



# **USER GUIDE FOR FEED FORMULATION APPLICATION**

**A comprehensive user manual for Feed Formulation App  
Addis Ababa, ETHIOPIA  
Version 1.0  
26/12/2023**

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## 1 Legend

Name	Abbreviation	Unit	Description
Dry matter	DM	%	The dry matter or dry weight is a measure of the mass of a completely dried substance. <sup>a</sup>
Metabolizable Energy	ME	kcal/kg	
Crude protein	CP	%	
Lysine	Lys	%	
Meth. +cystine	m+c	%	
Methionine	Met	%	
Ether extract	EE	%	
Crude fiber	CF	%	
Calcium	Ca	%	
Phosphorus	P	%	

## 2 Glossary

Ration

Formulation

Formula

Grid Formulation

Ingredients

Ingredient Group

Ingredient Composition

Nutrient Group

Nutrients

Requirements

Requirement Composition

Requirement Boundaries (Min & Max)

### 3 Introduction

This guide outlines the TPGS websites' capabilities and walks you through how you can use the application.

Access the webiste using either the below url or QR code.

#### To Access The App



Scan the QR Code or go to: <https://tpgs.ilri.org/>



## 4 Ingredient

### 4.1 View Ingredient List

1. Inorder to access list of ingredient click on "Ingredients" menu from the sidebar.

Name	Dry Matter (%)	Price (kg)	Ingredient Group	Create at	Actions
Water Spinach Cambodia	10	0.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Maize Cambodia	89	0.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Blood meal Cambodia	92	0.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Cassava leaves Cambodia	14	0.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Rice broken Vietnam	88	90.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Soybean meal Cambodia	89	120.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Wheat bran Vietnam	89	300.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Wheat bran Cambodia	89	22.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Concentrate feed Cambodia	88	250.000		Dec 6 2023	[Edit] [Delete] [Duplicate]
Rice bran Vietnam	89	200.750		Dec 6 2023	[Edit] [Delete] [Duplicate]

Figure 1: Ingredients List

1. Filter the list of ingredients by using the "SEARCH" card.

### 4.2 Create new Nutrient

1. To create new ingredient click on "Create" from Ingredients page 20
1. Input the necessary information about the ingredient and click on "CREATE" button
1. After the ingredient is created, a "COMPOSITION" will appear at the top.
1. Set ingredient's composition by clicking "Add New" and choosing the type of nutrient.

The screenshot displays the ILRI Water Spinach Cambodia - Edit page. The sidebar menu on the left includes sections for Dashboard, Users, Farms, Units, Production Purpose, Feed Formulation, and Breeding. The main content area shows the 'Water Spinach Cambodia - Edit' page with tabs for DETAIL and COMPOSITION. The Ingredient Detail form contains the following fields:

Ingredient Detail	
Name	Code
Water Spinach Cambodia	Code
Ingredient Group	Unit Price (kg)
	0.000 kg
Dry Matter (%)	Description
10 %	Description

At the bottom of the form are buttons for UPDATE and CANCEL. On the right side, there is a 'Histories' section with a VIEW button, and an 'Archive' section with an ARCHIVE button. Below the Archive section is a 'Delete' section with a DELETE button.

Figure 2: Create new Nutrient

1. To set value to nutrient double click on value column to corresponding row, the value will be automatically saved once you are done editing.



## 5 Sign Up

1. Access the website refer to [5](#). If you already have an account login by following [section 6](#).
2. Enter the required information (Full name, Email address & message), Click "Submit" and wait for email response.

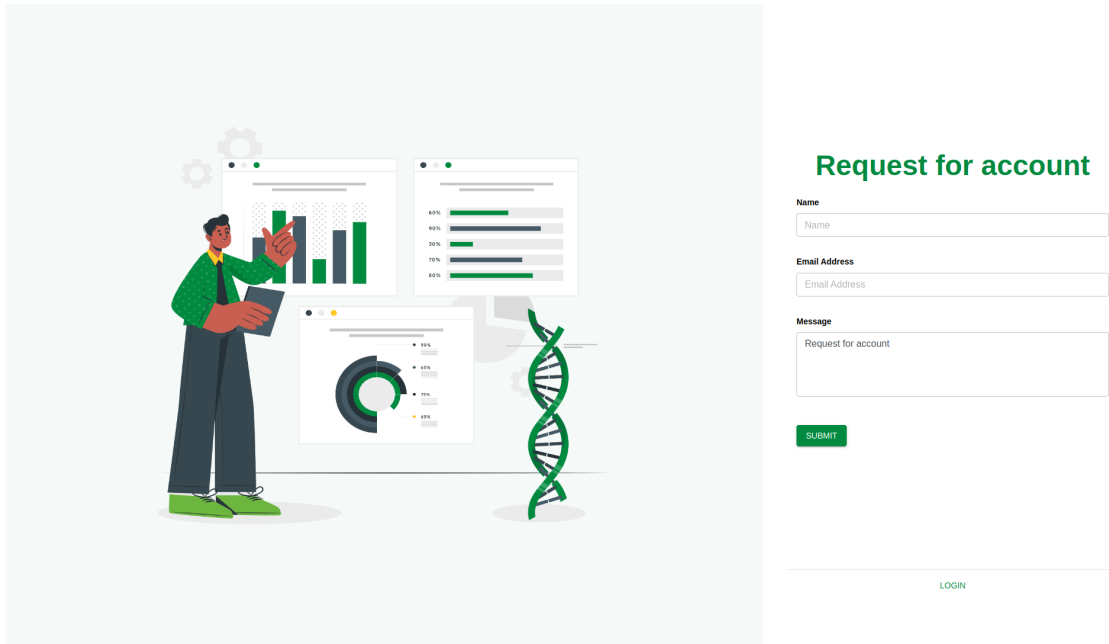


Figure 3: Sign up page

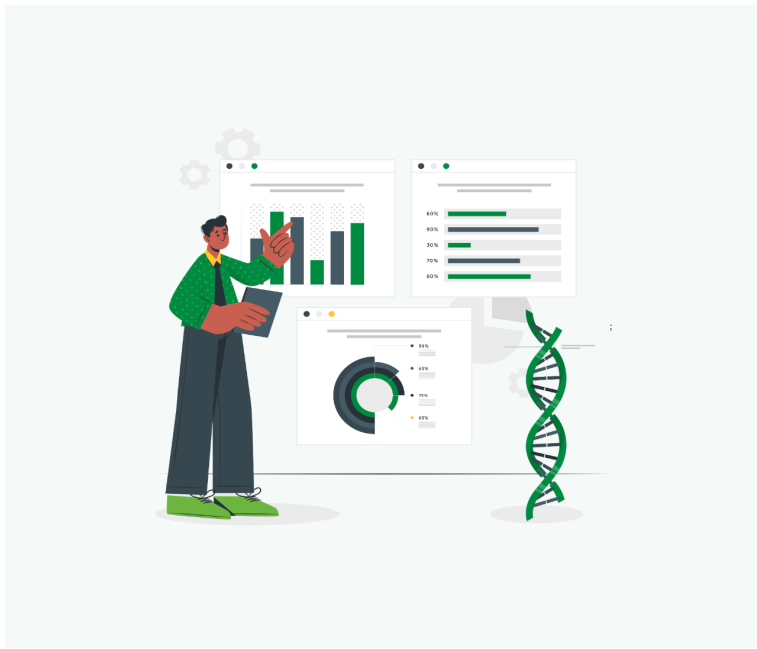
3. Go to your email inbox to create new account.




