



INATrace

The Traceability Tool for Sustainable Supply Chains

User guide 2023



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Executive Summary

The INATrace user guide for producer organizations provides a detailed walkthrough of the various modules within the INATrace system. The guide was developed to explain the components of each module in a step-by-step manner, ensuring that users have a clear understanding of how to utilize the system effectively.

At first, the documentation covers topics of accessing the system, information on language settings and an overview of the user interface. The guide provides an introduction to INATrace, a system that attends to traceability of agricultural supply chains through recording farmers deliveries, processing and payments actions in the producers' organization.

The delivery module focuses on recording single and bulk deliveries. The next part of processing module covers the actions of processing farmers' delivered products. It consists of sections on pre-processing, storage facilities, and the actual processing activities of the products. To give deep understanding, the guide explains step-by-step how to record data of processing activities such as weighing, wet-processing, and packing. It also elucidate the transfer of products from storage to processing facilities. Additionally, it discusses post-processing activities and the transfer of products to the company's final storage.

Moreover, the payment module deals with recording farmers payments. And the all-stock module allows users to view stock and batch history. It also provides the option to create offers on Beyco, specifically for coffee value chain. With this guidebook, the system users can apprehend how to access existing farmer profiles and how to create new ones.

The guide explains how to view and manage deliveries and processing performance data through the dashboard. The producers' organizations share traceability data with the upper value chain stakeholders through orders chapter. So, the guide explains how to view and fulfill orders. Finally, the document provides guidance on accessing and editing company profile to the admin users.

In summary, this guidebook provides a comprehensive overview of the INATrace system and its various modules that are utilized by the users from producer organizations.

0.1. Producer organization

The documentation provided can be utilized by users of the INATrace system who are part of producers' organizations. In the context of the INATrace project, a producers' organization refers to a cooperative or company that is involved in the initial production and transformation of raw agricultural products into value-added products. These organizations may be owned by or directly work with farmers who cultivate the crops. It is important to note that the roles of producers can vary depending on the specific agricultural sector and the value chain involved. For instance, a farmers' cooperative that grows coffee, processes the harvested coffee cherries into green coffee, and exports it to buyers would be considered both a producer and exporter organization within the value chain.

From the perspective of the INATrace system, the common factor among all producers' organizations is that they are responsible for registering the deliveries from farmers as the initial entry point of traceability information into the system.

0.2. Objectives

The objective of this user guide is to demonstrate step by step functionalities of all INATrace system modules to the users. The following are the specific objectives of this user guide:

- System users will understand the general background of INATrace system and how it enables traceability a. and transparency in agricultural value chains.
- Users will have a thorough understanding of INATrace and how it accommodates all value chain data.
- Users will have guidelines on how to use INATrace. c.

0.3 INATrace Background

INATrace is a digital open-source solution that puts people first. With the aim of improving the economic situation of smallholder farmers, INATrace focuses on the traceability of global supply chains. Better payment for producers at the beginning of the supply chain can only be secured if it becomes clear how little they receive for the raw material produced compared to other actors.

Data on the supply chain, such as what prices are paid, which processing steps take place and which actors are involved, is stored digitally and, if desired, can also be viewed by consumers via a QR code. In addition, new functions for recording farmers' field polygons and satellite-based forest monitoring are being developed. Thus, the data collected in INATrace can be used to fulfil the due diligence requirements for the new EU Deforestation Regulation (EUDR). Companies in the processing, wholesale and retail sectors are being made responsible for their own supply chains with the introduction of the German Supply Chain Act (LkSG) and the EU Regulation on Deforestation-Free Products (EUDR). Compliance with human rights and the protection of forests is indispensable, especially at the beginning of global supply chains. In the market for traceability solutions, which currently is very fragmented, INATrace consistently builds on the requirements of those at the beginning of supply chains.

With INATrace, cooperatives have the opportunity to say goodbye to paper or Excel-based systems and make their processes fully transparent and digital. They also retain ownership over their data, strengthening their negotiating position vis-à-vis buyers of their products.

INATrace at a glance





- It is a digital **traceability** tool.
- It makes agricultural commodities traceable.
- It enables **transparency** among value chain actors and to the end-consumers.
- It allows **end consumers to learn and give feedbacks** about the product.
- It helps **producers** to digitalize their operations and have **data** that they can analyze and present.

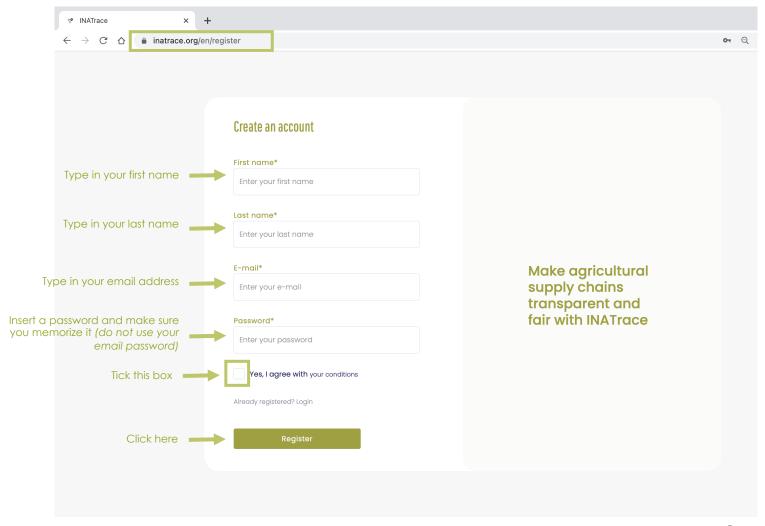
Chapter 1.

Getting Started with INATrace

INATrace is accessible using any modern browser (e.g. Chrome or Microsoft Edge) through the URL: https://inatrace.org/

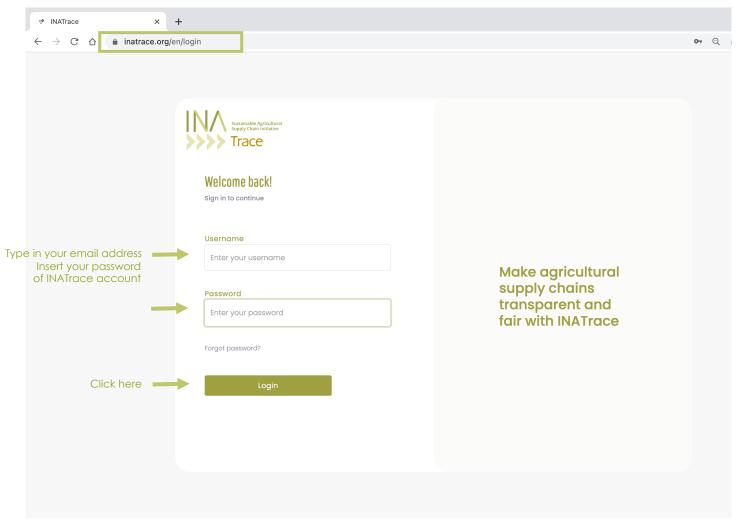
1.1 Register in the system

In order to register a user account on INATrace, access https://inatrace.org/en/register and proceed by filling in the registration form below. After filling in all the required inputs, click on register and ask your INATrace contact person to approve your account.



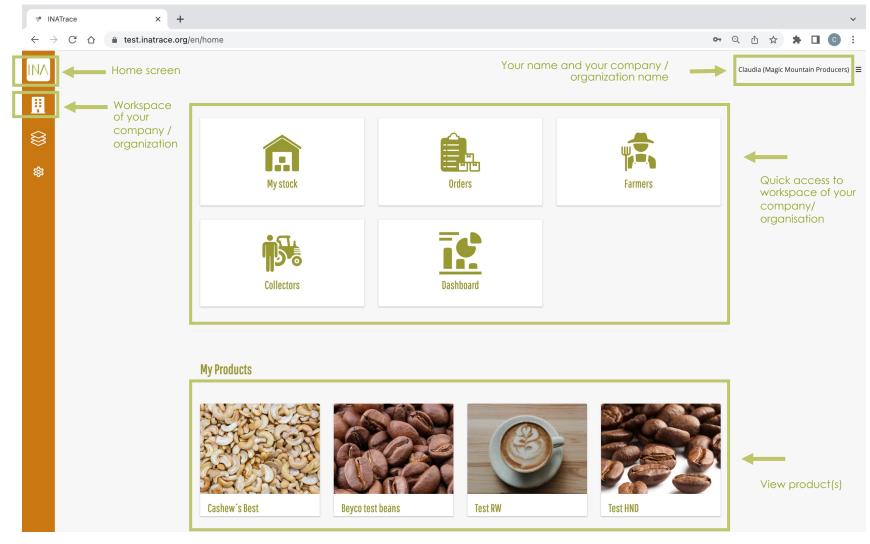
1.2 Access to the system

Once your account has been verified and activated, you can click on "Login" on https://inatrace.org/ and input your email and password to enter the system.



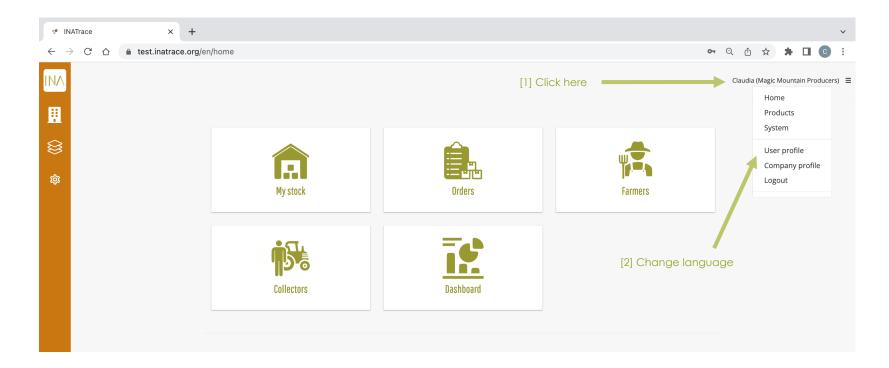
1.3 Overview of the user interface

Once you have successfully logged in into the system, the first page you see is the homepage (see below). On the same page, there are different tiles and icons that help you perform various tasks in the system.

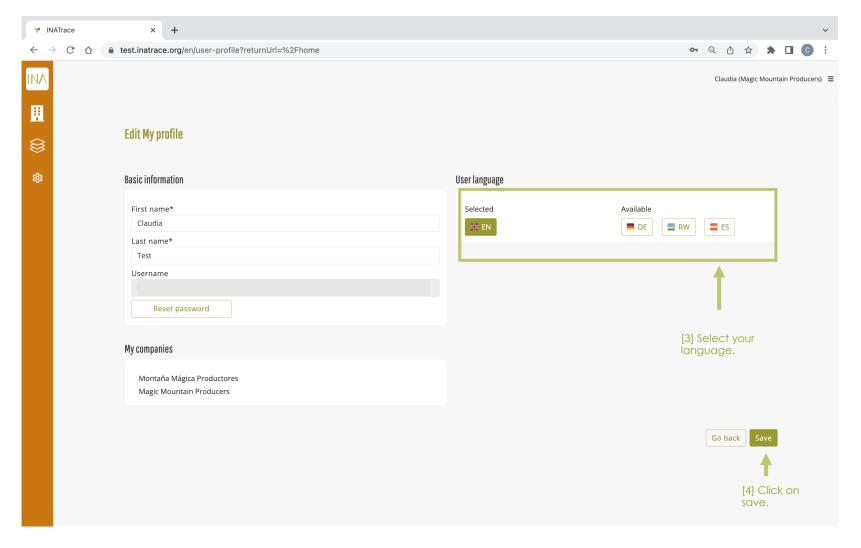


1.4 Language settings (English, Kinyarwanda, Spanish and German)

To change the system language, click on the menu icon in the top left corner, then click on user profile.



On the screen that appears, locate, and select the language of your choice under user language then click on save button at the bottom of the page to validate change of language.



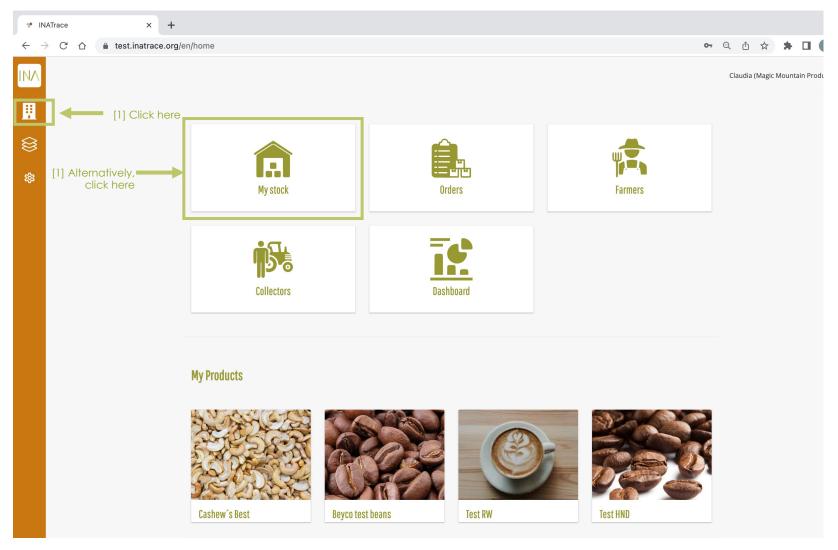
Chapter 2.

Delivery module

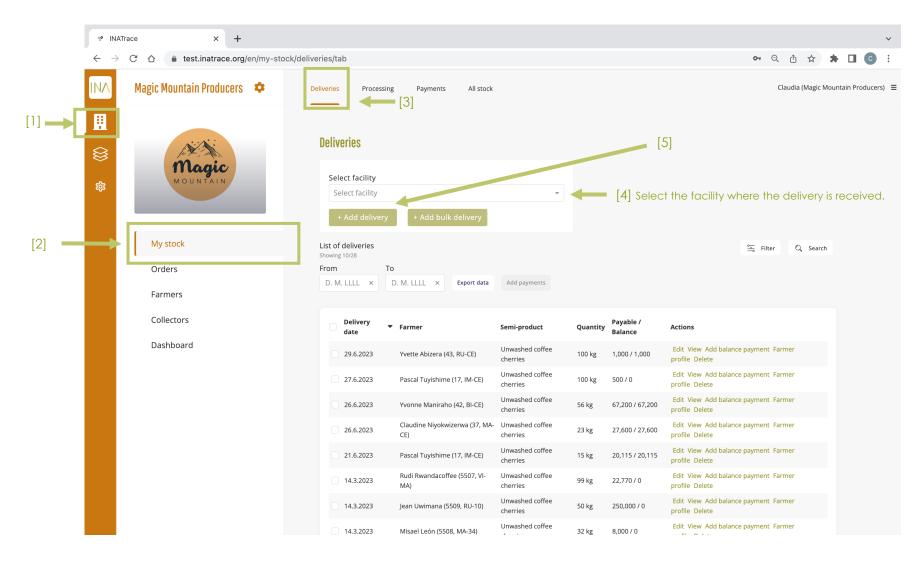
The system gives its user the ability to record either a single delivery or multiple deliveries all at once.

