PRDP GEOCAMERA
USER GUIDE

I. Introduction

The Philippine Rural Development Project (PRDP) has developed and established geo-mapping tools and systems that allow for the intensive mapping of project investments in rural infrastructure and enterprise sub-projects in the 81 provinces covered by the Project. The PRDP Applied Geo-tagging Tool (AGT) is being used to provide accurate data and photo documentation of sub-projects throughout their subproject cycle — from identification, validation, procurement, monitoring, supervision and operations and maintenance.

The PRDP AGT is one of the basic yet effective tools that the Project has pioneered and deployed nationwide, and is being adopted and used by partner Local Government Units (LGUs) and other national government agencies for their subproject monitoring and supervision. It has been lauded by the World Bank as a revolutionary and inexpensive approach to using Information and Communication Technology (ICT) and Global Positioning System (GPS) applications for accurate visualization of sub-projects.

The creation of PRDP GeoCamera application will provide better real-time monitoring experience by providing the project with location based motion visual information of particular subproject activity to further strengthen transparency and accountability.

II. Device Requirements

Android OS Device
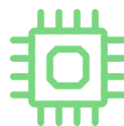at least android 5 (Lollipop) version

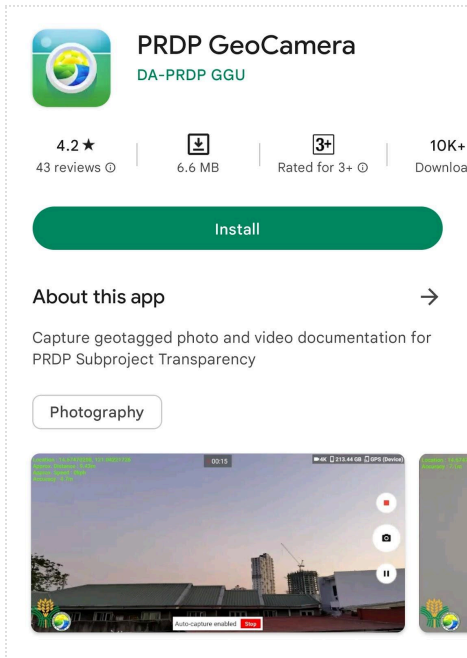Device rear camera at least 3 MP resolution

GPS Enabled

At least 500 MB Free Storage Space

2 GB RAM

III. Installation

1. Open Google Play Store or Huawei App Gallery then search for " **PRDP GeoCamera**"

2. Click "**install**" and wait until the installation completes.

3. Open PRDP GeoCamera then <u>grant all the required application permissions</u>.

   App Permissions:
   - **Camera** - allows the application to use device camera in capturing geotagged photos and videos
   - **Location** - allows the application to get GPS location update that can be used in geotagging
   - **Storage** - allows the application to store generated output such as geotagged-video, photo, KMZ and application resources

IV. Application User Interface
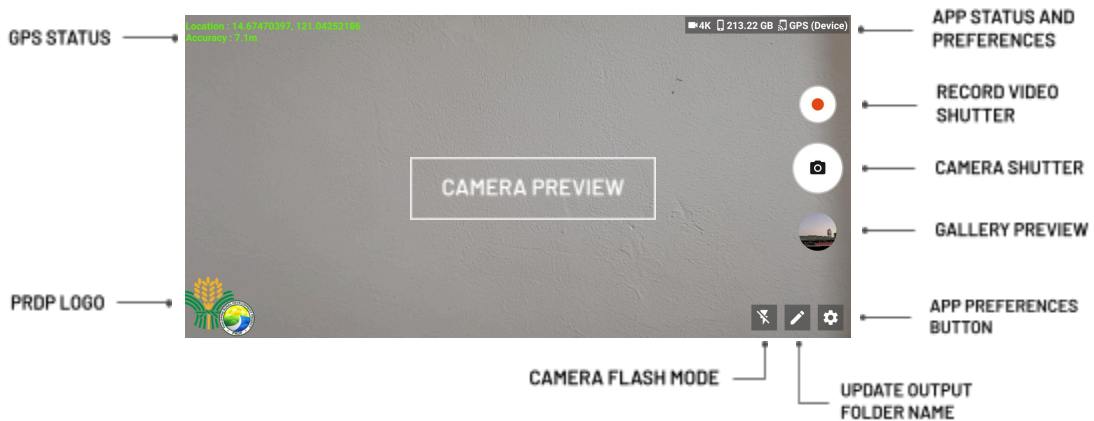
- **GPS STATUS –** shows the current GPS location information and accuracy.

