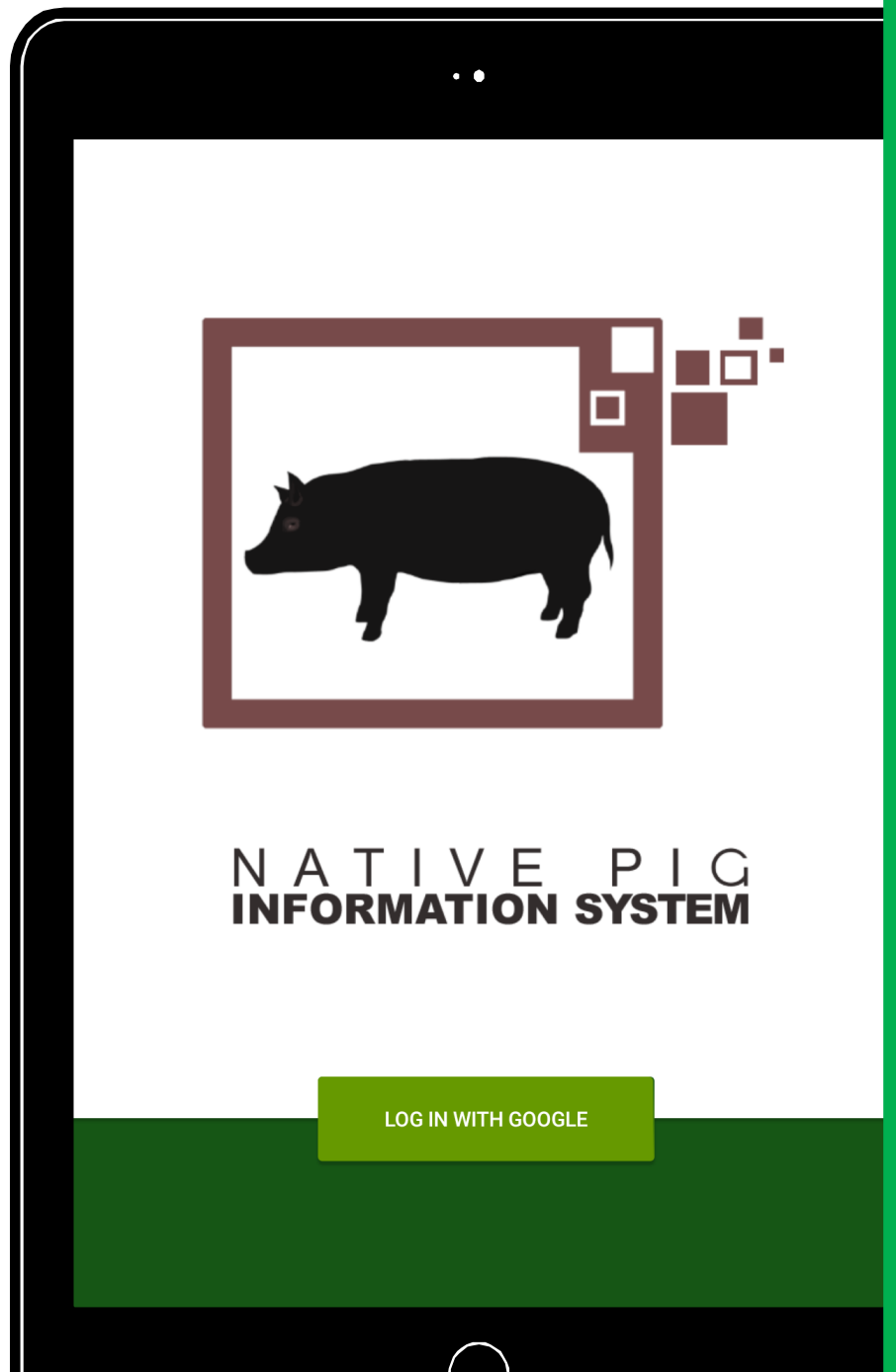


Native Pig Breed Mobile Application

# USER GUIDE

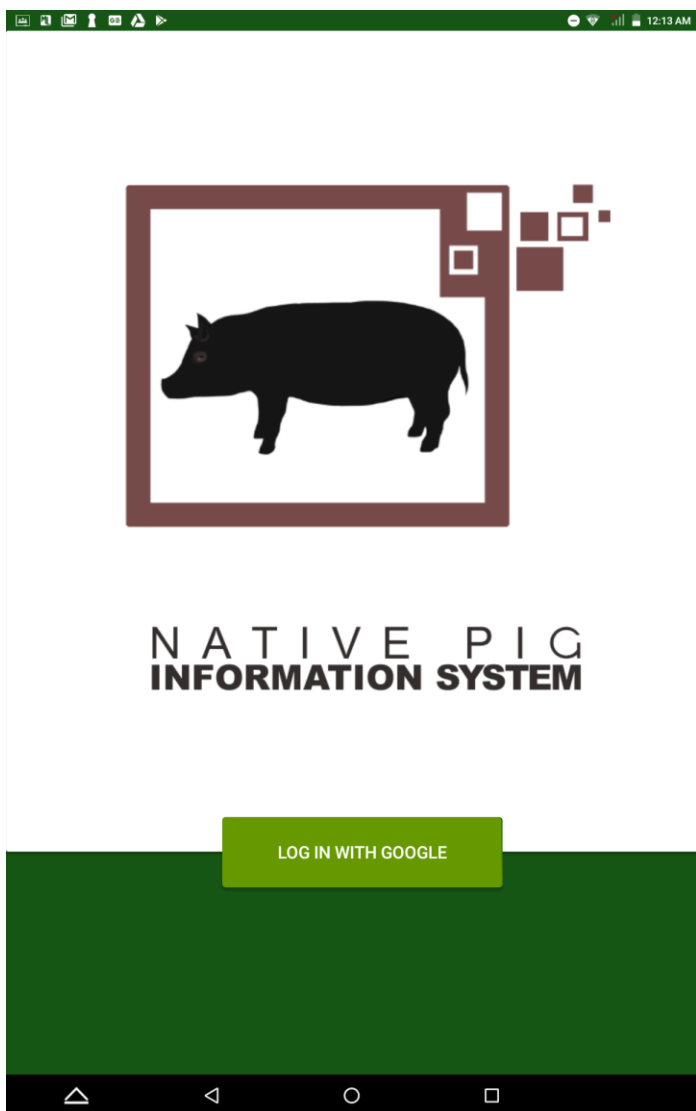


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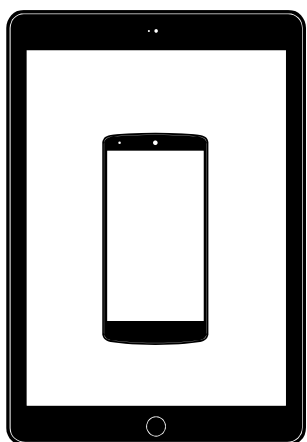
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## HOMEPAGE

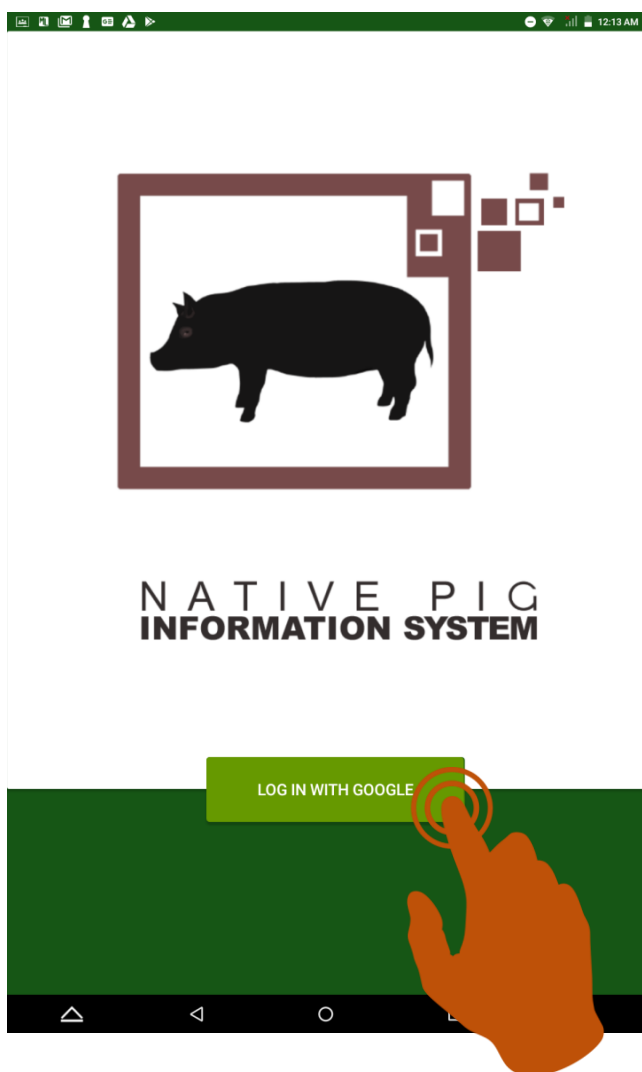


For the farms that were already registered in the Philippine Native Pig Breed Information System web application through the DOST-PCAARRD, they can already use the mobile application. Unlike the web application which helps in generating several reports, the mobile application counterpart was developed for recording purposes only. The Philippine Native Pig Breed Mobile Application is offline-able which makes recording easier. This was designed to help farm staffs record directly to the system. The data entered using the mobile application will reflect in the web application when the device is connected to the Internet. The image on the left shows the homepage of the mobile application. It contains the logo of the Philippine Native Pig Breed Information System and a button which redirects the user to the login page.