2.1 How to record a single delivery

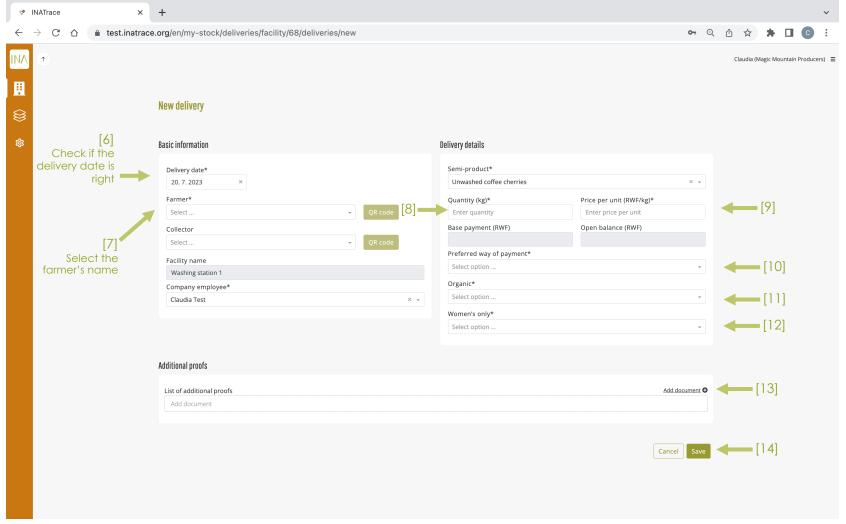
To record a single delivery, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.



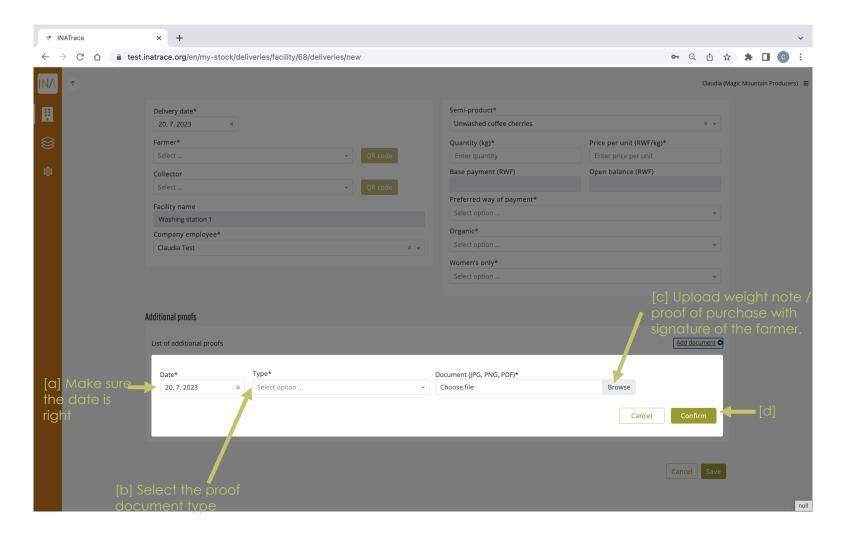
Once you are on the my stock page, follow the indicated steps to add a single delivery.



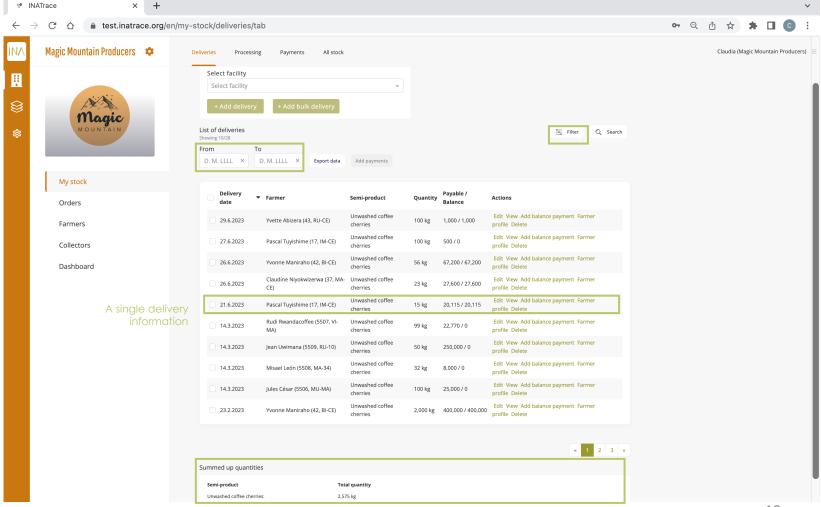
After clicking on "Add delivery" button, this page will appear, which gives you the ability to record all required information related to the delivery. You will be required to supply information such as delivery date, farmer's name, quantity delivered, price per unit, farmer's preferred way of payment, product characteristics - if applicable for your company (organic or women's only) and additional proof. Follow the indicated steps:



Here are steps of "Adding a proof document" of the purchase.

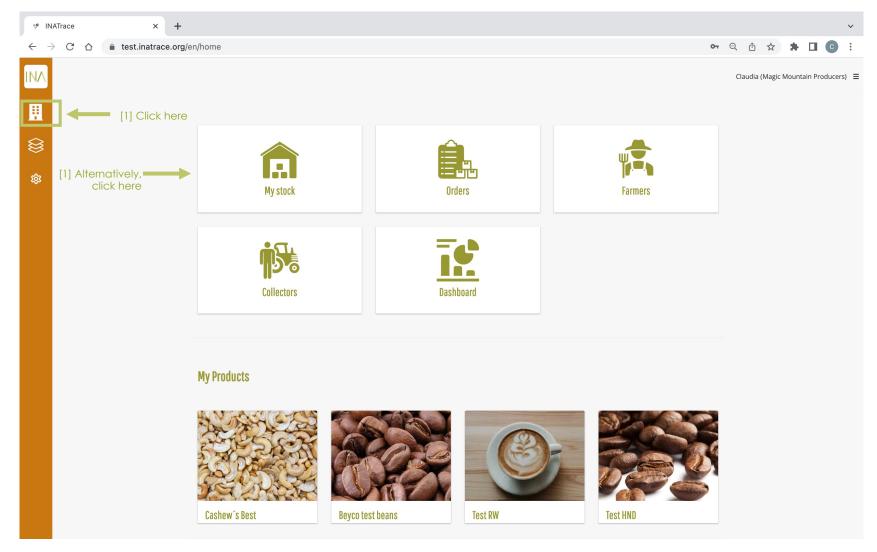


Here you have access to a list of concluded deliveries "List of deliveries" where you are able to make some modifications to a particular delivery by editing information related to it, viewing the delivery, adding payments or even deleting the delivery. The bottom part shows the "Summed up quantities" delivered which can be searched per facility, date of delivery or any period of time. The "filter" icon is an additional help when searching for specific deliveries.

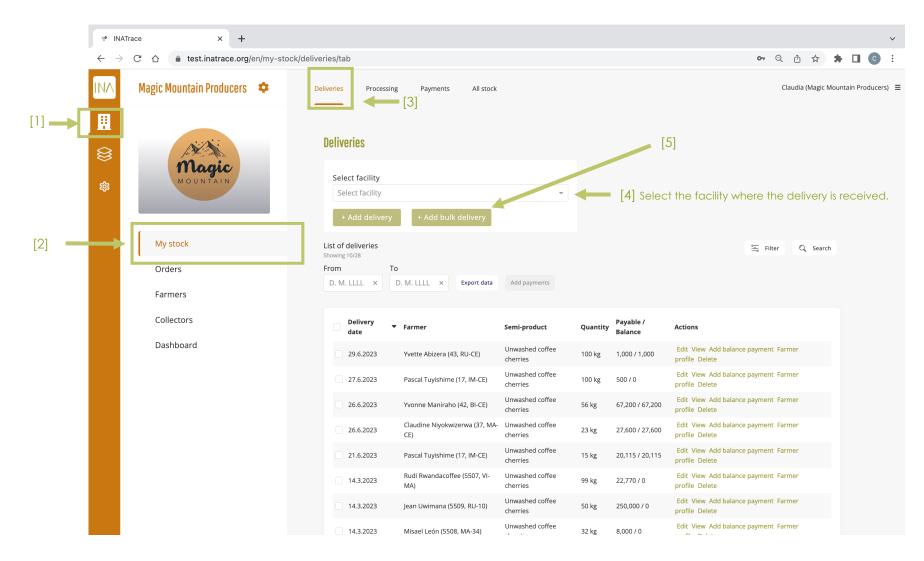


2.2 How to record bulk delivery

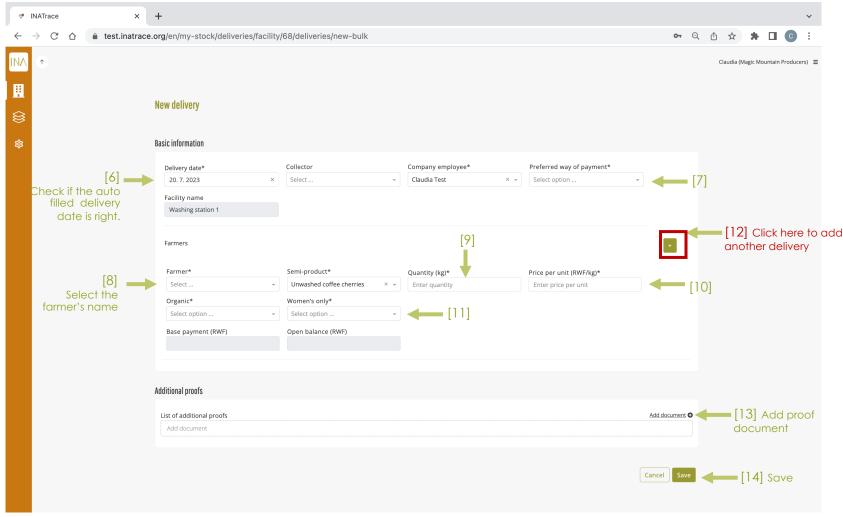
To record bulk delivery, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.



Once you are at my stock page, follow the indicated steps to add a bulk delivery.



After clicking on "Add bulk delivery" button, this page will appear, which gives you the ability to record all required information related to the deliveries of different farmers. You will be required to supply information such as delivery date, names of different farmers, quantities delivered, price per unit, farmers' preferred way of payment, coffee characteristics (organic or women's coffee) and the additional proof. Follow the indicated steps:



Chapter 3.

Processing module

The processing module helps system users to record all activities related to semi- products processing from one stage to the next and transferring the semi-product from one facility to another.

General Note on recording processing actions

Each supply chain is different, each company's configuration and user interface in INATrace are individual. This is especially true regarding the company's facilities and processing actions.

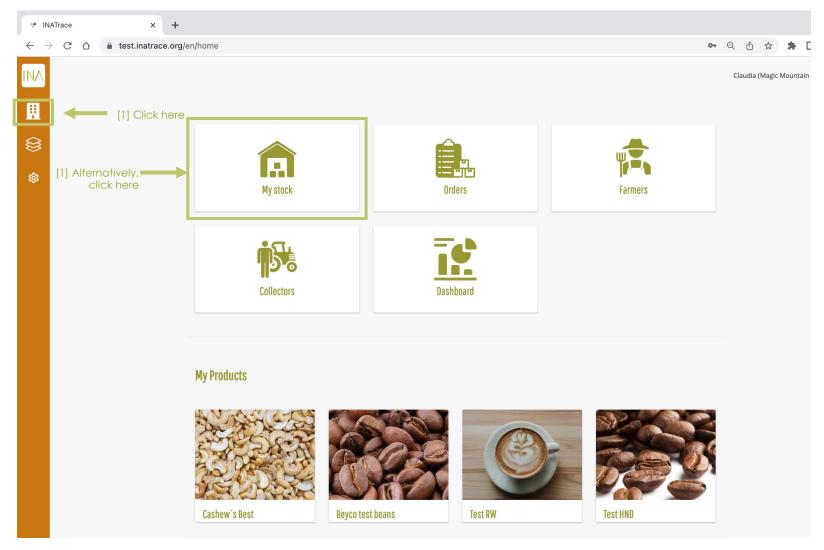
In the following, we show how to document processing actions from delivery to the company's final storage for an exemplary coffee supply chain.

KEEP IN MIND:

- All processes need to be recorded in a chronological order AFTER adding all deliveries which are part of the processing action.
- You will need to identify your product batch through all processing steps. The system will therefore ask you for an internal lot number which represents the unique identifier for your batch.
- Make sure to select the correct output facility, especially in case your product changes the location as part of a specific processing action. Example: The input facility for your processing action 2 needs to be the same one as your output facility of processing action 1. Otherwise you will not be able to select your batch for processing action 2.

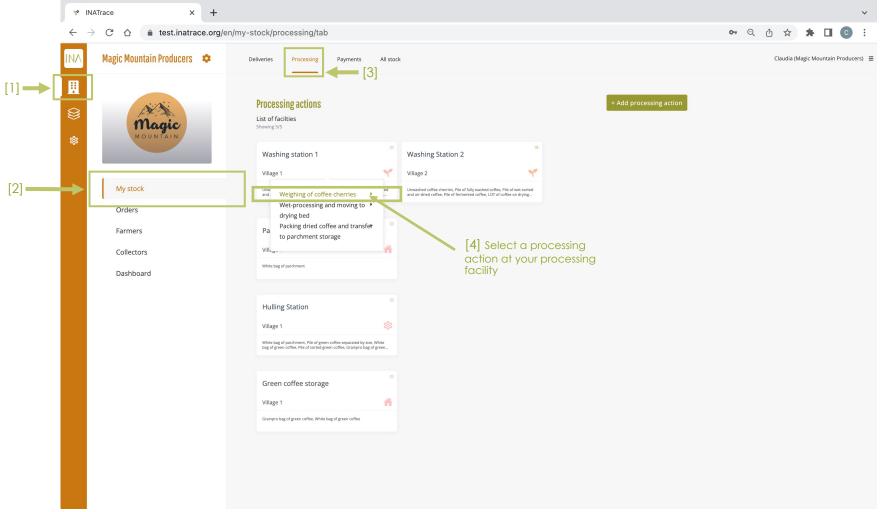
3.1 Pre-Processing

To record a processing action, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.



3.1.1 Weighing of delivered product

Hover over the tile of your processing facility where the processing action is done. In this example, we click on "Weighing of coffee cherries" to record the weighing action.