### Haven't received invitation email?

You will only receive an invitation email address, if the request is approved by admins. For further detail contact support [support address 6](#)

Click "Join" and you will be redirected to account creation page. Enter the required fields and click "**CREATE NEW ACCOUNT**".



**ILRI**   
CGIAR

Join via invitation

**Email \***

**Full name \***

**Password \***

**Confirm Password \***

**Country**

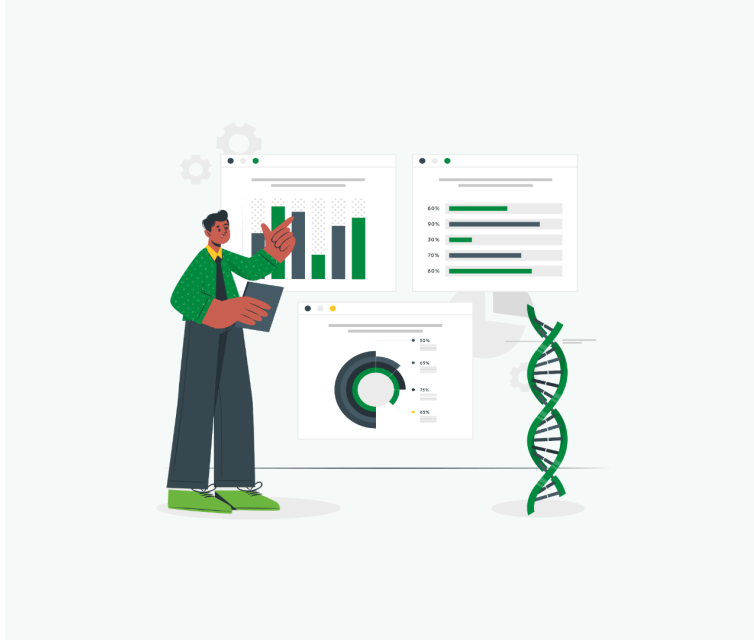
**Company**


[CREATE NEW ACCOUNT](#)

[LOGIN](#)

Figure 4: Verify Invitation Page

## 6 Login



**ILRI**  CGIAR

Login in to your account

**Email Address**

**Password**

[Forgot Password?](#)

**SIGN IN**

[SIGN UP](#)

Figure 5: Login Page

## 7 Forgot Password

There are two ways you can reset your password, you can use "Group"

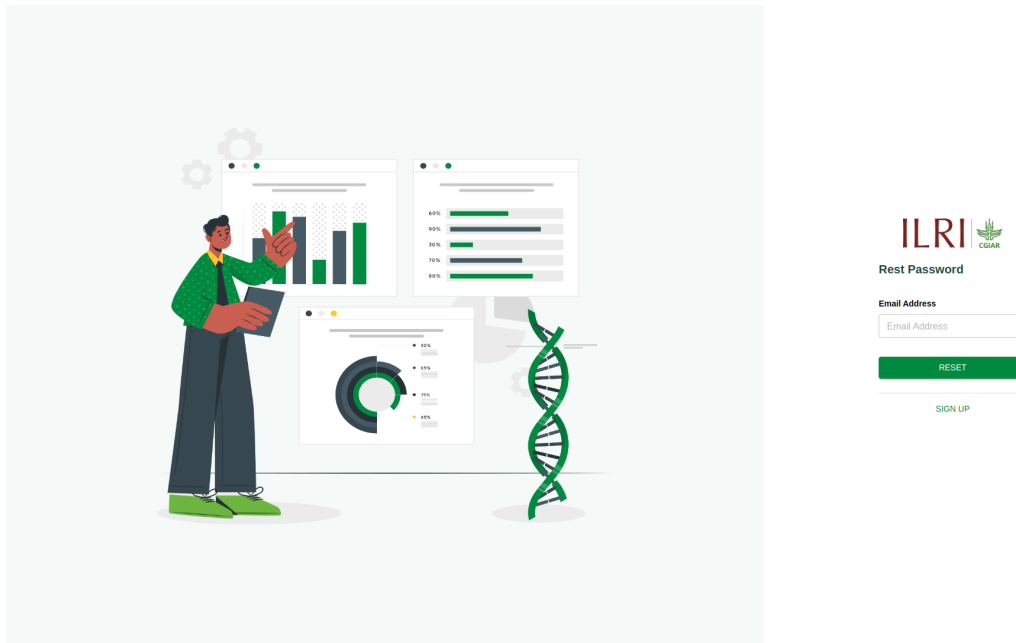


Figure 6: Forgot Password Page

### 7.1 Reset password before logged in

SS

(1)

