

Memorandum Order

No. <u>34</u> Series of 2022

SUBJECT:

GENERAL GUIDELINES FOR THE GEOREFERENCING

ACTIVITY OF THE UPDATING OF THE REGISTRY SYSTEM

FOR BASIC SECTORS IN AGRICULTURE (RSBSA)

I. Background and Rationale

The Registry System for Basic Sectors in Agriculture (RSBSA) is an electronic compilation of basic information of farmers, farm laborers, and fisherfolk, and their agricultural activities, demographic, and socio-economic characteristics. This Registry aims to provide the DA a systematic way of directly reaching and supporting its beneficiary farmers and fishers and serve as a reference for the targeting and monitoring of programs, activities, and projects of the Department.

Since 2020, the Department of Agriculture (DA) is undertaking a database update of the 2013-2015 version of the RSBSA through the development of the Farmer and Fisherfolk Registry System (FFRS).

The Updating of the RSBSA consists of three components namely: (1) Profiling of Farmers and Fishers, (2) Georeferencing of Farm Parcels, and the (3) Development of the DA Interventions Monitoring System.

This guideline will mainly focus on the second component of the Updating of the RSBSA which is the **Georeferencing of Farm Parcels**. It primarily aims to map the approximate farm area being tilled by the farmer through Global Positioning System (GPS). Each georeferenced field shall be assigned a particular GPX ID to be linked to the FFRS record of the RSBSA-registered farmer. This component shall utilize a GPS receiver to track the field area point by point. The standard protocol adhered by this guideline is adopted from the Rice Crop Manager (RCM) protocol, developed by the DA- National Rice Program, International Rice Research Institute (IRRI), and Philippine Rice Research Institute (PhilRice), which was rolled out through the issuance of its general guidelines under Memorandum Order No. 20, Series of 2019.





The RCM is a web-based decision tool that contains a set of science-based principles and formula for calculating field-specific nutrient and crop management recommendations. Its georeferencing feature, to be adopted for the purpose of the RSBSA Updating, called the Farmer and Farm Lot Registration (FFR) is a complementary tool of RCM used to register farmers and measure the exact size of their fields.

Following the on-going implementation of the RSBSA profiling activity which commenced last 2019, the georeferencing activity shall ensure that the verified farm area of the RSBSA-registered farmer is accurately linked to the geospatial location of the farmer's field. Through this component, the users shall also be able to view detailed particulars of the field such as Field ID, name of the farmer registrant, crops/commodities planted, among others. It is crucial to exactly measure the field size since it shall substantially contribute in determining accurate interventions intended for the field and crops/commodities of the RSBSA-registered farmer.

The georeferencing activity is fundamental for the RSBSA Updating since through this component, all major users of the RSBSA (e.g. DA, its regional offices, and other implementing programs and agencies) are able to view a whole mapping situation across the Philippines of active and abundant farm areas of different commodities.

The completion of the georeferencing activity shall play a vital role in mechanism enhancements relating to disaster preparedness and response, climate forecasting, agricultural growth, and farm interventions appropriate to the needs of farmer stakeholders. Programs and agencies can refer to the complete mapping of georeferenced-fields in the regional, provincial, municipal, or even until the barangay level.

II. Objectives

The georeferencing activity of the RSBSA Updating mainly aims to verify the declared field area registered under the FFRS through geospatially mapping the agricultural lands in the Philippines and linking each field to an RSBSA-registered farmer. Specifically, this georeferencing activity would like to:

- 1. Measure the approximate field area of RSBSA-registered farmers by adopting the Rice Crop Manager (RCM) protocol;
- 2. Develop a database of georeferenced fields through Global Positioning System (GPS) mapping;





- 3. Link other available and updated georeference database/s maintained by bureaus and attached agencies of the Department to the RSBSA georeference database; and
- 4. Provide reliable data on field area and geolocation for policy, program planning, and monitoring of the Department.

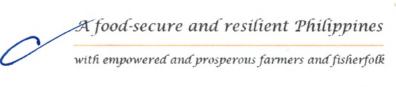
III. Scope/Coverage

This Memorandum Order shall cover all persons/and or offices involved in the implementation of activities under the second component of RSBSA: Georeferencing Activity led by RSBSA-RPMOs in coordination with the Local Government Units. This guideline shall be implemented in all agricultural lands in the Philippines, scoping from Regions I to XIII, CAR, and BARMM, prioritizing open field areas of active RSBSA-registered farmers tilling 500 square meters and above. In case an agricultural land is owned by a non-registered farmer, RSBSA enrollment shall first be administered.