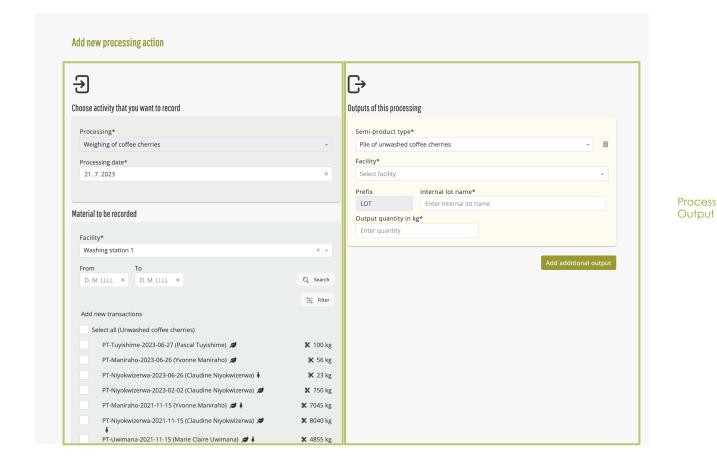


"Add new processing action" page appears with prefilled information in the processing and facility fields.

The page has two main parts:

"Material to be recorded" meaning process input information,

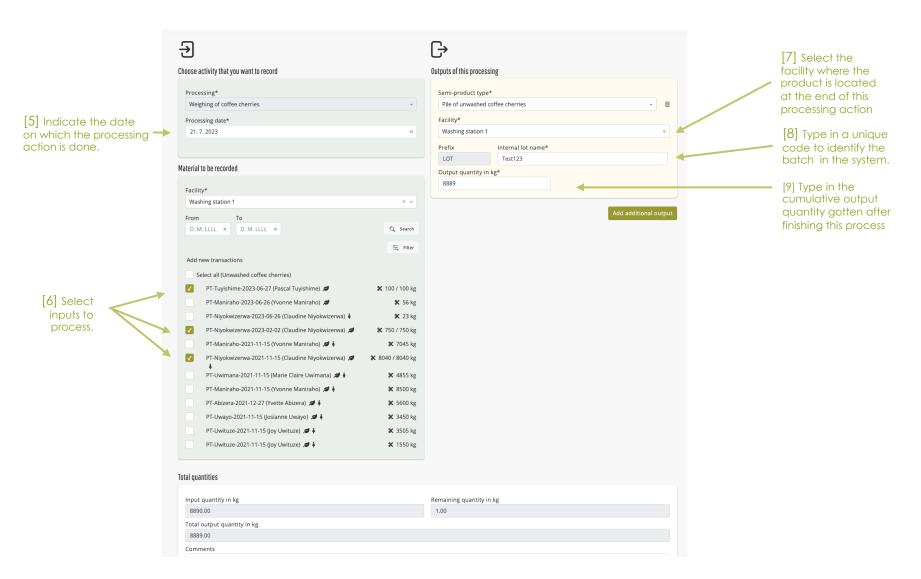
"Outputs of this recording" which means the results after processing



Process input

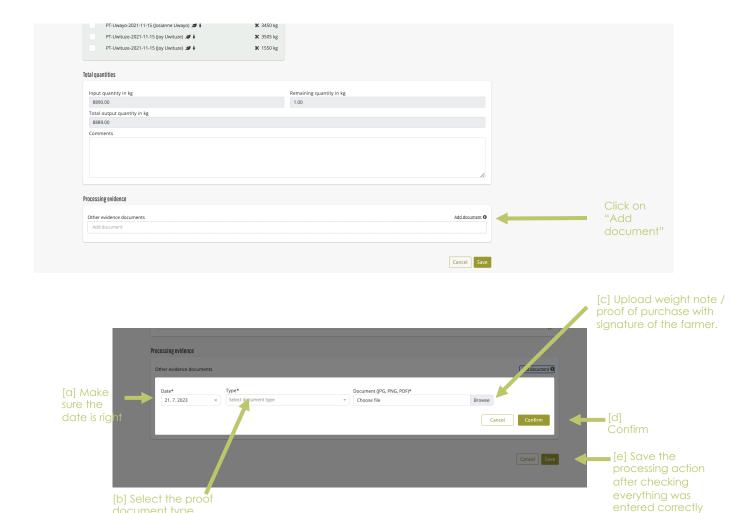
27

Follow below steps to document the processing action, like in the below example of "weighing of coffee cherries"



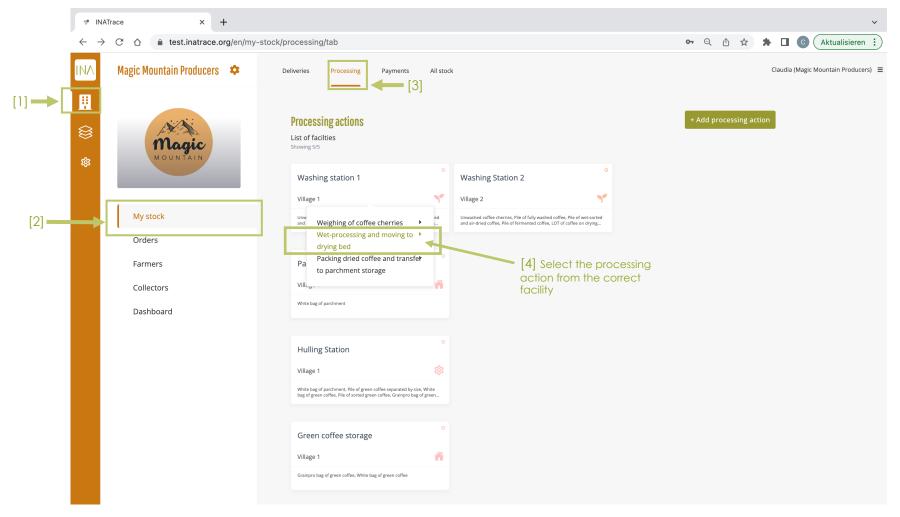
Here are steps of "Adding a proof document" and saving the processing action.

document type



3.1.2 Pre-processing (e.g. wet-processing and moving to drying bed)

Hover on the tile of the facility where the pre-processing action is to be done. In our example, we click on "Wetprocessing and moving to drying bed" to start recording the process.

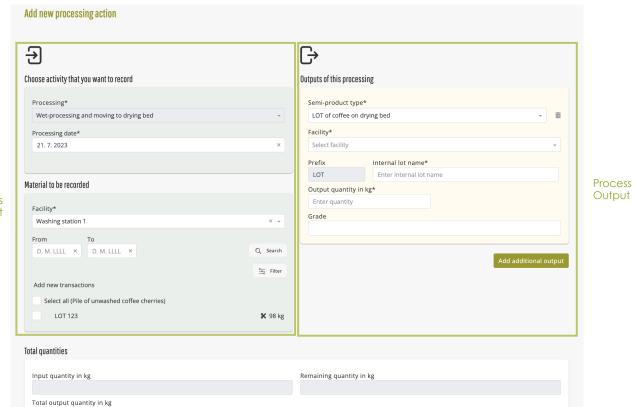


"Add new processing action" page appears with prefilled information in the processing and facility fields.

The page has two main parts:

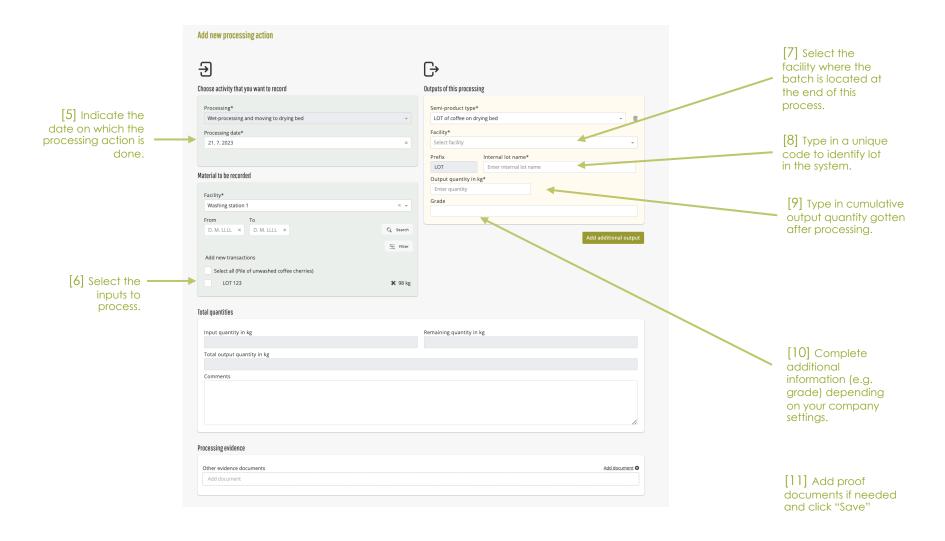
"Material to be recorded" meaning process input information,

"Outputs of this recording" which means the results after processing



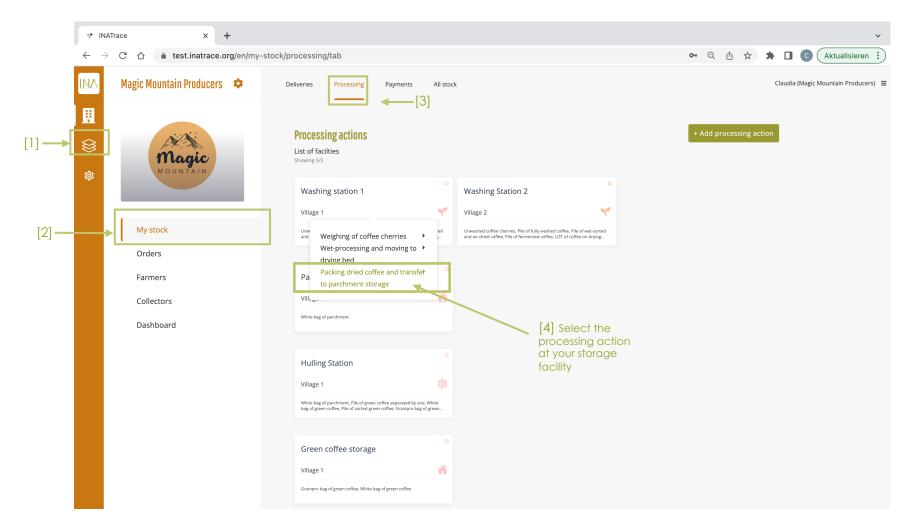
Process input

Follow below steps to document your pre-processing action.



3.1.3 Packing dried product and transfer to storage

Hover on the tile of the facility where the processing action is to be done and select the transaction, In our example, we click on "Packing dried coffee and transfer to parchment storage" to record the transaction.

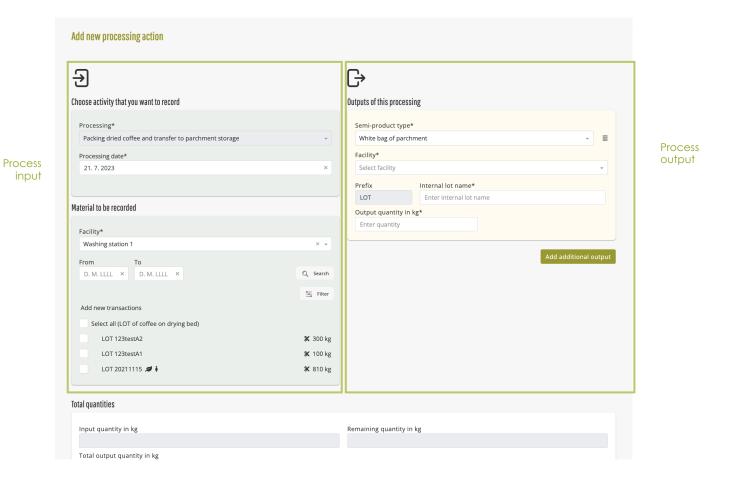


"Add new processing action" page appears with prefilled information in the processing and facility fields.

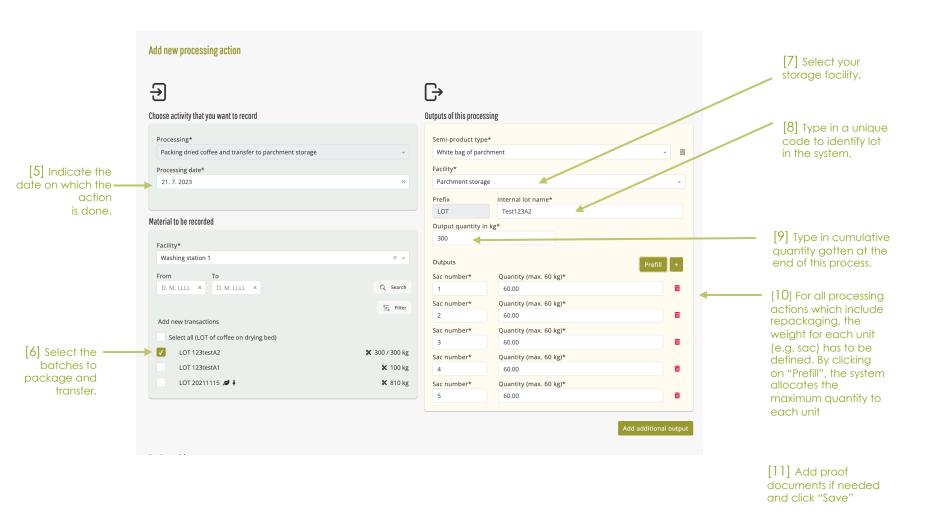
The page has two main parts:

"Material to be recorded" meaning process input information,

"Outputs of this recording" which means the results after processing

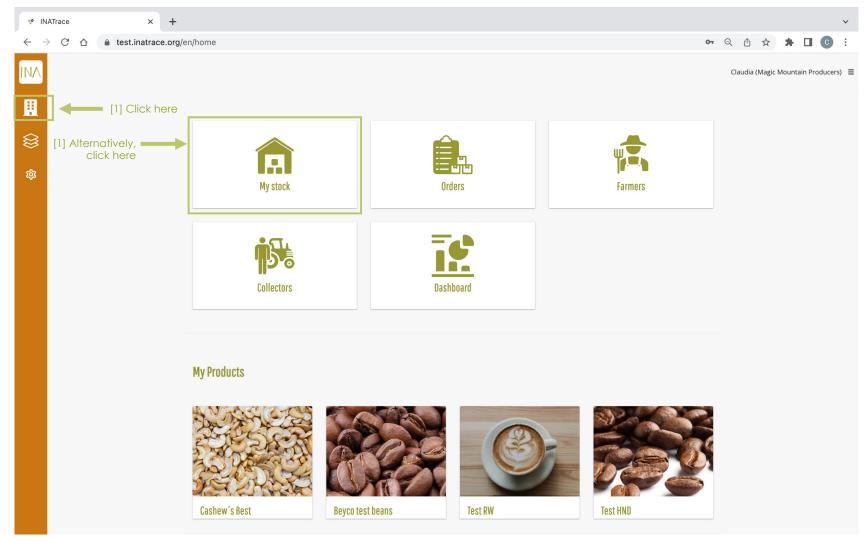


Follow below steps to document Packing dried product and transfer to storage.