### 7.2 Reset password after logged in

## 8 First View

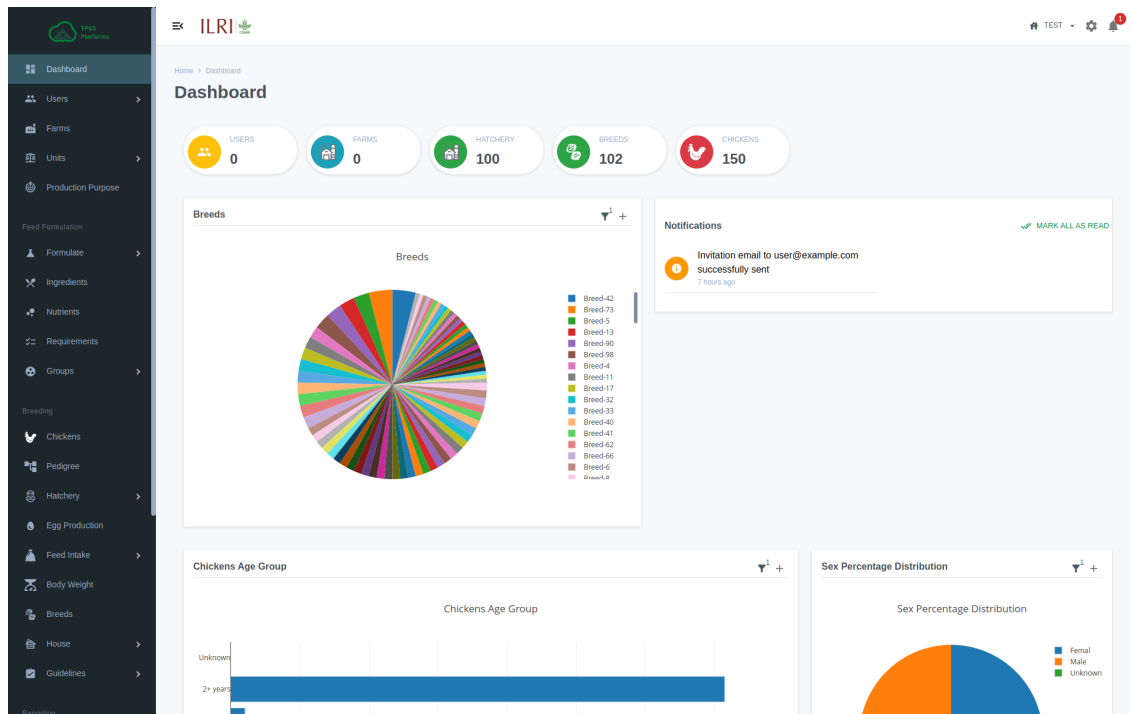


Figure 7: Dashboard Page

## 9 Manage Farm

Switch farm either by going to [Farms](#) menu or by click on top right farm menu.

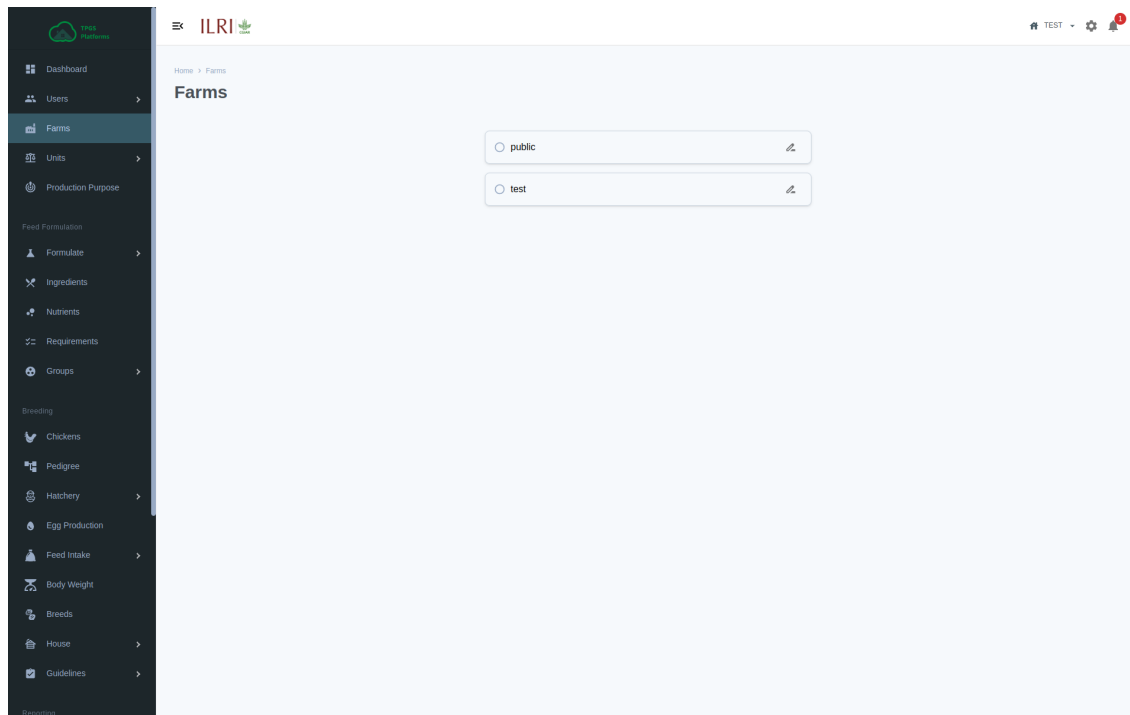


Figure 8: Switch Farm

## 10 How to formulate a ration

### 10.1 View Nutrient List

1. On left sidebar menu click **Formulate** then select **New Formula** menu, then you will be redirect to Ration Formulation page.

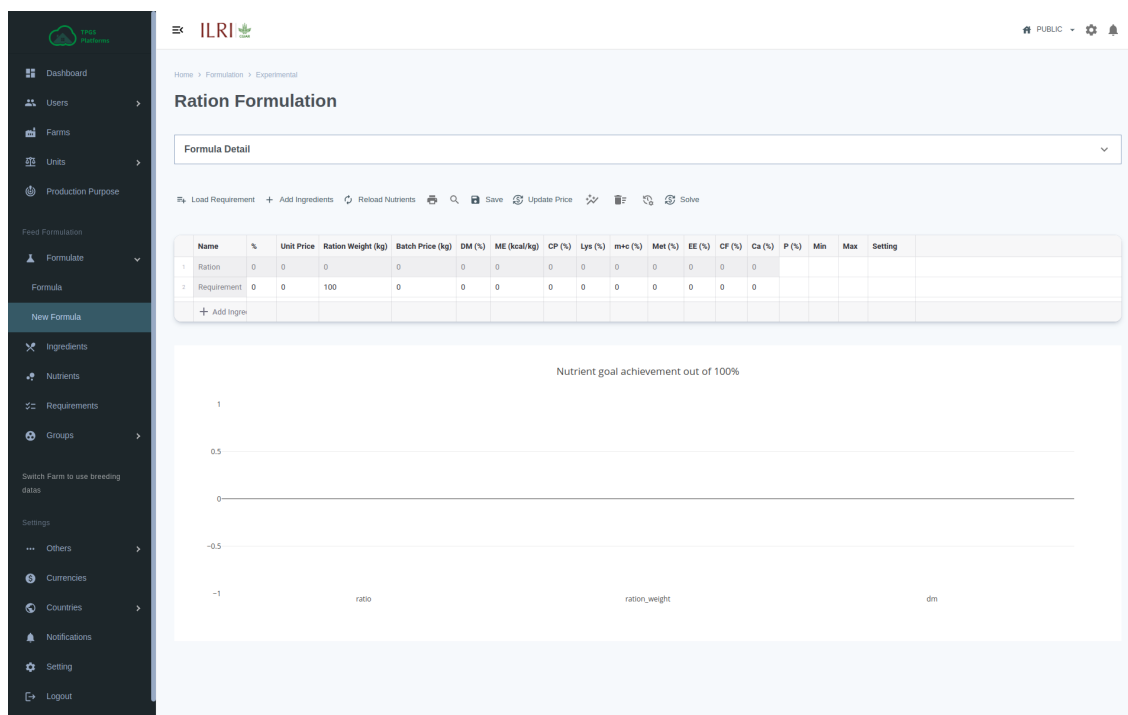


Figure 9: Ration Formulation page

1. Select the type of ration you want to prepare by clicking on **Load Requirement**
1. Click **Add Ingredients** to include the required ingredients.
1. If the ingredient you want to include in you ration is not available Refere to [4.2](#)
1. Formulate your ration ingredient type - % per 100 kg, price (current price)
1. Print or save (to keep it as an archive)