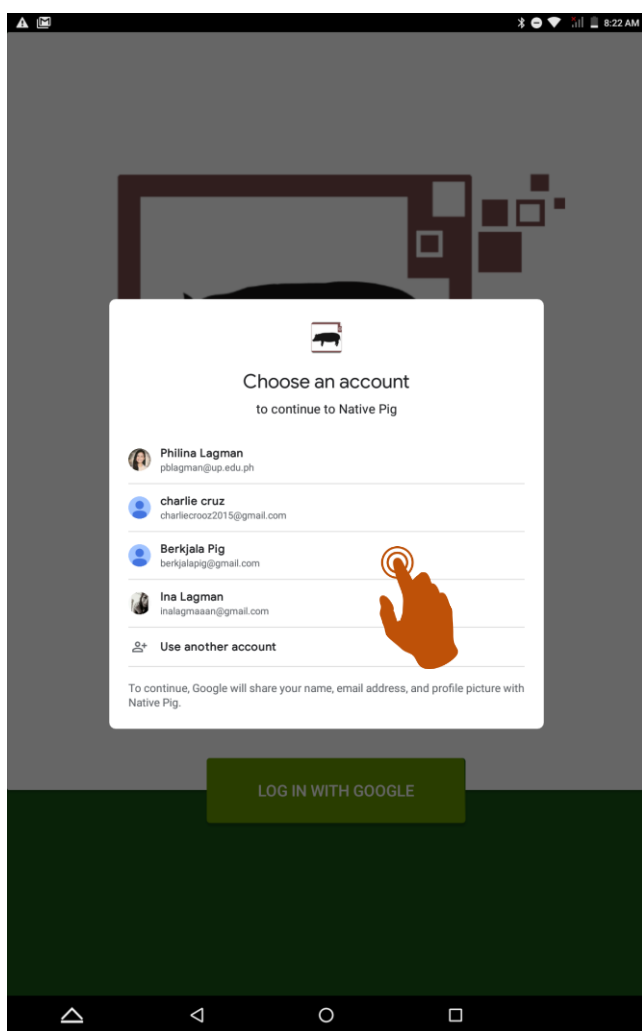
The mobile application can be installed in Android phones or tablets.

## LOGIN PAGE

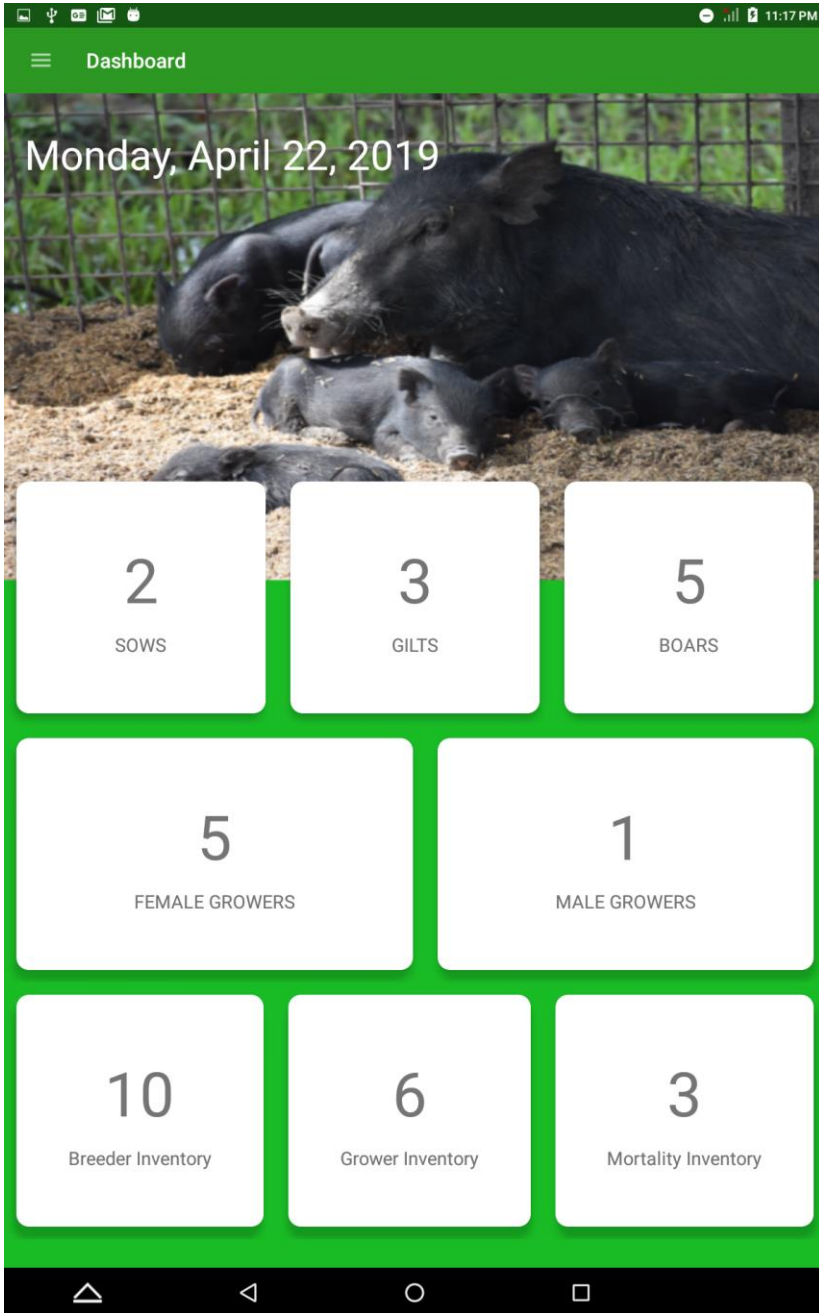


The mobile application, like the web application, uses login via Google. The user shall use the same account he/she uses when logging into the web application. Upon tapping the “LOG IN WITH GOOGLE” button, as shown in the figure on the left, a dialog box will appear like in the image below.

To login, the user will just tap the account he/she is going to use as shown in the image on the right. Upon tapping, the user will be redirected to the dashboard. It is important to login first before going to the farm to record the data for the day.

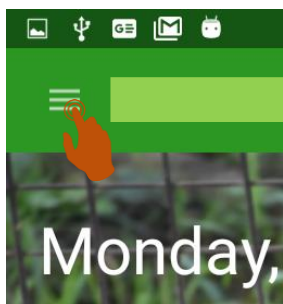



## DASHBOARD

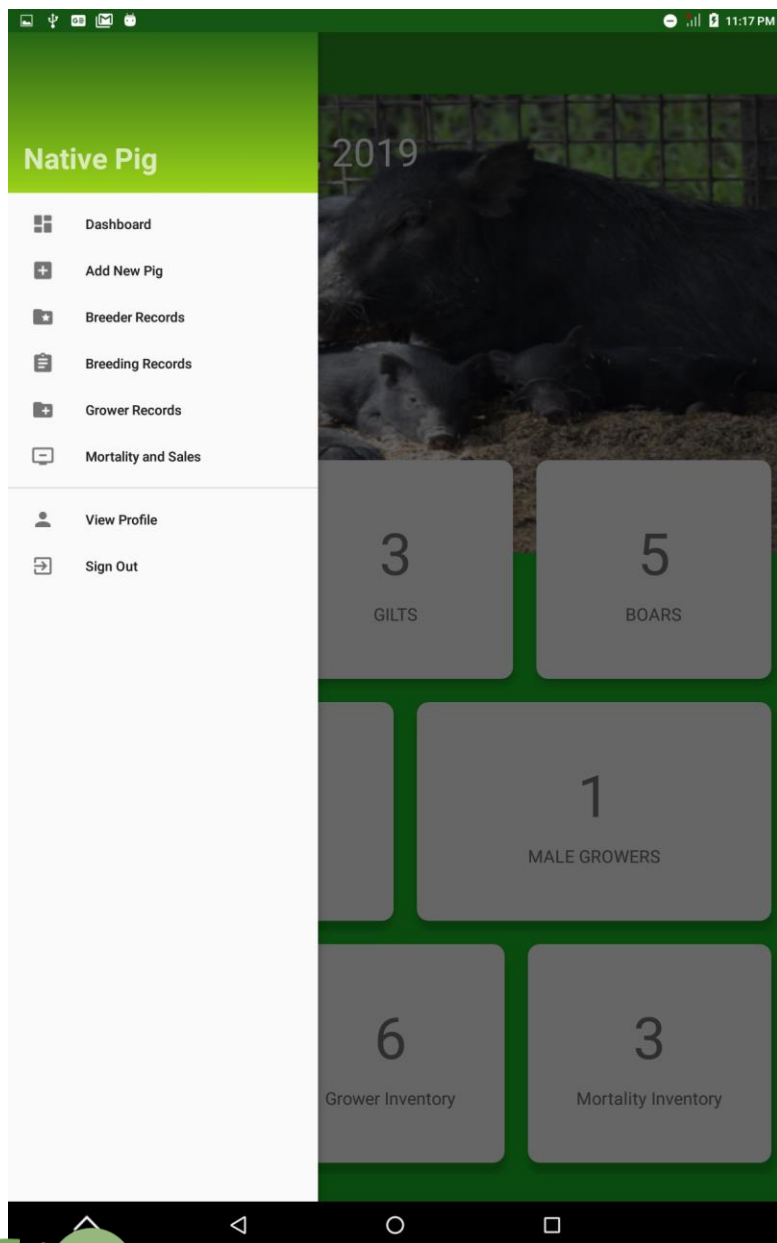


This is where the user will be directed upon logging in. The dashboard shows the inventory of the breeders categorized into sows, gilts, and boars. It also shows the number of growers separated according to sex. The Breeder Inventory shows the total number of breeders, Grower Inventory shows the total number of growers, and Mortality Inventory shows the number of all dead pigs. The numbers in this page are automatically updated every time the user updates the farm records.