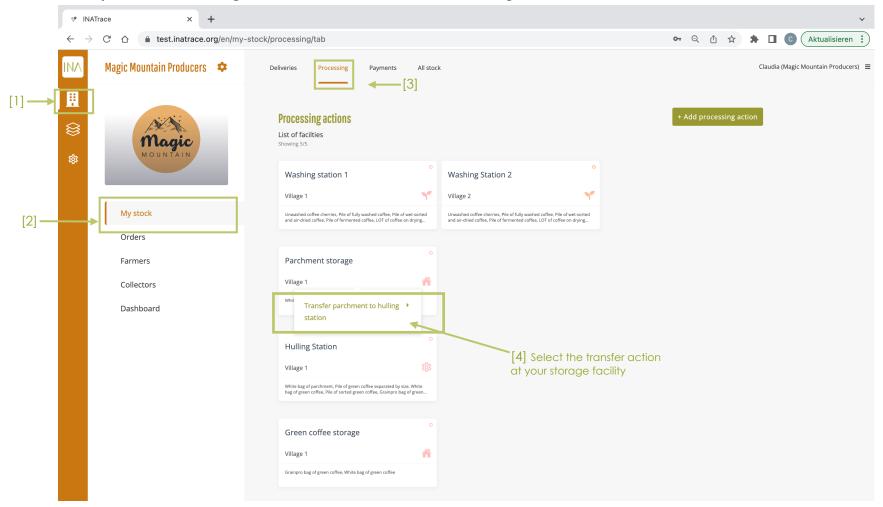
3.2 Storage facility

To record transaction at the storage facility, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.



3.2.1 Transfer from storage to processing facility

Hover on the tile of the storage where the processing action is to be done. In this example, we click on "Transfer parchment to hulling station" to move the coffee to the hulling station.

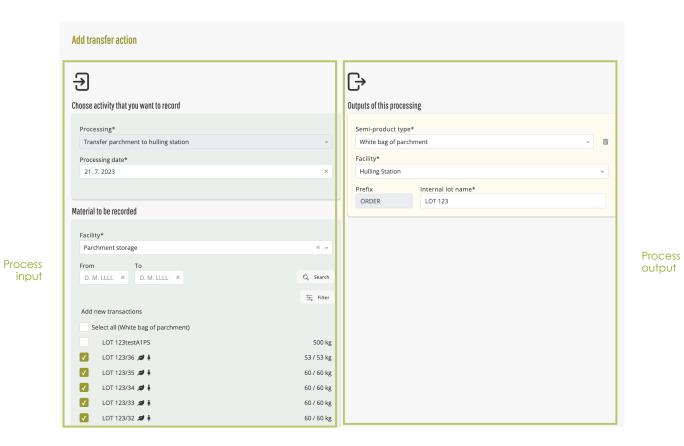


"Add transfer action" page appears with prefilled information in the processing and facility fields.

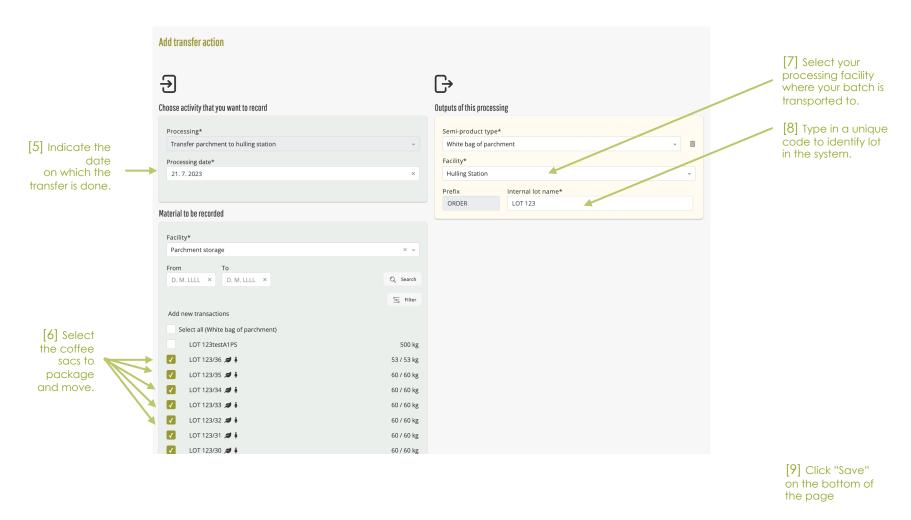
The page has two main parts:

"Material to be recorded" meaning process input information,

"Outputs of this recording" which means the results after processing

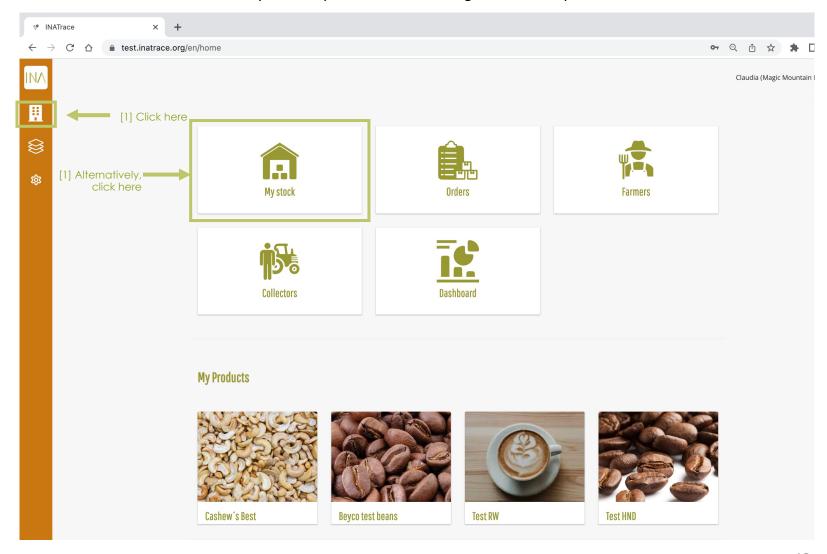


Follow below steps to document Transfer from storage to processing facility.



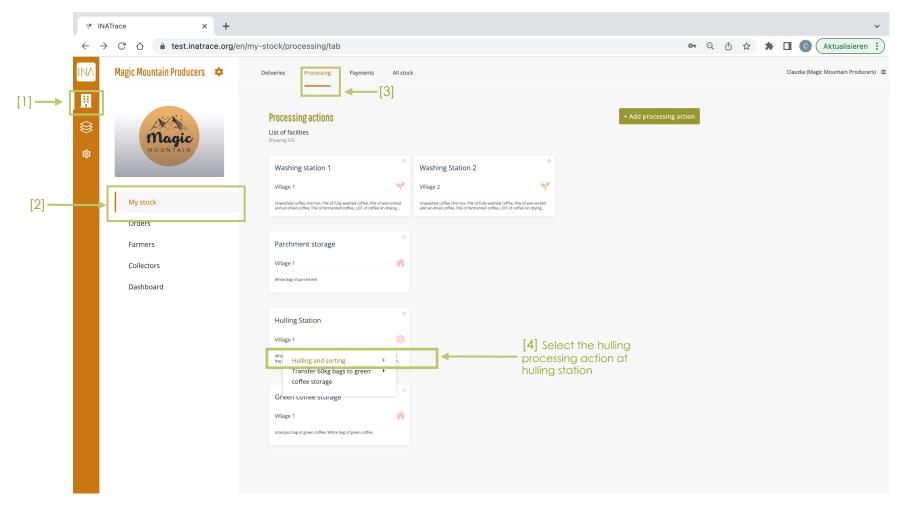
3.3 Processing

To record a processing action from your processing facility, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.



3.3.1 Processing example: hulling of coffee

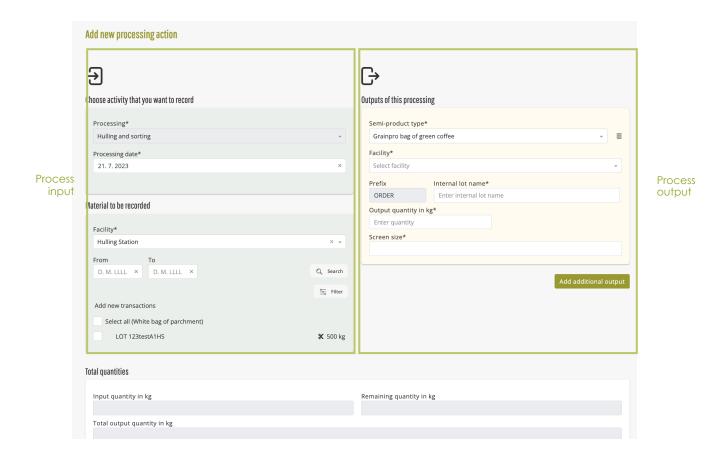
Hover on the tile of the facility where the processing action is to be done. In our example, we click on "hulling and sorting".



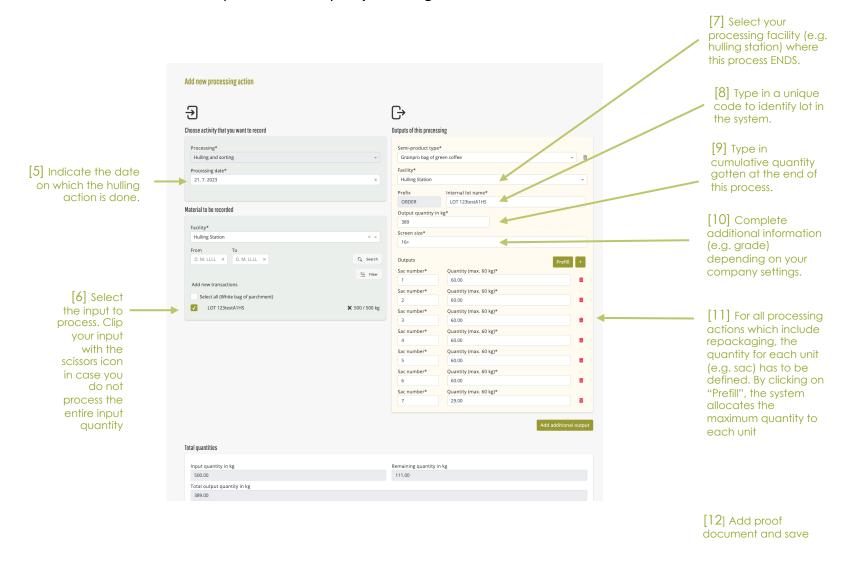
"Add new processing action" page appears with prefilled information in the processing and facility fields.

The page has two main parts:

- "Material to be recorded" meaning process input information,
- "Outputs of this recording" which means the results after processing

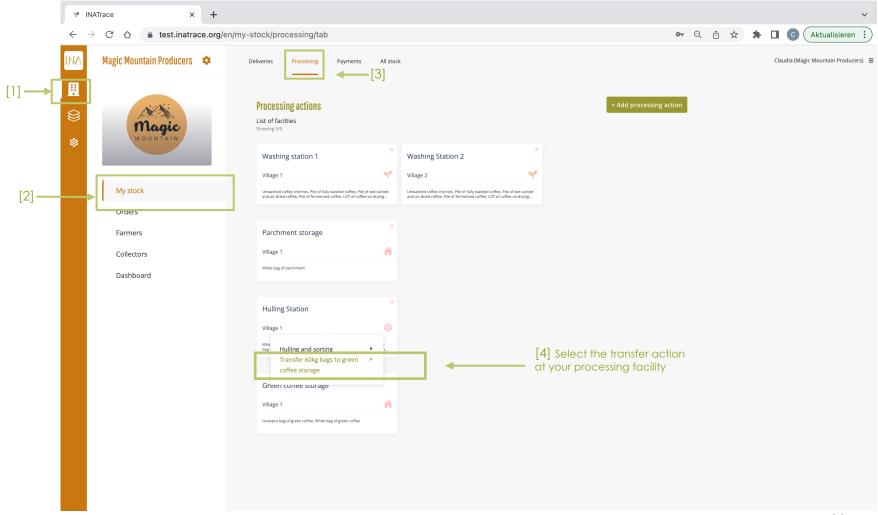


Follow below steps to document your processing action.



3.3.2 Post-process example: Transfer to company's final storage

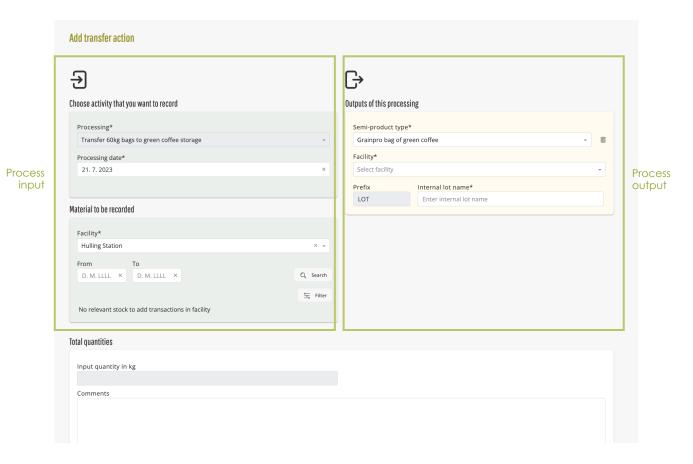
Hover on the tile of the facility where the processing action is to be done. In our example, we click on "Transfer GrainPro bags to green coffee storage" to open the add action page and document the transfer information.



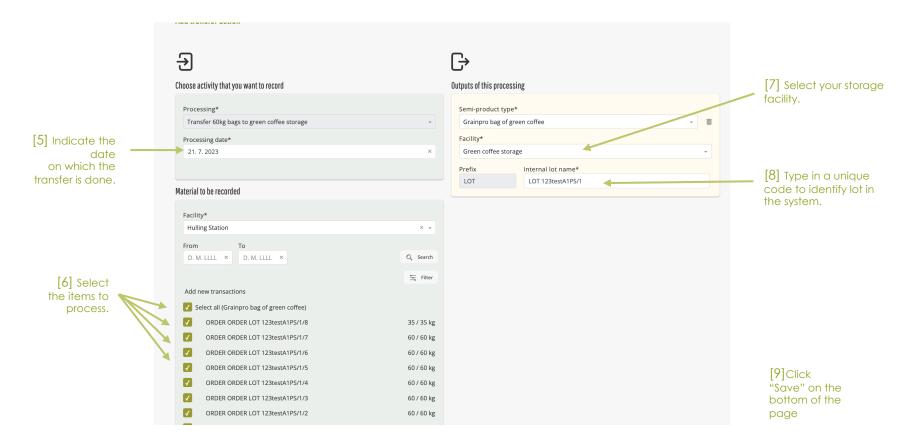
"Add transfer action" page appears with prefilled information in the processing and facility fields.

The page has two main parts:

- "Material to be recorded" meaning process input information,
- "Outputs of this recording" which means the results after processing



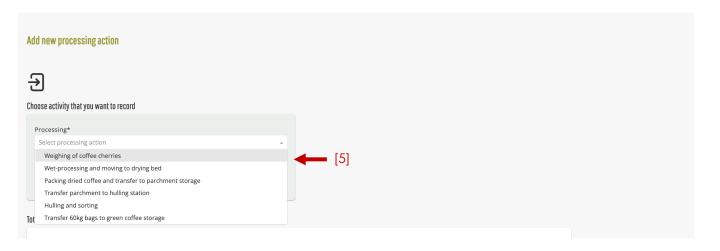
Follow below steps to document Transfer to company's final storage.