IV. Definition of Terms

Farmer - a farmer can be categorized into three (3) primary categories: (1) registered owner, (2) tenant, and (3) lessee. Others that do not fall under the three aforementioned categories can also be declared in the RSBSA enrollment form as certified by authorities.

- a.1 **Registered owner** is the individual who owns the farmland legally through any form of land tenure or as an Agrarian Reform Beneficiary (ARB) who acquired the land through the Comprehensive Agrarian Reform Program (CARP);
- a.2 **A tenant,** according to Republic Act 1199, is "a person who cultivates, with themselves and/or with the aid available from within their immediate farm household, the land belonging to, or possessed by, another, with the latter's consent for purposes of production, sharing the produce with the landholder under the share tenancy system, or paying to the landholder a price certain or ascertainable in produce; and
- a.3 **The lessee** is a farmer sworn in agreement to pay to the landholder or the farmland owner a price certain in money under the leasehold tenancy system.





Farmers and Fisherfolk Registration System (FFRS) – an online system used to facilitate the encoding of registered enrollment forms in support of the updating of the Registry System for Basic Sectors in Agriculture (RSBSA).

Farmer and Farm Lot Registration (FFR) – a registration process, under the Rice Crop Manager Advisory System (RCMAS), that aims to register farmers and their respective farm parcel/s using the Global Positioning System (GPS).

Farm Parcel – as defined by the Philippine Statistics Authority, "farm parcel refers to a contiguous piece of land under one form of tenure without regard to land use". In this context, a farm parcel can be composed of smaller pieces of land subject to a certain land use each called a field.

Field – one of several contiguous pieces of land which comprise a farm parcel; one field is being regarded only to one specific land use (e.g. growing crops, tending of livestock, poultry and/or aquaculture, regardless of land area, number of heads, and type of farm ownership).

Field Assistant (FA) – an individual who is primarily tasked to one full cycle of measuring farm areas using a GPS device to assign coordinates to geographical objects and encoding the data collected during the georeferencing activity.

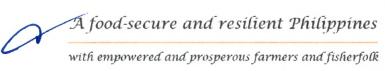
Georeferencing – the process of assigning locations to geographical objects within a geographic frame of reference.

Global Positioning System (GPS) – a space-based radio-navigation system using satellites, receiver, and algorithms to synchronize location, velocity, and time data.

GPS receiver – an L-band radio processor capable of solving the navigation equations in order to determine the user position, velocity and precise time, by processing the signal broadcasted by GPS satellites.

GPS track – a GPS recording of an object's motion, collected using a GPS receiver.

GPX ID – refers to the unique identification number assigned to the RSBSA-registered farmer with declared farm parcel, that will be used to identify their field during the georeferencing process.





Registry System for Basic Sectors in Agriculture (RSBSA) – the electronic compilation or database of basic information on farmers, farm laborers, and fisherfolk who are the target beneficiaries of agriculture-related programs and services.

Rice Crop Manager Advisory System (RCMAS) – a digital agriculture service that provides farmers with information geared toward increasing productivity and profitability of rice farming through targeted integrated nutrient and crop management.

Trackpoint - refers to the location information of an entity or object gathered through the use of GPS.

Validated tracks – refers to the GPX tracks uploaded and accepted through a series of filters run by the RCM system.

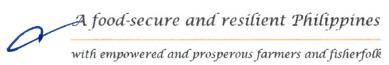
Verified size – refers to the field size generated by the GPS receiver after the actual area measurement.

V. Key Components of RSBSA - Georeferencing of Farm Parcels

The RSBSA-Georeferencing consists of three major components, which are the following: (1) the RSBSA registration, (2) GPX ID, and the (3) GPX Track. All are equally important and interdependent requirements for the successful georeferencing of each field.

The **RSBSA registration** is a prerequisite to proceed with the georeferencing of the field/s owned by a farmer. This is administered by hired enumerators collecting farmer socio-economic data and basic information of the field to be certified by the City/Municipal Agriculture Office (C/MAO). Upon registration and encoding of the RSBSA registration, they will be given a unique sequence of numbers that will serve as their RSBSA reference number.

Subsequently, successfully-registered farmers will be assigned a unique **GPX ID** to be used as an identifier of the field subject for georeferencing. The GPX ID shall be attached as the primary file naming convention of the GPX files generated after the actual field measurement. During the actual field measurement, the FA holding a GPS receiver will be guided by the farmer-registrant while walking through the perimeters of the field to ensure the exact boundaries of the field area.





After successfully recording the trackpoints of the field using the GPS receiver, the generated file or the **GPX track** shall be uploaded in the RCM system and validated for consolidation in the database to generate a map of georeferenced farm areas nationwide.

