

FEED FORMULA APP **USER GUIDE**

DOCUMENT	DATE
User Guide	11/03/2021 - Version 2
Product	
Product	
Feed Formula App	
Description	
A comprehensive user manual	for a FEED FORMULA APP correct
usage.	
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SUPPORT PROVIDED BY



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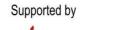


AN INITIATIVE OF THE DE-BUSHING ADVISORY SERVICE IN COLLABORATION WITH:



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Bush Control and Biomass Utilisation Project



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LEGEND

SHORT NAME	LABEL	UNIT OF MEASURE	DESCRIPTION
ME	Metabolisable energy	MJ/Kg cal/Kg	Metabolisable energy is the energy avai- lable for use by the animal and it is calcu-lated as Digestible energy minus energy lost in urine and gases (carbon dioxide & methane). (Feedipedia)
DM	Dry matter	% / g/Kg	The dry matter of feed refers to the ma-terial remaining after removal of water from the feed. The dry matter includes the nutrients in the feed such as includes carbohydrates, fats, proteins, vitamins, minerals, and antioxidants (e.g., thio- cyanate, anthocyanin, and quercetin). Carbohydrates, fats, and proteins, which provide the energy in foods (measured in kilocalories or kilojoules), make up ninety percent of the dry weight of a diet. (Wikipedia)
СР	Crude protein	% / g/Kg	A measurement of protein content. In animal feeds, crude protein is calculated as mineral nitrogen x 6.25 (the assumpti-on is that proteins of typical animal feedscontain 16% nitrogen in average). (Feedipedia)
CF	Crude fiber	% / g/Kg	A measurement of fibre content. Also known as Weende cellulose, crude fibre is the insoluble residue of an acid hy-drolysis followed by an alkaline one. This residue contains true cellulose and inso- luble lignin. Even though the more ac- curate Van Soest analysis has supersededit since the 1970s, the analysis of crude fibre remains common in feed laborato ries. (Feedipedia)
ADF	Acid Detergent Fiber	% / g/Kg	Acid Detergent Fiber, fraction of the cell walls according to Van Soest, considered to be roughly equivalent to true cellulose and lignin. (Feedipedia)
NDF	Neutral Deter- gent Fiber	% / g/Kg	NDF, fraction of the cell walls according to Van Soest, considered to be roughly equivalent to hemicellulose, true cellulose and lignin. (Feedipedia)



SHORT NAME	LABEL	UNIT OF MEASURE	DESCRIPTION
ADL	Acid Detergent Lignin (Fiber)	% / g/Kg	It is the percentage of plant material which is insoluble in 72 percent sulfu- ric acid. Treatment with 72 % sulfuric acid dissolves cellulose and ashing the residue will determine the crude ligninfraction including cutin. Lignin reduces digestibility of a feed.
CF	Fat	% / g/Kg	Crude fat is the amount of fat or oil content of a feed, which is extracted by petroleum ether. This ether extract contains not only true fat, but fat soluble vitamins A, D, E, K, free fatty acids, cholesterol, chlorophyll, lecithin, resins, and volatile oils
Са	Calcium (Mine- ral)	% / g/Kg	A major mineral (symbol Ca) essential for living organisms, in particular in cell physiology and for the mineralization ofbone, teeth and shells. (Feedipedia)
Р	Phosphorus (Mineral)	% / g/Kg	A major mineral (symbol P) essential for living organisms, in particular in cell physiology and for the mineralization of bone, teeth and shells. In plants, phosphorus is mostly stored in phytic acid. (Feedipedia)



GLOSSARY

LABEL	DESCRIPTION
RATION	Commonly defined the Ration is the total supply of feed given to an animal in a period of twenty–four hours. In this app, a ration is calcu- lated taking into consideration specific animal parameters, the nutri-tional requirements associated to that parameter and the nutritionalvalues of the ingredients used in the ration.
NUTRITIONAL REQUIREMENT	The requirement for an essential nutrient is the amounts or concent-ration that is needed to maintain health or prevent disease. For manynutrients there is range of acceptable intakes which is defined by the minimum amount required to prevent adverse effects resulting from too little intake (deficiency) or the maximum intake above which, alsoresults in adverse effects (i.e., toxicity). The range of acceptable intakes for any nutrient varies according to the specific nutrient in question, and the species and life-stage (i.e., growth, adult maintenance, pregnancy and lactation) it is intended for. (WikiVet)
NUTRITIONAL VALUES	Nutritional value or nutritive value as part of food quality is the measu-re of a well- balanced ratio of the essential nutrients carbohydrates, fat,protein, minerals, and vitamins in items of food or diet in relation to the nutrient requirements of their consumer). (Wikipedia)
INGREDIENTS	Elements used for formulating the ration. Ingredient can be single ingredients, feed or milled bush.



INTRODUCTION



Welcome TO FEED FORMULA APP

Feed Formula Application is an advanced app focused on animal he-alth. By improving animal nutrition, each farmer can obtain the best balance in feed formulas and feed cost, monitoring every step of the process and its outcomes.

The app can be used on a laptop or mobile, using any browser availa-ble on the device.

The Feed Formula Application also works without an internet connec-tion and you can consult and update your library of ingredients and rations using the offline mode.



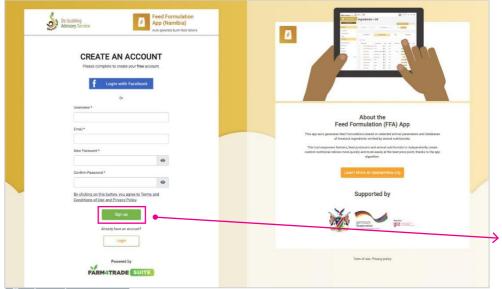
TO ACCESS THE APP:

Scan the QR Code or go to https://ffa.dasnamibia.org



01 REGISTRATION

Registration screen: ffa.dasnamibia.org



1. THE FEED FORMULA APP IS ACCESSIBLE ON LINEAT THE ADRESS:

<u>https://ffa.dasnamibia.org</u>

If you already have an account, login using your username and password.

If you don't have an account yet, click on the**"SIGN-UP"** button to create a new one.

Registration screen

De-bushing Advisory Service App (Namibia) Auto geometic bush feet topics	
CREATE AN ACCOUNT Please complete to create your free account.	
Or Username *	
	About the Feed Formulation (FFA) App
Email *	This app auto generates feed formulations based on selected animal parameters and databases
New Password *	of lamitatis strangedients writeful by generative advantationals. This is and improve lammer, fixed produced and animal advantational control control control control controls without actions more gaicity and more weaky at the lame prior point. Basics to the appr public,
Confirm Password *	Learn More at dastrembia.org
By clicking on this button, you agree to Terms and Conditions of Use and Privacy Policy	Supported by
Sign up	Dir and Dir an
Login	
Powered by	Term of use. Privacy policy

2. INSERT THE REQUIRED INFORMATION:

Username, Email and Password.

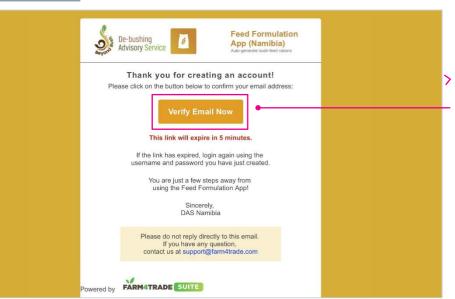
The password must be atleast 8 digits long, and include one symbol, one number and an upperca-se and lowercase letter.

Click on **"SIGN-UP"** tocreate your account.



01 REGISTRATION

Verify email screen



3. GO TO YOUR INBOXTO VERIFY EMAIL:

Click on the link you have received in your inbox to verify your account and access the **Feed Formu- lation App** for the first time.