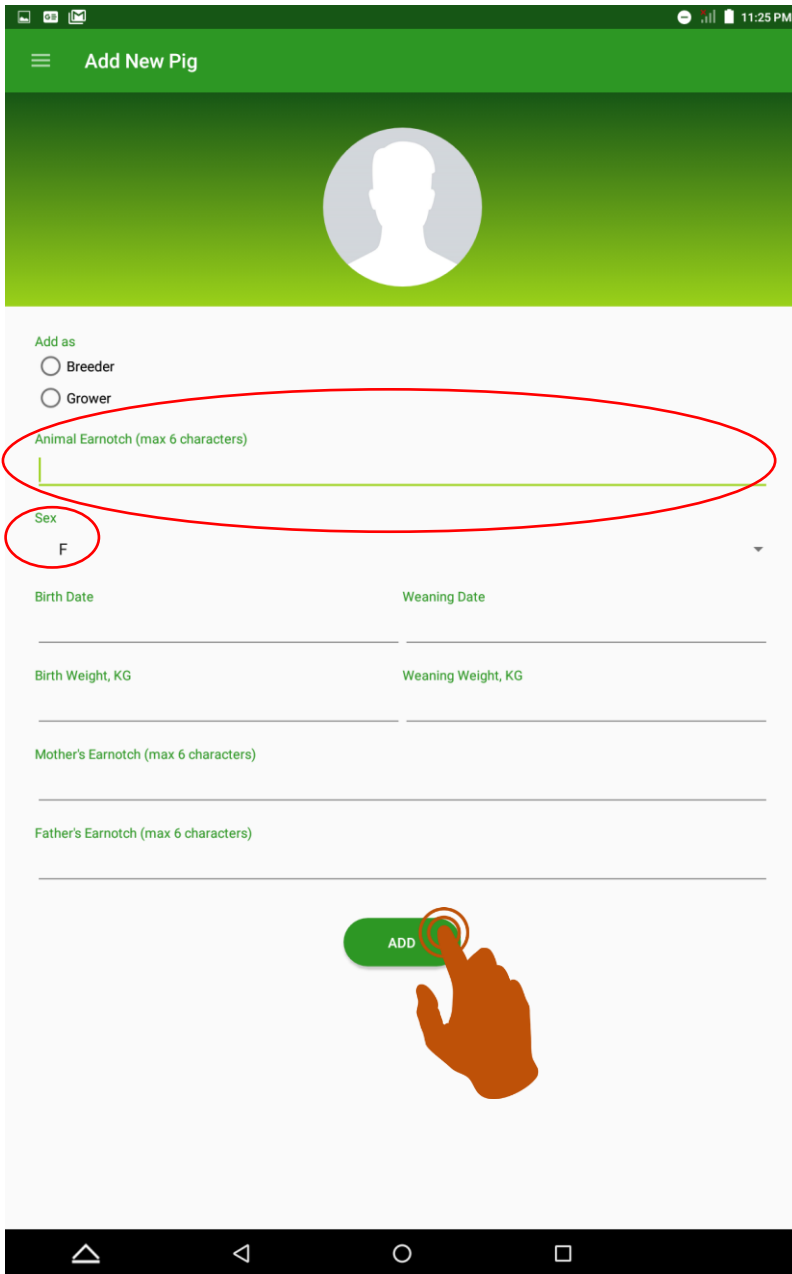
## NAVIGATION DRAWER



On the top left corner of the screen, there is a  icon. If tapped, a navigation drawer will be opened as shown in the image on the right. It contains the menu of the application. The following items are in the menu: Dashboard, Add New Pig, Breeder Records, Breeding Records, Grower Records, Mortality and Sales, View Profile, and Sign Out. This is accessible anywhere from the mobile application as this navigation drawer serves as the user's guide to the recording forms.



## ADD NEW PIG



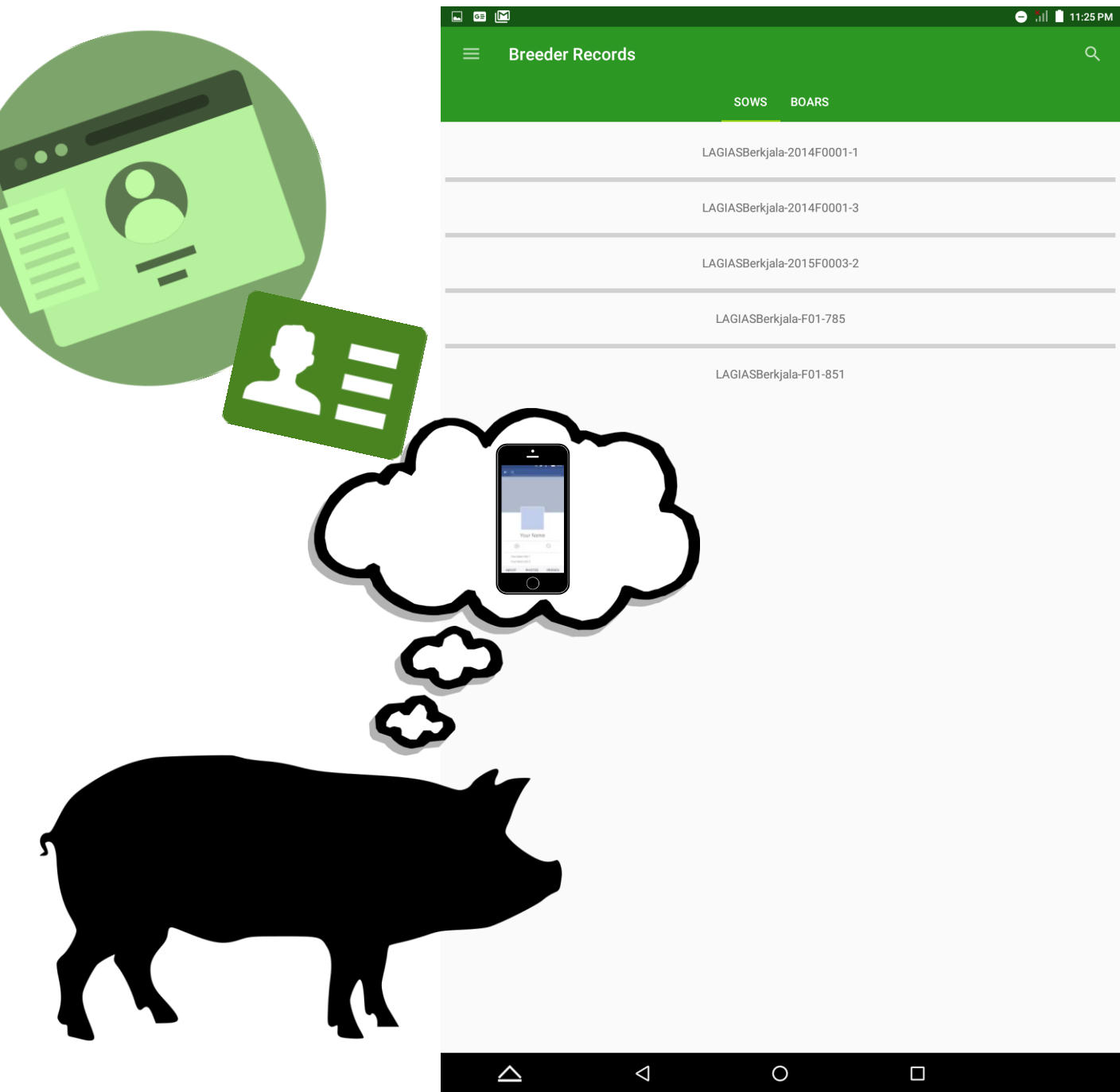
### REMEMBER


Fields encircled with red are required and therefore must be filled to be able to tap the “Add” button and submit the new record

The Add New Pig module is ideally for adding growers or breeders which were bought from other farms or those with only little information are known like foundation stocks. Like in the web application, the required fields to be filled out in this module are the Animal's Eartnotch (6 characters) and its sex. The user shall not forget to tap the radio button corresponding to what he/she is adding the pig as. Leaving other fields blank will tell the application that no data is available for those properties. Tap the “Add” button when the required fields are accomplished to add the new pig to the system.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

