

## PERFORMANCE AGREEMENT

BETWEEN
NATIONAL CENTRE FOR ORGANIC AGRICULTURE YUSIPANG

AND
DEPARTMENT OF AGRICULTURE (DoA), MINISTRY OF AGRICULTURE AND FORESTS (MoAF)
(July 1, 2021 - June 30, 2022)

Section 1: Vision, Mission and Objectives
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## Preamble

The Performance Agreement is entered into between the National Centre for Organic Agriculture-Yusipang and Department of Agriculture (DoA), MoAF.

The objectives of this Performance Agreement are:
a) To establish clarity and consensus about annual priorities for the Department of Agriculture consistent with the $12^{\text {th }}$ Five Year Plan of the Ministry, and Government's other priorities;
b) To provide an objective and fair basis for evaluating the overall performance of the National Centre for Organic Agriculture-Yusipang at the end of the financial year

The Performance Agreement represents an important accountability mechanism for inculcating a performance-based culture at all levels of government.

THEREFORE, the parties hereto agree as follows:

## Section 1: Vision, Mission and Objectives Vision

A self-reliant, resilient and sustainable agriculture food system.

## Mission

Achieve food and nutrition security, agricultural transformation through innovative and sustainable technologies, diversified and competitive economic/production options, inclusive and sustainable policies and programs.

## Objectives

1) To increase crop production for enhancing food self-sufficiency, income and nutrition security
2) To generate and promote climate-resilient agriculture technologies
3) To promote organic farming for sustainable agriculture, safe food, and environment conservation
4) To develop functional farm infrastructures and facilities (irrigation channel, farm roads, post-harvest facilities, etc.)
5) To promote agriculture enterprise development
6) To enhance effective and efficient delivery of agricultural services

Section 2: Objectives, Success Indicators \& Target

| Objective | Action | Success Indicator | Unit | Weight | Excellent [100\%] | Very <br> Good [90\%] | $\begin{aligned} & \text { Good } \\ & {[80 \%]} \end{aligned}$ | $\begin{aligned} & \text { Fair } \\ & {[70 \%]} \end{aligned}$ | $\begin{aligned} & \text { Poor } \\ & {[60 \%]} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To increase crop production for enhancing food self-sufficiency, income and nutrition security | Other cereal production enhanced | Quinoa Promotion | Acres | 1 | 24 | 21.6 | 19.2 | 16.8 | 14.4 |
|  |  | Upscaling Quinoa production in the country | Mt | 1 | 249.3 | 224.37 | 199.44 | 174.5 | 149.58 |
|  | Cereal production enhanced | Basic Seed <br> Production of Paddy | Kg | 3 | 500 | 450 | 400 | 350 | 300 |
|  | Horticulture <br> Production <br> Enhanced | Intensification of new potato varieties | Kg | 2 | 17000 | 15300 | 13600 | 11900 | 10200 |
|  |  | Promotion of Lateblight resistant and nutrient-dense potato varieties | Kg | 2.5 | 3000 | 2700 | 2400 | 2100 | 1800 |
|  |  | Promote commercial Vegetable production sites in the region | No. | 3 | 2 | 1 | 0 | 0 | 0 |
|  |  | Basic Seed multiplication of newly released potato Varieties | Mt | 2 | 6 | 5.4 | 4.8 | 4.2 | 3.6 |
|  |  | Promote Winter Vegetable Production | Acres | 3 | 10 | 9 | 8 | 7 | 6 |
| To enhance effective and efficient delivery of agricultural services | Awareness on improved agricultural technologies enhanced | Demonstration and basic seed maintenance of released potato varieties | No. | 2.5 | 4 | 3 | 2 | 1 | 0 |
|  |  | Farmers' capacity development on potato production | No. | 2 | 400 | 360 | 320 | 300 | 280 |
|  |  | Collection and establishment of MAP germplasm in the herb garden | No. | 2 | 25 | 23 | 20 | 17 | 15 |
|  |  | Demonstration and maintenance of temperate fruit germplasm | No. | 2 | 5 | 4 | 3 | 2 | 1 |
|  |  | Demonstrate and create awareness on organic/biofertilizer for organic soil fertility management including vermicomposting technology | No. | 2 | 33 | 28 | 26 | 23 | 19 |
|  |  | Demonstration of different compost technologies | No. | 1.5 | 3 | 2 | 1 | 0 | 0 |
|  |  | Demonstrate BioPesticide and botanical extracts formulation for pest and diseases management | No. | 2 | 23 | 21 | 18 | 16 | 14 |
|  |  | Establish <br> floriculture and amenity landscape block in the center | No. | 2 | 2 | 1 | 0 | 0 | 0 |
|  | Agriculture research conducted | Conduct study on vermi-compost technologies to assess different raw materials | No. | 3 | 1 | 0 | 0 | 0 | 0 |
|  |  | Conduct Minimum tillage trial as part of soil fertility and nutrient management research | No. | 2 | 1 | 0 | 0 | 0 | 0 |