VI. Protocol for Georeferencing of Registered Farm Parcels

6.1. Prioritization of location

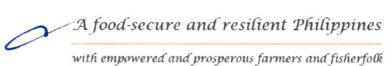
For the matter of this guideline, the georeferencing activity suggests to prioritize measuring fields based on these three (3) main factors: (1) crops/commodities, (2) land use, and (3) field size being tilled. This covers effective farm parcel areas with each field size not less than 500 square meters, tilling rice and/or corn as priority commodities. All fields with crops/commodities other than rice and corn shall still be measured after the completion of the priority farm areas and upon the release of a supplementary guideline specific for measuring high-value crops (HVC) aside from plantation crops.

The RSBSA-Regional Program Management Offices (RPMOs) will have the discretion to strategize on which provinces and municipalities to be prioritized prior to the activity implementation. This includes considerations in the varying geographical situations (e.g. uneven terrains, far-flung field areas, fields less than 500sqm per location) in order to complete a whole mapping picture of a location's agricultural land at a time.

6.2. General Georeferencing Activity Process Flow

The following are specific implementing instructions formulated by the RSBSA-National Program Management Office (NPMO) with reference to the implemented and adopted DA Memorandum on Nationwide Rollout of RCM Farmer and Farm Lot Registration (FFR) to the DA-RFO Field Operations Division issued 03 August 2021, also known as the RCMAS Protocol. Kindly refer to the steps below to ensure consistency and adherence of georeferencing implementation to the approved guidelines.

- 1. Ensure that the farmer is RSBSA-registered and field/s are already assigned with valid and unique GPX ID.
- 2. Download, print, and bring the farmers masterlist with corresponding GPX ID as reference during the field measurement activity. Refer to **Annex A** for the sample farmers masterlist.





- 3. Coordinate with the LGU officials (C/MAO and Barangay) of the target locations for georeferencing. Make sure to conduct a courtesy call with officials and meet with the Agricultural Extension Workers (AEW) for guidance in visiting the farm areas in their jurisdiction.
- 4. Schedule the field visit based on the following suggested attributes: commodities/crops, land use, size of land as stated in Section *6.1*.
- 5. Prior to the field visit, make sure to brief the registered owner with regards to the purpose and schedule of the georeferencing activity to avoid conflict of non-consensual conduct of area measurement.
- 6. Ensure that the handheld GPS device is functional and operational during the day of the field visit equipped with batteries that are usable for the whole day duration of the activity.
- 7. Set up the handheld GPS device using the recommended setting on the RCM protocol (See Section 6.4).
- 8. The farmer must be involved in the actual field measurement through guiding the FA in order to identify the actual declared boundaries of the field that is being measured. In case the farmer will not be able to join the FA in measuring the field, an authorized representative shall be allowed to guide the FA. However, the farmer shall still be the one to sign on the FA's Logbook and on the Georeferencing stub.
- 9. After measuring the field, the FA must record the verified size on the **Field Assistant's Logbook** (see **Annex B** for the Logbook format). The farmer and the AEW shall affix their signatures (or thumb mark) on the logbook to serve as proof that they consent the data collection, are present during the field visit, and certify that the data collected is true and correct.
- 10. After signing the FA's Logbook, the FA shall issue the **RSBSA Georeferencing stub** (see **Annex C** for the Georeferencing stub format) as proof to the farmer that their field has been successfully measured.

6.3 Generation of the GPX ID

The generation of the GPX ID is used as an identifier for each field being measured during the georeferencing activity. It is an 11-digit sequence number based on the issued RCM protocol which is composed of the following: field location's ZIP code (first 4 digits), farmer's incremental number (5 digits in the middle of the sequence), and the field incremental number (last 2 digits).

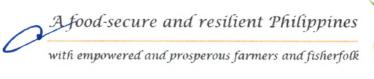




Figure 1. GPX ID 11-digit sequence composition

One field planted with one specific commodity or seed type will each be assigned with a single unique GPX ID.

1 GPX ID = 1 Field = 1 Commodity / Seed Type

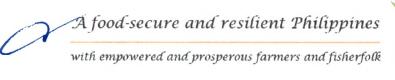
Device and set-up

Handheld GPS receiver device is used to determine the exact location and to measure the area of the field which are relevant data to provide precise crop management recommendations to farmers.



Figure 2. Garmin Etrex models

Garmin Etrex 10, Etrex 20x, and Etrex 30x (Figure 2) are examples of handheld GPS receiver devices that are available in the market at relatively inexpensive price. For the purpose of field measurement, the most important feature of these devices is AREA CALCULATION (Figure 3). Several other features are also available in these devices such as mark waypoint, route planner, map information, calculator, alarm clock, sun and moon information, and picture viewer.