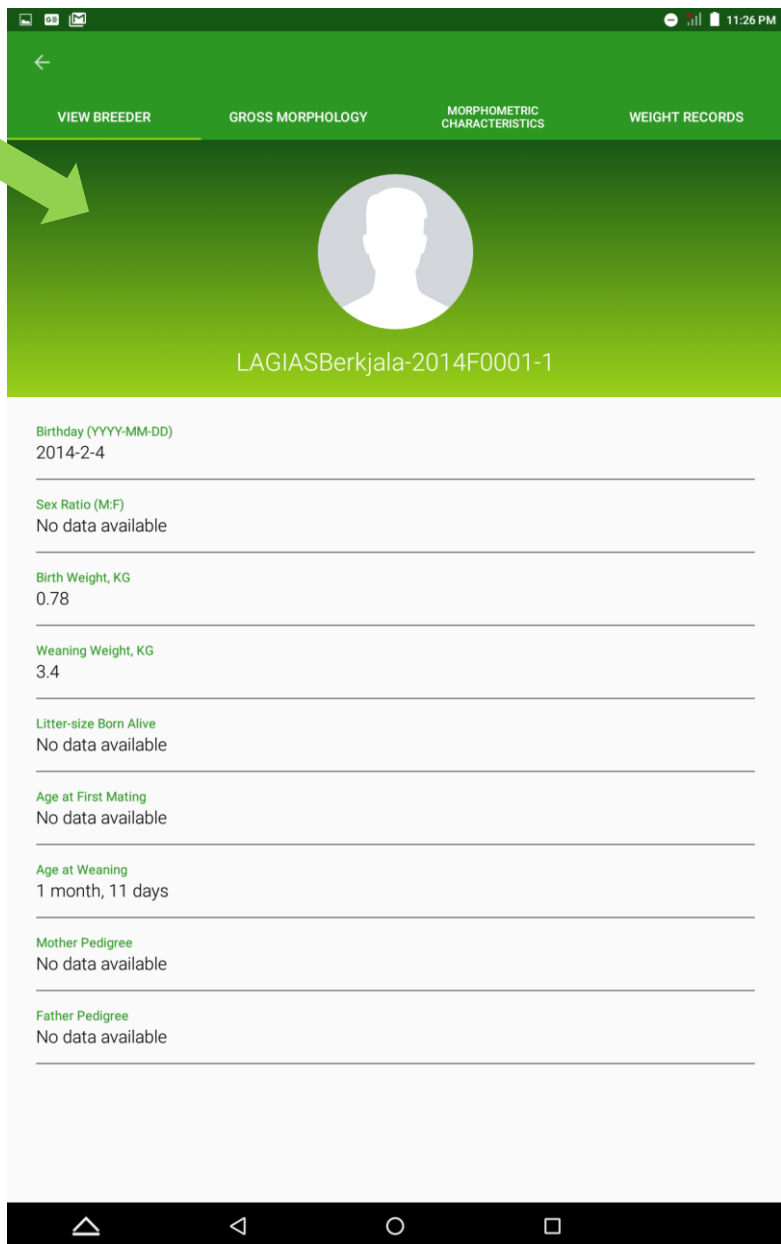
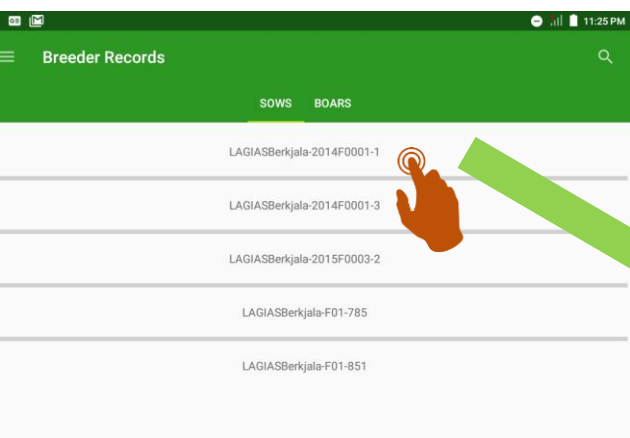
## BREEDER RECORDS



In Breeder Records page, all of the farm's current (alive) breeders are listed and are separated into Sows and Boars. The default view is for the sows, if the user wants to view the list of boars, he/she will just tap "Boars". There is a  icon on the upper right corner of the page for the search bar. When the list became long, the search bar will be a very helpful tool to find the breeders.



## VIEW BREEDER



If the user wishes to view the record of a certain breeder, he/she will just tap the registration ID of the breeder as shown in the figure above and the image on the right will show which is where all the information of the breeder are. There are four (4) sections in this page namely: View Breeder, Gross Morphology, Morphometric Characteristics, and Weight Records. In View Breeder, all the available basic information (date of birth, litter-size born alive and sex ratio when it was born, birth weight, weaning weight, age at weaning, age at first mating, mother's and father's ID) of the breeder are displayed.



# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## GROSS MORPHOLOGY

VIEW BREEDER   GROSS MORPHOLOGY   MORPHOMETRIC CHARACTERISTICS   WEIGHT RECORDS

LAGIASBerkjala-F0001-1

Date Collected  
2019-5-28

Hair Type  
Straight

Hair Length  
Long

Coat Color  
Black

Color Pattern  
Plain

Head Shape  
Concave


Skin Type  
Smooth

Ear Type  
Semi-lop

Tail Type  
Curly

Backline  
Swayback

Other Marks  
Not specified

If you tap the “Gross Morphology” tab, the image above will be shown. These are the morphological traits of the breeder. This can be edited by tapping the  icon on the upper right corner.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## GROSS MORPHOLOGY

**Edit Gross Morphology**

Date Collected (YYYY-MM-DD)  
2019-5-28

Hair Type  
☐ Curly ☒ Straight

Hair Length  
☐ Short ☒ Long

Coat Color  
☒ Black ☐ Others

Color Pattern  
☒ Plain ☐ Socks

Head Shape  
☒ Concave ☐ Straight

Skin Type  
☒ Smooth ☐ Wrinkled


Ear Type  
☐ Drooping ☒ Semi-lop ☐ Erect

Tail Type  
☒ Curly ☐ Straight

Backline  
☒ Swayback ☐ Wrinkled

Other Marks  
Enter values separated by commas

CANCEL OK

The window shown in the image above will appear upon clicking the  icon. The user can now edit the date when morphological traits were collected, hair type, hair length, coat color, color pattern, head shape, skin type, ear type, tail type, backline, and other marks. Tap “OK” to save the record or “CANCEL” to cancel editing.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## MORPHOMETRIC CHARACTERISTICS

←

VIEW BREEDER   GROSS MORPHOLOGY   **MORPHOMETRIC CHARACTERISTICS**   WEIGHT RECORDS

LAGIASBerkjala-F0001-1

Date Collected  
2019-5-28

Ear Length  
6

Head Length  
48

Snout Length  
53

Body Length  
2


Heart Girth  
86

Pelvic Width  
56

Tail Length  
36

Height at Withers  
4

Number of Normal Teats  
13

If you tap the “Morphometric Characteristics” tab, the image above will be shown. These are the morphometric measurements of the breeder. This can be edited by tapping the  icon on the upper right corner.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE


## MORPHOMETRIC CHARACTERISTICS

VIEW BREEDER   GROSS MORPHOLOGY   MORPHOMETRIC CHARACTERISTICS   WEIGHT RECORDS

### Edit Morphometric Characteristics

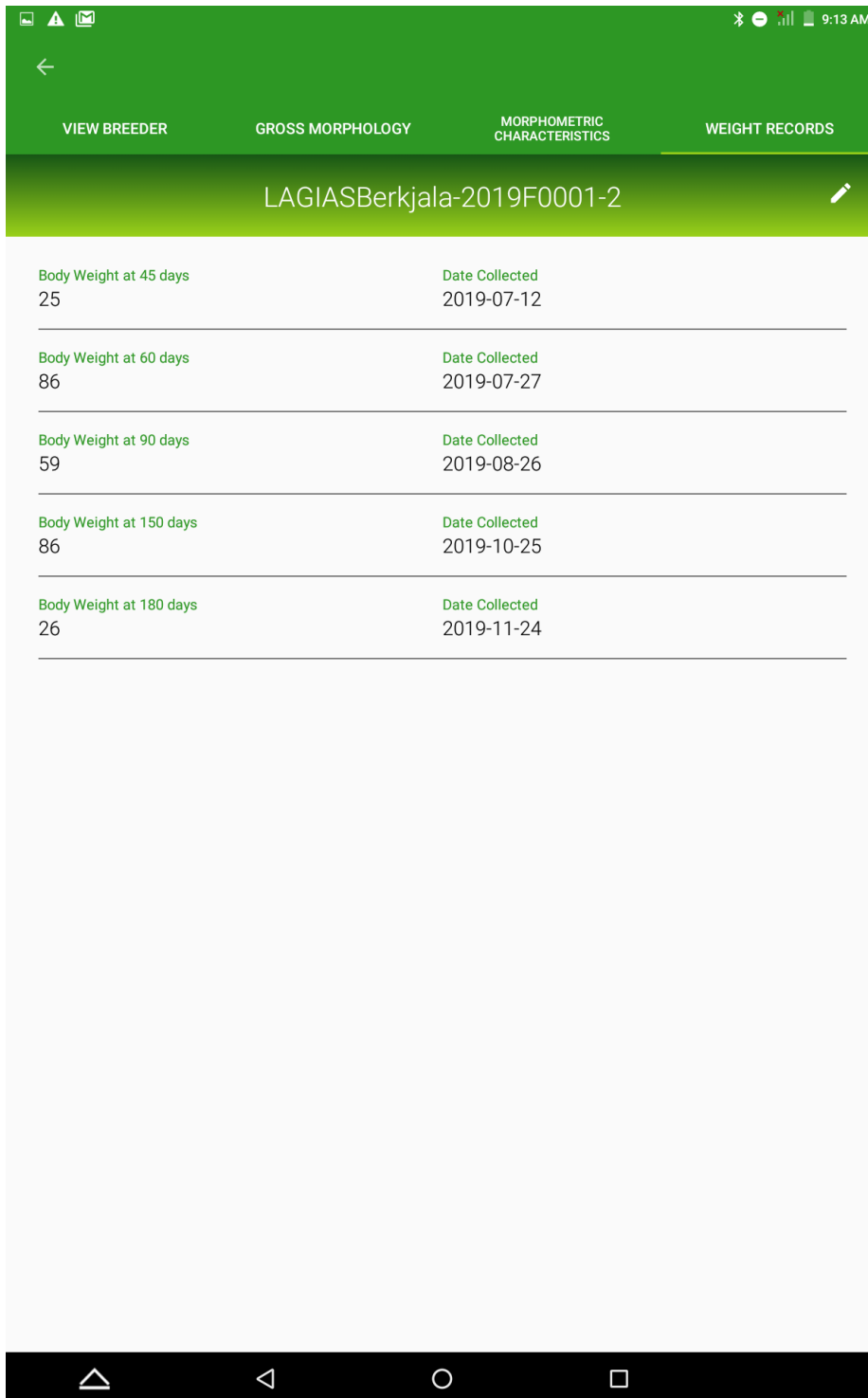
Date Collected	2019-5-28
Ear Length	6
Head Length	48
Snout Length	53
Body Length	2
Heart Girth	86
Pelvic Width	56
Tail Length	36
Height at Withers	4
Number of Normal Teats	13

CANCEL   OK


The window shown in the image above will appear upon clicking the  icon. The user can now edit the date when morphometric measurements were collected, ear length, head length, snout length, body length, heart girth, pelvic width, tail length, height at withers, and number of normal teats. Tap “OK” to save the record or “CANCEL” to cancel editing.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## WEIGHT RECORDS



LAGIASBerkjala-2019F0001-2	
Body Weight at 45 days 25	Date Collected 2019-07-12
Body Weight at 60 days 86	Date Collected 2019-07-27
Body Weight at 90 days 59	Date Collected 2019-08-26
Body Weight at 150 days 86	Date Collected 2019-10-25
Body Weight at 180 days 26	Date Collected 2019-11-24


If you tap the “Weight Records” tab, the image above will be shown. These are the weights of the breeders and the corresponding date of weighing. This can be edited by tapping the  icon on the upper right corner.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## WEIGHT RECORDS

The screenshot shows the 'Edit Weight Records' dialog box in the Native Pig Breed Mobile Application. The dialog box is overlaid on a screen displaying weight records for a pig. The dialog box has a green header 'Edit Weight Records' and contains input fields for 'Weaning Weight, KG', 'Body Weight at 45 days', 'Body Weight at 60 days', 'Body Weight at 90 days', 'Body Weight at 150 days', and 'Body Weight at 180 days'. Each weight field is followed by a 'Date Collected' field. The background screen shows a list of weight records with 'No data available' for each entry. At the bottom of the screen is a numeric keypad.