02 FIRST ACCESS

Registration form step 1/3 screen

Í	Registration form (1/3)		
	Required Informatio	n	
	First name *	Last name *	
	Country *	-	
	Dial code * Phone num	ber *	
	ENA J 1204 ♥	Continue →	
		conunde -	

1. WHEN YOU ACCESS THE APP FOR THE FIRST TIME,

you will be prompted to complete your account with some basic informa-tion.

Complete with your **First**and **Last name**, confirm your **Country** and add your **Phone number**.

The required fields mar-ked with an *asterisk**,

When the informationis complete, click on "CONTINUE".

Registration form step 2/3 screen

Please enter your Farm's info You can always modify later. Organization type * Farm Organization name * My Farm Countros *	You can always modify later. Organization type * Farm Organization name *	Registration form (2/3)	
Farm Organization name * My Farm	Farm Organization name * My Farm Country *		
My Farm	My Farm Country *		
	Country *		
country	Namibia		

2. ENTER YOUR FARM'S INFO

Complete with the nameof the farm and confirm the country where the farm is based.

When the informationis complete, click on **"CONTINUE"**.



02 FIRST ACCESS

Registration step 3/3 screen

Registration form (3/3)			1	
Please confirm you You can always modify later.	r Settings			
Country *		•		
Currency *		•		
Weight Units *	Weight unit of measure *	•		
	Ourfurn all			
← Back	Confirm all			;

3. CONFIRM YOUR SETTINGS.

Such as **country**, **curren-cy** and **weight units**.

These last settings will be used in the formulation of the rations in the app.

You can change them af-ter your first login, by go-ing to the **App Settings** section in the app.

When the informationis complete, click on **"CONFIRM ALL"**.

TIP:

When you create an account and login for the first time, it is strongly advised to finish the sub-scription and access the app for the first time from the same device.



Create ration button screen

	le-bushing dvisory Service				My Farm Manager	¢	 ۵
6 Feed Formula Application	Please refer to the Legend Page for descri	ptions of terms.					×
CREATE RATIONS	Create Ration						
Ingredients ~	0	0		0 0)		0
Nutritional Requirement							
Rations Library	1 Define animal parameter	S					
Disclaimer	1. Select Species *			Production Purpose Level			
App Settings	Cattle		*				•
Legend	2. Production Purpose *			Geography *			
🗢 Offline mode 🕥			*	Namibia			-
	3. Sex of the animal			Budget for 100Kg of ration	Currency * Select Currency		
			*		Namibian dollar		 •
	4. Production Status						
	4. Floudedon Status		*				
	5. Weight Range Min - kg *	Weight Range Max - kg *					
	100 0	100	٥				
	1 to 1500kg (100kg range recommended)						
CLOSE X	NEXT						

1. CLICK ON THE CREATE RATIONS BUTTON

(on the top left), to start creating rations.

For a detailed explanation of the fields, see the Ani- mal Parameters definiti- on below.

ANIMAL PARAMETERS DEFINITION:

At the first login, it is advised to select the Geography zone and Baseline unit cost fields and **"SAVE"**, in order to avoid repeated prompts in the Create Rations module.

- **1. Select Species:** this is a required field. Select the species of the animal (at the moment onlythe option Cattle is available)
- 2. **Production Purpose:** this is a required field. Choose between Dairy/Milk or Meat/Beef, accor-ding to your activity.
- **3. Sex of the animal:** this is not a required field, but can be useful when calculating distinctrations for animals that are raised for the same purpose but are different sexes.
- **4. Production Status:** specify the status of the animal to better adapt the calculation of the rati-on to your production purposes.
- 5. Weight range: this is a required field. Indicate the average weight range of your animals, tobetter adapt the ration. The 100kg range is recommended as a generic range.

The **Production Purpose Level** field is not a required field, and can be used as a more specificindication of your production goal in case of milk production.

You can change the pre-selected Geography and Currency information if needed.

By indicating the **Budget for 100kg of ration**, the app will compare the prices and show the bestprice match in the generated rations.



STEP 1: Define animal parameters screen

	2-bushing giz				My Farm Manager	¢	 \$
Feed Formula Application	Please refer to the Legend Page for descrip	otions of terms.					×
CREATE RATIONS	Create Ration						
Ingredients ~	0	0	0	0			 0
Nutritional Requirement Rations Library	1 Define animal parameters	s					
Disclaimer	1. Select Species *		Production Purpose Level				_
App Settings	Cattle	•					·
Legend	2. Production Purpose *		Geography *				
🗢 Offline mode 🕥		Ŧ	Namibia				·
	3. Sex of the animal		Budget for 100Kg of ration		Currency *		
		-			Select Currency Namibian dollar		·
	4. Production Status						
	5. Weight Range Min - kg *	Weight Range Max - kg *					
	100 8	100	8				
	1 to 1500kg (100kg range recommended)						
CLOSE X	NEXT						

STEP 1. DEFINE THE ANIMAL PARAMETERS

that you want to use for your ration: complete thefields following the orderfrom 1 to 5. (ex: first the field Select Species, thenProduction Purpose etc.).

Required fields are mar-ked with an *asterisk**.

Each field is dependent on the previous field ac-cording to your choice.

Click on **"NEXT"** to move to the second step.



STEP 2: Select a nutritional requirements screen

Feed Formula Ap	plication	Please refer to the Legend Page for	r descriptions of tern	ms.								×	
CREATE RATION	NS	Create Rati	on										
gredients	~	0	0			0		0				0	
tritional Requirement													
tions Library claimer		Species Cattle	Production F Meat/Beef	Purpose	Production Steers(Finis cattle)		Weight 100-100 kg		ography nibia				
Settings		Budget for 100Kg of											
gend		- NAD/day											
		- NAD/GBY											
• Offline mode		2 Confirm Daily N	utritional Requ	uirements					See Nu	tritional Value	is Legend		
• Offline mode		2 Confirm Daily N	for calculation: 🧕	NDF - Neutral	l detergent fiber		CF - () de fiber		See Nu	iritional Value	s Legend		
Offline mode		2 Confirm Daily N Fiber fraction used I	for calculation: () MEMJ/Kg	NDF - Neutral	I detergent fiber	Ca %/Kg	P %/Kg	Weight Range	See Nut	tritional Value	is Legend		
Offline mode	0	2 Confirm Daily N	for calculation: (©) MEMJ/Kg 10.07 MJ/Kg 1	NDF - Neutral CP %/Kg 16.39 %/Kg	NDF%/Kg 23 %/Kg	Са %/Кg 0.76 %/Kg	Р %/Kg 0.45 %/Kg	100 - 100 Kg	See Nu	tritional Value	is Legend		
Offline mode	0	2 Confirm Daily N Fiber fraction used I	for calculation: (©) MEMJ/Kg 10.07 MJ/Kg 1	NDF - Neutral	I detergent fiber	Ca %/Kg	Р %/Kg 0.45 %/Kg	12	See Nut	tritional Value	is Legend		
Offline mode		 Confirm Daily N Fiber fraction used I PHILSAN, 2010. 	for calculation: () MEMJ/Kg 10.07 MJ/Kg 1 9 MJ/Kg	NDF - Neutral CP %/Kg 16.39 %/Kg	NDF%/Kg 23 %/Kg	Са %/Кg 0.76 %/Kg	P%/Kg 0.45%/Kg 0.34%/Kg	100 - 100 Kg	See Nut	tritional Valur	is Legend		
Coffline mode	•	Confirm Daily N Fiber fraction used I O PHILSAN, 2010 PHILSAN, 2010	for calculation: () ME MJ/Kg 10.07 MJ/Kg 9 MJ/Kg 8.12 MJ/Kg 1	NDF - Neutral CP %/Kg 16.39 %/Kg 14 %/Kg	NDF %/Kg 23 %/Kg 23 %/Kg	Ca %/Kg 0.76 %/Kg 0.63 %/Kg	P %/Kg 0.45 %/Kg 0.34 %/Kg 0.3 %/Kg	100 - 100 Kg 100 - 100 Kg	See Nu	tritional Value	is Legend		
Coffine mode	•	Confirm Daily N Fiber fraction used I PHILSAN, 2010 PHILSAN, 2010 PHILSAN, 2010 PHILSAN, 2010	for calculation: () MEMJ/Kg 10.07 MJ/Kg 1.07 MJ/Kg 8.12 MJ/Kg 1.7.66 MJ/Kg 1	NDF - Neutral CP %/Kg 16.39 %/Kg 14 %/Kg 12.63 %/Kg	NDF %/Kg 23 %/Kg 23 %/Kg 23 %/Kg	Ca %/Kg 0.76 %/Kg 0.63 %/Kg 0.5 %/Kg	P%/Kg 0.45 %/Kg 0.34 %/Kg 0.3 %/Kg 0.27 %/Kg	100 - 100 Kg 100 - 100 Kg 100 - 100 Kg	See Nu	tritional Value	is Legend		
Coffine mode		Confirm Daily N Fiber fraction used I Fiber fraction used I PHILSAN, 2010 PHILSAN, 2010 PHILSAN, 2010 PHILSAN, 2010 PHILSAN, 2010	for calculation:	NDF - Neutral CP %/Kg 16.39 %/Kg 14 %/Kg 12.63 %/Kg 11.77 %/Kg	23 %/Kg 23 %/Kg 23 %/Kg 23 %/Kg	Ca %/Kg 0.76 %/Kg 0.63 %/Kg 0.5 %/Kg 0.38 %/Kg	P%/Kg 0.45 %/Kg 0.34 %/Kg 0.3 %/Kg 0.27 %/Kg	100 - 100 Kg 100 - 100 Kg 100 - 100 Kg 100 - 100 Kg	See Nd	tritional Value	is Legend		