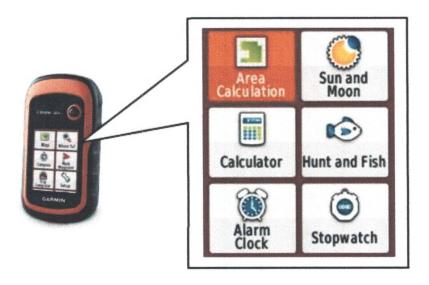


Figure 3. AREA CALCULATION in the main menu of Garmin Etrex models

- 1. Before using the handheld GPS device in actual field measurement, select SETUP on the main menu and adjust based on the settings below:
 - Setup > System > Satellite System > GPS
 - Setup > Display > Backlight Timeout > STAYS ON
 - Setup > Units > Distance and Speed > METRIC
 - Setup > Position Format > Map Datum > WGS 84
 - Setup > Tracks > Record Method > TIME
 - Setup > Tracks > Recording Interval > 00:00:05
- 2. Go back to the main menu and select SATELLITE. Establish a good satellite connection before starting to walk around the perimeter of the field. Wait until the margin of error is at 2 m to 3 m, as indicated on the upper right corner of the screen (Figure 4).





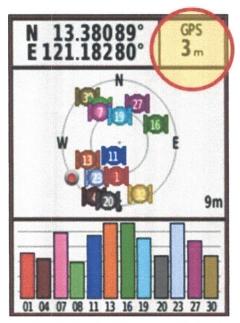
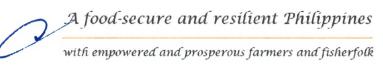


Figure 4. Level of accuracy indicated at the upper right corner of SATELLITE page

3. Once the desired accuracy is set, go back to the main menu. Go to TRACK MANAGER and select CURRENT TRACK > CLEAR CURRENT TRACK. Choose YES when asked, "Do you really want to clear the track log?"

Measuring the field

- 1. Go to one corner of the field that will be measured and stand at the starting point.
- 2. On the main menu of the handheld GPS device, go to AREA CALCULATION. Select START (Figure 5) and stay for at least five seconds at the starting point before walking around the field.





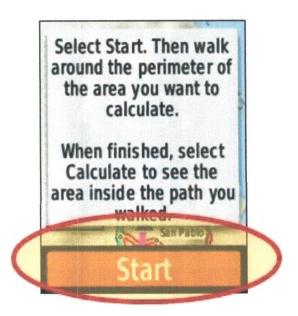


Figure 5. Instruction in the AREA CALCULATION page

3. While walking around the field, make sure to stop at every corner for at least 5 seconds. Don't walk too fast and keep a steady pace to allow the satellites to capture several trackpoints. Make sure that the farmer is guiding the staff to ensure that the correct boundaries are being measured.

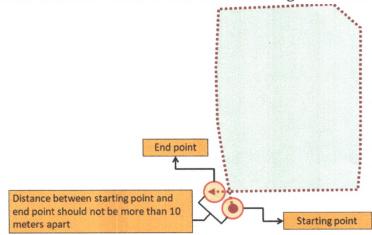
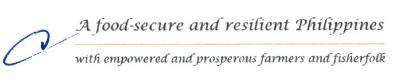


Figure 6. Sample path around the perimeter of the field

- 4. After going around the field, walk for about 5 meters past the starting point (Figure 6). Stay at that spot for at least 5 seconds.
- 5. Select CALCULATE on the device to see the area measurement.





6. The calculated area of the measured field will appear on the screen. Ensure that the calculated area is expressed in square meters, otherwise change units before saving the track (Figure 7). Select SAVE TRACK afterwards.

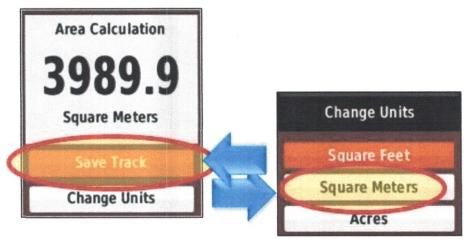


Figure 7. Calculated area and options to save track or change units

7. After selecting SAVE TRACK, the default track name will be registered on the next page. Delete the default name by clicking the backspace key (Figure 8) once using the thumb stick. Encode the valid track name assigned to the measured field (for RCM, we are currently using the generated GPX ID number for the registered field).

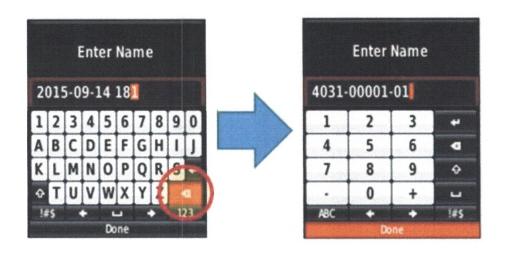


Figure 8. Deletion of default track name and encoding of valid track name that corresponds to the measured field



8. Review the encoded track name and select DONE afterwards. The next screen will notify that the track is saved. Click OK. GPS tracks from the activity are saved as files with extension/format: .gpx (GPS Exchange Format).