|  |  | Evaluation of quinoa production technologies | No. | 3 | 4 | 3 | 2 | 1 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Conduct trials on improved production and management practices of fruits and Nuts | No. | 2 | 1 | 0 | 0 | 0 | 0 |
|  |  | Collection and Evaluation of indigenous vegetable varieties of beans and chilli | No. | 3 | 2 | 1 | 0 | 0 | 0 |
|  |  | Evaluation of offseason vegetable | No. | 2 | 5 | 4 | 3 | 2 | 1 |
|  |  | Yield gap analysis of apple in Bhutan | No. | 1.5 | 1 | 0 | 0 | 0 | 0 |
|  |  | Evaluate efficacy of Bio-fertilizer on MAPs for nutrient management | No. | 1.5 | 1 | 0 | 0 | 0 | 0 |
|  |  | Conduct floriculture and amenity landscape research on magnolia | No. | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  | Evaluate new potato varieties through multi-location trials at Yusipang, Khangma and Bumthang under organic and conventional management | No. | 2 | 4 | 3 | 2 | 1 | 0 |
|  |  | Conduct multilocation trial on imported potato varieties from Nepal at Yusipang, Khangma and Bumthang | No. | 2 | 4 | 3 | 2 | 1 | 0 |
|  |  | Evaluation of highaltitude rice technologies | No. | 3 | 4 | 3 | 2 | 1 | 0 |
|  |  | $\begin{aligned} & \text { Release high } \\ & \text { yielding vegetable } \\ & \text { varieties through } \\ & \text { VRC/TRC } \end{aligned}$ | No. | 3 | 1 | 0 | 0 | 0 | 0 |
|  | Agriculture Technologies Generated | Develop Potato knowledge management product | No. | 1.5 | 1 | 0 | 0 | 0 | 0 |
|  |  | Generate PoP for plant protection and nutrient management of soil | No. | 2 | 1 | 0 | 0 | 0 | 0 |
|  |  | Promote protected vegetable cultivation | Acres | 2 | 1.5 | 1.35 | 1.2 | 1.05 | 0.9 |
|  | Enhanced adoption of agriculture technologies | Promote T-Yangku cultivation technologies | Timeline | 1 | Feb, 22 | Mar, 22 | Apr, 22 | May, 22 | June, $22$ |
|  |  | Promote MAP sustainable harvest package | Timeline | 1.5 | Sept, 21 | Oct, 21 | Nov, 21 | Dec, 21 | Jan, 21 |
| To generate and promote climate resilient agriculture technologies | Climate smart technologies released and adopted | Evaluation of crops under Hydroponics system as climate resilient technologies | No. | 2 | 4 | 3 | 2 | 1 | 0 |
| To promote organic farming for sustainable | Organic Agriculture Promoted | Area under organic agriculture | Acres | 3 | 10080 | 9072 | 8064 | 7056 | 6048 |
| agriculture, safe food, and environment conservation |  | Area of land certified for organic agriculture production | Acres | 2 | 5000 | 4500 | 4000 | 3500 | 3000 |