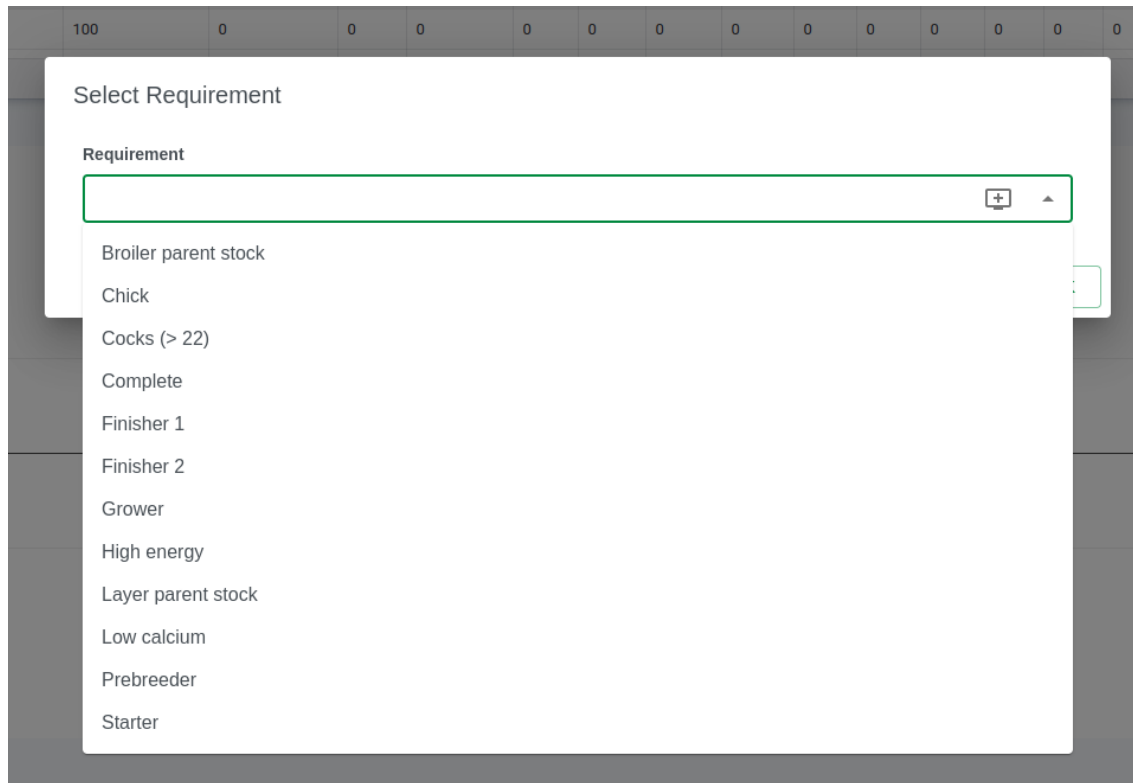


Figure 10: Load Requirement

1. To update the ingredients with the current price click “Update price”  
Remark: If you want to do further analysis on formulated ration click the graph icon