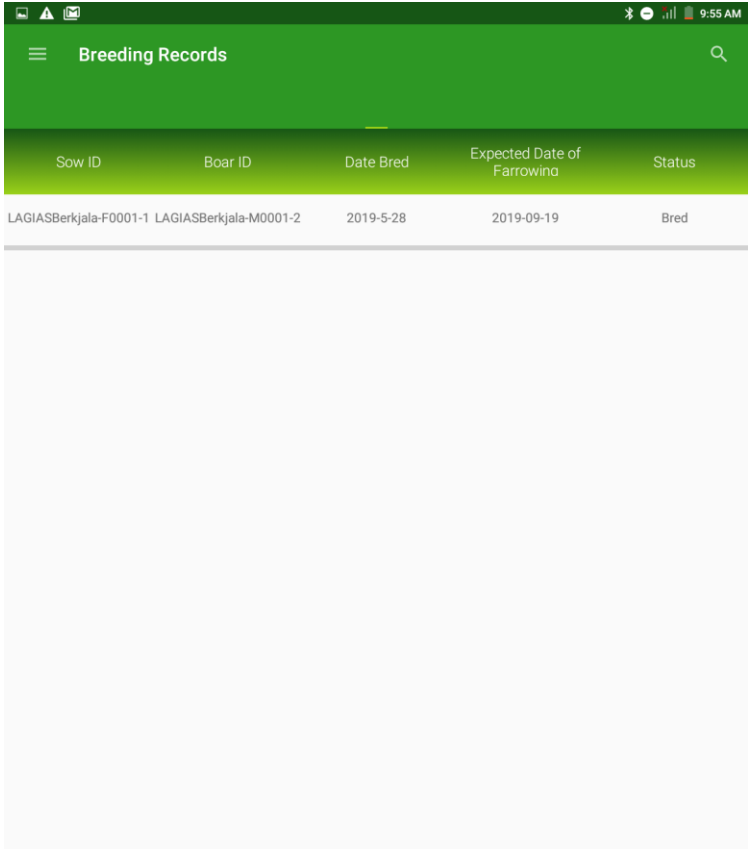
Weight Type	Weight (KG)	Date Collected
Weaning Weight, KG	0	
Body Weight at 45 days	0	
Body Weight at 60 days	0	
Body Weight at 90 days	0	
Body Weight at 150 days	0	
Body Weight at 180 days	0	

The window shown in the image above will appear upon clicking the  icon. The user can now edit the weights at 45, 60, 90, 150, and 180 days and the corresponding dates when the breeder was weighed. Tap “OK” to save the record or “CANCEL” to cancel editing.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## BREEDING RECORDS

Breeding Records page, shown on the right, is for keeping track of the farm's breeding records. It is important to know the date when the breeders were bred since it is required for this module. In this page, you can add and view breeding records. The Sow and Litter Record page is only accessible from this page. To add an entry, tap on the **+** icon located at the bottom right corner of the screen and a window like what is shown below will appear. Fill up the form and tap "ADD" to submit.



Breeding Record

Sow ID

LAGIASBerkjala-F0001-1

Boar ID

LAGIASBerkjala-M0001-2

Date Bred

2019-5-28

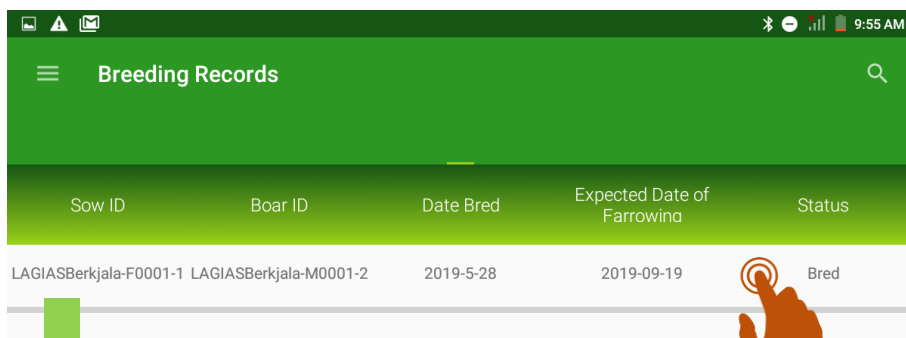
CANCEL

ADD



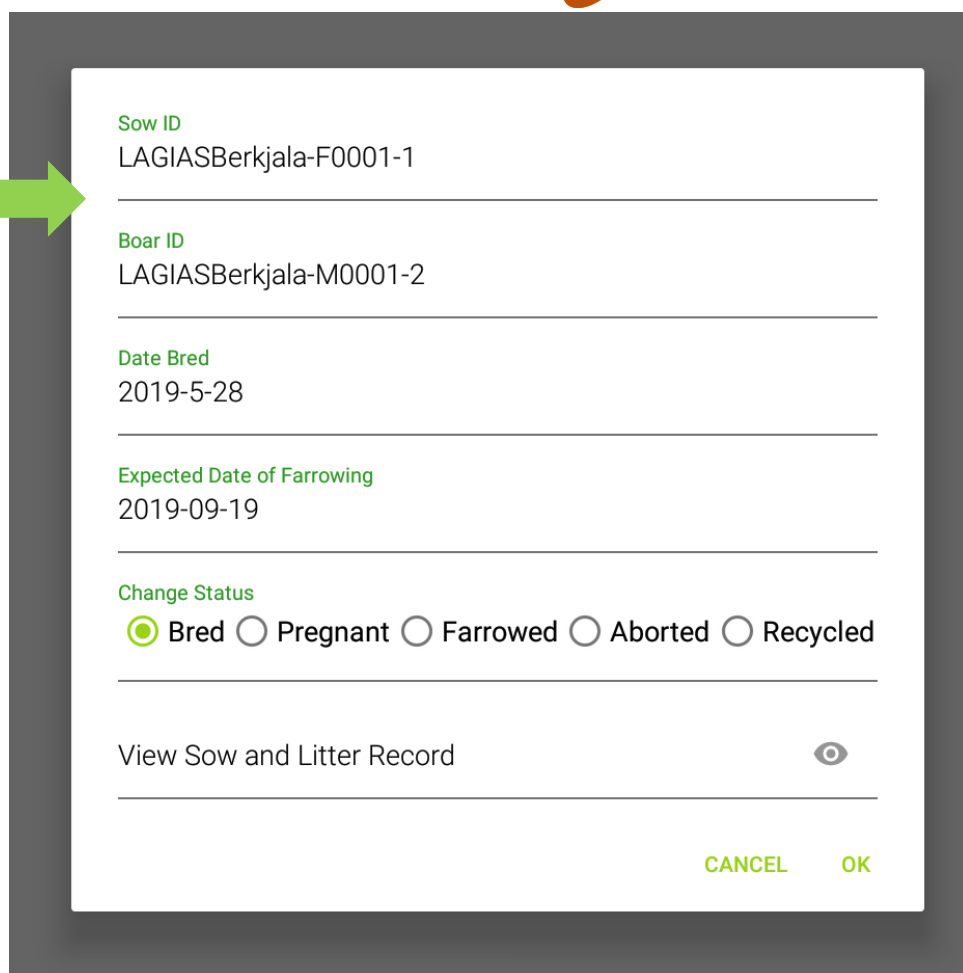
# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## BREEDING RECORDS



Sow ID	Boar ID	Date Bred	Expected Date of Farrowing	Status
LAGIASBerkjala-F0001-1	LAGIASBerkjala-M0001-2	2019-5-28	2019-09-19	Bred

To view and edit the details of the breeding record, tap the row of that record as shown in the figure on the left.




