P2	Develop commodity value chains for cereals, fruits, vegetables and spices	Ex-country	To gain skills and knowledge on value chain and enterprise development
Extension and communication	P4-P1	Training on audio visual tools in Agriculture	In-country	To gain skills and knowledge on use of audio-visual tools for effective communication
		Online knowledge and data management training	In-country	To gain skills and knowledge to manage online database
		Participatory planning	Ex-country	To gain skills and knowledge on different participatory tools for proper planning
Exposure visit	P5-P1	Study tour to update information on emerging agriculture technologies and innovations	Ex-country	To expose on new technologies that can be replicated in the country
Monitoring and Evaluation	P3-P1	Result Based Management (RBM) and advanced M&E tools and methodologies	Ex-country	To gain skills and knowledge on tools and techniques for assessment of plans and programs
Development of competitive project proposal	P3-P1	Developing of comprehensive financial and business project proposals for resource mobilization	In-country	To gain skills and knowledge on developing effective project proposals
Project Management	P2-P1	Capacity building on advanced tools and methods of project work planning, budgeting and management	Ex-country	To gain skills and knowledge on use of tools and techniques for effective management of project
Policy analysis	P2-P1	Tools and methods of policy analysis and governance for effective planning and monitoring	Ex-country	To gain skills and knowledge to carry out effective policy analysis
Leadership management	P2-P1	Leadership skills and organizational development	In-country	To gain skills and knowledge on leadership skills for effective governance
Mentoring and coaching/HR Management	P2-P1	Short course on mentoring skills and HR management	In-country	To equip with skills and knowledge to enhance mentoring and HR management capacity
Financial management	P5/P4	Preparation of budget/forecasting and financial management	In-country	To orient new recruit on basic budgeting and financial planning
Sensitization of CBF	All levels	Sensitization program on CBF for Agriculture Officers and its implementation	In-country	To sensitize all the agencies for effective implementation

Table 11. Proposed Long-term training programs

Course Title	Priority			Number of Slots
	Immediate (2020-21)	Medium (2021-22)	Long-term (2023++)	
Agriculture Production Division (APD)				
MSc. Agriculture (Sustainable/Agronomy/Horticulture)		1	1	2
MSc. Urban Horticulture/ Garden Landscaping/Garden Designing		1		1
PhD In Agriculture	1	1		2
Doctoral Degree (PhD) in Agriculture/Horticulture		1	1	1
MSc. Agriculture (Olericulture/ Climate change)		1	1	2
Agriculture Research and Extension Division (ARED)/Dzongkhag Agriculture Sector				
PhD Climate Resilient and Agriculture		1		1
PhD Agronomy			1	1
MSc. Agriculture/Horticulture Science	2	7	6	15
Agriculture Research and Development Centre (ARDC), Wengkar				
Post Doc Degree Citrus Breeding		1		1
PhD Climate Change and Agriculture	1			1
PhD Agronomy	1			1
PhD Genetic Characterization of Crops		1		1
MSc. Agriculture Science		1		1
MSc. Agriculture Economics	1			1
MSc. Horticulture Science			2	2
MSc. Seed Science and Technology			1	1
MSc. Mycology		1		1
MSc. Crop Breeding		1	1	2
MSc. Plant Pathology / Entomology			1	1
MSc. Agrometeorology / Hydro Met		1		1
MSc. Soil Fertility			1	1
Agriculture Research and Development Centre (ARDC), Bajo				
PhD Agriculture		1		1
MSc. Agriculture Science		2	1	3
MSc. Horticulture Science		1	1	2
MSc. Soil Science and Land Management		1		1
MSc. Plant Pathology / Entomology			1	1
Agriculture Research and Development Centre (ARDC), Samtenling				
MSc. soils and sustainability		1		1
Master in Tropical/Sub-tropical agriculture			1	1
MSc. Plant Breeding			1	1
MSc. Plant Biotechnology	1	1		2
MSc. Agriculture Information and Data management	1	2		3
MSc. Climate change	1	2		3
Master in Agriculture Business Management		2		2
MSc. Extension Education		2		2

National Centre for Organic Agriculture (NCOA), Yusipang				
PhD/Doctorate in Agriculture/Horticulture/Sustainable Development and related Subject/allied science		3	2	5
MSc. Horticulture/Agriculture/Sustainable Development subject/Soil Science		4	4	8
National Seed Centre (NSC), Paro				
PhD in Seed Science and technology	2			2
MSc. in Seed Science and Technology	4	1		5
National Soil Service Centre (NSSC), Semtokha				
PhD Soil Sciences and Land Management & Climate and Environmental Sciences		1		1
MSc. Soil Sciences and Land Management		2	2	4
National Post Harvest Centre (NPHC), Paro				
MSc. / M.Tech (Food Science/Food Tech/Food Engineering/Post Harvest Technology)		2	3	5
PhD Post Harvest Technology (Physiology, Food Processing and Food Technology)		1		1
National Plant Protection Centre (NPPC), Semtokha				
MSc. in Weed agronomy		1		1
MSc. Agriculture/ Plant Pathology (Fungal Diseases)		1		1
MSc. Agriculture/ Plant Pathology (Bacterial Diseases)		1		1
MSc. Agriculture/ Plant Pathology (viral Diseases)		1		1
MSc. Agriculture/Entomology		1		1
BSc. Agriculture/ Entomology		1		1
PhD in Weed Science			1	1
PhD in Plant Pathology			1	1
National Mushroom Centre (NMC), Thimphu				
MSc. Agriculture/Mycology and Plant Pathology/Microbiology/Lab Technology		2	3	5
Total				106