Submitting GPS track of measured field (GPX Batch Upload GPX feature in Rice Crop Manager Advisory Service)

- 1. Download the GPX files from the handheld GPS device into a laptop or personal computer using a micro-USB cord and compile in a designated file folder.
- 2. Connect online and access the Rice Crop Manager Advisory Service website through: https://rcm.da.gov.ph/.
- 3. Log-in using valid user credential (Figure 9). Currently, user credential is generated after successful registration through RCM User Registration app (https://rcmuser.da.gov.ph/).

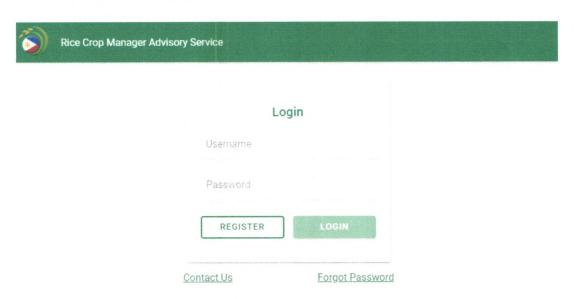


Figure 9. Log-in page in Rice Crop Manager Advisory Service website

4. Once logged-in, select in the sidebar menu the GPX Batch Upload (Figure 10) option then select UPLOAD to upload a maximum of <u>15 GPX files per batch</u>.





Figure 10. GPX Batch Upload feature in Rice Crop Manager Advisory Service

5. After selecting the files, the system will automatically check if the track name of the GPS track is similar to the GPX filename (Figure 11). Only the files with similar track name and filename will be valid for submission.

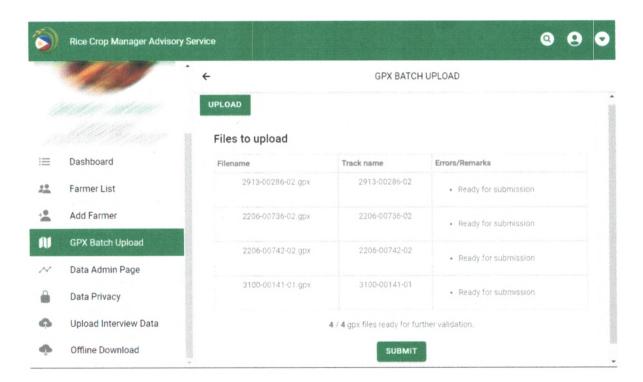


Figure 11. Pre-upload processing of GPX files





- 6. Click SUBMIT to upload the GPX files. The system will automatically check the submitted files for validity through a series of filters (Figure 12). Invalid tracks will be filtered and the uploader will be informed why the track is invalid. Valid tracks (Figure 13) will be saved in the RCM database including the area measurement and geolocation of the corresponding field.
- 7. Click MAP PREVIEW to check the track overlaid on satellite image.