STEP 2. CONFIRM NUTRITIONAL REQUIREMENTS.

According to the parame-ters chosen in step 1, the app will suggest a list of **Daily Nutritional Requi- rements**, formulated by our experts, that better match your production purposes.

You can choose between**NDF** and **CF** as the fiber fraction used for the cal- culation.

Select one of the nutriti- onal requirements pro- posed by the system. If you prefer or if you don't have any results, enter your custom values (whenentering your custom values, use « . » for de- cimals). These require- ments will be used in the calculation of the ratio of the ingredients that will be part of your Ration.

Click on **"NEXT"** to con- tinue to the next step or on **"BACK"** if you wish to change the entered data.

TIP:

For a detailed explanation of **Nutrional Values** used in these calculations, see the Legend at thebeginning of this guide or click on **Nutrional Values Legend** on the App.



STEP 3: Compare with your library screen

	e-bushing dvisory Service			Ĩ	My Farm Manager 🎝 🏭 🗱
6 Feed Formula Application	Please refer to the <u>Legend</u>	Page for descriptions of terms.			×
CREATE RATIONS	Create R	ation			
Ingredients	0	0	0	O	0
All Ingredients					
Single Ingredients	1 Species Cattle	Production Purpose Meat/Beef	Production Status Steers(Finishing	Weight Geograp 100-100 kg Namibia	
Feeds			cattle)		
Milled Bush	Budget for 100Kg of ration - NAD/day				
Nutritional Requirement					
Rations Library	2 ME 9 Mj/Kg	CP NDF 14%/Kg 23%/Kg	Ca P 0.63 %/Kg 0.34 %/K	9	
Disclaimer					
App Settings	3 Proposed R	ation			Comparison View -
Legend	You already have these rations	in your library similar to your research. Do you	a want to use one?		
🗢 Offline mode 🕖	A Ration	<u>#995871</u>	Budget Difference:	0 % • <u>Ration Price (100Kg);</u> 300.58 N\$	SHOW IN LIBRARY
	Nutritional Values Sco	res (Ration / Target)			•
	General Score	No. ingredients	ME <u>CP</u> ND	<u>F Ca P</u>	
	97.73 %	3 11.	92 MJ/Kg 17.37 %/Kg 18.95	%/Kg 0.45 %/Kg 1.84 %/Kg	
	BACK	NEXT			
CLOSE X		NEXT.			

STEP 3. PROPOSED RATION

If your **Rations Library** contains one or more rations similar to the onethat you are

creating, theapp will automatically suggest to use it.

For more information on how to read the details of the rations, see **Rations Comparison & Card view**in the next page.

If you are happy with one of the results and you want to save it with another name inside your library, click on **"SAVE"**. You can also see the ration in detail by clicking on**Show in library**. Another page will open (*see secti-on 07 for more details onthe Rations Library*).

If you have no results orif you want to create a brand-new ration, click on "NEXT".



RATIONS COMPARISON VIEW AND CARD VIEW:

There are two views available to help you compare and understand the generated rations:

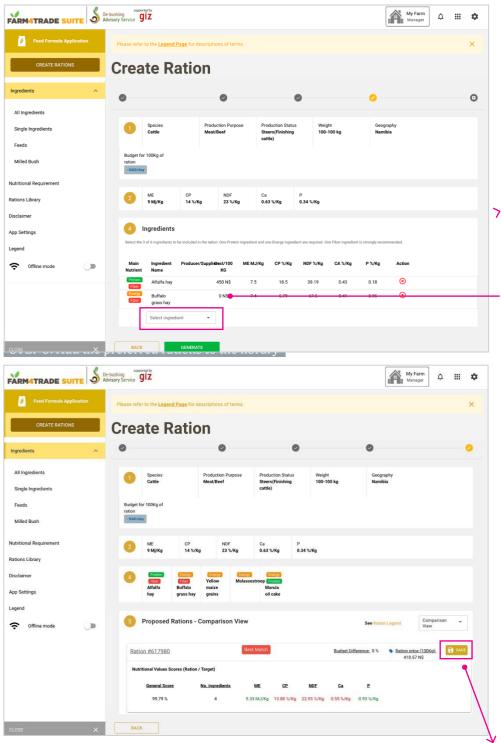
- 1. Comparison view (default view)
- 2. Card view

In the **Comparison view**, rations are shown in a list sorted by **General Score**. Switch to **Card view**if you want to compare the rations by looking at the details of the ingredients used. Each view contains the following elements:

- **General score:** the match between the proposed ingredient and the requested nutritionalvalues.
- **Budget difference:** the difference between the cost of the proposed ration compared to thebudget indicated in the request
- **Ration price:** the price of 100kg of the proposed ration
- **No. Ingredients:** the number of ingredients used for the proposed ration. If you are using the Comparison view, click on the name of the ration to see which ingredients are used.
- **ME, CP, NDF, Ca, P:** these are the nutritional values scores (see legend for more info on eachvalue). If these values are green, it means that they are above the suggested value, if they are red, they are below.

You can sort the list of rations by clicking on each of the values above. For example, of you wish tosort the list from the highest to the lowest price, click on Ration price.

STEP 4: Select at least 3 ingredients screen



STEP 4. INGREDIENTS

Select 3 to 5 ingredients to include in the ration. One Protein ingredient and one Energy ingre- dient are required. One Fi-ber ingredient is strongly recommended.

 Click on the "SELECT INGREDIENT" menu and
 choose from the list. If you are using a laptop, you can start typing youringredient to move fasterin the list.

Once your selection is done, click on **"GENERA-TE"**.

STEP 5. PROPOSED RATIONS

The App will provide a list of rations that match your request.

The first three on the list correspond to the

Best Match Lowest Price

Most Nutrient

Like in step 3, you can switch between **Comparison View** or **Card View** and click on the other values to sort the list dif-ferently.