**Sow ID**  
LAGIASBerkjala-F0001-1

**Boar ID**  
LAGIASBerkjala-M0001-2


**Date Bred**  
2019-5-28

**Expected Date of Farrowing**  
2019-09-19

**Change Status**  
☒ Bred ☐ Pregnant ☐ Farrowed ☐ Aborted ☐ Recycled

**View Sow and Litter Record** 

CANCEL OK

Upon tapping the row, a window, like what is shown above, will appear. Here, the status can be changed. The default status upon adding a new breeding record is “Bred”. Other statuses are “Pregnant”, “Farrowed”, “Aborted”, and “Recycled”. As stated before, Sow and Litter Record is only accessible from the Breeding Records page and it is accessible in the said window. Just tap the  icon to view the Sow and Litter Record page.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## SOW AND LITTER RECORD


10:22 AM

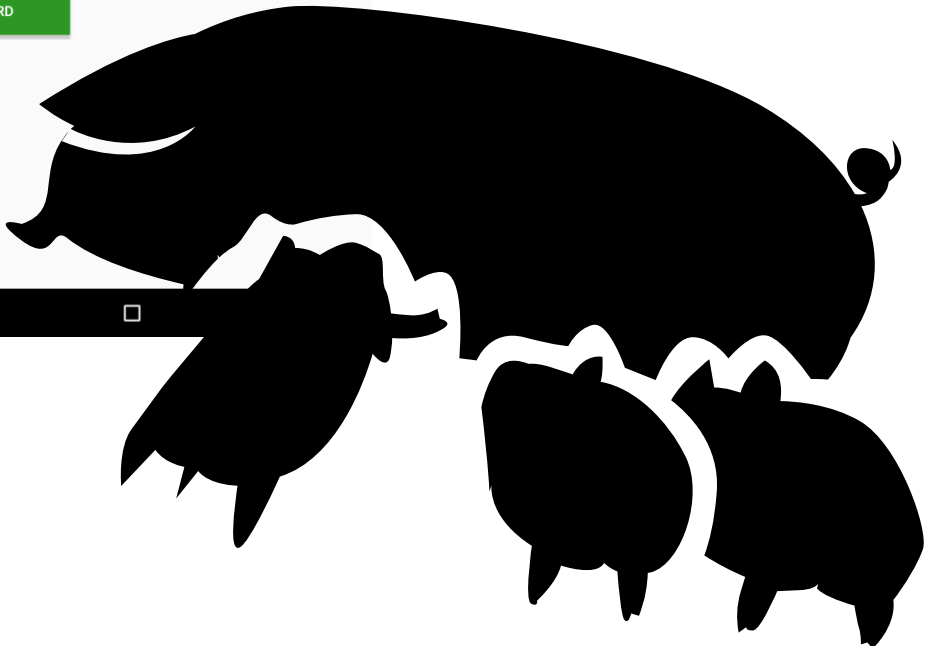
SOW LITTER RECORD

OFFSPRING RECORD

<div>Sow Used</div> <div>LAGIASBerkjala-F0001-1</div>	<div>Boar Used</div> <div>LAGIASBerkjala-M0001-2</div>
<div>Date Bred</div> <div>2019-5-28</div>	<div>Gestation Period</div> <div>114 days</div>
<div>Date Farrowed</div> <div>2019-09-19</div>	<div>Lactation Period</div> <div>No data available</div>
<div>Date Weaned</div> <div>No data available</div>	<div>Parity</div> <div>No data available</div>
<div>Total Littersize Born</div> <div>No data available</div>	<div>Total Littersize Born Alive</div> <div>No data available</div>
<div>Number of Males</div> <div>No data available</div>	<div>Number of Females</div> <div>No data available</div>
<div>Sex Ratio (M:F)</div> <div>No data available</div>	<div>Average Birth Weight</div> <div>No data available</div>
<div>Number Weaned</div> <div>No data available</div>	<div>Average Weaning Weight</div> <div>No data available</div>
<div>Number Stillborn</div> <div>No data available</div>	<div>Number Mummified</div> <div>No data available</div>
<div>Abnormalities</div> <div>No data available</div>	

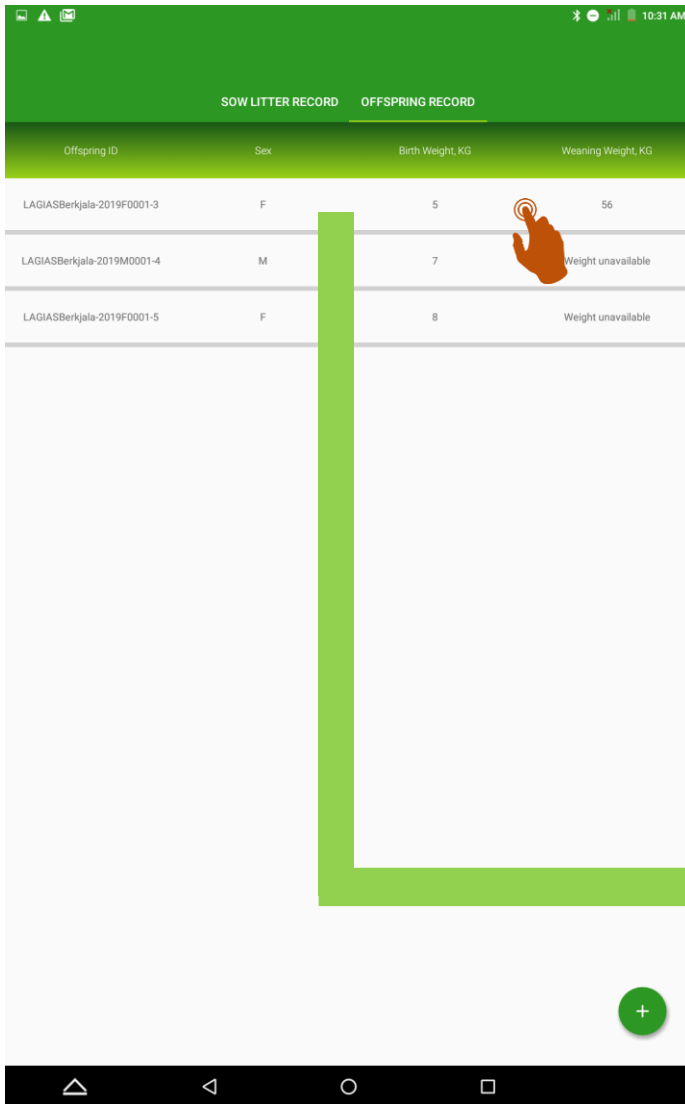
EDIT RECORD

Upon tapping the  icon, the user will be redirected in this page, the Sow and Litter Record. This is divided into two (2) sections: Sow Litter Record and Offspring Record. Most of the information in the “Sow Litter Record” section are generated by the application. Only Date Farrowed, Date Weaned, Number Stillborn, Number Mummified, and Abnormalities are the fields which are manually filled by the user. To edit the record, just tap the “Edit Record” button.



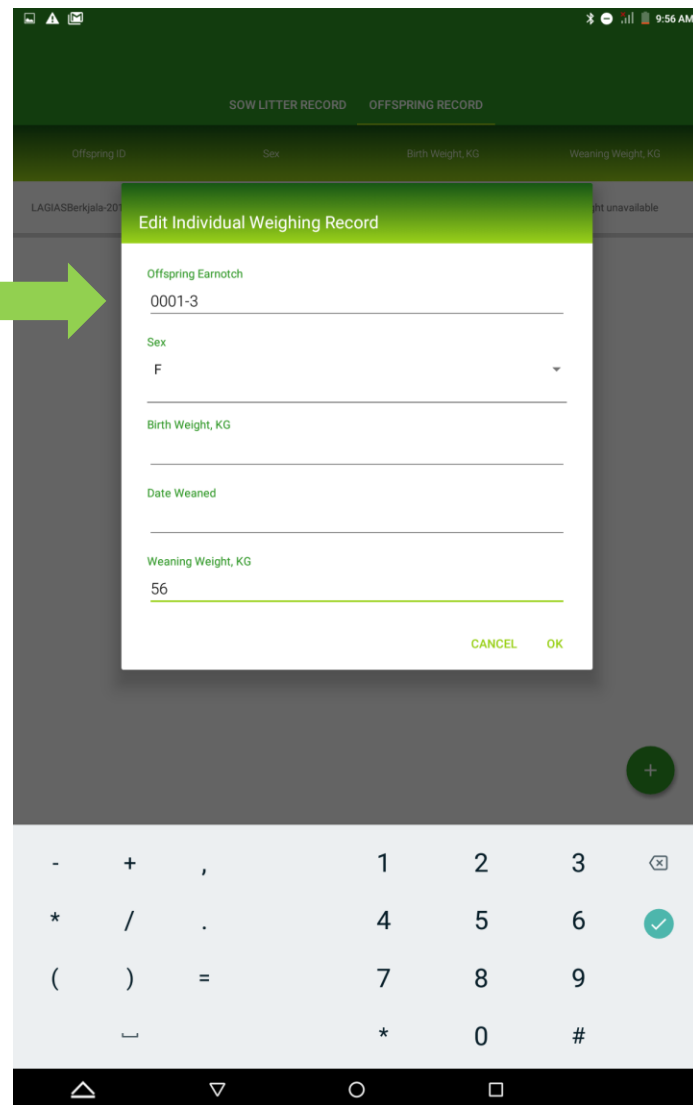
# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## SOW AND LITTER RECORD



Offspring ID	Sex	Birth Weight, KG	Weaning Weight, KG
LAGIASBerkjala-2019F0001-3	F	5	56
LAGIASBerkjala-2019M0001-4	M	7	Weight unavailable
LAGIASBerkjala-2019F0001-5	F	8	Weight unavailable

On the left is the “Offspring Record” section of the Sow and Litter Record module. All the offspring are listed here as well as their information. To edit the records of a specific offspring, just tap its row and a window, as shown in the image below, will appear.