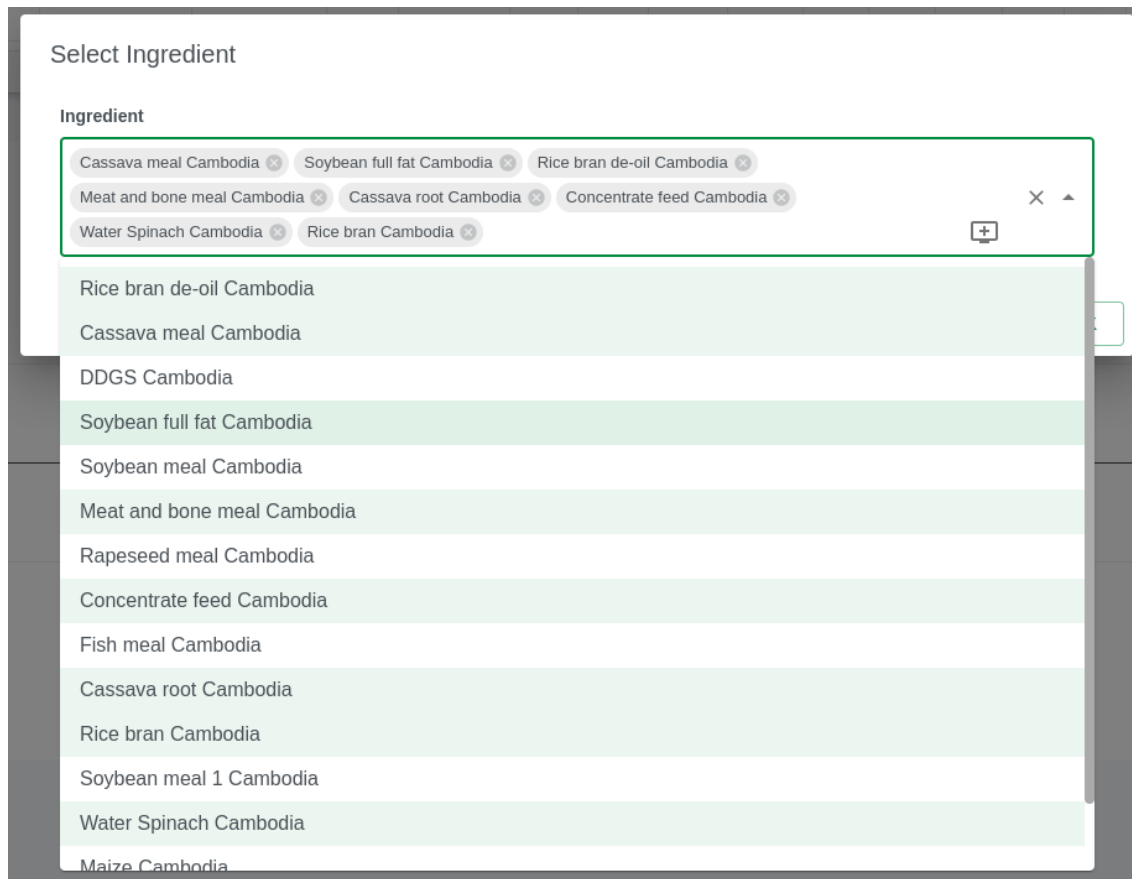


Figure 11: Select multiple ingredients

# 11 Unit

## 11.1 View Unit List

1. Click on "Unit"

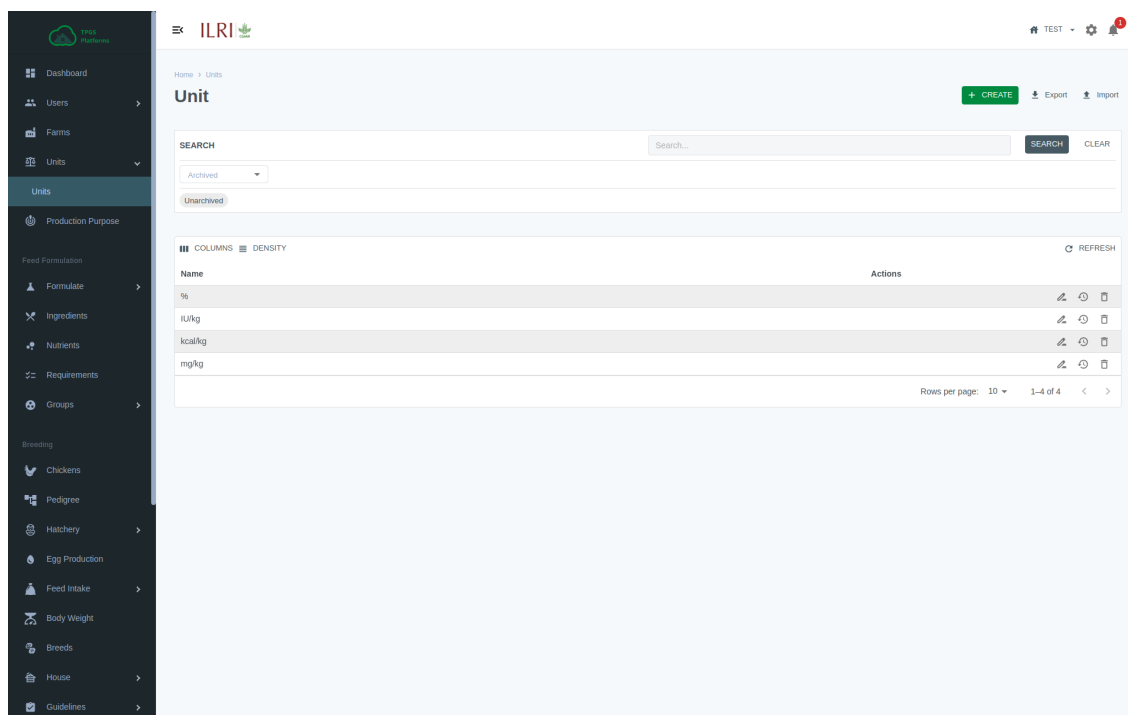


Figure 12: Unit List

## 11.2 Archive Records

1. On filter section filter the records by archive.

## 11.3 Create new Unit

1. To create new unit click on "Create" Refer [Figure 12](#) And click "CREATE", you will be redirect to [Section 11.1](#)

## 11.4 Edit Unit

1. Go to the Unit [Refer to Section 11.1](#), then click on Pencil icon and it will redirect to the [Figure 15](#).

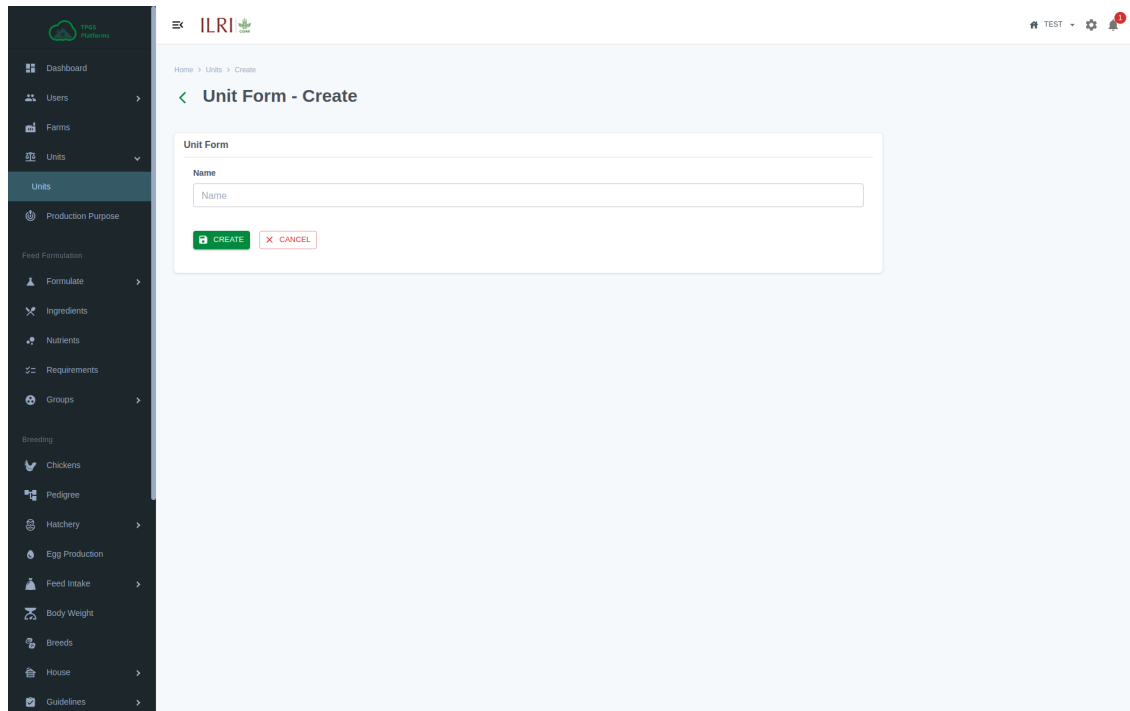



Figure 13: Create new Nutrient Group

## 11.5 Delete Unit

1. Go to the edit Unit [Refer to Section 11.4](#).
1. To archive the record click on **"Archive"**. If you want to bring back the record/unarchive follow the step under [Section 11.2](#), and click on **"UnArchive"**
1. To permanently delete the record click on **"Delete"**.



