

DOMESTIC WOOD TRACKING SYSTEM

USER GUIDE

Tracing and accounting for legal timber distribution by artisanal millers, timber products distributors and traders on the domestic market of Ghana

by

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Table of Contents

CHAPTER 1 - INTRODUCTION	1
What is Voluntary Partnership Agreement? (VPA).....	1
Why did Ghana enter into the VPA with the EU?	1
What are the components of the Legality Assurance System (LAS)?	1
What are the critical control points of the LAS?	2
Regulation of the Domestic Market under the L.I 2254	3
The Domestic Wood Tracking System Mobile App	4
CHAPTER 2 - STARTING THE WEB CLIENT	6
CHAPTER 3 - VENDOR MANAGEMENT	10
CHAPTER 4 - DoTIC MANAGEMENT	13
DoTIC Audit.....	14
Adding a new DoTIC	15
CHAPTER 5 – DOMESTIC WOOD TRACKING SYSTEM MANAGEMENT.....	20
CHAPTER 6 - PRODUCT MANAGEMENT.....	22
Adding a New Wood Product	23
Species Tab	23
Adding a New Species	25
CHAPTER 7 - INSTITUTION MANAGEMENT	26
Adding an Institution.....	27
CHAPTER 8 - TIDD STATION MANAGEMENT.....	28
Adding a new Area Office.....	29
CHAPTER 9 - REPORT MANAGEMENT	30
CHAPTER 10 - USER MANAGEMENT	32
Adding a New User	32
Adding a New Role.....	35

CHAPTER 11 – DOMESTIC WOOD TRACKING MANAGEMENT SYSTEM MOBILE APP 37

 Introduction 37

 The dashboard icons..... 38

ANNEX 1 46

Table of Figures

Figure 1: Web-client Interface	6
Figure 2: Dashboard.....	7
Figure 3: Dashboard TIDD	8
Figure 4: Dashboard 3.....	8
Figure 5: Dashboard 4.....	9
Figure 6: Vendor Management.....	10
Figure 7: Vendor List.....	11
Figure 8: Adding New Vendor 1	12
Figure 9: Adding New Vendor 2	12
Figure 10: DoTIC Management	13
Figure 11: DoTIC List	14
Figure 12: Displays the DoTIC audits	14
Figure 13: Add New DoTIC	15
Figure 14: Add New DoTIC 2	16
Figure 15: Imported File	16
Figure 16: Imported DoTIC Form.....	17
Figure 17: Edit Extracted DoTIC form.....	17
Figure 18: Selecting a Vendor	18
Figure 19: Click on Submit	18
Figure 20: DoTIC Stored Successfully.....	19
Figure 21: Domestic Wood Tracking Management System Interface	20
Figure 22: View Waybill Interface 1	21
Figure 23: View Waybill Interface 2	21
Figure 24: Product Management Interface 1	22
Figure 25: Product Management Interface 2	22

Figure 26: Species Management Interface 1	24
Figure 27: Species Management Interface 2	24
Figure 28: Institutions Interface 1	26
Figure 29: Institutions Interface 2	27
Figure 30: TIDD Station Interface 1	28
Figure 31: TIDD Station Interface 2	28
Figure 32: Report Management Interface	30
Figure 33: Report Generation Form Interface	30
Figure 34: User List Interface	33
Figure 35: Role List Interface	33
Figure 36: Add New User	34
Figure 37: Add New Role 1	35
Figure 38: Add New Role 2	35
Figure 39: Image 2 (Login Screen)	37
Figure 40: Image 1 (Device screen)	37
Figure 41: Image 3 (Home Screen)	38
Figure 42: Image 4 (Product Balance)	39
Figure 43: Image 6	40
Figure 44: Image 5 (Sales)	40
Figure 45: Image 8	42
Figure 46: Image 7(New Species)	42
Figure 47: Image 9 (Inflows)	43
Figure 48: Image 10	43
Figure 49: Image 12	44
Figure 50: Image 11 (Stocks)	44
Figure 51: Image 13 (Profile)	45
Figure 52: Exhibit 1	46

Figure 53: Exhibit 2	47
Figure 54: Exhibit 3	47
Figure 55: Exhibit 4	48
Figure 56: Exhibit 5	49

CHAPTER 1 - INTRODUCTION

What is Voluntary Partnership Agreement (VPA)?