|  |  | Individuals, FGs and Coops registered under LOAS for production and marketing increased. | No. | 2 | 1500 | 2700 | 2400 | 2100 | 1800 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Organic products certified for domestic market | No. | 3 | 14 | 10 | 9 | 8 | 7 |
|  |  | Organic agriculture technologies generated, packaged and promoted | No. | 2 | 2 | 1 | 0 | 0 | 0 |
|  |  | Stakeholders trained (individual, farmers group, cooperatives, enterprises) incountry | No. | 2.5 | 100 | 90 | 80 | 70 | 60 |
|  |  | Timely monitoring and reporting of Flagship program | Timeline | 2 | 27th of Every Month | 28th of Every Month | 29th of Every Month | 30th of Every Month | 31st of Every Month |
| To enhance effective and efficient delivery of agricultural services | Agriculture service delivery facilities established/improved | Construction of Training Hall cum Laboratory | Percentage | 3 | 100 | 90 | 80 | 70 | 60 |
|  | Annual Report/Annual Highlight published/Strategies | Produce Gender Disaggregated report | No. | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  | Budget Utilization | Percent | 2 | 95 | 90 | 85 | 80 | 75 |
|  |  | Dzongkhag Language Promotion | Timeline | 1 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 |
|  |  | Published research articles in BJA, national or international Journals | No. | 3 | 4 | 3 | 2 | 1 | 0 |
|  |  | Publish annual report of the Centre | Timeline | 2 | July 1st Week | July 2nd week | July 3rd week | July 4th Week | Aug 1st Week |
| 100 |  |  |  |  |  |  |  |  |  |

Section 3: Trend values of success indicators

| Objective | Action | Success Indicator | Unit | $\begin{gathered} \text { Actual } \\ \text { Values } \\ \text { [FY } \\ \text { 2018-19] } \end{gathered}$ | Target Values [FY 2019- 20] | $\begin{aligned} & \text { Projected } \\ & \text { Values [FY } \\ & 2020-21] \end{aligned}$ | $\begin{gathered} \text { Projected } \\ \text { Values } \\ {[\text { FY 2021- }} \\ \text { 22] } \end{gathered}$ | Projected Values [FY 202223] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To increase crop <br> production for enhancing food selfsufficiency, income and nutrition security | Other cereal production enhanced | Quinoa Promotion | Acres | 18 | 20 | 22 | 24 | 25 |
|  |  | Upscaling Quinoa production in the country | MT | 64 | 126 | 188 | 249.3 | 311.03 |
|  | Cereal production enhanced | Basic seed production of paddy | Kg | 600 | 400 | 500 | 500 | 500 |
|  |  | Intensification of new potato varieties | Kg | 20000 | 8,000 | 1,000 | 17,000 | 18,000 |
|  |  | Promotion of late-blight resistant and nutrient-dense potato varieties | Kg | 2000 | 2,000 | 2,000 | 3,000 | 4,000 |
|  |  | Promote commercial Vegetable production sites in the region | No. | 0 | 0 | 5 | 2 | 0 |
|  |  | Basic seed multiplication of newly released potato varieties | MT | 7 | 6 | 6 | 6 | 5 |
|  |  | Promote Winter Vegetable Production | Acres | 0 | 0 | 10 | 10 | 10 |
| To enhance effective and efficient delivery of agriculture services | Awareness onimproved agriculturetechnologiesenhanced | Demonstration and basic seed maintenance of released potato varieties | No. | 2 | 2 | 1 | 1 | 1 |
|  |  | Farmers' capacity development on potato production | No. | 0 | 300 | 400 | 200 | 300 |
|  |  | Collection and establishment of MAP germplasm in the herb garden | No. | 20 | 24 | 5 | 25 | 26 |
|  |  | Demonstration and maintenance of temperate fruit germplasm | No. | 11 | 0 | 0 | 5 | 0 |
|  |  | Demonstrate and create awareness on organic/biofertilizer for organic soil fertility management including vermicomposting technology | No. | 0 | 0 | $4+5=9$ | 33 | 33 |
|  |  | Demonstration of efficacy of different compost technologies | No. | 0 | 0 | 0 | 3 | 0 |
|  |  | Demonstrate Bio-Pesticide and botanical extracts formulation for pest and diseases management | No. | 0 | 0 | 9 | 23 | 23 |
|  |  | Established floriculture and amenity landscape block in the center | No. | 0 | 0 | 0 | 1 | 0 |
|  | Agriculture research conducted | Conduct study on vermicompost technologies to assess different raw materials | No. | 0 | 0 | 1 | 1 | 2 |
|  |  | Conduct zero/minimum tillage trial as part of soil fertility and nutrient management research | No. | 0 | 0 | 4 | 0 | 0 |
|  |  | Evaluation of quinoa production technologies | No. | 4 | 3 | 4 | 4 | 3 |
|  |  | Conduct trials on improved production and management practices of fruits and Nuts | No. | 0 | 0 | 1 | 1 | 0 |
|  |  | Collection and evaluation of indigenous vegetable varieties of beans and chilli | No. | 1 | 1 | 1 | 1 | 0 |
|  |  | Evaluation of off-season vegetable | No. | 0 | 0 | 0 | 5 | 5 |
|  |  | Yield gap analysis of apple in Bhutan | No. | 0 | 0 | 0 | 1 | 0 |
|  |  | Evaluate efficacy of Biofertilizer on MAPs for nutrient management | No. | 0 | 0 | 1 | 1 | 0 |
|  |  | Conduct floriculture and amenity landscape research on magnolia | No. | 0 | 0 | 0 | 1 | 0 |