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Hatchery

Egg Production

Feed Intake

Body Weight

Breeds

House

Guidelines

Home > Units > 5 > Edit

< kcal/kg - Edit

Unit Form

Name

kcal/kg

UPDATE

CANCEL

Date Created

Dec 6 2023

Created by

unknown

Last updated

Dec 6 2023

Last Updated by

Admin

Histories

1 Changes

Histories

Active changes made.

VIEW

Archive

Change the visibility of the record.

ARCHIVE


Delete

Once you delete this record, there is no recovering it.

DELETE

Figure 14: Edit Unit

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Hatchery

Egg Production

Feed Intake

Body Weight

Breeds

House

Guidelines

Home > Units > 5 > Edit

< kcal/kg - Edit

Unit Form

Name

kcal/kg

UPDATE

CANCEL

Date Created

Dec 6 2023

Created by

unknown

Last updated

Dec 6 2023

Last Updated by

Admin

Histories

1 Changes

Histories

Active changes made.

VIEW

Archive

Change the visibility of the record.

ARCHIVE

Delete

Once you delete this record, there is no recovering it.

DELETE

Figure 15: Edit Unit

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## 12 Nutrient Groups

### 12.1 View Nutrient Group List

1. Expand "Group" menu and click on "Nutrient Group"

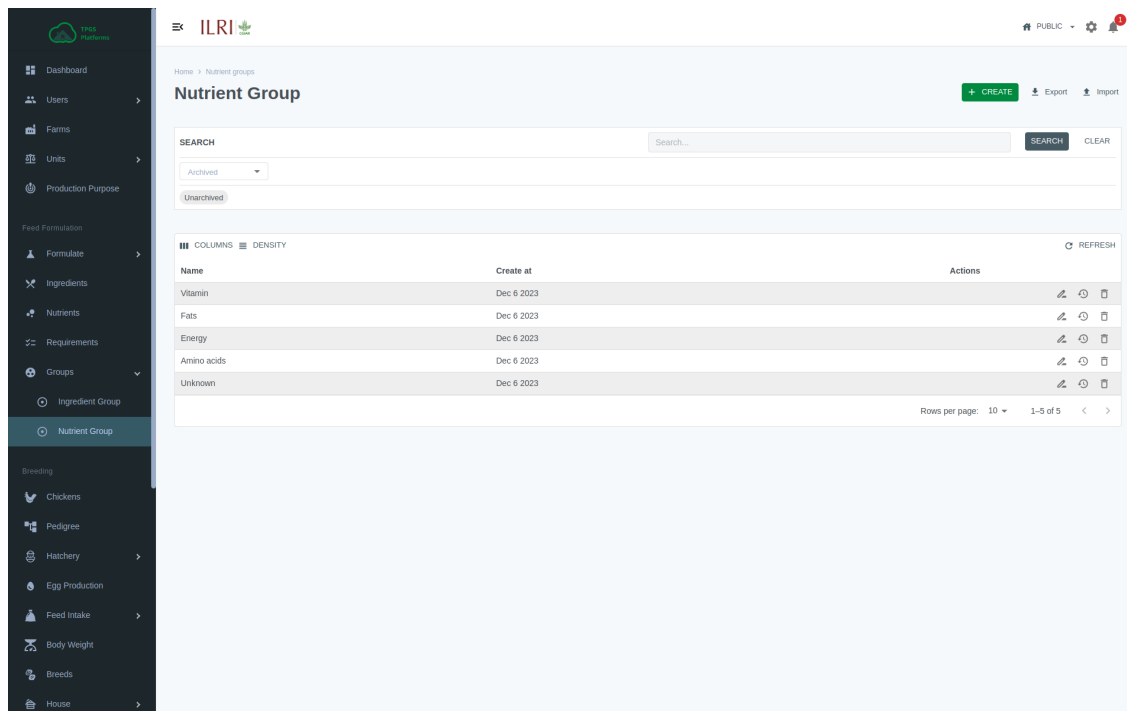


Figure 16: Nutrient Group List

### 12.2 Archive Records

1. On filter section filter the records by archive.

### 12.3 Create new Nutrient Group

1. To create new nutrient group click on "Create" Refer from nutrient list Figure 16 And click "CREATE", you will be redirect to Nutrient List section 12.1

### 12.4 Edit Nutrient Group

1. Go to the Nutrient Group Refer to Section 12.1, then click on Pencil icon and it will redirect to the Figure 19.

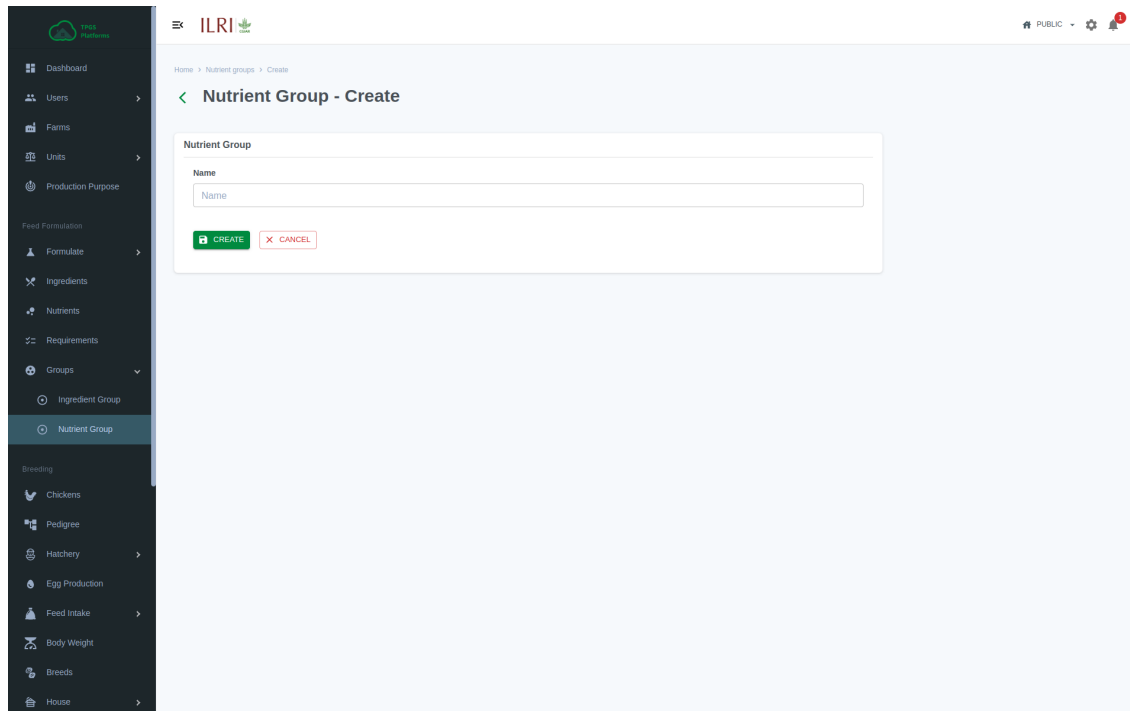


Figure 17: Create new Nutrient Group

## 12.5 Delete Nutrient Group

1. Go to the edit Nutrient Group [Refer to Section 12.4](#).
1. To archive the record click on "**Archive**". If you want to bring back the record/unarchive follow the step under [Section 12.2](#), and click on "**UnArchive**".
1. To permanently delete the record click on "**Delete**".