Using "Add processing action" button

You can alternatively access the processing interface by clicking on the "Add processing action" button. Then, choose a processing or transfer action and continue the documentation accordingly as shown in the previous steps.





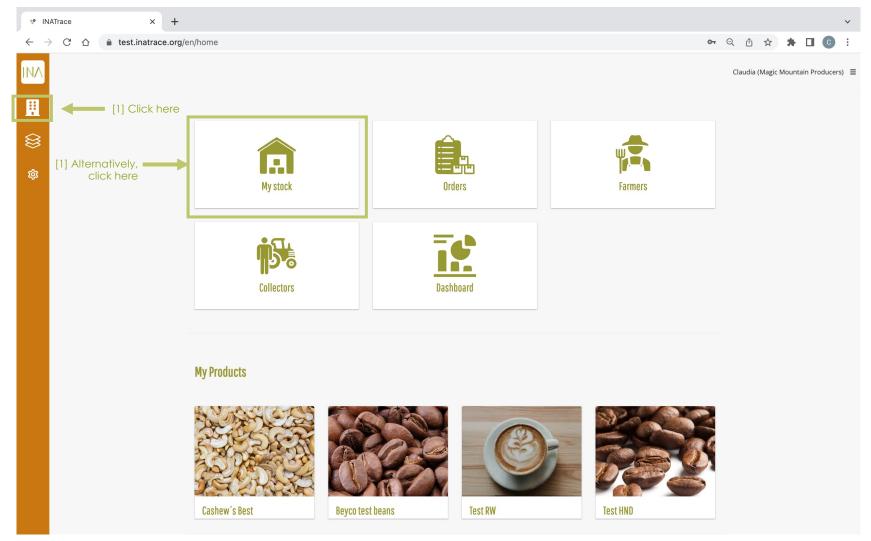
Chapter 4.

Payment module

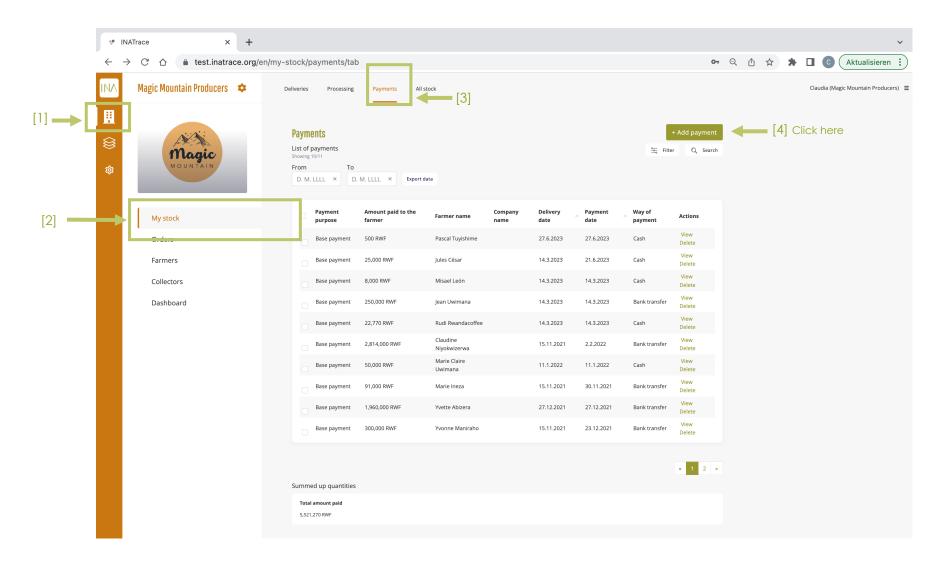
This module helps system users to perform actions related to payment of farmers. The system gives you options to either record a single payment or bulk payments.

4.1 Recording a single payment

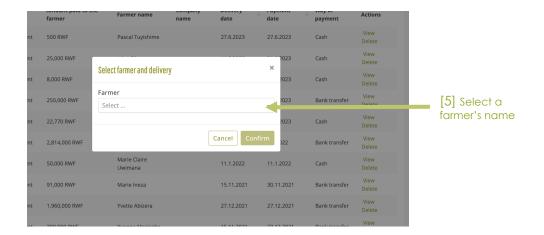
To record a single payment, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.



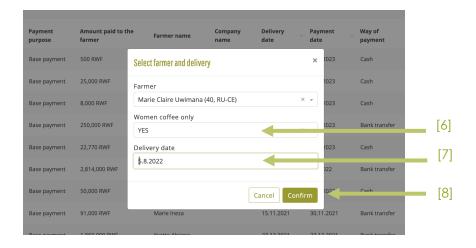
Inside my stock page, go to "Payments" then click on the "Add payments" button.



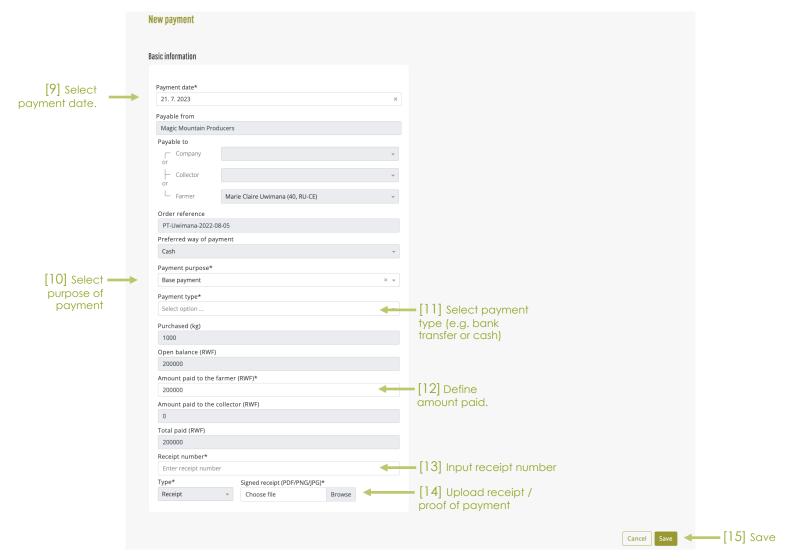
You will then be prompted with the dialog box where you can select a farmer to whom the payment was made.



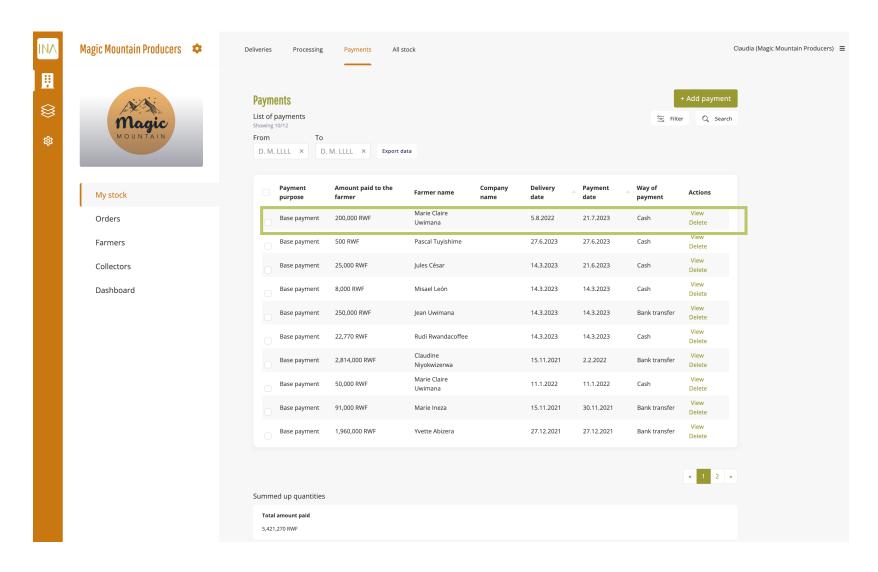
Specify whether the delivery was a woman's only, select delivery date and then confirm.



After confirming basic information about the payment, the "New Payment" page will appear with some prefilled information. You fill in all information related to the selected payment such as payment purpose, payment type, amount to be paid to the farmer, receipt number and upload a signed receipt as per the below screen. To validate the payment, click on save.

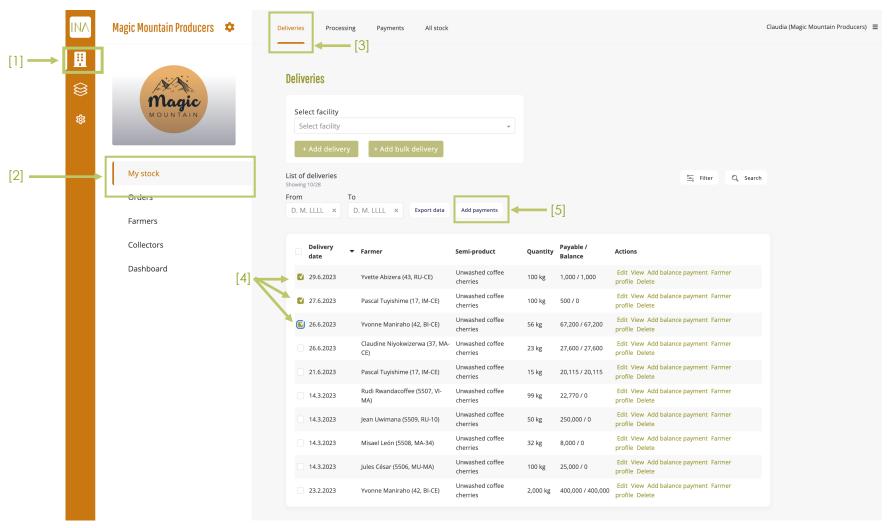


The payment performed will then be viewed in the list of payments as below.

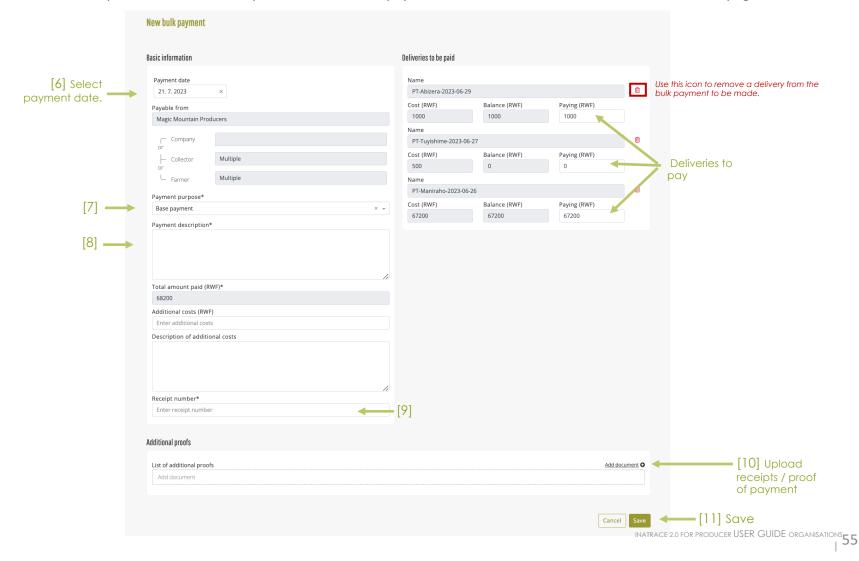


4.2 Recording Bulk Payments

Under deliveries tab, select a list of that need to be paid for, then click on "Add payments" button.



Add the details of all the payments to be made as per the below page of "New bulk payment": fill in required information such as payment purpose, payment description, additional proofs and other details related to purchase orders to be paid. To validate the payments, click on save button at the bottom of the page.



Chapter 5.

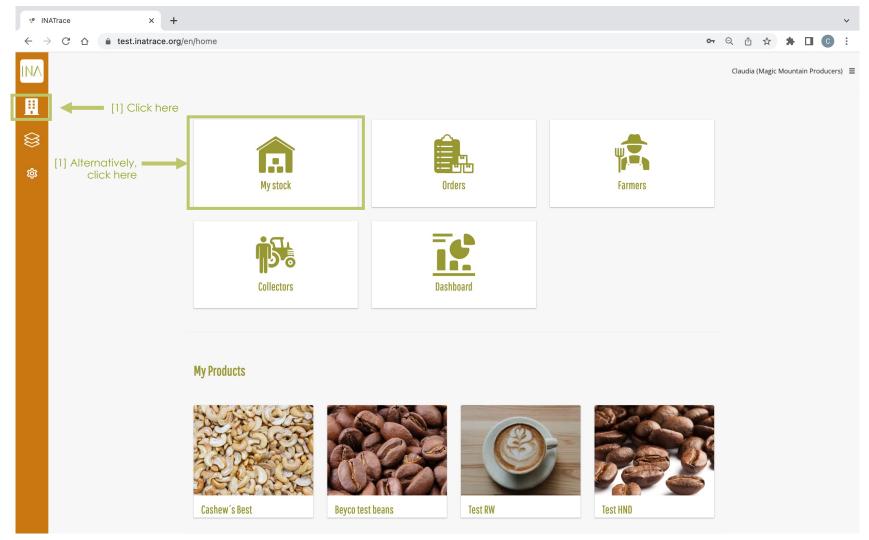
All stock module

This module allows system users to view the batch history as well as to edit or delete incorrectly recorded transactions.

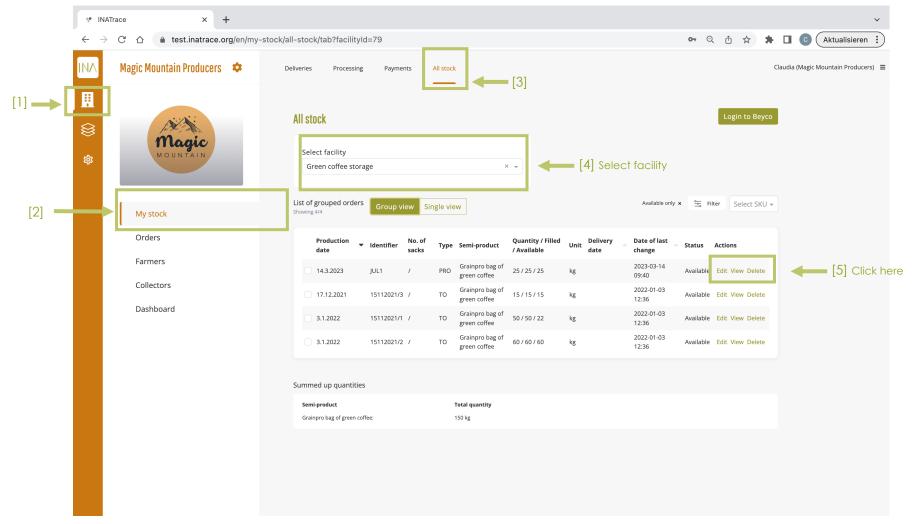
For coffee value chains, this module also allows offering stock items on the Beyco green coffee sales platform.