|  |  | Evaluation of new potato varieties through multilocation at Yusipang, Khangma and Bumthang | No. | 0 | 4 | 2 | 4 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Conduct multi-location trial on imported potato varieties from Nepal at Yusipang, Khangma and Bumthang | No. | 0 | 0 | 4 | 0 | 0 |
|  |  | Evaluation of high-altitude rice technologies | No. | 4 | 4 | 4 | 4 | 3 |
|  |  | Release high yielding vegetable varieties through VRC/TRC | No. | 1 | 1 | 1 | 1 | 1 |
|  | Agriculture Technologies | Develop Potato knowledge management product | No. | 1 | 1 | 1 | 1 | 1 |
|  | Generated | Generate PoP for plant protection and nutrient management of soil | No. | 0 | 0 | 2 | 1 | 1 |
|  |  | Promote protected vegetable cultivation | Acres | 0 | 2 | 0 | 1.5 | 1.5 |
|  | Enhanced adoption of agriculture | Promote T-Yangku cultivation technologies | No. | 0 | 1 | 1 | 1 | 0 |
|  | logies | Promote MAP sustainable harvest package | No. | 0 | 0 | 0 | 1 | 0 |
| To generate and promote climate resilient agriculture technologies | Climate smart technologies released and adopted | Evaluation of crop under Hydroponic system as climate resilient technologies | No. | 0 | 0 | 0 | 1 | 1 |
|  |  | Area under organic agriculture | Acres | 2 | 8146.2 | 7060 | 10080 | 13728 |
|  |  | Area of land certified for organic agriculture production | Acres | 2 | 2344.97 | 3000(655.39) | 5000 | 9666 |
| To promote organic |  | Individuals, FGs and Coops registered under LOAS for production and marketing increased | No. | 2 | 505 | 1000 | 1500 | 2782 |
| farming for sustainable agriculture, | Organic Agriculture | Organic products certified for domestic market | No. | 2 | 0 | 12 | 14 | 16 |
| safe food and environment | Promoted | Organic agriculture technologies generated, packaged and promoted | No. | 2 | 0 | 1 | 2 | 3 |
| conservation |  | Stakeholders trained (individual, farmers group, cooperatives, enterprises) in-country | No. | 1 | 68 | 100 | 200 | 300 |
|  |  | Timely monitoring and reporting of Flagship program | Timeline | 1.5 | 27th of Every Month | 27th of <br> Every Month | 27th of Every Month | 27th of Every Month |
| To enhance effective and efficient delivery of agricultural services | Agriculture service delivery facilities established/improved | Construction of Training Hall cum Laboratory | Percent | 2 | NA | June, 2020 | NA | NA |
|  | Annual <br> Report/Annual <br> Highlight <br> published/Strategies | Gender Disaggregated data | No. | 1 | 1 | 1 | 1 | 1 |
|  |  | Budget Utilization | Percent | >95\% | >95\% | >95\% | >95\% | >95\% |
|  |  | Dzongkhag Language Promotion | No. | 1 | 1 | 1 | 1 | 1 |
|  |  | Published research articles in BJA, national or international Journals | No. | 0 | 0 | 3 | 3 | 3 |
|  |  | Publish annual report of the Centre | Timeline | 1 | 1 | 1 | 1 | 1 |