- **PRDP LOGO –** application owner logo

- **APP STATUS AND PREFERENCES –** shows the current application preferences such as current video output resolution, remaining free storage capacity and location source.

- **VIDEO SHUTTER** - shutter that can be used to start geotagged video recording

- **CAMERA SHUTTER** - shutter that can be used to capture geotagged photos.

- **GALLERY PREVIEW** - preview of last captured geotagged file and also serve as the button used to navigate application gallery page.

- **APP PREFERENCES BUTTON** - use to navigate application preferences page that allows the user to set geotagged output options such as resolution, GPS location source and storage location.

- **OUTPUT FOLDER NAME** - directory that will contain the geotagged files to be captured.

- **FLASH** - used to set camera flash mode to be able to enhance camera output especially for low light areas.

## V. Capture Geotagged Video/Photo
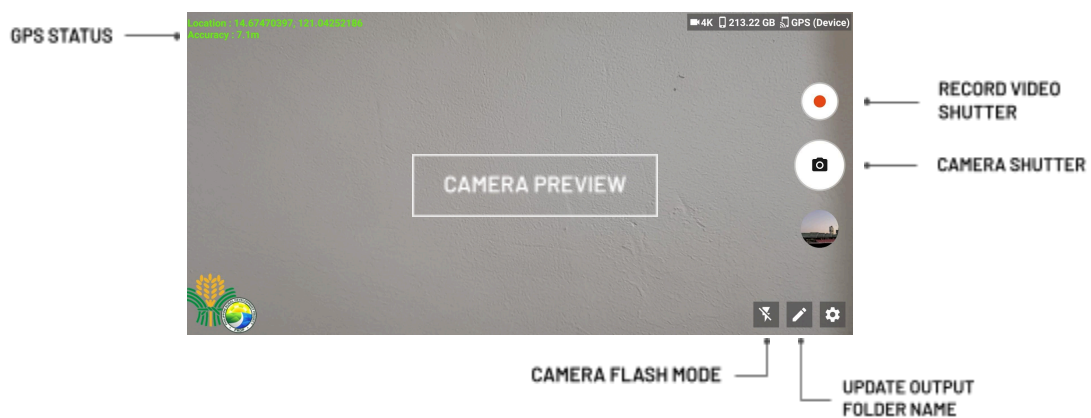
HOW TO CAPTURE GEOTAGGED VIDEO / PHOTO

1. Input the output folder name
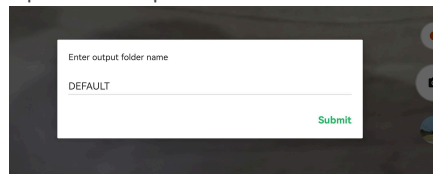
2. Wait until the application establishes a GPS connection and make sure that the GPS status has **at least 15m accuracy**.