Choose the ration that matches your need and save it in your **Rations Library** by clicking on the"**SAVE**" button on the ingredient.



Save ration screen

FARM4TRADE SUITE	9 Service GIZ	My Farm Manager	¢	ш	۵	
Legend Offline mode	Exercise Secret Advisors pods					۲
CLOSE X	BACK					

6. RENAME

the ration you have just chosen and click on **Yes,save** ration.

If you want to see the details or make any ch- anges to the **Ration**, clickon **"SHOW MY RATION IN LIBRARY"**, or choose

"CLOSE" if you are done.

Legend info screen

Feed Formula Application	Please refer to the Legend Pag	e for descriptions of terms.			×
CREATE RATIONS	Create Ra	tion			
Ingredients ^	•	0	۲	0	0
All Ingredients Single Ingredients	Species Cattle	Production Purpose Meat/Beef	Production Status Weight Steers(Finishing 100-10 cattle)		
Feeds	Budget for 100Kg of ration		cattery		
Milled Bush	- NAD/day				
Nutritional Requirement		CP NDF 14 %/Kg 23 %/Kg	Ca P 0.63 %/Kg 0.34 %/Kg		
Rations Library					
Disclaimer	Alfalfa Buf	falo maize	troop Proteia Marula		
App Settings	hay gras	ss hay grains	oil cake	•	
Cegend 🤇	5 Proposed Ratio	ons - Comparison View		See Ration Legend	Comparison 👻 View
	Ration #617980	Best	Match	Budget Difference: 0 % Ration price / 410.57 N	
	Nutritional Values Scores	(Ration / Target)			
	General Score	No. ingredients	ME <u>CP</u> NDE	Ca P	
	99.79 %	4 9.33	MJ/Kg 13.88 %/Kg 22.93 %/Kg	0.55 %/Kg 0.93 %/Kg	

7. FOR MORE INFORMATION,

on how to read this page,click on **Ration Legend**.

The Legend is always available in the left side menu.



Ingredient list screen

Advisory Service						Manager	
Feed Formula Application Please rel	er to the Legend Page for descriptions	a of terms.					3
CREATE RATIONS Creat	ate Ration						
nts		0	(D	0		 0
	fine animal parameters						
er 1. Select	Species *			Production Purpose Level			
Cattle							*
	tion Purpose *		*	Geography *			*
2. Produ	tion Purpose *		•	Geography * Namibia			•
2. Produ Offline mode	tion Purpose *			1000000000		Currency *	
2. Produ Offline mode				Namibia		Currency * Select Currency Namibian dollar	•
2. Produ Offline mode			*	Namibia		Select Currency	
Offine mode	the animal	Weight Range Max - kg +	•	Namibia		Select Currency	•

1. CLICK ON INGREDIENTS IN THE MENU,

 on the left of the screen to access the list of ingre-dients.

Ingredient list screen

	le-bushing supported by divisory Service giz					My Farm Manager	¢	•
Feed Formula Application	Please refer to the Legend Page for descriptions of	f terma,						×
CREATE RATIONS	Create Ration							
Ingredients A	0	0		0	0			0
All Ingredients Single Ingredients	0 Define animal parameters							
Feeds	1. Select Species *			Production Purpose Level				
Milled Bush	Cattle		*					*
lutritional Requirement	2. Production Purpose *			Geography *				
			+	Namibia				*
Rations Library	3. Sex of the animal			Budget for 100Kg of ration		Currency *		
			*			Select Currency Namibian dollar		*
App Settings Legend	4. Production Status							
🗢 Offline mode 🕖	5. Weight Range Min - kg *	Weight Range Max - kg *						
	100 0	100	٥					
	1 to 1500kg (100kg range recommended)							

2. YOU NOW HAVE ACCESS TO THE LISTOF INGREDIENTS THAT WILL BE USEDTO FORMULATE YOUR RATIONS.

You can choose to view All ingredients at once or to filter by Single Ingredients (ingredientscommonly used in ra- tions calculation), Feeds(processed ingredients normally sold in bulk by a supplier) and Milled Bushby switching item in the side menu or by using thebar on the top of the list.



Ingredient list label view screen

	De-bushing Advisory Service			My Farm Manager	û III û
Feed Formula Application	Ingredients > All		CRE	ATE NEW INGREDIENT	IMPORT CSV
CREATE RATIONS	All Ingredients Main Nutrient	COST RANGE PER V	Q RESET FILTERS		
All Ingredients Single Ingredients	ALL INGREDIENTS SINGLE INGREDIENT	FEEDS MILLED BUS	н	Standard Labels	•
Feeds	Ingredient name 🛧 Producer/Supplie	rs Source Visibility	Cost per 100Kg	Standard Labels	
Milled Bush	BLACKTHORN	🕗 das Public		Nutritional Labels	
utritional Requirement	BLACKTHORN	edas Public	-	Energy Fiber	6
tions Library	BLACKTHORN	edas Public		Energy Fiber	6
claimer	BLACKTHORN	edas Public		Energy Fiber	B
	BLACKTHORN	e das Public	-	Energy Fiber	6
o Settings	BRITTLE THORN	🥑 das Public		Energy Fiber	6
end	CANDLE POD ACACIA	edas Public		Energy Fiber	6
Offline mode	COMPHOR BUSH	e das Public		Energy Fiber	6
	☆ FLAME THORN	edas Public		Energy Fiber	5
OSE X			Records per page	n: 20 ∓ 1-20 of 56	$\langle \cdot \rangle$

3. SWITCH VIEWS between Nutritional La- bels and **Standard Labels**

by using the menu on the top right of the list.

Standard Labels will display the general infor- mation of the ingredients(*see Standard* Labels definition below for moreinformation);

Nutritional Labels will show the nutritional valu-es details of the ingre- dients.

STANDARD LABELS DEFINITION:

Ingredient name: name of the ingredient

Producer/ Suppliers: name of the supplier of the ingredient

Source: name of the user who added the ingredient in the list

Visibility: permission status for the ingredients. All ingredients that are verified and added by averified source are "public". Ingredients added by the user are "me" by default.

Cost per 100kg: cost of the ingredient per 100kg. This information is specified during the creation of the Ingredient.

Main nutrient: main nutrient (Energy, Protein, Fiber, Mineral or Additive) of the ingredient (Ingre-dients may have more than one tag).



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04 INGREDIENTS

How to filter the ingredients list screen

ARM4TRADE SUITE		giz						My Farm Manager	¢ ‼	•
Feed Formula Application	Ingi	redients	s > Al	I			CR	EATE NEW INGREDIENT	• IMP	ORT CSV
CREATE RATIONS	- All In	igredients 👻	Main Nutrient	Ŧ	COST RAM	IGE PER 🔺 Search	Q RES			
ngredients	Verif	ied Ingredients	Energy		Min Max	ок				
All Ingredients		Preferred Ingredients	Protein		FEEDS	MILLED BUSH		Standard Labels		-
Single Ingredients Feeds		ngredients	Fat		Source	Visibility	Cost per 100Kg	Main ny trient	Duplicate	Delete
Milled Bush	☆	BLACKTHORN	Additive R		🕑 das	Public	-	Energy Fiber	1	
tritional Requirement	☆	BLACKTHORN	Fiber		🅑 das	Public		Energy Fiber	5	
tions Library	☆	BLACKTHORN	۲ Mineral		🥑 das	Public		Energy Fiber	16	
sclaimer	\$	BLACKTHORN			🥜 das	Public		Energy Fiber	16	
op Settings	\$	BLACKTHORN			🥑 das	Public		Energy Fiber	1	
gend	*	BRITTLE THORN			🕑 das	Public	-	Energy Fiber	1	
-	\$	CANDLE POD AC	ACIA		🥑 das	Public		Energy Fiber	1	
Offline mode	☆	COMPHOR BUSH			🕜 das	Public		Energy Fiber	6	
	☆	FLAME THORN			🌏 das	Public		Energy Fiber	6	
	☆	FLAME THORN			🅑 das	Public		Energy Fiber	6	
	☆	FLAME THORN			🥑 das	Public		Energy Fiber	6	
.ose							Records per pag	e: 20 ▼ 1-20 of 56	K <	> >1

4. IN THE STANDARD LABEL VIEW, YOU CAN FILTER YOUR LIBRARY OF INGREDIENTS BY USING THE SEARCHFILTERS BAR

You can filter your list by:

Verified ingredients: these are standard in- gredients included in theApp, that are validated byAnimal Nutritionists.