## Section 4: Definition of Success Indicators

| Success Indicator | Description | Data Collection Methodology | Data Collection Frequency | Data Source |
| :---: | :---: | :---: | :---: | :---: |
| Quinoa Promotion | This SI measures the area under quinoa promoted by NCOA Yusipang, Bajo, Wengkhar \& Samteling in collaboration with highland Dzongkhags | Report submitted by ARDCs (, Bajo, <br> Wengkhar) \& NCOAYusipang | Half Yearly | $\begin{aligned} & \text { Quinoa } \\ & \text { Commodity } \\ & \text { Highlights } \end{aligned}$ |
| Upscaling Quinoa production in the country | This SI measures the Quantity of Quinoa Produced and Reported in Annual Agriculture statistics by National Quinoa Coordinator | Annual Agriculture Statistics | Annual | Agriculture Statistics |
| Basic seed production of paddy | This SI measures the quantity of basic seed of high-altitude rice varieties produced by NCOA for variety maintenance and to supply to NSC for multiplication | Field report | Annual | Annual Report |
| Intensification of new potato varieties | The SI measures quantity of seed supplied for promotion of new potato varieties (Yusimaap) through seeds support. | Field report | Annually | Annual Report |
| Promotion of late-blight resistant and nutrient-dense potato varieties | The SI measures the promotion of late blight resistant potato varieties (Yusimaap and NKK) in late blight affected areas. | Field report | Annual | Annual Report |
| Promote commercial Vegetable production sites in the region | This SI measures the locations where commercial Vegetable production is promoted in the region | Field report | Annual | Annual Report |
| Basic Seed multiplication of newly released potato Varieties | The SI measures the production of 6 MT of newly released cultivars through demonstration and seed village approach in potato growing Dzongkhags. | Field report | Annual | Annual Report |
| Promote Winter Vegetable Production | This SI measures the area brought under commercial winter vegetable production through seeds, seedlings and input support with technical guidance to Dzongkhags for Potential Crops | Field report | Annual | Annual Report |
| Demonstration and basic seed maintenance of released potato varieties | The SI measures the demonstration trials and basic seed maintenance of 4 released varieties (Yusi Maap, NKK, Khangma Kaap, Desiree) | Field report | Annual | Annual Report |
| Farmers' capacity development on potato production | The SI measures the number by which 400 farmers will be trained on improved package of practices on potato production to support DOA's target of $61,780 \mathrm{MT}$ | Field report | Annual | Annual Report |
| Collection and establishment of MAP germplasm in the herb garden | The SI measure the collection of 5 new herbs or medicinal plants and maintained in the herb garden (No Budget) | Field report | Annual | Annual Report |
| Demonstration and maintenance of temperate fruit germplasm | The SI measures the number of varieties add to the exiting germplasm collection | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Demonstrate and create awareness on organic/biofertilizer for organic soil fertility management including vermicomposting technology | This SI measure the numbers of demonstration and awareness on organic/bio-fertilizer for organic soil fertility management including vermicomposting technology in NOFP sites | Field report | Semi-Annually | Field Reports and Annual reports |
| Demonstration of different compost technologies | The SI measures the number of demonstrations on different composting technology | Field report | Semi-Annually | Field Reports and Annual reports |
| Demonstrate Bio-Pesticide and botanical extracts formulation for pest and diseases management | This SI measure the number of households covered for demonstration of Bio-Pesticide and botanical extracts for pest and diseases management in two sites. | Field report | Semi-Annually | Field Reports and Annual reports |
| Established floriculture and amenity landscape block in the center | The SI measure the number of floriculture block established on station | Field report | Annual | Annual Report |
| Conduct study on vermi compost technologies to assess different raw materials | This SI Measure the trial established on vermicomposting assessing 4 different types of raw materials. | Field report | Semi-Annually | Field Reports and Annual reports |