3. Tap the camera shutter to capture a geotagged file based on the preferred output (photo or video) and wait until the application prompts that the process is finished.
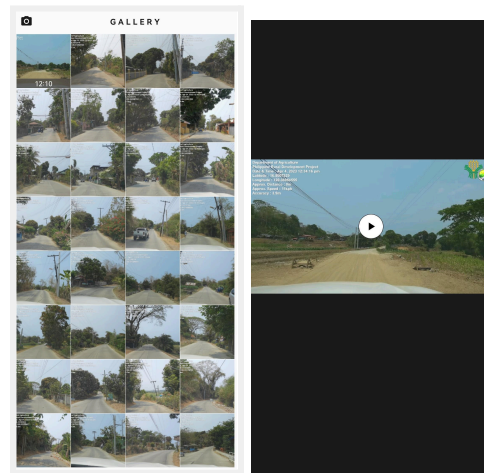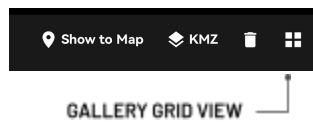
VI. Gallery
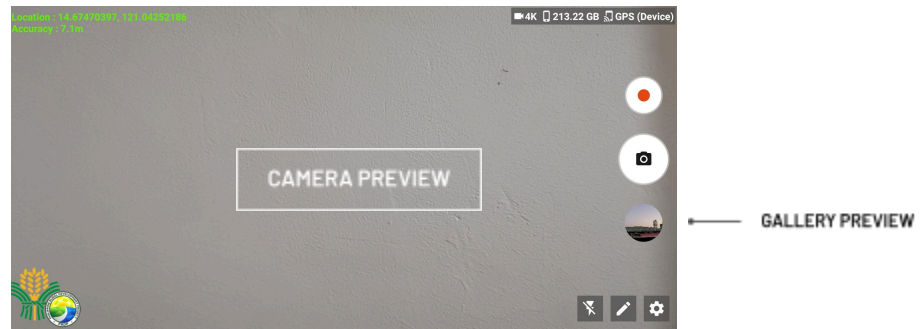
HOW TO OPEN APP GALLERY

Click the "**Gallery Preview**" below the camera shutter to be able to navigate the output gallery page.
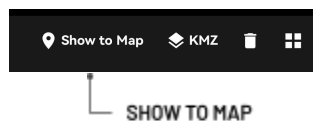
To change the gallery view mode, click the **"Gallery Gridview"** button

GALLERY GRID VIEW

VII. Map Viewer

HOW TO VIEW GEOTAGGED PHOTOS IN OFFLINE MAP

1. Open the application gallery
2. Select the photo to be viewed on the map
3. On the upper portion of the page, click the "**Show to Map**" menu to go to the Map Viewer page.

SHOW TO MAP

4. Download the basemap (optional).
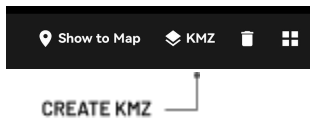
   Note: The application requires an internet connection to download the map from the server and at least 500 MB of device storage free space.

VIII.   Generate KMZ

HOW TO CONVERT GEOTAGGED PHOTOS TO KMZ

1. Open the application gallery
2. Select the photo to be converted into KMZ File
3. On the upper portion of the page, click the "**KMZ**" menu to go to the Create KMZ page.

4. All geotagged photos within the selected photo parent directory will be loaded
5. Select geotagged photos that will be included in the KMZ conversion
6. Click the **"Execute"** button and input the KMZ filename to start the conversion process.
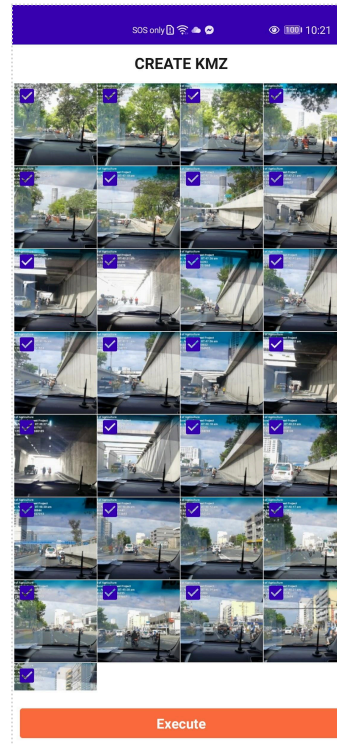
IX.   Output Location