Edit Individual Weighing Record

Offspring Earnotch  
0001-3

Sex  
F

Birth Weight, KG

Date Weaned

Weaning Weight, KG  
56

CANCEL OK

On the right, the user can edit the earnotch, sex, and the birth weight of the selected offspring. This is also where the weaning record of the offspring can be added. Tap “OK” to submit the record and “CANCEL” to close the window.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## SOW AND LITTER RECORD

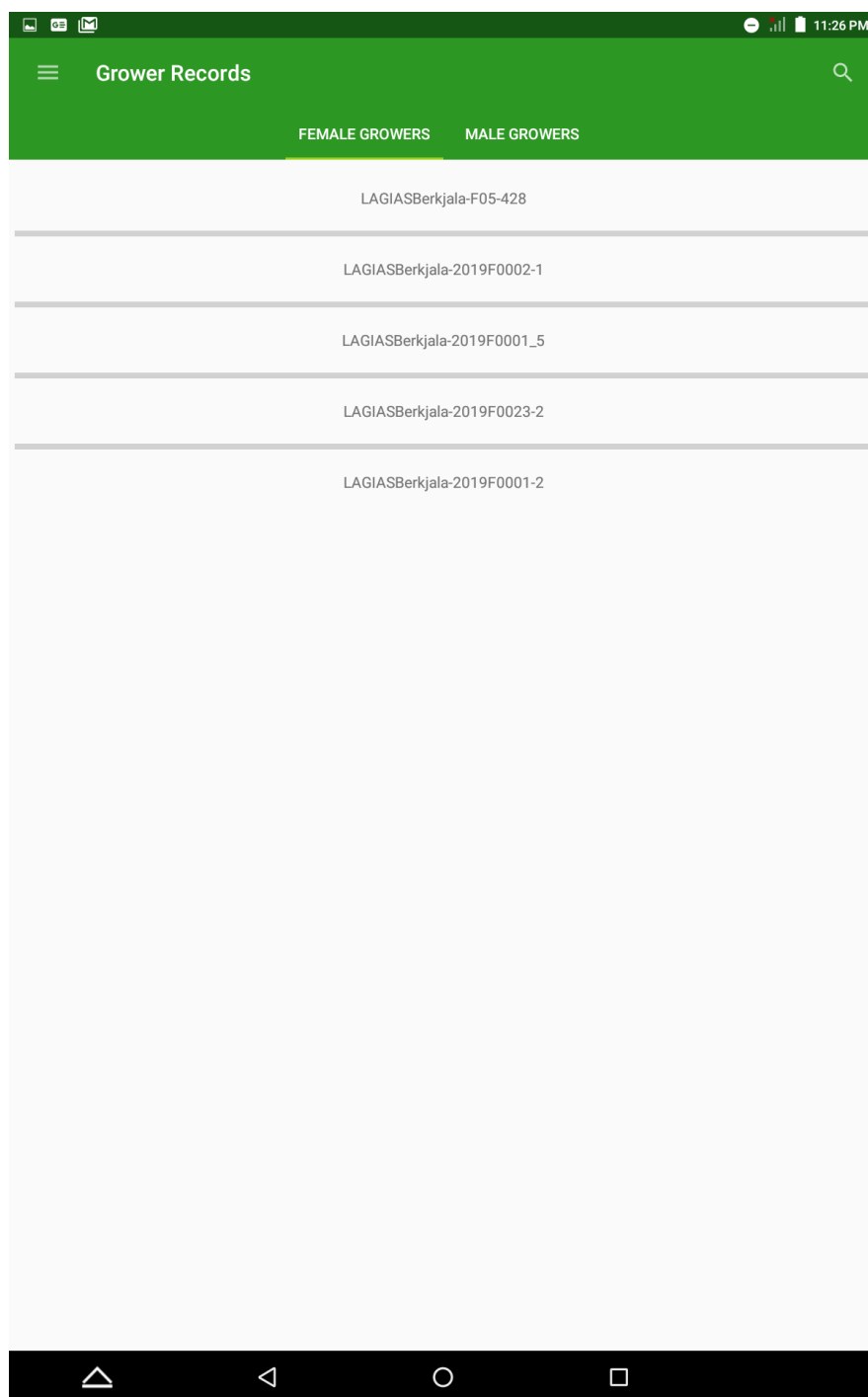
The screenshot shows the 'Individual Weighing' dialog box. It has a green header with the title 'Individual Weighing'. Below the header, there are three input fields: 'Offspring Earnotch' with the value '1-3', 'Sex' with a dropdown menu showing 'F', and 'Birth Weight, KG' with the value '5'. At the bottom right of the dialog box are two buttons: 'CANCEL' and 'OK'. The background shows a table with columns 'Offspring ID', 'Sex', 'Birth Weight, KG', and 'Weaning Weight, KG'. The table has three rows of data. At the bottom of the screen, there are two buttons: 'Group Weighing' and 'Individual Weighing', both with a pencil icon. A keyboard is visible at the bottom of the screen.


The screenshot shows the 'Group Weighing' dialog box. It has a green header with the title 'Group Weighing'. Below the header, there are three input fields: 'Birthday' with the value '2019-6-19', 'Litter-size Born Alive' with the value '2', and 'Litter Birth Weight, KG' with the value '6'. At the bottom right of the dialog box are two buttons: 'CANCEL' and 'OK'. The background shows a table with columns 'Offspring ID', 'Sex', 'Birth Weight, KG', and 'Weaning Weight, KG'. The table has three rows of data. At the bottom of the screen, there are two buttons: 'Group Weighing' and 'Individual Weighing', both with a pencil icon. A keyboard is visible at the bottom of the screen.

Upon tapping the **+** icon on the bottom right corner of the screen, two more buttons will appear, "Individual Weighing" and "Group Weighing". The image on the left shows the window when "Individual Weighing" was tapped. While the image on the right shows the window when "Group Weighing" was tapped. For Individual Weighing, the user will be asked to input the offspring earnotch, sex, and birth weight. While for Group Weighing, the date farrowed, litter-size born alive, and litter birth weight are asked. Then,  $b$  piglets (where  $b$  = litter-size born alive) will be added into the list with earnotch "TEMP $n$ ", where  $n$  ranges from 1 to  $b$ . These offspring's registration ID should be edited when they already have their own identification (earnotch or ear tag) so that they can be added to Grower Records. Editing records and adding weaning records are same whether it was individual or group weighing.

# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

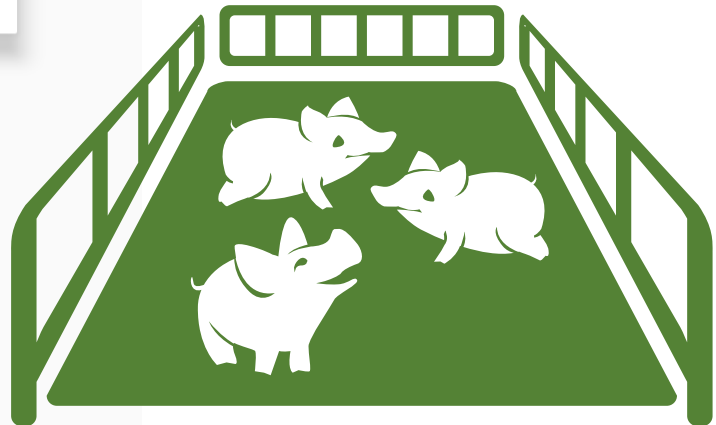
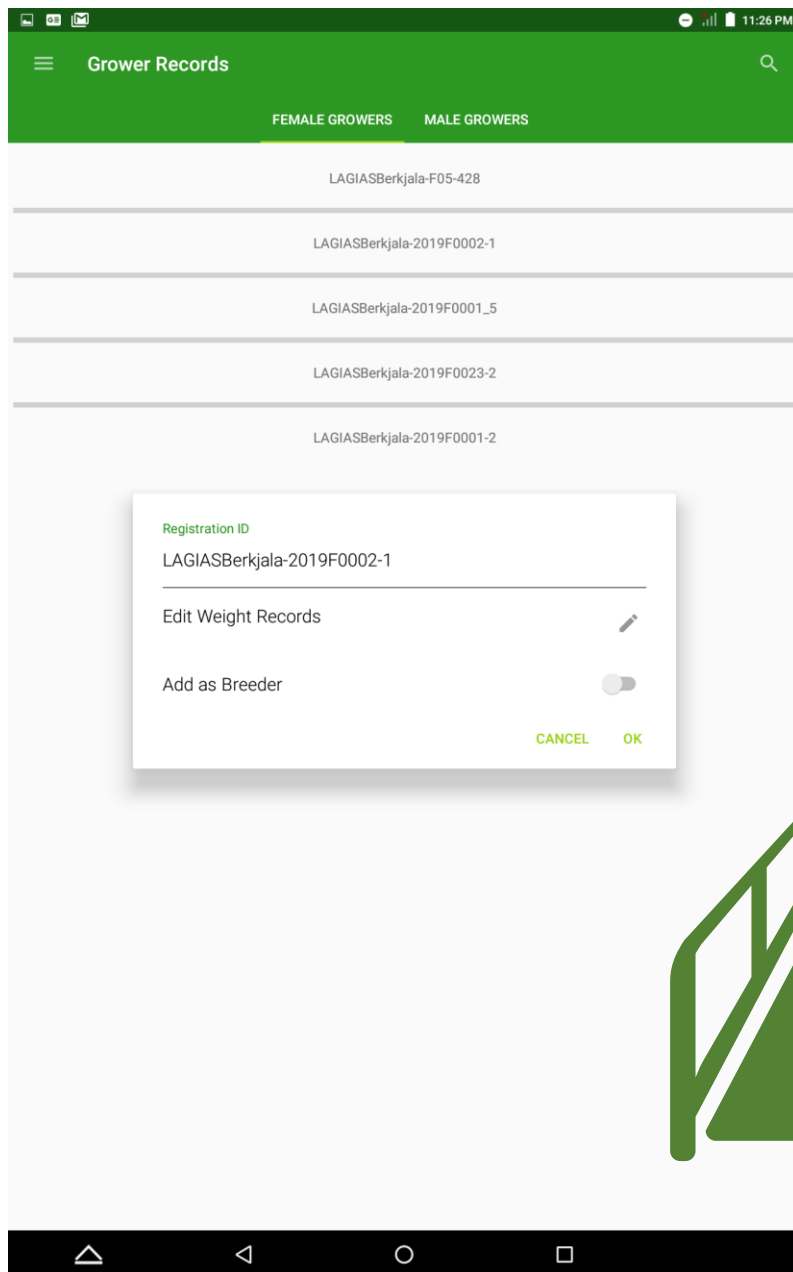
## GROWER RECORDS



Here in the Grower Records page, all active pigs except breeders are listed and separated by sex. The individual records of growers can be viewed by tapping its corresponding row. This page also has a  icon to open the search bar with functions like the search bar in Breeder Records.