| Conduct Minimum tillage trial as part of soil fertility and nutrient management research | This SI Measure the long-term minimum tillage trial with different treatments established at NCOA. | Field report | Semi-Annually | Field Reports and Annual reports |
| :---: | :---: | :---: | :---: | :---: |
| Evaluation of quinoa production technologies | The SI measures the 4 diff. trials undertaken to evaluate different quinoa production technologies. | Field report | Annual | Annual Report |
| Conduct trials on improved production and management practices of fruits and Nuts | The SI measures the number of trials established on improved production and management practices on fruits and nuts | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Collection and Evaluation of indigenous vegetable varieties of beans and chilli | This SI measures the numbers of indigenous crops for which indigenous varieties are collected and evaluated | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Evaluation of off-season vegetable | The SI measures the number of vegetable verities evaluation initiated during off season on on-station in double layer poly-house. | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Yield gap analysis of apple in Bhutan | The SI measure the survey undertaken on yield gap analysis of apple. | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Evaluate efficacy of Biofertilizer on MAPs for nutrient management | The SI measures the trial established to study efficacy of organic manure for nutrient management on MAPs | Field report and annual report | Annual | Horticulture <br> Program, <br> Yusipang |
| Conduct floriculture and amenity landscape research on magnolia | The SI measure the research undertaken on the propagation method on Magnolia | Field report and annual report | Annual | Horticulture <br> Program, <br> Yusipang |
| Evaluate new potato varieties through multi-location trials at Yusipang, Khangma and Bumthang under organic and conventional management | The SI measures the 4 multilocation trials established for selection of heat and drought tolerant potato germplasm under organic and conventional management | Field report | Annual | Annual Report |
| Conduct multi-location trial on imported potato varieties from Nepal at Yusipang, Khangma and Bumthang | The SI measures 4 observation trials completed and reported by timeline | Field report | Annual | Annual Report |
| Evaluation of high-altitude rice technologies | The SI measures the number of different trials established to evaluate high altitude rice technologies | Field report | Annual | Annual Report |
| Release high yielding vegetable varieties through VRC/TRC | This SI measures the number of release proposal submitted to VRC | Field report | Annual | Horticulture Program, <br> Yusipang, VRC |
| Develop Potato knowledge management product | The SI measures the number of POP on potato production produced as extension material. | Poster/brochure | Annual | Annual Report |
| Generate PoP for plant protection and nutrient management of soil | This SI Measure the numbers of POP generated for plant protection and nutrient management | Field report | Semi-Annually | Field Reports and Annual reports |
| Promote protected vegetable cultivation | The SI measures the area brought under protected vegetable cultivation through supply of fabricated poly houses, low-cost shelters, seeds, seedling, training and demonstration | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Promote T-Yangku cultivation technologies | The SI measure the timeline by which T-Yangku cultivation technology is promoted. | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Promote MAP sustainable harvest package | The SI measures the timeline by which training of farmers on sustainable harvest package is conducted | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Evaluation of crops under Hydroponics system as climate resilient technologies | This SI Measure the crops evaluated under Hydroponic system as climate resilient technology | Field report | Annual | Horticulture <br> Program, <br> Yusipang |
| Area under organic agriculture | This SI measures the cumulative total land registered with NCOA for organic production. | Progress report | Monthly/Quarterly | Annual Report, Admin. Data. |
| Area of land certified for organic agriculture production | This SI measures the cumulative total registered land monitored and inspected for LOAS and third-party certification. | Progress report, Field report | Monthly/Quarterly | Annual Report, Admin. Data. |
| Individuals, FGs and Coops registered under LOAS for production and marketing increased. | This SI measures the cumulative numbers of organic operators engaged in value chain. | Progress report, Field report, | Monthly/Quarterly | Annual Report, Admin. Data. |
| Organic products certified for domestic market | This SI measures the cumulative total number of products certified under LOAS for domestic market. | Progress report, Field report, | Monthly/Quarterly | Annual Report, Admin. Data. |


| Organic agriculture technologies <br> generated, packaged and <br> promoted | The SI measures the timeline by <br> which organic solutions is packaged <br> and promoted by NCOA. | Progress report, Field <br> report, | Monthly/Quarterly | Annual Report, <br> Admin. Data. |
| :--- | :--- | :--- | :--- | :--- |
| Stakeholders trained (individual, <br> farmers group, cooperatives, <br> enterprises) in-country | This SI measures the total number of <br> farmers, FG/Cooperatives and other <br> stakeholders trained on organic <br> farming and management. | Progress report, Field <br> report, | Monthly/Quarterly | Annual Report, <br> Admin. Data. |
| Timely monitoring and reporting <br> of Flagship program | This SI measures the timely <br> submission of Monthly Flagship <br> implementation reports \& end year <br> report to the NOFP-CU | Office Records | Monthly | Admin Data |
| Construction of Training Hall <br> cum Laboratory | This SI measures of the percentage the <br> expenditure and physical progress <br> made on construction of training hall <br> \& laboratory. | Progress report, Field <br> report, | Monthly/Quarterly | Admin. Data. |
| Produce Gender Disaggregated <br> report | The SI measures the report on the <br> gender disaggregated data for FSAPP, <br> GEF and RMS project activities | Field report | Annual | Annual Report |
| Budget Utilization | The SI measure the percent of budget <br> utilization by the end of FY | Accounts <br> Statement/Exp. <br> Statement | Biannual | EPEMS |
| Dzongkhag Language Promotion | The SI measure timeline of different <br> activates conducted on the Dzongkhag <br> National Language Promotion in the <br> center | Field report | Annual | Annual Report |
| Published research articles in <br> BJA, national or international <br> Journals | The SI measures the numbers of <br> technical papers published in BJA, <br> national or international journals | Report | Annually | Annually |
| Publish annual report of the <br> Centre | The SI measures the timeline by <br> which Annual Report is Published | Sectors Report | BJA | Published Annual |
| Report |  |  |  |  |