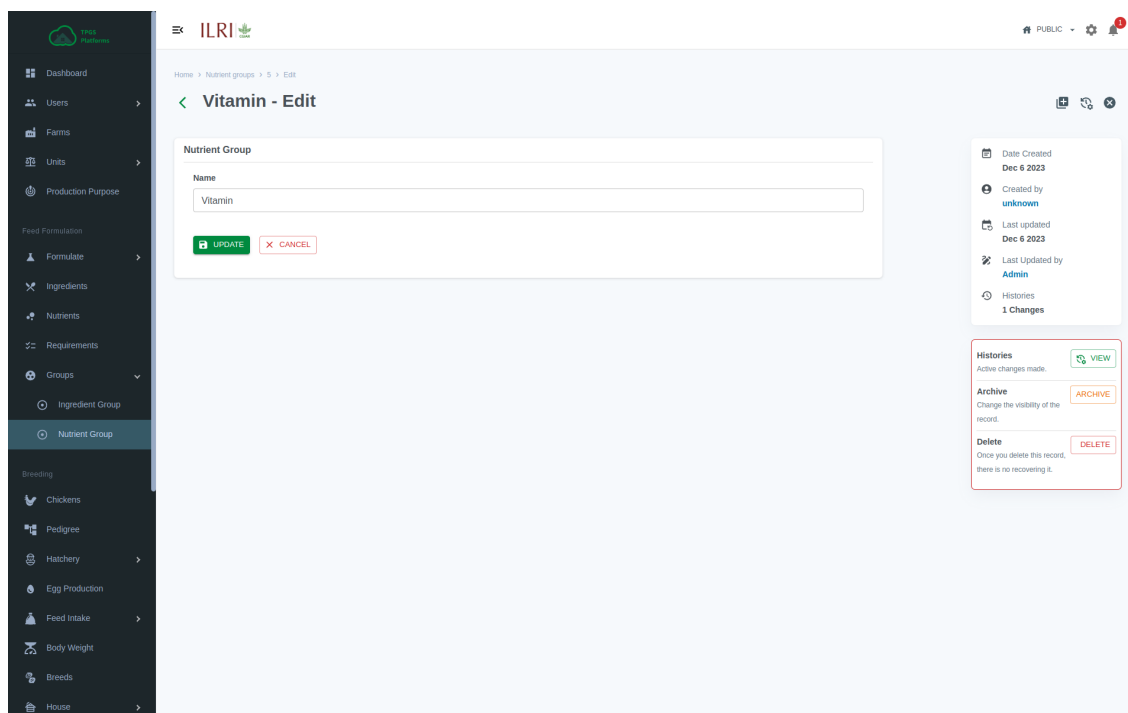


Figure 18: Edit Nutrient Group



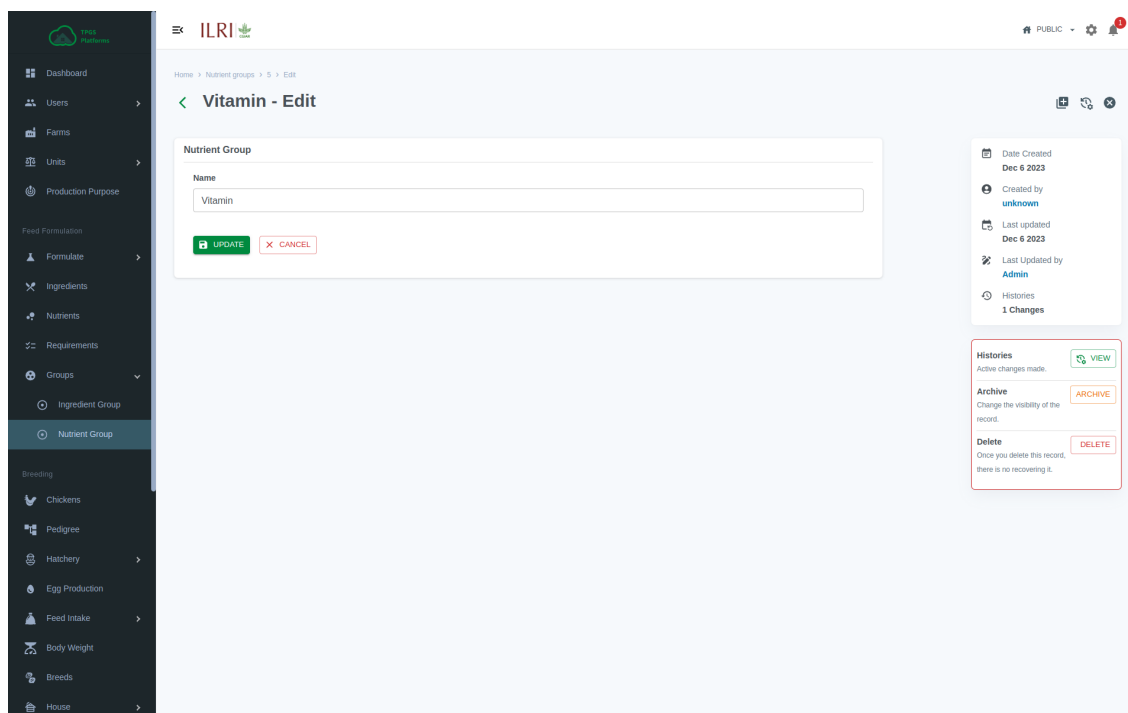
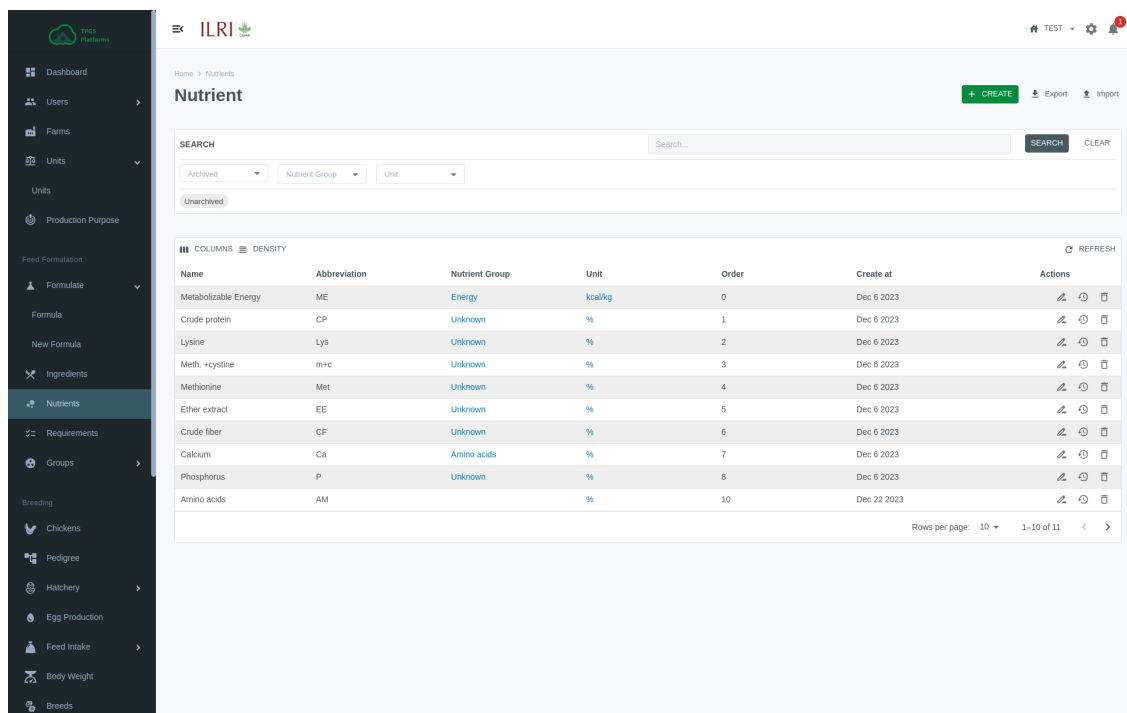