The VPA is a bilateral agreement between the European Union (EU) and wood exporting countries. The initiative aims to improve forest governance and ensure that the wood imported to the EU has complied with the legal requirements of the partner country. It is part of the EU action plan to eliminate illegal timber from its market.

Why did Ghana enter into the VPA with the EU?

- Europe is Ghana's most valued market as it continues to offer one of the highest per cubic meter price values for Ghana's timber exports.
- Ghana reorganization of European markets becoming increasingly concern with the legal source of imported timber.
- Complementing the efforts of individual players in the timber industry towards forest certification.
- Legality is a step towards sustainability.
- Ghana's intention of promoting investment in the forest sector of Ghana to ensure future viability of the timber product industry.

What are the components of the Ghana's Legality Assurance System (GhLAS)?

- The definition of legality (Legality standards)
- Verification of Compliance to the Standard
- The Chain of Custody (CoC) to be able to established wood traceability system, from forest to the point of export, a Wood tracking system (WTS) is being developed

and it will be used primarily to exercise the control interventions already known to actors in the system.

- The Licensing System
- The Independent Monitor.

What are the critical control points of the GhLAS?

- i. Source of Timber (all sources identified in Ghana)
- ii. Timber Rights Allocation
- iii. Stock Enumeration/Assessment
- iv. Tree Felling & Log Production
- v. Log Transport & Inspections
- vi. Post-Harvest Audit
- vii. Log Arrival at Processing Plant
- viii. Log processing
- ix. Processed Wood (wood products)
- x. Export of Processed Wood Bundles/Sale of Wood Products on Domestic Market

What are the sources of wood under the GhLAS?

- TUC/Permit
- Plantation
- Imports
- Salvage Permits
- Confiscated or Abandoned logs.

The Combined Output of the GWTS and the Field Audit is to generate system reports that can be picked online by TIDD (the Licensing Authority) to issue **FLEGT or DoTIC** and other **Legality Licenses** for all market destinations (EU, other Export Destinations and Domestic).

The L.I. 2254

An L.I 2254 was passed with the following objectives:

- a) Regulate the identification of land suitable for the grant of timber rights
- b) Regulate the terms and conditions for small and large scale timber rights
- c) Regulate other sources of timber
- d) Provide for a legality licensing scheme which include the DoTIC

Regulation of the Domestic Market under the L.I 2254: Mingling of timber

Regulation 54

- (1) A person shall not mingle a timber product for which a license has not been obtained with a timber product for which a license has been obtained for the purpose of export from Ghana or for sale on the domestic market.
- (2) A person who contravenes sub regulation (1) commits an offence and is liable on summary conviction to
 - (a) a fine of not less than two hundred and fifty penalty units and not more than one thousand penalty units or to a term of imprisonment of not more than two years or to both

- (b) A fine of not less than one thousand penalty units for a second or continued offence under these Regulations.

Regulation 62

- (1) A person shall not transfer or move timber from a forest area unless that person has obtained for the transfer or movement of the timber, a timber conveyance certificate.
- (2) A conveyance certificate shall not be issued for lumber produced by chain saw.

Prohibition of use of chainsaw to convert timber into lumber for sale

Regulation 70

- A person shall not use a chainsaw whether registered or unregistered, to convert timber into lumber or other forest products for sale, exchange or any other commercial Purpose.
- A person shall not sell a timber product to which sub regulation (1) applies.