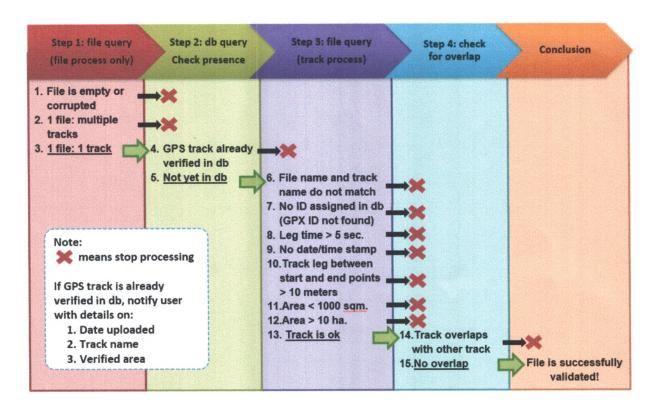


Figure 12. Steps in processing uploaded GPX files



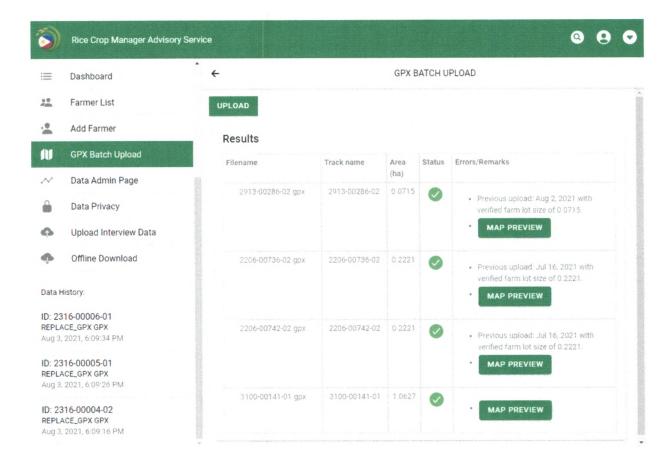


Figure 13. Sample output of uploading GPX files

VII. Duties and Responsibilities of the Operating and Implementing Units

7.1 RSBSA - National Program Management Office (RSBSA-NPMO) - The RSBSA-NPMO shall oversee the overall georeferencing component implementation, coordinate all activities related to the program nationwide, and regularly monitor the progress of the implementation. The RSBSA-NPMO consists of the following offices:



- (a) The **DA-Information and Communications Technology Service** (**DA-ICTS**) shall undertake the following:
 - a.3. Coordinate ICT-related activities and resolve ICT-related concerns regarding the georeferencing;
 - a.4. Maintain and manage the georeferencing database; and
 - a.5. Provide technical support in the GPX uploading activities of the DA-RFOs, troubleshooting, among others.
- (b) The **DA-Field Operations Service (DA-FOS)** shall directly coordinate with the DA-RFOs with the following:
 - b.1. Provide guidance on the execution of protocol and guidelines of the georeferencing activity;
 - b.2. Monitor targets and accomplishments and for the purpose of information dissemination; and
 - b.3. Provide instructions and response to concerns regarding the implementation.
- (c) The **DA-Planning and Monitoring Service (DA-PMS)** shall provide guidance in the formulation of protocol, guidelines, and the overall plan and target of the registry and its components.
- 7.2 **PhilRice RCM Team –** The PhilRice RCM Team consisting of the following groups: Apps and Database Group, Dissemination Group, and Research Group, shall:
 - 7.2.1. Provide guidance to the RSBSA-NPMO and RPMOs on any RCM system and protocol-related issues and concerns in support of the implementation of the activity; and
 - 7.2.2. Extend assistance on the needed system arrangements and enhancements on the RCM system to accommodate the conduct of the georeferencing activity of other commodities.
- 7.3 **DA Agricultural Training Institute (DA-ATI) -** The DA-ATI shall provide guidance and technical support in capacitating trainers for the regional implementation of the RSBSA georeferencing activity as they have trained Regional RCM trainers.





- 7.4 RSBSA Regional Program Management Offices (RSBSA-RPMOs) Each RSBSA-RPMO shall be responsible for the overall execution of the RSBSA georeferencing activities in their respective regions. Also, it shall be responsible in the hiring of the FAs for the implementation of the activity. The following personnel under the RSBSA-RPMO are tasked to fulfill the duties and responsibilities stated below:
 - (a) The **RSBSA Focal Person/s** of each RSBSA-RPMO shall:
 - a.1. Oversee the implementation of the RSBSA georeferencing in their region in accordance with the issued guidelines and protocols;
 - a.2. Coordinate with various DA and non-DA offices and agencies related to the conduct of georeferencing activities;
 - a.3. Monitor the execution of tasks and responsibilities of all personnel assigned under the RSBSA-RPMO in their respective region;
 - a.4. Provide guidance and support for concerns/problems encountered; and
 - a.5. Apprise the RSBSA-NPMO on other issues/concerns beyond the scope and capacity of the region to resolve.
 - (b) The Field Assistants (FAs) will act as georeferencer and encoder of the data collected during the georeferencing activity. The FAs must be at least a college graduate with a background in Agriculture and/or IT-related courses and has basic knowledge and experience in Geographical Information System (GIS) and in operating a GPS receiver.

Each FA shall undertake a full-cycle of tasks to ensure minimum data transfer and accurate encoding to the system. They shall perform the following responsibilities:

- b.1. Arrange schedule of farmers to be visited and prepare necessary device and supplies that will be used during the field visit;
- b.2. Collect data from the RSBSA-registered farmers prior the actual field measurement;
- b.3. Conduct field measurement and mapping of declared farm areas of RSBSA-registered farmers;
- b.4. Attend training sessions, workshops, meetings, and briefings with DA-RFO and LGUs in relation to the conduct of the georeferencing;

A food-secure and resilient Philippines

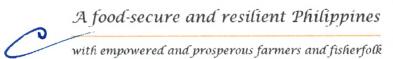
with empowered and prosperous farmers and fisherfolk



- b.5. Upload the GPX files and encode data collected during the field measuring activity through the RCM system (and ICTS-developed system);
- b.6. Validate/verify data collected with the AEWs and C/MAOs to ensure accuracy and correctness of data/information;
- b.7. Provide feedback to the RSBSA-RPMO on the progress of field activities, challenges and other issues that may affect efficient project implementation; and
- b.8. Prepare and submit periodical work plans and accomplishment reports to the RSBSA-RPMO supervisor.