5.1 View stock and batch history

To view the history of a batch, click on the "Company" icon as shown on the screenshot below which leads you to "My Stock". You can also go direct to "My stock" tile as shown below.

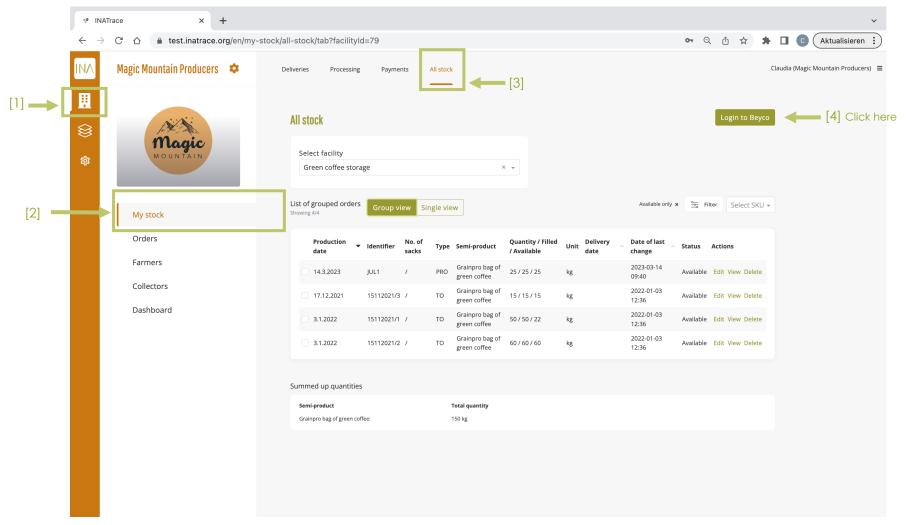


To view the history of a batch, follow the steps below. In case your batch shows as "available" you are also able to edit or delete the LAST transaction performed on it. Remove the "Available only" filter to see all batches. In case your batch shows as "not available", it might already be processed further and will be found as "available" in another facility of your company. If you wish to see individual items of a batch or any QR codes that might exist for this batch, switch to "single view".

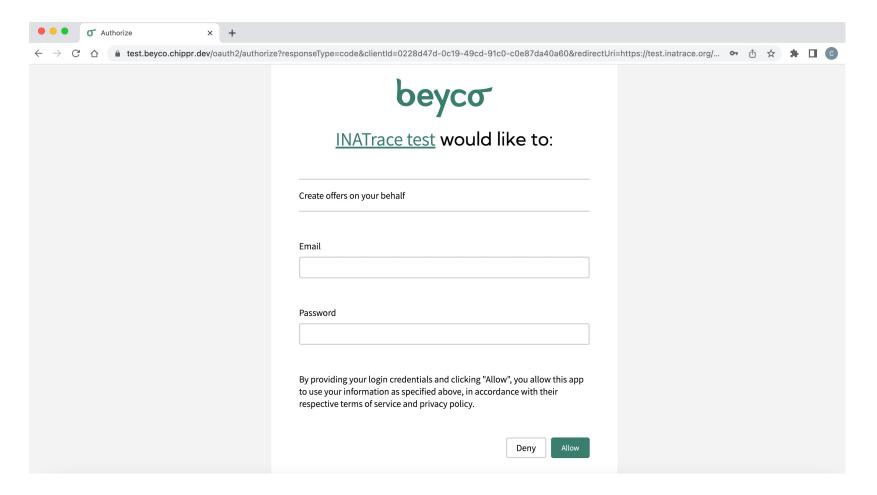


5.2 Create an offer on Beyco (coffee only)

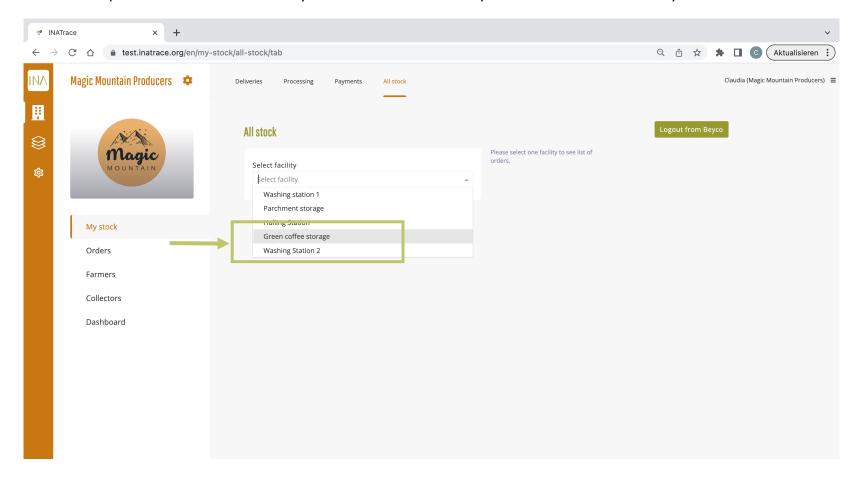
In order to create an offer on the Beyco coffee sales platform, you need to be a registered user on Beyco and also need to have the Beyco integration activated in your INATrace company configuration. After that, start the session by following the steps below.



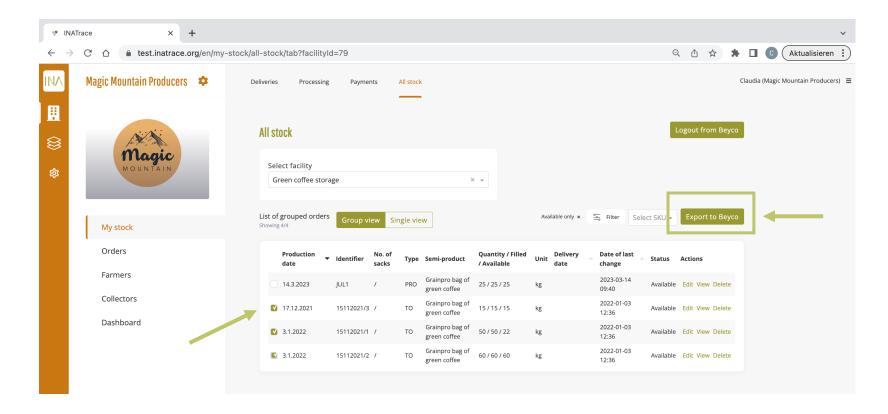
You will be asked to enter your email address and password you used for your registration on beyco.nl and click "Allow".



You will automatically be redirected back to your "All stock" section of your INATrace profile. Select here from the drop-sown menu the stock facility where the coffee batches you want to offer are currently stored.



Next: Select one or several available batches of coffee from your stock that you want to create an offer for by checking the box(es) next to it. Then, click on "Export to Beyco."



Complete the empty fields which are required for the offer and click "Submit offer".

Export to Beyco			
General values			
Offer title*			Available at* D. M. LLLL ×
Address of port of export*			Country of port of export*
Cell 1, Sector 1, Village 1			Rwanda
Latitude of port of export*			Longitude of port of export*
-1,9940744144617375			29,52199661515044
Name* 15112021/3 Price* Region Kimironko Incoterms* Min screen size*	Country* Rwanda S* Max screen size*	Quantity* kg Price unit* Harvest period* 17. 12. 2021 × cess Cupping score*	NOTE: Enter the quantity of GREEN COFFE you are offering here
Variations	0 11		
Varieties*	Quality seg	ments*	
Grades*	Certificates		
OTHER	× 🔻 Organic	X ¥	
Other grade			
A1			
			Submit offer

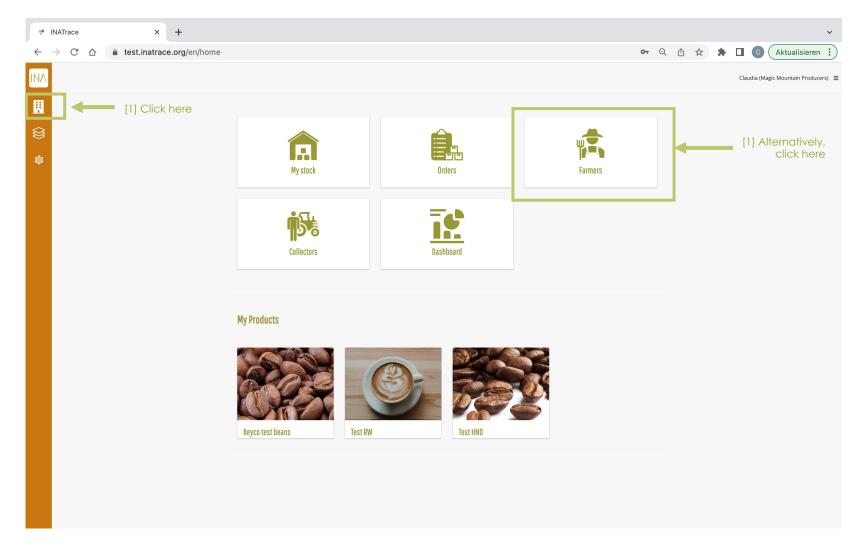
Chapter 6.

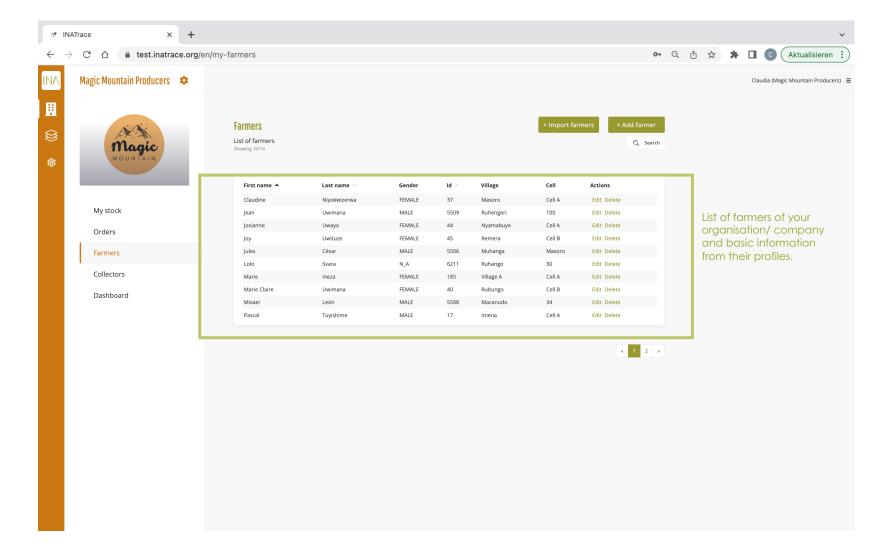
Farmer profiles

This module guides system users to add and edit farmer profiles.

6.1 Accessing farmer profiles

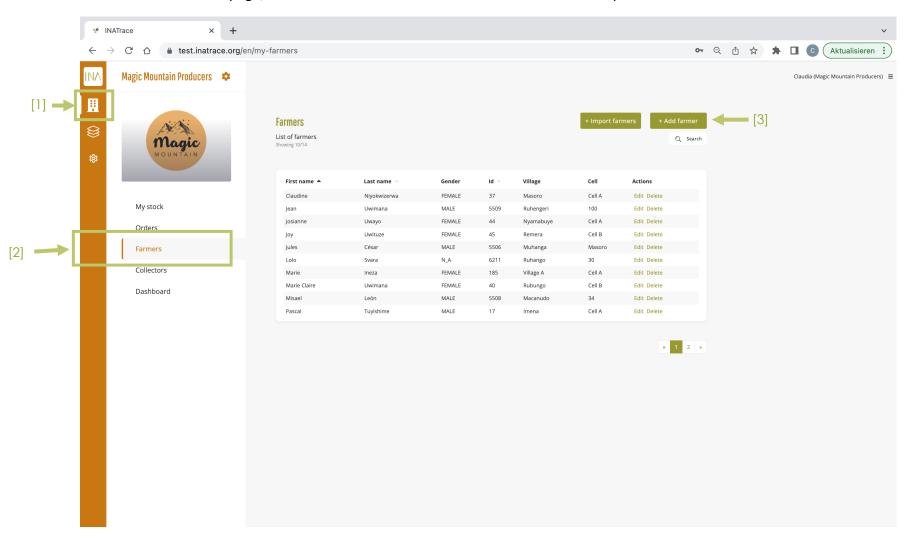
To access your farmers' profiles, click on the "Company" icon as shown on the screenshot below and select "Farmers" from the submenu. You can also go directly to "Farmers" tile as shown below.





6.2 Create a farmer's profile

Inside "Farmers" page, click on "Add Farmer" button to create a new farmer profile.



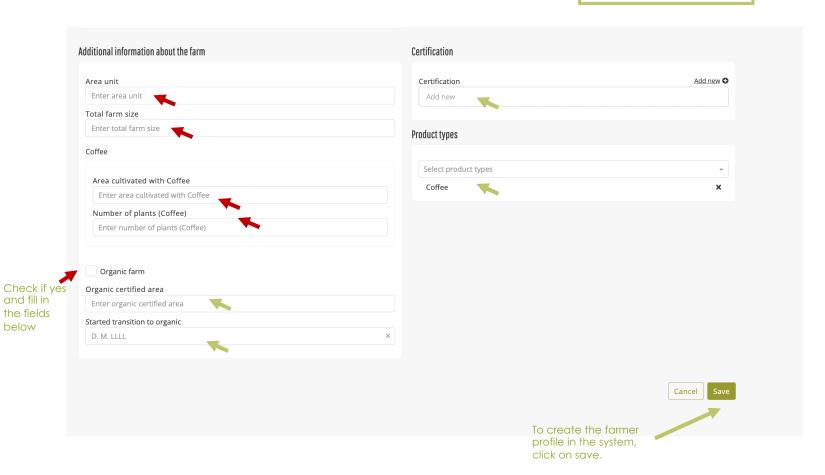
New farmer Basic information First name Enter first name Green = Optional filling Last name* Red = Mandatory Enter last name Gender* Select option ... Company internal farmer ID Enter company internal farmer ID Location Country* Select from codes . Village* Enter village Karte Satellit Cell* Enter cell Faso Südsudan Äthiopien Sector* Gabun Demokratische Republik Kongo Is location publicly visible on a map? Angola Sambia Kurzbefehle Kartendaten o 2023 Google, INEGI Nutzungsbedingungen Select option ... Double click on the map to drop a pin and mark the locations. Right click on marker to remove it.