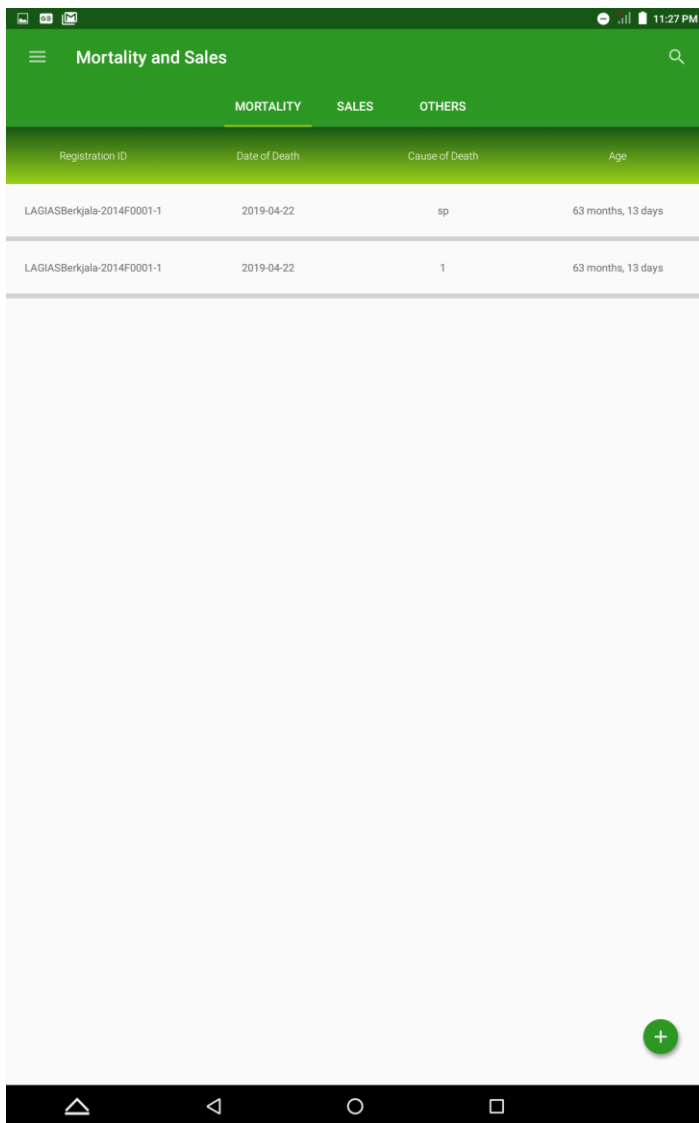
# NATIVE PIG BREED MOBILE APPLICATION USER GUIDE

## GROWER RECORDS



Upon tapping on the corresponding row of the selected grower, a window, as shown in the image above, will appear. It shows the link to where its Weight Records can be edited. The procedure in adding or editing Weight Records is also the same for the Weight Records in the Breeder Records page. There is also a switch opposite to the “Add as Breeder” label to add the grower as breeder. Toggling that switch, another window will appear to alert the user that the grower will be added as breeder. Click “OK” to confirm and “CANCEL” to close the window.

## MORTALITY, SALES, AND OTHERS

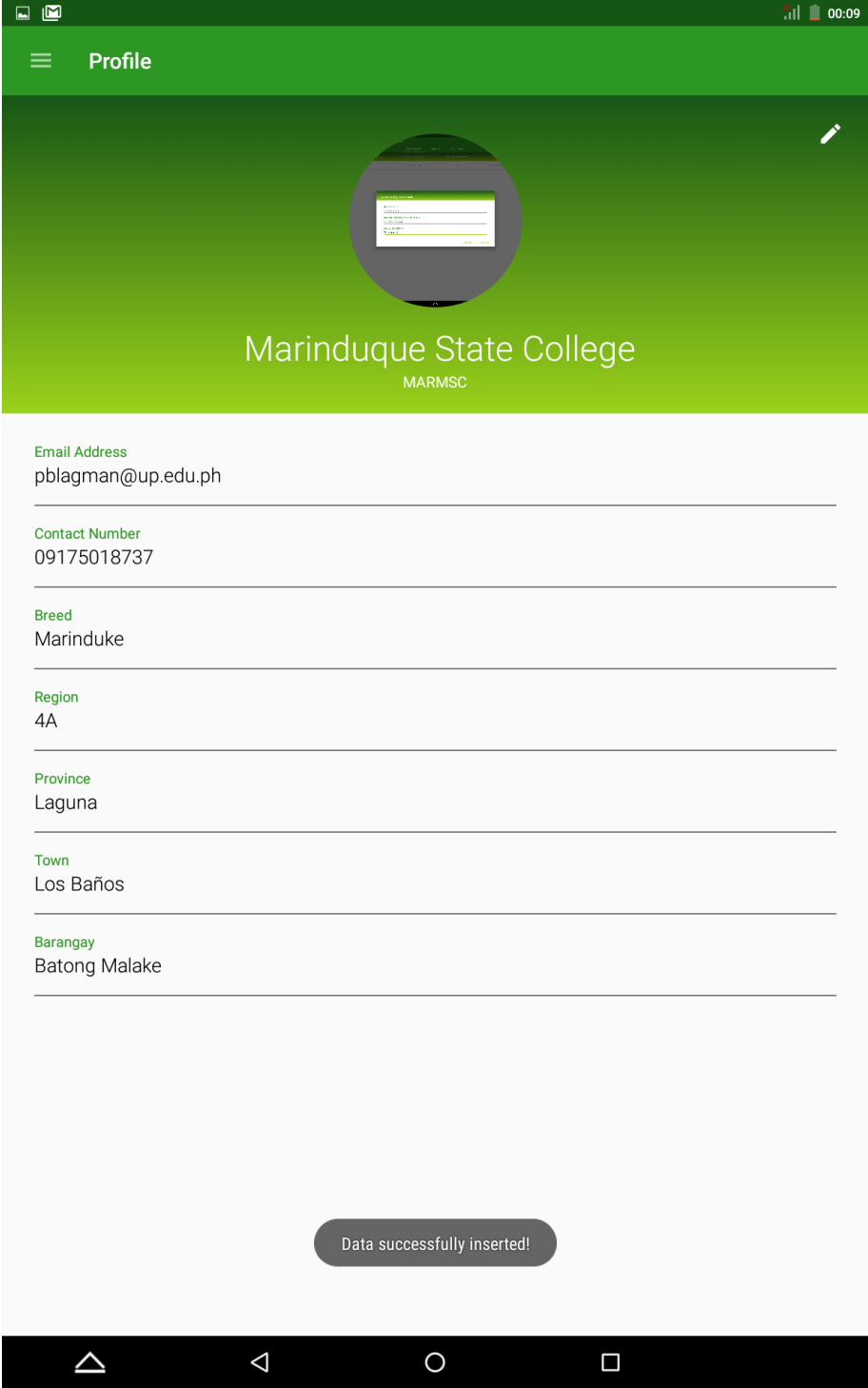



Registration ID	Date of Death	Cause of Death	Age
LAGIASBerkjala-2014F0001-1	2019-04-22	sp	63 months, 13 days
LAGIASBerkjala-2014F0001-1	2019-04-22	1	63 months, 13 days

To add Mortality record, tap on the “Mortality” tab and tap on the **+** icon located on the lower right corner of the screen. The only required field is the “Select a Pig” field. The date and cause of death are optional fields. Leaving the date field blank tells the system that the day the user entered the data is the same day the pig died, while for the cause of death, if left blank, it means that the cause was not specified. After adding the information, the Mortality record looks like the image on the left. The age is automatically computed based on the date died and date of birth. When no date of birth is found, age unavailable will be written instead.

To add Sales record, tap on the “Sales” tab and tap on the **+** icon located on the lower right corner of the screen. The only required field is the “Select a Pig” field. The date sold, weight sold, and price are optional fields. Leaving the date field blank tells the system that the day the user entered the data is the same day the pig was sold, while for the weight sold and price, if left blank, it means that the both of them were not specified. To add Others record, tap on the “Others” tab and tap on the **+** icon located on the lower right corner of the screen. The only required field is the “Select a Pig” field. The date and reason removed are optional fields. Leaving the date field blank tells the system that the day the user entered the data is the same day the pig was removed from the herd, while for the reason, if left blank, the reason will automatically be “Donated”.

## FARM PROFILE



In this page, the user can customize his/her profile. He/she can add his/her phone number, the farm location's region, town, and barangay. The profile picture can also be changed. All these information can be edited by tapping the  icon on the upper right corner of the page.





# REMEMBER

It is best to record everyday.  
Accurate reports are made if  
data are recorded everyday.

# PARTNER INSTITUTIONS



BUREAU OF ANIMAL INDUSTRY – NATIONAL SWINE  
AND POULTRY RESEARCH AND DEVELOPMENT  
CENTER, TIAONG, QUEZON

BENGUET STATE UNIVERSITY, LA TRINIDAD,  
BENGUET



EASTERN SAMAR STATE UNIVERSITY, BORONGAN  
CITY, EASTERN SAMAR

ISABELA STATE UNIVERSITY, ECHAGUE, ISABELA



KALINGA STATE UNIVERSITY, BULANAO, TABUK  
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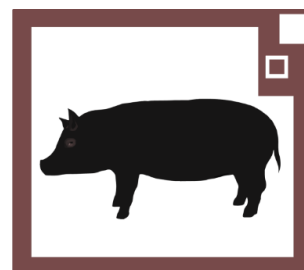
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Laubrey Marie U. Ual

**User Guide**

**Native Pig Breed Mobile Application**

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**ISO 9001:2015**