For the purpose of recording and monitoring the accomplishment of the FAs, the RSBSA-RPMO shall refer to the **total hectares** from the validated tracks in the RCM system as uploaded by each FA's account.

- 7.5 **Regional Banner Programs (Rice, Corn, and High Value Crops) -** The Regional Banner Programs of each region shall:
 - 7.5.1. Provide necessary data to the RSBSA-RPMO as they set targets for the hectares to be georeferenced under their commodity;
 - 7.5.2. Assist the RSBSA-RPMO in coordinating with agencies and offices concerned to the proper conduct of the georeferencing of their commodity; and
 - 7.5.3. Extend other support necessary for the implementation of the georeferencing activity within their respective regions.
- 7.6 **Local Government Units (LGUs)** The primary responsibility of the LGUs is to guide the personnel from the RSBSA-RPMO in their respective areas as the latter carry out their tasks in georeferencing fields and interviewing farmers.
 - (a) The LGU through its **City/Municipal Agricultural Officer (C/MAO)** is expected to:
 - a.1. Assist in verifying the data being collected by the FAs deployed in their area;
 - a.2. Provide instructions to the AEWs working under their jurisdiction;
 - a.3. Ensure efficient coordination and communication among the Barangay, AEWs, the farmers scheduled to be visited; and
 - a.4. Coordinate with the DA-RFO for the schedule and conduct of georeferencing in their area.





(b) The Barangay Chairman shall:

- b.1. Assist in certifying the farmers located under their jurisdiction; and
- b.2. Assist the deployed FAs in verifying the data collected during the georeferencing activity as true and correct.
- (c) The **Agricultural Extension Workers (AEWs)** in each city/municipality shall guide the deployed FAs in locating and identifying the RSBSA-registered farmers and their fields for the purpose of georeferencing their agricultural area and interviewing the farmer.

VIII. Discrepancies/ Handling of Special Cases

8.1. Discrepancies on Size

During the field measurement, the FA shall only measure the open field area, excluding the infrastructures and other non-productive areas located adjacent or near the farm. The infrastructures include, but not limited to: storage facilities, irrigation systems and canals, livestock and poultry farms/facilities, and water resources surrounding the field/location. In case the infrastructures and other facilities are located within the area to be measured, a maximum size of 200 sq meters of non-productive area may be accepted to be included in the area measurement. Infrastructures with size beyond the 200 sq meters tolerable area shall be measured separately and subtracted from the total verified size of the farm from the GPS receiver. The FA may also opt to walk around the perimeter of the field and excluding the non-productive area as seen in Figure 14.

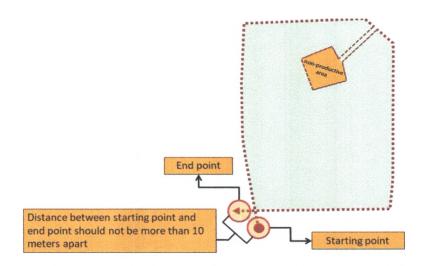


Figure 14. Sample GPX track excluding non-productive area within the field





In case of discrepancy in size from the farmer's declared field size versus the verified size from the GPS receiver, the latter shall prevail as true and correct based on the RCM protocol. The FA shall also inform the farmer regarding the discrepancy and request for the farmer's verification of the change in size as measured via the GPS receiver before inputting the verified size in the FA's Logbook.

8.2. Overlapping GPX tracks

If a GPX track is identified as overlapping with another GPX track, the overlapping fields shall be re-validated and reconciled among farmers involved (if tilled by different farmers) to determine if the farm location and each boundary is correct and exact. It shall also be validated through the ownership documents provided as attachments by the farmer during their enrollment to cross-check the field size and location.

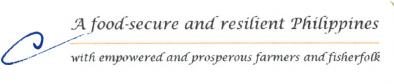
8.3. Georeferencing undeclared farm fields

For cases the farmer requested to include additional field/s they are tilling aside from the initially declared fields in the FFRS, the FA shall measure the additional field upon verification of the proof of ownership of the land. (refer to March 2021 RSBSA Supplemental Guidelines Section 8.2. for the list of ownership documents).

The FA shall ask the farmer to comply with the needed documents for updating: submit a photocopy of the ownership document of the additional land and a filled out RSBSA Enrollment Form (For Updating) and request the C/MAO to certify. Once certified, the RSBSA-RPMO shall update the FFRS record along with the additional field details.