In case of "yes": put pin on the map with double click

Green = Optional filling Red = Mandatory

dditional information about user	Bank information
Phone number	Account holder's name
Enter phone number	Enter account holder's name
E-mail	Account number
Enter e-mail address	Enter account number
	Bank name
Smart phone	Enter bank name
	Additional information
	Enter additional information
ompanies	Associations
Supplier of	Add new
Add new	Type association





below

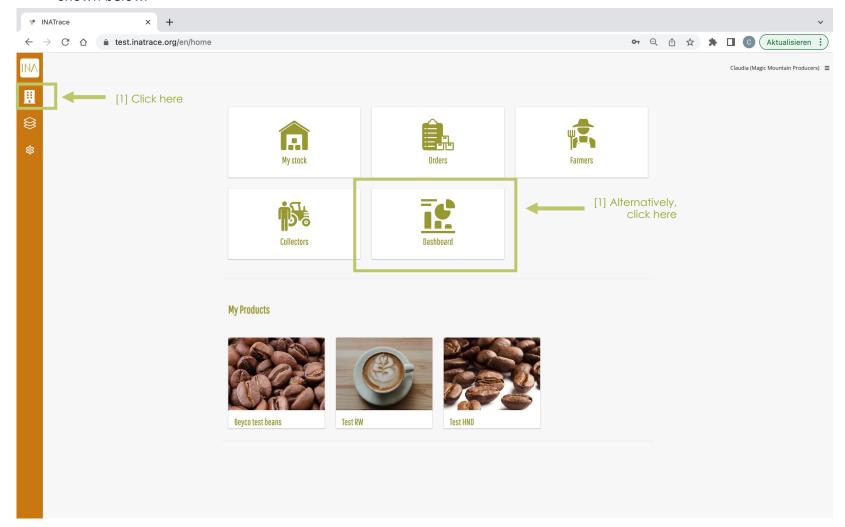
Chapter 7.

Dashboard

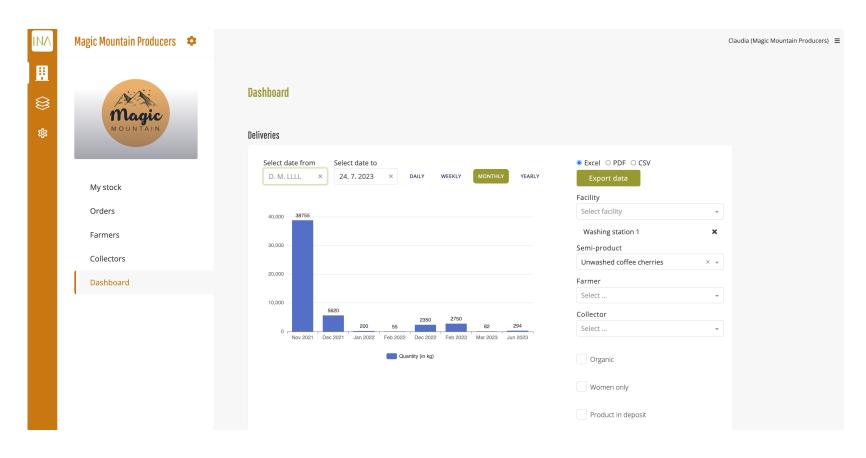
This module allows system users to view aggregated data previously entered into the system and export the data.

7.1 Deliveries dashboard

To access the dashboard of your company/organisation, click on the "Company" icon as shown on the screenshot below and select "Dashboard" from the submenu. You can also go directly to "Dashboard" tile as shown below.

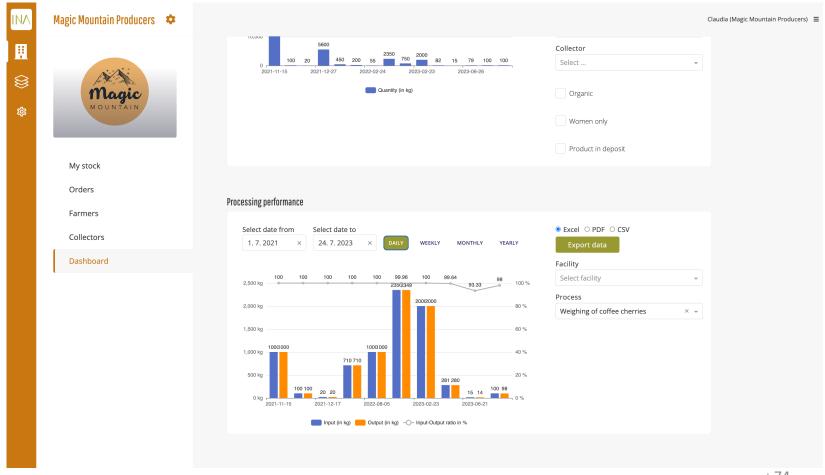


In the "Deliveries" dashboard, you can select a date range and switch to daily, weekly or yearly view. You will also be able to select one or several facilities, select a specific semi-product and even show data for a specific farmer or collector. By ticking the boxes below (e.g. organic) you can further filter the data to be aggregated by the system. Periods with zero data entries, will not show any bars. In order to export the data, select either Excel, PDF ord CSV format and click "Export data". Note that for large time periods it will not be possible to display all bars, however all data will still be exported up to a maximum time range of 3 years.



7.2 Processing dashboard

To see the "Processing performance" dashboard, scroll down on the dashboard page. You can select a date range, switch to daily, weekly or yearly view. You need to select a facility and the corresponding process you would like to see the performance for. Periods with zero data entries, will not show any bars. In order to export the data, select either Excel, PDF ord CSV format and click "Export data". Note that for large time periods it will not be possible to display all bars, however all data will still be exported up to a maximum time range of 3 years.



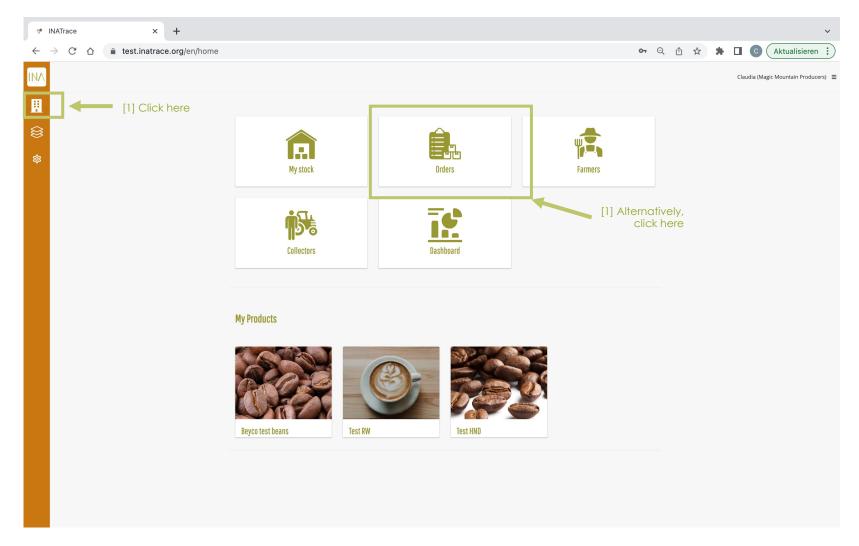
Chapter 8.

Orders

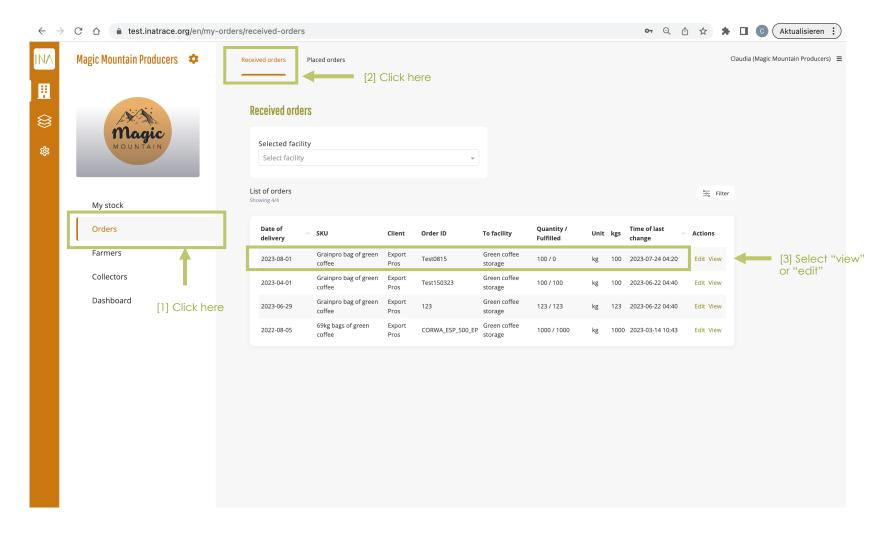
This module allows company users to receive and fulfil orders from their buyers.

8.1 View and fulfill an order

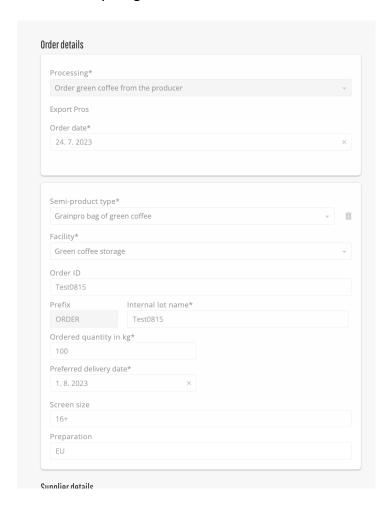
To access the orders section, click on the "Company" icon as shown on the screenshot below and select "Orders" from the submenu. You can also go directly to "Orders" tile as shown below.



Follow the steps below to view or edit an order. By clicking on "edit" you can allocate products from your stock to the order and thereby fulfill a buyer's order.



In the upper part of the order you see the the buyer's requirements in the "order details" section. Here, you cannot edit anything.

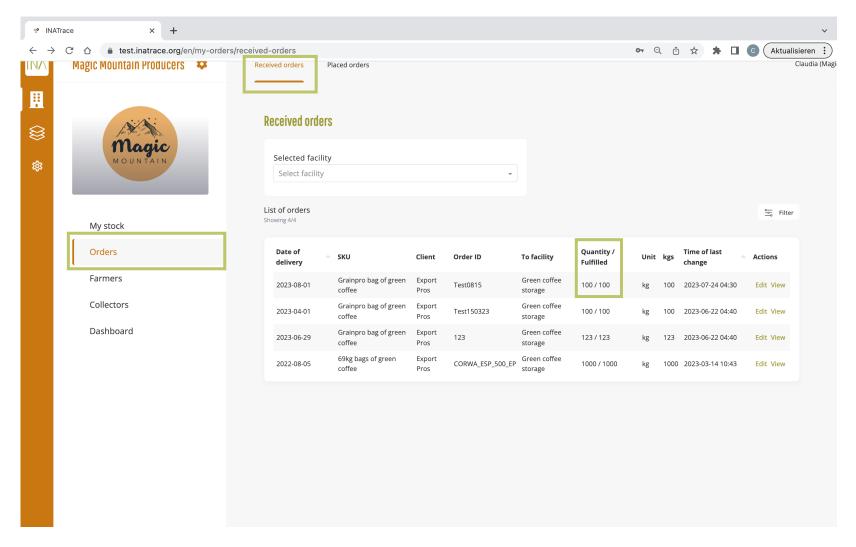


In the lower part of the order, select the batches you send to the buyer. Make sure the "quantity fulfilled" matches the "Total ordered". In case the added quantity surpasses the ordered quantity, the system will clip the last item added. You may also add evidence documents before you save the order.

	EU		
	Supplier details		
Add one or several items	Magic Mountain Producers		
	Facility*		
	Green coffee storage (Magic Mountain Producers)	•	
	From To		
	D. M. LLLL ×	rch	
	**************************************	iter	
	Add new transactions		
	Select all (Grainpro bag of green coffee)		
	ORDER JUL1 2	5 kg	
	LOT 15112021/3 ‡ 1	i kg	
	LOT 15112021/2 🛊) kg	
		2 kg	
	Total quantities		
	Quantity fulfilled by supplier in kg	Remaining quantity in kg	
		100.00	
	Total ordered quantity in kg		
	100.00		
	Comments		
		(8)	
	Processing evidence		
	Other evidence documents		
d evidence	Add document		
cuments as			
quested by the			
		Cancel	4
yer			

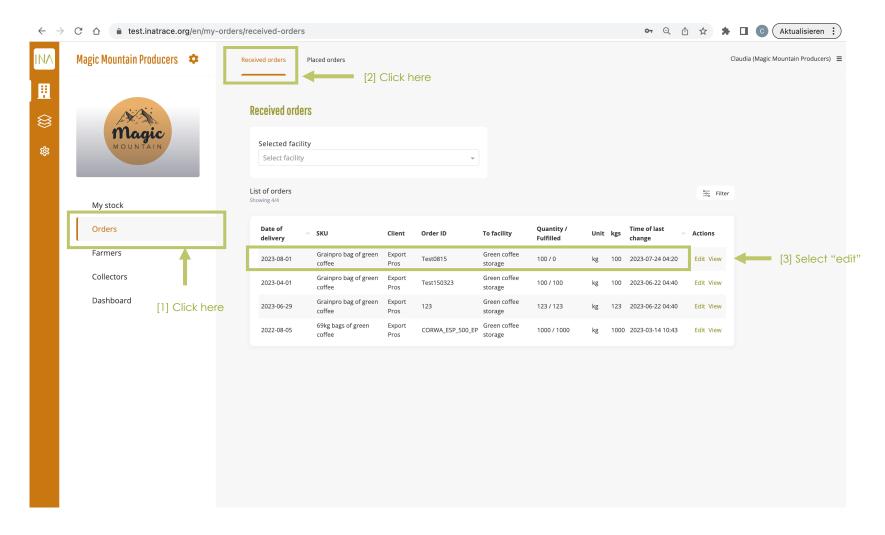
Add evidence documents as requested by the buyer

After saving the order, you can verify the fulfilled quantity in the list of orders.

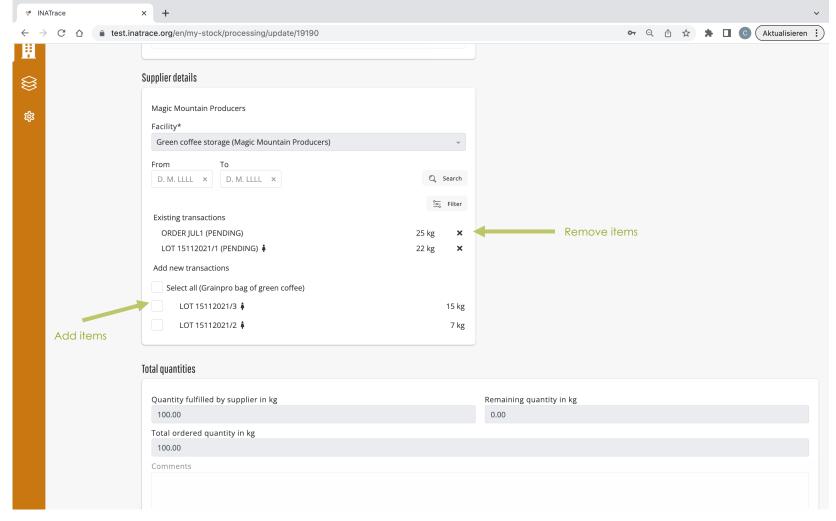


8.2 Edit an order

You also have the possibility to edit the items you allocated to a buyer's order by clicking again on "edit" in the "received orders" part of the system.