Section 5: Requirements from other Departments \& Secretariat Divisions

| Organization Name | Success Indicator | Requirement from the Organization | Justification for the Requirement | Requirement detail | Impact (If Not Met) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dzongkhags and other ARDCs | Quinoa Promotion | Data on the area of quinoa cultivation in Highland Agriculture Promotion | M \& E, and progress reporting | Data collection, mentoring, technical guidance to growers, and seed supplied | Target will not be achieved. |
| ARDC Bajo, <br> Samtenling, Wengkhar, FML, and Agriculture <br> Sector of 20 <br> Dzongkhags | Upscaling Quinoa production in the country | Implementation support, identification of area and farmers, production data | For promotion of quinoa in their regional mandate Dzongkhags | Identification of area, farmers, seed supply, implementation, monitoring \& reporting, timely production data. | APA target will not be achieved |
| Dzongkhags/Gewogs | Promotion of late-blight resistant and nutrient-dense potato varieties | Seed distribution and beneficiary list from the Dzongkhags (Involvement of DAOs and Extension Agents) | Relevant gewogs selection based on production potential | Leasing with local government officials and farmers | Insufficient late blight and nutrient dense potato varieties for growers |
|  | Promote commercial Vegetable production sites in the region | Implementation support, identification of area, mobilization of farmers and data | For promotion of vegetables production commercially in west regions | identification of area, farmers, seed supply, implementation, monitoring and reporting. | Not achieved |
|  | Seed multiplication of newly released potato varieties | Identification of potential households in Dzongkhags, gewogs and liaise with farmers. Seed distribution, monitoring and production assessment | NPP is a national <br> Programme and support from local government is essential for implementation | Participation of farmers, extension and tshogpas, gups and relevant officials | Unavailability of new varieties will hamper the production target of DoA ( 61,780 MT) |
| Dzongkhag and Gewogs | Promote Winter Vegetable Production | Implementation support, identification of area, mobilization of farmers and data | For promotion of vegetables production commercially in west regions | Identification of area, farmers, seed supply, implementation, monitoring and reporting. | Not achieved |
| Relevant Dzongkhags/geogs | Farmers' capacity development on potato production | Nomination of farmers for training to increase their production skills. Coordinate with local government for implementation. | Our stakeholders are farmers and they are based in relevant dzongkhags and gewogs | Nomination, coordination and support for implementation | New production skills will not be updated and will affect DoA's production target of $61,780 \mathrm{MT}$ |
| Dzongkhags and NSSC | Demonstrate and create awareness on organic/biofertilizer for organic soil fertility management including vermicomposting technology | Technical staffs | Need technical guidance and support | Formulation expertise on Bio-Fertilizer and other guidance. | Not achieved |
| NPPC \& Dzongkhags | Demonstration of different compost technologies | Technical staffs | Need technical guidance and support | Formulation expertise on Bio-pesticide and other guidance. | Not achieved |
| Dzongkhag/ Gewogs | Demonstrate Bio-Pesticide and botanical extracts formulation for pest and diseases management | Nomination of farmers for training to increase their production skills. Coordinate with local government for implementation. | Need technical guidance and support | Formulation expertise on Bio-pesticide and other guidance. | Not achieved |
| NSSC | Conduct study on vermi compost technologies to assess different raw materials | Technical staffs | Need technical guidance and support | construction details and estimates of worm bins. M\&E and data collection and analysis | Not achieved |
| NSSC | Conduct Minimum tillage trial as part of soil fertility and nutrient management research | Technical staffs | Need technical guidance and support | construction details and estimates of worm bins. M\&E and data collection and analysis | Not achieved |
| Dzongkhags/Gewogs | Collection and evaluate indigenous vegetable varieties | Need collaboration of DAOs or EAs in identifying the pure seeds of the indigenous beans and chilli varieties as well as for initiating onfarm trials. | Support from the Dzongkhag agriculture team is deemed necessary for successful implementation of the activity. | Collaboration and cooperation required from the dzongkhag | Production of local seeds to suit the organic production sites will be challenged. |