My Preferred ingre- dients: ingredients that can be marked as pre- ferred for easier retrievallater.

My saved ingredients: ingredients that have been created and saved by the user..

You can also filter by choosing the **Main nutri-ent** or by entering a **Costrange** with a Min and a Max value.

You can also search for an ingredient directly bytyping its name in the Search bar.

Click on "RESET FIL-

TERS"to cancel all filtersand go back to the com-plete list.

The NOTE:

When you login, **All Ingredients** is always the default view in all ingredients, requirements andrations lists.

Available actions on ingredients list screen

	De-bushing Advisory Service	ind by							My Farm Manager	¢ ∎	: \$
Feed Formula Application	Ingr	edien	ts > /	All				CREAT	NEW INGREDIENT	• IMP	ORT CSV
CREATE RATIONS	✓ All Inc	aredients 👻	Main Nutrien	t - C0	ST RANGE PER 🔻	Search	Q	RESET FILTERS			
Ingredients											
All Ingredients		GREDIENTS	entroi E i	NGREDIENT	FEEDS	MILLED BUSH					
Single Ingredients	ALL IN	GREDIENTS	SINGLE	NGREDIENT	FEEDS	MILLED BUSH			Standard Labels		Ŧ
Feeds	ing	redient name		Producer/Suppl	iers	Source \uparrow	Visibility	Cost per 100Kg	Main nutrient	Duplicate	Delete
Milled Bush	* 🗶	LUCERNE HA	Y			📵 Me	Me	- N\$	Energy Fiber	16	Û
lutritional Requirement	☆	PEANUT/GRO	DUNDNUT CAKE	E Farmers		🕑 das	Public		Energy Protein	6	
	\$	RICE		Amta, agribusdev	bokomo and Unam)gongo 🕑 das	Public		Energy	16	
lations Library	☆	COCONUT CA	AKE	Farmers		🕑 das	Public		Energy Protein	6	
lisclaimer	☆	COTTON CAP	KE	Farmers		🕑 das	Public		Energy Protein	6	
pp Settings	☆	SUNFLOWER	CAKE	Agribusdev		🥑 das	Public		Energy Protein	6	
egend	☆	SUNFLOWER	MEAL	Feedmaster,agra,	kaap Agri	🕑 das	Public		Energy Protein	6	
Coffline mode	☆	BARLEY (DUS	ST)	Namibia Brewery		🥑 das	Public		Energy Protein	6	
	☆	BARLEY GRA	IN	Namibia Brewery		🥑 das	Public		Energy	6	
	\$	LABLAB		Farmers		🕑 das	Public		Protein Fiber	6	
	\$	LABLAB WILI	D	Farmers		🕑 das	Public		Protein Fiber	6	
LOSE X	1							Records per page: 2	0 🔻 1-20 of 145	IK K	> >1

5. THE ICONS IN THE LIST REPRESENT DIFFERENT ACTIONS THAT ARE AVAILABLE:

Click on the **Star** to markyour preferred ingre- dients.

Edit directly each ingre- dient by using the **Pencilicon**. This icon appears only if the user has per- mission to edit.

By clicking on the **Dupli- cate icon**, create a copy of the ingredient, with the benefit of fields beingpre-populated from the original ingredient. The copy will appear in the list. You can edit the information by clicking on the **Pencil icon**.

Use the **Delete function** to delete an ingredient from the list. This function appears only if you have permission rights or if youhave created the ingre- dient.



Create new ingredient screen

	De-bushing supported by Advisory Service giz				H	My Farm Manager	¢ ≣	•
Feed Formula Application	Ingredien		TRANCE PER V Search	٩	CREATE NE Single Ing RESET FIL 72 Feeds	ew INGREDIENT - 4	IMP	DRT CSV
Ingredients	✓ All Ingredients ▼	Main Nutrient - COS	TRANGE PER V Search	ζ	Milled Bu	ish		
All Ingredients Single Ingredients	ALL INGREDIENTS	SINGLE INGREDIENT	FEEDS MILLED BUSH	I	Sta	andard Labels		¥
Feeds	Ingredient name	Producer/Supplier	rs Source ↑	Visibility	Cost per 100Kg	Main nutrient	Duplicate	Delete
Milled Bush	🛨 🧭 LUCERNE HA	Y	🙆 Me	Me	- N\$	Energy Fiber	6	Ū
Nutritional Requirement	PEANUT/GR	UNDNUT CAKE Farmers	🕑 das	Public		Energy Protein	6	
Rations Library	📩 RICE	Amta, agribusdev, b	okomo and Unam Ogongo🕑 das	Public		Energy	1	
Disclaimer	📩 сосолит си	KE Farmers	🕑 das	Public		Energy Protein	6	
		E Farmers	🥑 das	Public		Energy Protein	6	
App Settings	SUNFLOWER	CAKE Agribusdev	🥑 das	Public		Energy Protein	6	
Legend	SUNFLOWER	MEAL Feedmaster,agra,ka	ap Agri 📀 das	Public		Energy Protein	6	
Offline mode	BARLEY (DU	T) Namibia Brewery	🥑 das	Public		Energy Protein	6	
	📩 BARLEY GRA	IN Namibia Brewery	😕 das	Public		Energy	6	
	📩 LABLAB	Farmers	🥏 das	Public		Protein Fiber	6	
	🟠 LABLAB WILI	Farmers	🥏 das	Public		Protein Fiber	-	
CLOSE X					Records per page: 20		I< <	> >1

6. YOU CAN CREATEA NEW INGREDIENT

by clicking on "CREATEA NEW INGREDIENT" button on the top right ofth

button on the top right ofthe page.

Select in the drop list that appears the type of ingredient you want to create: Single ingredient, Feeds or Milled Bush.

Scroll down the page to view all the sections. Click on the yellow section hea-ders to toggle expand and collapse of info panels.

Complete new ingredient form screen

Ingredient Name *	Photos
Ingredient Type * Select ingredient type Single Ingredient	•
Verified Ingredient Unverified Unverified	
Description	
Market Pricing Price Currency Quantity U.o.m	<u></u>
O Select currency Quanty O.d.m 0 Select currency 1 Select U.s.m kilogram * 1 Select U.s.m	
Main Nutrient(s)	
Suppliers Separated with comma	
Visibility	<u>n</u>
Me	Ŧ

7. START BY ADDING THE GENERAL INFORMATION OF THE INGREDIENT.

Add the Name, the Type of ingredient and a brief description. You can set the Market Pricing and also the Main Nutrients tag. You can set the in- gredient as a preferred ingredient in this section.

All ingredients will be automatically set on **Unveri-fied** and **Visibility** "me".



Name translations and technical info screen

	e-bushing service giz		My Farm A III 🌣
Feed Formula Application	Please refer to the Legend Page for descriptions of terms.		x
CREATE RATIONS	New Ingredient > Single Ingre	edient	
Ingredients	General Information		~
All Ingredients	Neme Translations		*
Single Ingredients	Technical Info		^
Milled Bush	Scientific Name	Geographic origin	
Nutritional Requirement		Lab result	
Rations Library Disclaimer App Settings	Description and reference	Select file to add	
Legend		8	
Offline mode	Nutritional Values		~
	Safety Restrictions		×
	Permission (coming soon)		*
CLOSE X	Back Save		

8. TRANSLATE THE NAME OF YOUR INGRE-DIENT IN ANOTHER LANGUAGE,

and add Technical information such as Scientific name, Geographic originor Lab results.