Figure 19: Edit Nutrient Group

## 13 Nutrient

### 13.1 View Nutrient List

1. Expand "Group" menu and click on "Nutrient "



Name	Abbreviation	Nutrient Group	Unit	Order	Create at	Actions
Metabolizable Energy	ME	Energy	kcal/kg	0	Dec 6 2023	
Crude protein	CP	Unknown	%	1	Dec 6 2023	
Lysine	Lys	Unknown	%	2	Dec 6 2023	
Meth. +cystine	MEC	Unknown	%	3	Dec 6 2023	
Methionine	Met	Unknown	%	4	Dec 6 2023	
Ether extract	EE	Unknown	%	5	Dec 6 2023	
Crude fiber	CF	Unknown	%	6	Dec 6 2023	
Calcium	Ca	Amino acids	%	7	Dec 6 2023	
Phosphorus	P	Unknown	%	8	Dec 6 2023	
Amino acids	AM		%	10	Dec 22 2023	

Figure 20: Nutrient List

### 13.2 Archive Records

1. On filter section filter the records by archive.

### 13.3 Create new Nutrient

1. To create new nutrient group click on "Create" Refer from nutrient list Figure 20 And click "CREATE", you will be redirect to Nutrient List section 13.1

### 13.4 Edit Nutrient

1. Go to the Nutrient Refer to Section 13.1, then click on Pencil icon and it will redirect to the Figure 23.

The screenshot shows the 'Nutrient Form - Create' interface. The sidebar on the left contains a list of navigation items. The main area has a breadcrumb trail 'Home > Nutrients > Create' and a title '< Nutrient Form - Create'. The form itself is titled 'Nutrient Form' and includes the following fields:


- Name:** A text input field with the placeholder 'Name'.
- Abbreviation:** A text input field with the placeholder 'Abbreviation'.
- Nutrient Group:** A dropdown menu with a plus icon and a downward arrow.
- Unit:** A dropdown menu with a plus icon and a downward arrow.
- Description:** A text input field with the placeholder 'Description'.
- Order:** A text input field with the placeholder 'Order'.

At the bottom of the form are two buttons: a green 'CREATE' button and a red 'CANCEL' button.

Figure 21: Create new Nutrient

## 13.5 Delete Nutrient

1. Go to the edit Nutrient [Refer to Section 13.4.](#)
1. To archive the record click on "Archive". If you want to bring back the record/unarchive follow the step under [Section 13.2](#), and click on "UnArchive"
1. To permanently delete the record click on "Delete".



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Hatchery

Egg Production

Feed Intake

Body Weight

Breeds

Home > Nutrients > 12 > Edit

ME (kcal/kg) - Edit

Name

Metabolizable Energy

Abbreviation

ME

Nutrient Group

Energy

Unit

kcal/kg

Description

Description

Order

0

UPDATE

CANCEL

Date Created

Dec 6 2023

Created by

unknown

Last updated

Dec 6 2023

Last Updated by

Admin

Histories

1 Changes

Histories

Active changes made.

ARCHIVE

Archive

Change the visibility of the record.


DELETE

Delete

Once you delete this record, there is no recovering it.

Figure 22: Edit Nutrient

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Pedigree

Hatchery

Egg Production

Feed Intake

Body Weight

Breeds

Home > Nutrients > 12 > Edit

ME (kcal/kg) - Edit

Name

Metabolizable Energy

Abbreviation

ME

Nutrient Group

Energy

Unit

kcal/kg

Description

Description

Order

0

UPDATE

CANCEL

Date Created

Dec 6 2023

Created by

unknown

Last updated

Dec 6 2023

Last Updated by

Admin

Histories

1 Changes

Histories

Active changes made.

VIEW

Archive

Change the visibility of the record.

ARCHIVE

Delete

Once you delete this record, there is no recovering it.

DELETE

Figure 23: Edit Nutrient

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## **14 Contact Info**

For further information contact [W.Esatu@cgiar.org](mailto:W.Esatu@cgiar.org)

## 15 Reference

### References

- [1] Wikipedia contributors. *Dry matter* — *Wikipedia, The Free Encyclopedia*. [Online; accessed 26-December-2023]. 2023. URL: [https://en.wikipedia.org/w/index.php?title=Dry\\_matter&oldid=1178208071](https://en.wikipedia.org/w/index.php?title=Dry_matter&oldid=1178208071).