HOW TO LOCATE APPLICATION OUTPUTS

1. Open **File Manager** then select the current **default PRDP GeoCamera output storage** *(Internal Storage or SD Card).*

2. Open **"DCIM"** folder then locate the "PRDP GeoCam" folder containing the application outputs and resources

   Note:
   Devices using Android 12 and up version, PRDP GeoCam is located at the **DOCUMENTS** folder.
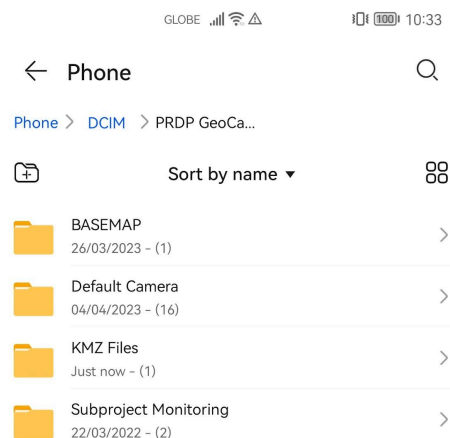
FOLDERS INSIDE PRDP GEOCAM

- **GEOTAG FOLDER** - this directory contains the geotag files captured using PRDP GeoCamera

- **KMZ FOLDER** - this directory contains the list of KMZ files converted from the captured Geotagged Photos

- **BASE MAP FOLDER** - this directory contains the offline map that is used in the application map viewer

X. Application Preferences

- **GPS Location Source -** allows the user to select the default application GPS location source

  - Device GPS Provider
    - Provides location update through satellite depending on condition
    - Provides location update through Network depending on the availability of cell towers

  - Fused Location Provider
    - provider automatically chooses what underlying provider to use, based on accuracy, battery usage, etc. It is fast because you get location from a system-wide service that keeps updating it.

- **Video Resolution** - allows the user to set the default Geo-Video Resolution

  Note:
  Video resolution will be based on the supported video resolutions of the device camera. Higher video resolution requires more device free storage capacity
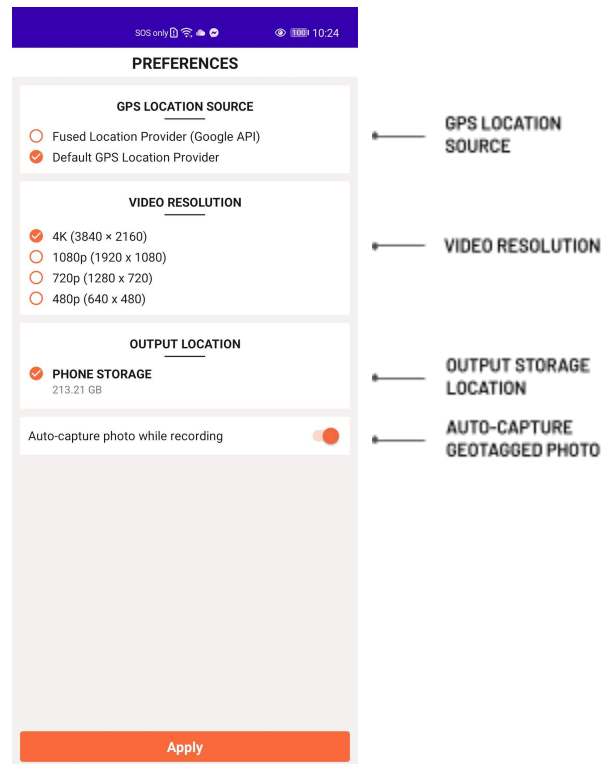
- **Output Storage** - allows the user to choose the default storage location where the application will be stored. *(Internal Storage or SD Card)*

- **Auto-capture Photo** - this features enables the application to capture geotagged photos during geotagged video recording