These parts are not compulsory. All required fields are marked with an *asterisk**.

Nutritional values tab screen

ain Nutritional Values				
rude Protein (CP) %	Required: CF or both ADF and NDF *			
	Crude Fiber (CF) %	Acid Datergent Fiber (ADF) %	Neutral Detergent Fiber (NDF) %	
ry Matter (DM) %	Ether Extract (EE)/Crude fiber	Acid Detergent Lignin(ADL) %	Gross Energy (GE) MJ/Kg	
Minerals				
Calcium (CA) %	Phosphorus (P) %	Magnesium (Mg) %	Potassium (K) %	
Sulfur (S) %	Sedium (Na) %	Zinc (Zn) %	Chlorine (Cl) %	
Vitamins				
Vit A value (Vit A e Carotene) UI	Vit D LI	Vit F UI		
nergy per species				
Species	Digestible Energy (DE) MJ/Kg	Metabolizable Energy (ME) MJ/Kg	Net Energy (NE) MJ/Kg	Action
Select Species	→ DE Mj/Kg	ME MJ/Kg	NE Mj/Kg	🕀 ADD

9. IN THE NUTRITIONAL VALUES TAB,

complete the nutritional values information of your ingredient.

Refer to the legend at the beginning of this guide for more information.

Remember: Crude Fiber(CF) or both Acid Deter-gent Fiber (ADF) and Neutral Detergent Fiber(NDF) are required.

In the last part of this section, you can specify the Energy values of the ingredient for a particularspecies (at the moment, only Cattle is available).



Safety restrictions and permission screen

ARM4TRADE SUITE	S De bashing Strekke giz	My Farm 🗘 🏭 🌣
6 Feed Formula Application	Please refer to the Legend Page for descriptions of terms.	×
CREATE RATIONS	New Ingredient > Single Ingredient	
Ingredients	General Information	×
All Ingredients	Name Translations	×
Single Ingredients	Technical Info	v
Milled Bush	Nutritional Values	
Nutritional Requirement	Safety Restrictions	
Rations Library	Proper usage instructions and important recommendations: Risk Warnings and Feeding instructions:	
Disclaimer		
App Settings Legend		
✿ Offline mode	Species Min inclusion ratio Max inclusion ratio	Action
	Select Species	G ADD
	Permission (coming soan)	~
	Back Save	
CLOSE		

10. COMPLETE YOUR INGREDIENT'S INFOR-MATION,

by filling up the **Safety Restrictions tab**, where you can add important instructions or recommendations.

The **Permission tab** is not editable at the moment.

Click on **"SAVE"** to addyour ingredient.

Milled bush ingredient screen

	De-bushing Service giz		My Farm D III C
CREATE RATIONS	New Ingredient > Mi	lled Bush	
Ingredients	Ceneral Information		×
All Ingredients	Name Translations		Ŷ
Single Ingredients	Technical Info		~
Feeds Milled Bush	Nutritional Values		~
Nutritional Requirement	Safety Restrictions		×
Rations Library	Milled Bush specific information		^
Disclaimer	Season	Photos	
App Settings		Select image to add	
Legend	Description of the plant		
♥ Offline mode	•		
		4	
	Permission (coming soon)		Ý
	Back Save		
	×		

11. IF YOU ARE ADDING A MILLED BUSH INGRE-DIENT,

You will find an additionaltab called **Milled Bush** specific information, that refers only to milled bush ingredients.

Add information such asthe **Season** of the ingredient, the **description** of the plant and upload a picture if you wish.



Import ingredients using a CSV file screen

	seeming and a second se	My Farm A III O
Feed Formula Application	Ingredients > Import CSV	
Ingredients	PREPARE CSV Or a desisting computer, please download this "CSV legredents template" and populate is a spreadsheets editor (ms. Excel or Google Sheens).	
All Ingredients	DOWNLOAD CSV INGREDIENTS TEMPLATE DOWNLOAD LEGEND	
Single Ingredients		
Feeds	2 SELECT CSV Browse your computer and locate your CSV file.	
Milled Bush	0	
Nutritional Requirement		
Rations Library	3 UPLOAD Validate header and upload CSV.	
Disclaimer	(UPLOAD CSV)	
pp Settings		
egend		
🗢 Offline mode 🕖 🔊		
CLOSE X		

12. YOU CAN UPLOAD A LIST OF INGREDIENTS BYUSING THE IMPORT CSV FUNCTION,

In the All Ingredients list page, click on the importCSV icon you will find in the top right and follow these steps:

1. Prepare CSV by downloading the CSV INGREDIENTS TEM-PLATE and entering your data in a spread-sheet software of yourchoice;

- 2. Select the file you wish to import;
- **3. Upload** your CSV.
- **4. Go back to the list** of ingredients and se- arch for the imported ingredients.

TIP:

During importing, you may be prompted to take action if the system detects duplicate entries.

05 NUTRITIONAL REQUIREMENTS

Nutritional requirements list screen

Feed Formula Application	Nut	ritional Re	quire	ements			CREAT	E NEW NUTRITIC	NAL REQUIREN	MENT 👻
CREATE RATIONS	✓ All N	lutritional Req. 👻 Production	on Purpose 👻	WEIGHT IN KG 👻 Sea	rch Q	RESET FILTERS				
ngredients ^										
All Ingredients		ALL		CATTLE			Standar	d Labels		¥
Feeds		NR name 🛧	Source	Species	Production Status	Production Purpose	Weight Min	Weight Max	Duplicate	Delete
Milled Bush	☆	MCDONALD ET.AL, 2011	🥑 das	Cattle	Lactating	Dairy/milk	450 Kg	450 Kg	6	
	☆	MCDONALD ET.AL, 2011	🕗 das	Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	6	
Nutritional Requirement	☆	MCDONALD ET.AL, 2011	🥑 das	Cattle	Lactating	Deiry/milk	650 Kg	650 Kg	6	
lations Library	☆	MCDONALD ET.AL, 2011	🥑 das	Cattle	Lactating	Dairy/mik	650 Kg	650 Kg	6	
Disclaimer	☆	MCDONALD ET.AL, 2011	🥑 das	Cattle	Dry cattle (pregnant)	Dairy/milk	450 Kg	450 Kg	6	
App Settings	☆	MCDONALD ET.AL, 2011	🥑 das	Cattle	Dry cattle (pregnant)	Dairy/milk	650 Kg	650 Kg	6	
legend	☆	MCDONALD ET.AL, 2011	🥝 das	Cattle	Lactating	Dairy/milk	450 R	450 Kg	16	
🗢 Offline mode 🕖	☆	NRC, 2001	🥑 das	Cattle	Growing animals (male and female)	Dairy/milk	250 Kg	250 Kg	6	
	☆	NRC, 2001	🥑 das	Cattle	Growing animals (male and female)	Dairy/milk	150 Kg	150 Kg	6	
	☆	NRC, 2001	🥑 das	Cattle	Growing animals (male and female)	Dairy/milk	250 Kg	250 Kg	6	
	☆	NRC, 2001	🥑 das	Cattle	Growing animals (male and female)	Dairy/milk	150 Kg	150 Kg		
							ecords per page: 20	▼ 1-20 of 277		>