| HAA, Paro \& Thimphu | Yield gap analysis of apple in Bhutan | support for field implementation | Identification of farmers to carry out the data collection | data, farmers and location | not achieved |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dzongkhags/Gewogs, NSC-Bumthang/ ARDSC- Khangma | Evaluate new potato varieties through multilocation trials at Yusipang, Khangma and Bumthang under organic and conventional management | Provide land and other resources as NPP does not have land in Bumthang and Khangma | NPP does not have land in Bumthang and Khangma | Land, Machinery, labour contribution | It will hinder the process of new variety generation |
|  | Conduct multi-location on imported potato varieties from Nepal at Yusipang, Khangma and Bumthang | Provide land and other resources as NPP does not have land in Bumthang and Khangma and Chapcha | NPP does not have land in Bumthang, Khangma and Chapcha | Land, Machinery, labour contribution | It will hinder the process of new variety generation |
| NSSC, NBC | Evaluation of high-altitude rice technologies | collaboration in implementing the trial | It is NCT trial | Data collection, monitoring, technical guidance | Target will not be achieved. |
| Dzongkhags | Promote protected vegetable cultivation | Implementation <br> support, identification of area, mobilization of farmers and data | For promotion of vegetables production commercially in west regions | identification of area, farmers, seed supply, implementation, monitoring and reporting. | Not achieved |
| HAA Dzongkhag | Promote T-Yangku cultivation technologies | support for field implementation | Identification of farmers or growers and data source | data, farmers and location | not achieved |
| All dzongkhags and ARDCs | Area under organic agriculture | Facilitate implementation including registration and certification, Progress reporting | Regionalization of NOFP activities led by ARDCs. | Facilitate the implementation, registration, monitoring, data collection, inspection, Data on area, household registered | Target will not be achieved. |
| All dzongkhags and ARDCs | Area of land certified for organic agriculture production | Facilitate implementation including certification, Progress reporting | Regionalization of NOFP activities led by ARDCs. | Facilitate the implementation, support the certification processes, monitoring, data collection, inspection, Data on area, household registered | Target will not be achieved. |
| All dzongkhags and ARDCs | Individuals, FGs and Coops registered under LOAS for production and marketing increased. | Facilitate implementation including registration and certification, Progress reporting | Regionalization of NOFP activities led by ARDCs. | Facilitate the implementation, registration, monitoring, data collection, inspection, Data on area, household registered | Target will not be achieved. |
| All dzongkhags and ARDCs | Organic products certified for domestic market | Facilitate implementation including certification, Progress reporting | Regionalization of NOFP activities led by Arcs. | Facilitate the implementation, support the certification processes, monitoring, data collection, inspection. | Target will not be achieved. |
| All dzongkhags and ARDCs | Stakeholders trained (individual, farmers group, cooperatives, enterprises) in-country | Facilitate the mobilization of the participants including logistics | Regionalization of NOFP activities led by ARDCs. | Mobilization of participants, logistics and resource. | Target will not be achieved. |
| 4 dzongkhags | Timely monitoring and reporting of Flagship program | M \& E, and progress reporting | The budget has been directly given to the dzongkhags from NOFP-CU | consolidated compiled reports | Target will not be achieved. |
| AED, DoA | Construction of Training Hall cum Laboratory | Technical support for implementation | AED provides the engineering services, M \& E |  | Target will not be achieved. |

## Whereas,

I, Program Director, National Centre for Organic Agriculture (NCOA)-Yusipang, commit to the Director, Department of Agriculture (DoA), MoAF to deliver the results described in this Annual Performance Agreement.

We, Department of Agriculture, MoAF commit to the Program Director National Centre for Organic Agriculture (NCOA)-Yusipang to provide necessary support for the delivery of the results described in this Annual Performance Agreement.

## SIGNED:

## DIRECTOR, DoA

## Date

## Wangda Dukpa

Date
CHIEF, ARED