10. Implementation of Competency-Based Framework

The implementation of training programs and other CDI by the agency should be based on the mandatory CDI identified for different proficiency levels. The mandatory list of CDI includes all the interventions that are found to be “Not Competent” under the Training Needs Analysis. While implementing the training program, the Department/HR Division of the Ministry should prioritize based on the following criteria:

- Most critical area of intervention
- Interventions which are reflected as “Not Competent”

- Availability of resources
- Alignment of donor funded capacity building to the mandatory trainings identified under this framework

11. Recommendations

Different stakeholders were engaged and the Agriculture Officers at different proficiency levels were consulted through series of consultation, meeting, online survey, workshop and focused group discussions. In the process of CBF development, the team has come up with following recommendations for effective implementation of CBF for Agriculture Officers;

- Conduct adequate advocacy and provide sufficient training for CBF practitioners and users.
- CBF should be a living document and should be updated as and when required based on changing needs of the organization.
- HR Officers in the organization are critical in driving the successful implementation of CBF.
- The CBF is a new system in the organization and RCSC should communicate and advocate the importance and benefit of CBF across all the organizations for successful adoption and implementation.
- There should be proper mechanism in place for assessing the success and outcome of CBF across all the organizations.
- RCSC should recommend budget provision for capacity building in the Department/Agency's annual budget as per CBF recommendations.

12. Conclusion

The CBF is introduced to guide government agencies not only towards identifying the skills needed by the employees but also to assist in the continuous professional development of civil servants for effective service delivery. Additionally, CBF defines clear expectations in work environment and creates an organizational culture for reliable and high-quality service delivery.

The CBF for the Agriculture Officers consists of 3 Key roles, 9 Competency Areas, 27 Key Competencies and 81 Behavioral Indicators which will guide and help foster staff mobility, organizational change, and shaping of the organizational culture based on competency. Developed through detailed consultation and series of validations involving different stakeholders under the Department of Agriculture, CBF will contribute towards smooth transition of traditional to more structured modern and contemporary management systems.

At individual level, with CBF in place, it will provide opportunity for the Agriculture Officers to enhance their professional and behavioral competencies. For an organization, it will not only help in envisioning a clear performance expectation but also enable to design operational, strategic and succession planning frameworks and programs to enhance overall organizational performance and to realize goals and objectives.

BIBLIOGRAPHY

- DoA. (2019). *Agriculture Research Strategy 2018-28*. Thimphu: Department of Agriculture (DoA), Ministry of Agriculture & Forests, Royal Government of Bhutan.
- DoA. (2019). *Twelfth Five Year Plan 2018-2023*. Thimphu: Department of Agriculture (DoA), Ministry of Agriculture & Forests, Royal Government of Bhutan.
- DoA. (2020). *Agriculture Extension Strategy 2019-28*. Thimphu: Department of Agriculture (DoA), Ministry of Agriculture & Forests, Royal Government of Bhutan.
- Harlin, J. F., Roberts, T. G., Dooley, K. E., & Murphrey, T. P. (2007). Knowledge, Skills, and Abilities for Agricultural Science Teachers: A Focus Group Approach. *Journal of Agricultural Education*, 48(1), 86-96.
- MoAF. (2019). *RNR Strategic Human Resource Plan 2019-2024*. Human Resource Division, Ministry of Agriculture & Forests, Royal Government of Bhutan.
- MoAF. (2019). *Twelfth Five Year Plan 2018-2023 Renewable Natural Resources Sector*. Thimphu: Policy and Planning Division, Ministry of Agriculture & Forests, Royal Government of Bhutan.
- Movahedi, R., & Nagel, U. (2012). Identifying required competencies for the agricultural extension and education undergraduates. *Journal of Agricultural Science and Technology*, 14, 727-742.
- RCSC. (2018). *Position Directory 2018*. Thimphu: Royal Civil Service Commission (RCSC), Royal Government of Bhutan.
- RCSC. (2019). *A Guidebook on Competency-based Framework for Civil Service* Thimphu: Royal Civil Service Commission (RCSC), Royal Government of Bhutan.
- RCSC. (2020). Job Description. Retrieved from Royal Civil Service Commission website: <https://www.rcsc.gov.bt/en/job-description/>
- Roberts, T. G., Dooley, K. E., Harlin, J. F., & Murphrey, T. P. (2006). Competencies and Traits of Successful Agricultural Science Teachers. *Journal of Career Technical Education*, 22(2), 1-11.
- Singapore Government. (2020, 2021). Skills Future Singapore. Retrieved from <https://www.skillsfuture.gov.sg/>
- University of Baltimore. (2020). *Guide for Writing Functional Competencies* Baltimore, Maryland: University of Baltimore (UB)

Published by:
Department of Agriculture
Ministry of Agriculture & Forests
Thimphu: Bhutan
Tel# 02-322228/331316/336462/336186(F)
www.doa.gov.bt