	De-bushing Advisory Service giz					í.	My Farm Manager	¢ Ⅲ	\$
6 Feed Formula Application	Nutritional F	Requirem	ents			CREATE	IEW NUTRITIO	NAL REQUIREM	ient 👻
CREATE RATIONS	✓ All Nutritional Req. ▼	oduction Purpose 👻	IGHT IN KG 💌 Sea	rch Q	RESET FILTERS				
Ingredients ^								•	
All Ingredients	ALL	c	ATTLE			Standard L	abels		•
Feeds	NR name 🛧	Source	Species	Production Status	Production Purpose	Wei Standard L	abels		
Milled Bush	MCDONALD ET.AL, 20	11 🌍 das	Cattle	Lactating	Dairy/milk	Nutritional	Labels		
	MCDONALD ET.AL, 20	11 🕑 das	Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	6	
Nutritional Requirement	MCDONALD ET.AL, 20	11 🕑 das	Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	- The	
Rations Library	MCDONALD ET.AL, 20	11 🌍 das	Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	6	
Disclaimer	MCDONALD ET.AL, 20	11 👩 das	Cattle	Dry cattle (pregnant)	Dairy/milk	450 Kg	450 Kg	6	
App Settings	MCDONALD ET.AL, 20	11 🕜 das	Cattle	Dry cattle (pregnant)	Dairy/milk	650 Kg	650 Kg	16 C	
Legend	MCDONALD ET.AL, 20	11 🥑 das	Cattle	Lactating	Dairy/milk	450 Kg	450 Kg	6	
Offline mode	📩 NRC, 2001	🍘 das	Cattle	Growing animals (male and female)	Dairy/milk	250 Kg	250 Kg	6	
	📩 NRC, 2001	🅑 das	Cattle	Growing animals (male and female)	Dairy/milk	150 Kg	150 Kg	16	
	📩 NRC, 2001	🅑 das	Cattle	Growing animals (male and female)	Dairy/milk	250 Kg	250 Kg	16	
	📩 NRC, 2001	🅑 das	Cattle	Growing animals (male and female)	Dairy/milk	150 Kg	150 Kg	16	
close ×						Records per page: 20 *	1-20 of 277	< <	> >1

1. YOU CAN ACCESS THE COMPLETE LIST OF NUTRITIONAL REQUIREMENTS,

by clicking on **"NUTRITI-ONAL REQUIREMENT"** in the left menu.

The nutritional require- ments are formulated by our experts and contain the requirements for a specific species, sex, purpose etc. that will be used in the formulation of the ration.

The default view of the requirements is set to Standard Labels. This viewwill give you access to the**Name**, **Source, Species, Production status, Pur- pose** and **Weight range** of the requirement. Click on each of the items to sort the list.

2. SWITCH TO NUTRITIONAL LABELS,

If you wish to have a more detailed view of the nutri-tional elements used for the formulation.

05 NUTRITIONAL REQUIREMENTS

How to filter the nutritional requirements list screen

Feed Formula Application	Nutritional F	Poquirom	onte			CREAT	Manager	J NAL REQUIREN	AENT +
CREATE RATIONS	✓ All Nutritional Req. ▼	Production Purpose	WEIGHT IN	KG 🔺 Search	Q RESE	TFILTERS			
All Ingredients	Verified Nutritional Reg. My Preferred Nutritional Reg.	Dairy/mik Meat/Beef	Min Max 0 0	ок					
Single Ingredients	My Saved Nutritional Req. All Nutritional Req.	Source	ATTLE Species	Production Status	Production Purpose	S andan Weight (Vin	d Labels Weight Max	Duplicate	
Milled Bush	MCDONALD ET.AL, 20	-	Cattle	Lectating	Dairy/milk Dairy/milk	450 Kg	450 Kg	6	_
Nutritional Requirement Rations Library	MCDONALD ET.AL, 20	11 🕑 das	Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	1	
Disclaimer App Settings	MCDONALD ET.AL, 20 1 1 1 1	•	Cattle	Lactating Dry cattle (pregnant)	Dairy/milk Dairy/milk	650 Kg 450 Kg	650 Kg 450 Kg	6	
Legend	MCDONALD ET.AL, 20	•	Cattle	Dry cattle (pregnant)	Dairy/milk Dairy/milk	650 Kg 450 Kg	650 Kg 450 Kg	6	
Offline mode	Image: marcel with the second secon	🕑 das	Cattle	Growing animals (male and female) Growing animals (male and female)	Dairy/milk Dairy/milk	250 Kg 150 Kg	250 Kg 150 Kg	6	
	☆ NRC, 2001	💋 das	Cattle	Growing animals (male and female) Growing animals (male and female)	Dairy/milk Dairy/milk	250 Kg 150 Kg	250 Kg	6	
close X		•				tecords per page: 20			> >1

3. FILTER THE LIBRARY OF NUTRITIONAL REQUIREMENTS BY USING THE SEARCH FILTERS BAR.

You can filter your list by:

- Verified nutritional req: standard nutritional requirements informati-on included in the App, validated by Animal Nutritionists.
- My preferred nutritional req: nutritional requirements that have already been marked as preferred.
- My saved nutritional req: nutritional requirement information that has been created and saved by the user.

In the Standard Labels view, you can also filter by **Production purpose** and per **Weight in KG** or se- arch directly by typing thename of the ingredient in the **Search bar**.

05 NUTRITIONAL REQUIREMENTS

Add new nutritional requirement screen

RM4TRADE SUIT		ushing sory Service 9								My Farm Manager	¢ #	
🥖 Feed Formula Applical	tion	Nutr	itional Re	quire	ment	ts				E NEW NUTRITIO	NAL REQUIRE	AENT 🔺
CREATE RATIONS		✓ All Nu	tritional Req. 💌 Production	n Purpose 👻	WEIGHT IN K	G 👻 Sei	arch Q	RESET FILTERS	Cattle	e	•	
Ingredients	^											<
All Ingredients Single Ingredients			ALL		CATTLE				Standard	i Labels		•
Feeds			NR name 🛧	Source		Species	Production Status	Production Purpose	Weight Min	Weight Max	Duplicate	Delete
Milled Bush		☆	MCDONALD ET.AL, 2011	🥑 des		Cattle	Lactating	Dairy/milk	450 Kg	450 Kg	6	
		☆	MCDONALD ET.AL, 2011	🌏 das		Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	6	
Nutritional Requirement		☆	MCDONALD ET.AL, 2011	🌏 das		Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	- 16	
Rations Library		☆	MCDONALD ET.AL, 2011	🥑 das		Cattle	Lactating	Dairy/milk	650 Kg	650 Kg	16	
Disclaimer		☆	MCDONALD ET.AL, 2011	🥑 des		Cattle	Dry cattle (pregnant)	Dairy/milk	450 Kg	450 Kg	-	
App Settings		☆	MCDONALD ET.AL, 2011	🥑 das		Cattle	Dry cattle (pregnant)	Dairy/milk	650 Kg	650 Kg	-	
Legend		☆	MCDONALD ET.AL, 2011	🥑 das		Cattle	Lactating	Dairy/milk	450 Kg	450 Kg	16	
Offline mode	•	☆	NRC, 2001	🥑 dəs		Cattle	Growing animals (male and female)	Dairy/milk	250 Kg	250 Kg	16	
		☆	NRC, 2001	🥑 das		Cattle	Growing animals (male and female)	Dairy/milk	150 Kg	150 Kg	6	
		☆	NRC, 2001	🥑 das		Cattle	Growing animals (male and female)	Dairy/milk	250 Kg	250 Kg	6	
		☆	NRC, 2001	🜏 das		Cattle	Growing animals (male and female)	Dairy/milk	150 Kg	150 Kg	16	
									Records per page: 20			

4. YOU CAN ADD YOUR OWN NUTRITIONAL REQUIREMENT.

To do so, click on the button **"CREATE NEW**

NUTRITIONAL REQUIRE-

MENT" on the top right of the page with the Nutriti- onal Requirements list.

Choose the species (only Cattle is available at the moment).