8.4. Georeferencing field of RSBSA-registered individual with other livelihood category

If informed by the farmer that the field/s they are previously tilling has been transferred to a farmworker, fisherfolk, and/or an agri-youth, the FA **shall reschedule** the field measurement on the particular field/s upon verification of the proof of ownership of the land.





The FA shall ask the new farmer (the previously farmworker, fisherfolk, and/or an agri-youth) to comply with the needed documents for updating: submit a photocopy of the ownership document of the additional land and a filled out RSBSA Enrollment Form (For Updating) and request the C/MAO to certify. Once certified, the RSBSA-RPMO shall update the FFRS record along with needed field details and resume the field measurement.

8.5 Requests for re-measurement and division of georeferenced fields

The activity shall prioritize fields that are not yet measured by any georeferencing activities led by the Department. For cases that a farmer requests to divide a validated track/georeferenced field, the FA or the RSBSA-RPMO shall promptly inform the farmer that the updating of GPX tracks (i.e., request for re-measurement due to division of land) shall only be authorized with the endorsement of the C/MAO, if any modification in the planting, field activity, and land area has taken place.

IX. Access to Data

Access to data in the RSBSA Georeferencing is subject to existing data privacy policy of the Department of Agriculture and the Data Privacy Act of 2012.

A consent notice shall be signed by the farmers in the Field Assistant's Logbook (see Annex C) upon gathering data and georeferencing the field. All collected data will be under the safekeeping and custody of the RSBSA-NPMO. In this regard, offices and agencies requesting for data access shall submit a written request addressed to the DA Secretary, attention to the Chairperson of the Technical Working Group on National Registry System for Farmers and Fishers (TWG on NRSFF), specifying the information and purpose for which the information will be utilized. The RSBSA-NPMO shall review the request and recommend appropriate actions subject to the approval of the Chairperson.

X. Transitory Clause

The declared farm area in the Farmers and Fisherfolk Registration System (FFRS) of the RSBSA shall remain valid until the completion of the georeferencing field measurement; however, farmers who have registered and participated in the georeferencing activity shall be given priority when availing benefits from programs/projects of the DA.

XI. Repealing Clause

All issuances or portions thereof which are inconsistent with the provisions of this Order are hereby modified or amended accordingly.



XII. Effectivity

This Memorandum Order shall take effect immediately upon signing thereof and shall remain in full force and effect unless revoked, revised, or amended.

Done this 2nd day of May 2022, in Diliman, Quezon City, Philippines.

WILLIAM D. DAR, Ph.D.

Secretary

DEPARTMENT OF AGRICULTURE

in replying pls cite this code : For Signature: S-04-22-0606 Received : 04/27/2022 08:23 AM

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ANNEXES

Annex A. Sample Generated Farmers' Masterlist

FARMERS' MASTERLIST FA Code (FA's initials + Farmer's RSBSA Status of Tenure System incremental Exact Farm (Owner, Tenant, **GPX ID Number** number being Generated Full Name Residence Name of Owner (if tenant or lessee) (0000-00000-00) Field Name Crop/Commodity Declared Size Remarks Number geotagged) (Last, First Middle) Address Location Contact Number Lessee, others)

Annex B. Field Assistant's Logbook Format

FIELD ASSISTANT'S LOGBOOK

Date	Field Assistant Code (FA's Initials + Farmer's Incremental Number)	GPX ID Number	Type of Ownership (Registered Owner= RO, Tenant= T, Lessee= L)	Parcel Name	Crop or Commodity	Declared Size (ha)	Verified Size (ha)	Remarks	Remarks Code	By signing it, I hereby certify that I give consent to the data gathering, and attest that all information is true and correct.
03/23/2022	JAS01	2920-00001-01	Т	Tabi ng Ilog	Corn	1	0.97			
		2920-00001-02	Т	Paa ng Bundok	Rice	1	0.97			
		2920-00001-03	Т	Tapat ng Irigasyon	Rice	0.5	0.49			
***										Farmer: AEW:
	JAS02	2920-00002-01	RO	Paa ng Bundok	Corn	1	1			
		2920-00002-02	RO	Paa ng Bundok	Rice	1	1			
***										Farmer: AEW:
03/24/2022	JAS03	2920-00003-01	L	Tabi ng Ilog	Corn	1	1.1			
		2920-00003-02	L	Paa ng Bundok	Rice	1	1.1			
***										Farmer: AEW:

Annex C. RSBSA Georeferencing Stub

lame: SBSA Reference No.: arm Location Address: late Measured:		CERTIFIED BY DATE
GPX ID	Declared Farm Area	Verified Farm Area

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