You can remove items from an order by clicking on the "x" in the "existing transactions" part. You can add new items by ticking the boxes in the "Add new transactions" part. Click save after checking everything is correct and the total ordered matches the quantity fulfilled. Note that you cannot edit an order anymore once the buyer has approved your added batches.



Chapter 9.

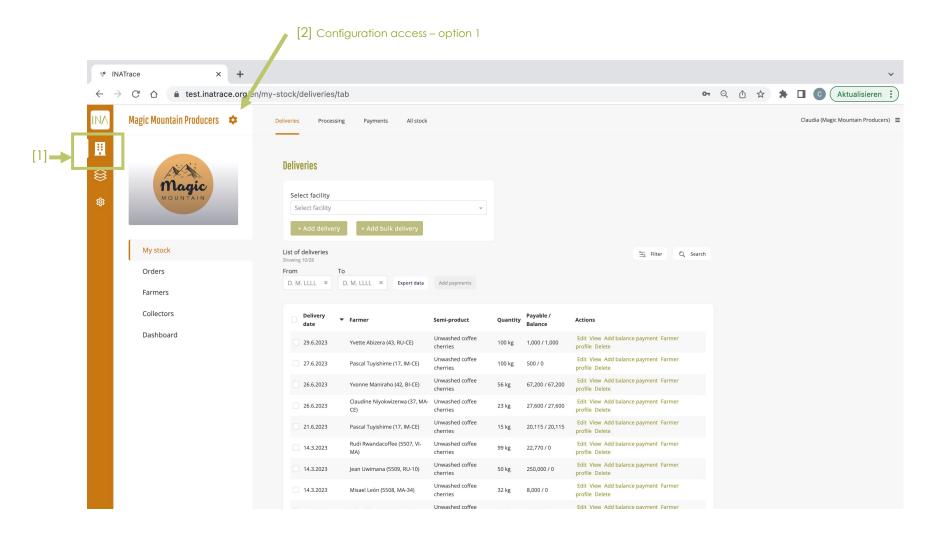
Company configuration

(ADMIN ONLY)

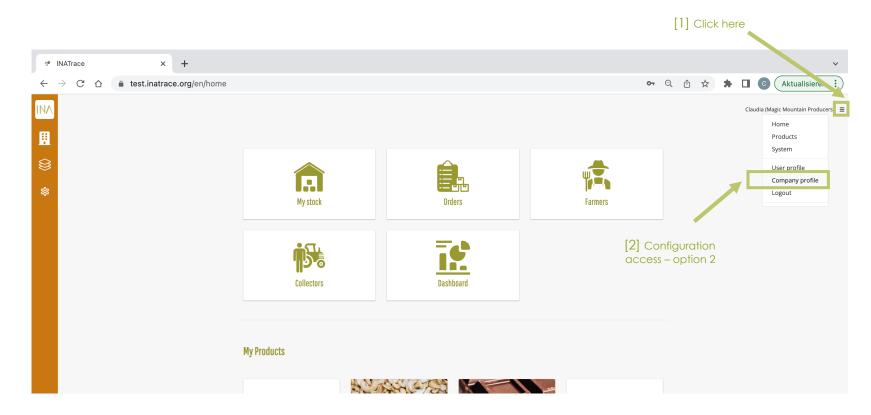
This module guides company admins to change configurations of their company.

9.1 Accessing your company profile - Option 1

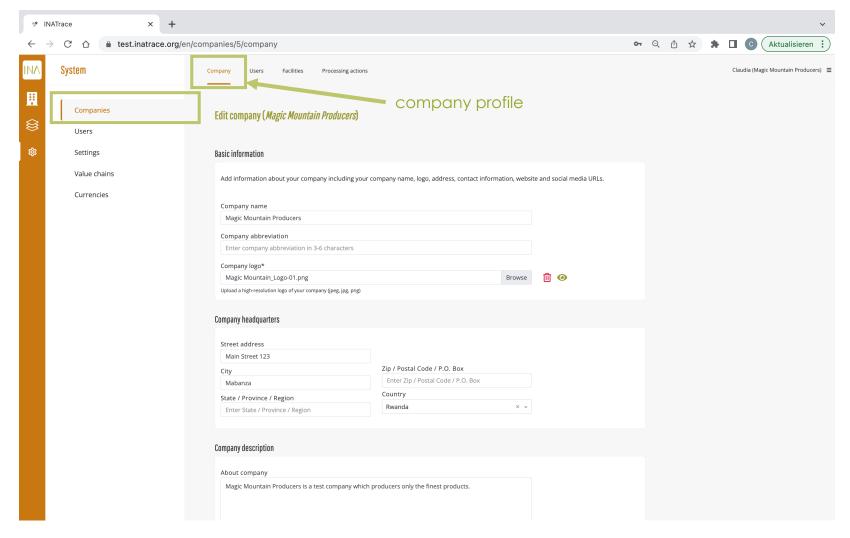
To access the company profile of your company/organisation, click on the "Company" icon as shown on the screenshot below the company profile icon which allows you to have configuration access.

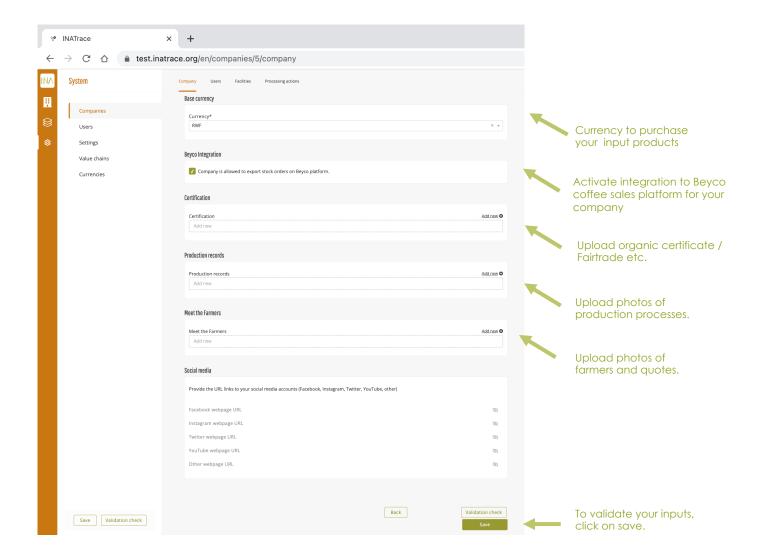


9.1 Accessing your company profile - Option 2

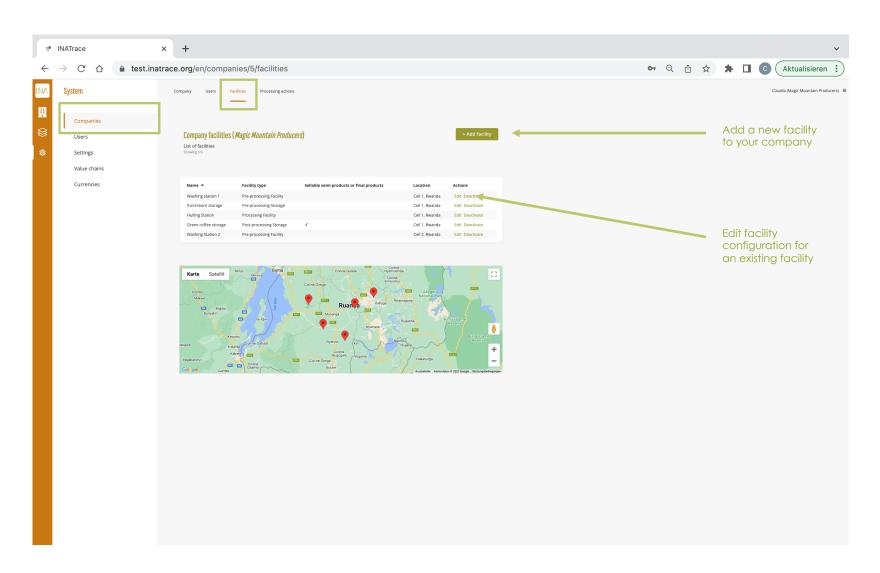


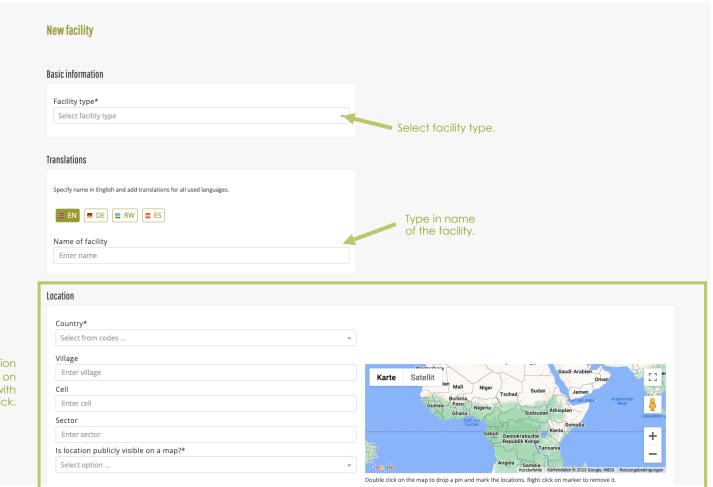
9.2 Edit Company information



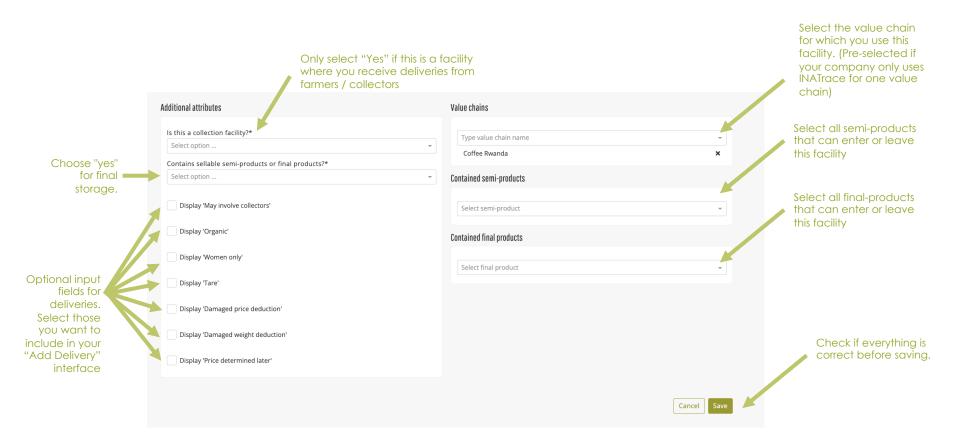


9.3 Add/Edit company facility



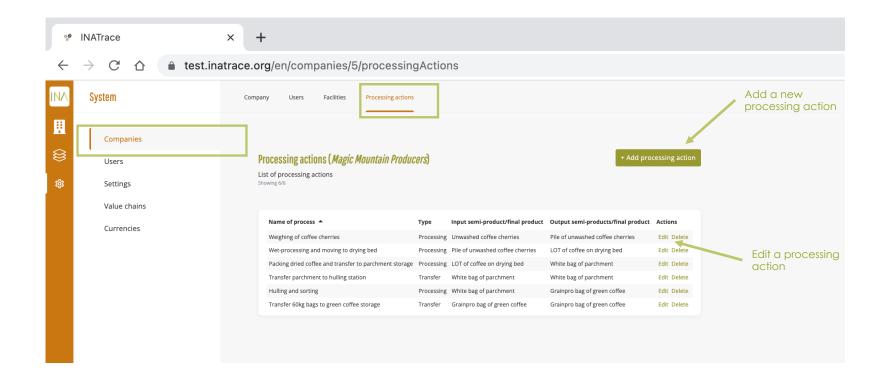


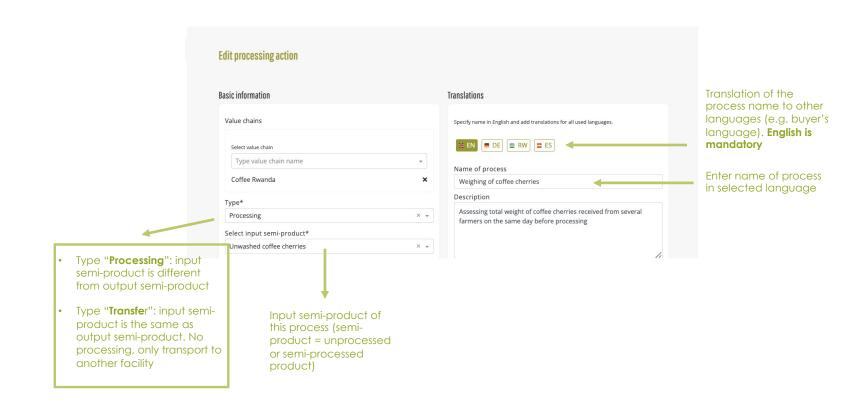
Fill location and put pin on the map with double click.



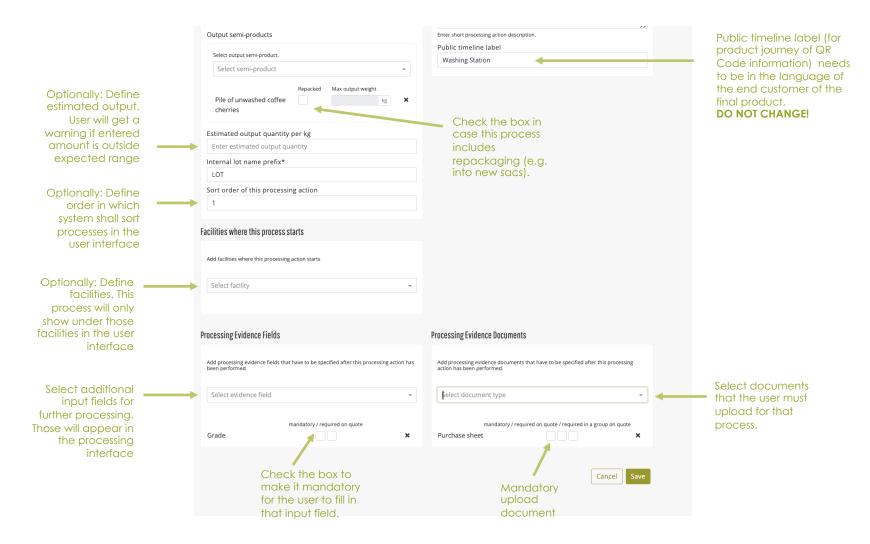
BE VERY CAREFUL WITH ALL CHANGES IN THE CONFIGURATION. ASK FOR HELP IF YOU ARE NOT SURE.

9.4 Add/Edit processing actions





BE VERY CAREFUL WITH ALL CHANGES IN THE CONFIGURATION. ASK FOR HELP IF YOU ARE NOT SURE.



BE VERY CAREFUL WITH ALL CHANGES IN THE CONFIGURATION. ASK FOR HELP IF YOU ARE NOT SURE.

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On behalf of