Complete animal paramenters screen

	e-bushing giz	My Farm A III 🌣
6 Feed Formula Application	Please refer to the Legend Page for descriptions of terms.	×
CREATE RATIONS	New Nutritional Requirement	
Ingredients	Animal Parameters	
All Ingredients	Select Species * Catle	Production Purpose Level
Single Ingredients	Production Purpose *	Geography
Milled Bush		Namibie
Nutritional Requirement	Sex of the animal	Visibility Me ~
Rations Library Disclaimer	Production Status	Verified Nutritional Requirement
App Settings Legend	× S. Weight Range Min - kg * Weight Range Max - kg *	Verified Unverified
Offline mode	1 to 1500kg (100kg range recommendee)	
	Nutritional Requirements	a da la constante de la consta
	Technical Info	• المالية المتعالمات المتعالمات •
	Permission (coming soon)	a la
CLOSE X	Back Save	

5. COMPLETE THE FIELDS IN EACH TAB.

Required fields are mar-ked with an asterisk.

Insert the **Animal parameters**, by choosing the species, production purpose and weight range.

In the Nutritional Requirements tab, add the spe-cific information about the Nutritional Target for each nutrient.

In the **Technical Info tab**,you can add a brief de- scription and reference ofthe requirement you are creating.



Rations library screen

CREATE ALL CATTLE			_	Â							SUITE Sh	
yngedards ALL CATTLE Energied (1997)	NUALLY	E RATION MA	CREAT					lbrary	ons l	Rati	a Application	eed Formula
gendents ALL CATTLE Examble Control Single hogedients Formula Manuelle + Kource Species Feeds Formula Manuelle + Kource Species Mide Bouh Catik Meso/Berl 8.82 3.48 150.68 Mail Introlow Regularement RATION #594259 Me Catik Meso/Berl 3.49 226.9 225.54 Mail statiss Library Selfining Selfining Selfining Selfining Selfining gend Selfining Selfining Selfining Selfining Selfining											TIONS	CREATE RATI
Al logedierts Single Ingredients Freds Miled Buuh Miled Buuh					RESET FILTERS	۹	GHT IN KG 👻 Search	Production Purpose *	ations *	🛹 All R		
ALL CATTLE Ended Labels Feeds Formala Namello 1 Kourse Species Metal Namello 1 Species											^	redients
Single lagordierts Freedie Freedie Source Speciality Mathematic Property Canada Managolity Conder Production Property Canada Managolity Conder Production Property Conder Production Program Deglication Milled Bunk. 												I Ingredients
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1. IN THE RATIONS LIBRARY,

you will find all the rations created or saved by you.

Click on the name of the ration to see its details and to edit it.

Click on **"SAVE"** if you want to save your chan- ges or on **Delete ration** ifyou want to delete it.

Rations library label view screen

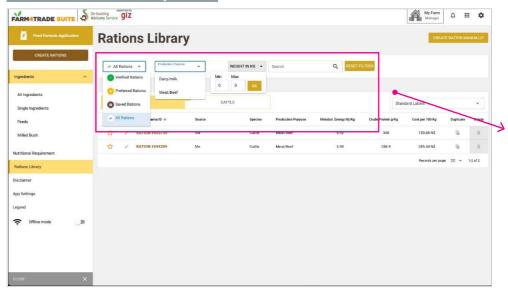
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2. SWITCH VIEWS BETWEEN STANDARD LABELS AND NUTRITIONAL LABELS,

by clicking on the drop- down menu on the right on top of the list of ingre-dients.



How to filter rations library screen



3. YOU CAN FILTER YOUR LIST BY USING THE FILTERS ON THE TOP OF THE LIST.

You can filter your list by:

- Verified rations: crea- ted and included in the App, validated by Animal Nutritionists.
- **Preferred rations:** rations that have been marked as preferred for easier retrieval later.
- **Saved rations:** rations created and saved by theuser.

Verified rations is alwaysthe default view.

You can also filter by **Pro**duction purpose and per Weight in KG or search directly by typing the name of the ration in the<mark>Search bar</mark>.

Click on **"RESET FILTERS"** to cancel all filters and goback to the complete list.



How to create a ration manually screen

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4. YOU CAN ALSO ADD A RATION MANUALLY TO YOUR LIBRARY.

Go back to the list of ra- tions and click on "CREA-TE RATION MANUALLY".

STEP 1: Define animal parameters screen

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5. DEFINE THE ANIMAL PARAMETERS.

Following the same stepsas illustrated in section 04.1.

Click on **"NEXT"** to moveto the following step.



STEP 2: Choose the ingredients screen

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6. CHOOSE THE INGRE-DIENTS

from the **"SELECT INGRE-DIENT"**menu.

Unlike the Create Ration section, you will choose the ratio of ingredients that will be part of the ration.

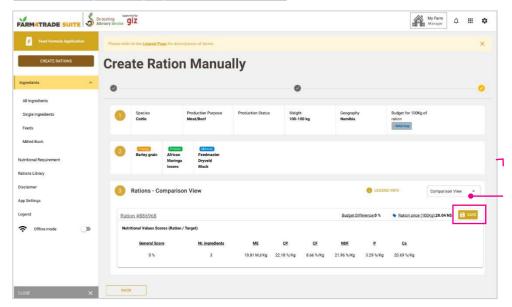
Choose them in the Ingredient Name list and assign them a percentagein the ration in the Ingr.% case that will appear.

Select at least 3 ingre- dients to be included in the ration. One Protein in-gredient and one Energy ingredient are required.

One Fiber ingredient is strongly recommended.

Click on "NEXT".

STEP 3: Compare the proposed rations screen



7. COMPARE THE PRO-POSED RATIONS

If you are satisfied withthe result, click on **"SAVE"**.

If not, go back and chan-ge the ingredients or thedetails of the ration.



07 OFFLINE MODE

Activate the offline mode screen

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1. SWITCH TO THE OFF-LINE MODE.

By clicking on the green toggle switch in the app menu.

> When you use the app in offline mode, you canaccess all the features except for the calculationof the rations.

Any information or data that you will add (nutritio-nal requirements, manualrations, ingredients) will be automatically updatedwhen you move back to online mode.

You can also click on the three dots on the top right of the browser andchoose the option Add to Home screen on the menu.



08 PC AND MOBILE APP

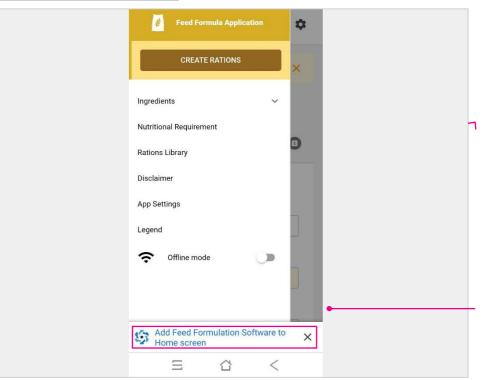
Activate the offline mode screen

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1. YOU CAN INSTALL THE APP DIRECTLY ON YOUR LAPTOP.

On PC: Use Chrome to connect to the Feed Formula Application. Onthe navigation bar of the browser, click on the + symbol. A shortcut to theapp will be automaticallyadded to your desktop.

Activate the offline mode screen



2. YOU CAN ALSO IN-STALL THE APP DIREC-TLY ON YOUR ANDROID PHONE.

On Android mobile: at your first connection, a pop up will appear that suggests to add the appto your screen.



09 DISCLAIMER

Warning: Users who created their own formula do so at their own risk.

This app is not intended to replace professional animal nutritionists. It is always advisable consult a nutritionist for a balanced diet.

Existing verified rations by Farm4Trade, have been acquired by reliable sources and pro-ven safe if applied accurately.



10 SUPPORT

If you still can't find your answer, please email us at: *support@farm4trade.com* or fill out thecontact form at this link: *https://www.farm4trade.com/contact-us*.

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