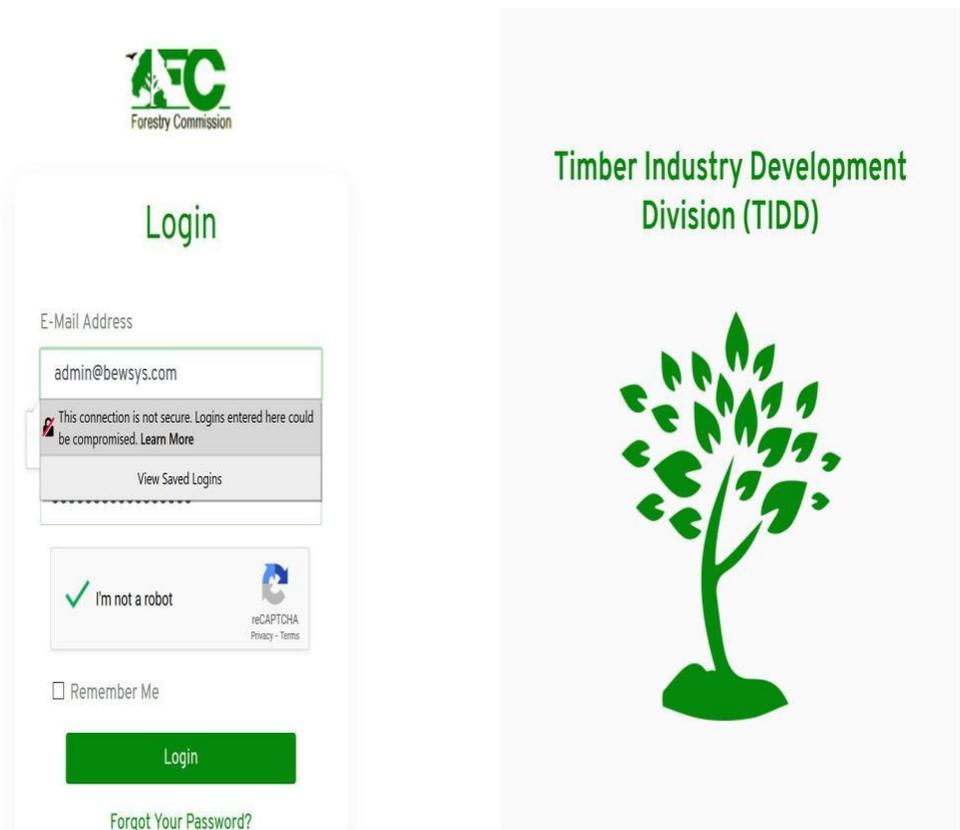
The Domestic Wood Tracking System Mobile App

As part of efforts to reform and regulate the domestic market by the Timber Industry Development Division (TIDD) through tracking the flow of timber to prevent mixing of legal timber and illegal timber (chainsaw timber) which is prohibited under Sub-regulation (1) of Regulation 70 of LI 2254, a Stock and the Domestic Wood Tracking Management System has been developed by TIDD to monitor and account for legal timber products received and distributed. This system (the App) which was developed with support from the Kumasi Wood Cluster Association (KWC) and funded by the FAO EU FLEGT Programme is made of

a Web-client and a Mobile-based App. This user Guide is a step-by-step guide to both the web-client and the mobile App.

CHAPTER 2 - STARTING THE WEB CLIENT

To launch the Web application, you need to enter the Uniform Resource Locator (URL) address of the App. The address is <http://timber.makedudev.com/>. When the application is launched, you will be required to enter a username and a password. Please note that these credentials are case sensitive. After entering the username and password, please tick the checkbox with the label “**I am not a robot**” and then click on the **Login** button as shown in figure 1.



The image shows a web client interface for the Timber Industry Development Division (TIDD). At the top left is the Forestry Commission logo. The main heading is "Login". Below this is an "E-Mail Address" input field containing "admin@bewsys.com". A security warning message is displayed below the input field: "This connection is not secure. Logins entered here could be compromised. Learn More". Below the warning is a "View Saved Logins" button. A reCAPTCHA "I'm not a robot" checkbox is checked. Below the checkbox is a "Remember Me" checkbox. A green "Login" button is positioned below the "Remember Me" checkbox. At the bottom of the login form is a link for "Forgot Your Password?". To the right of the login form is a large green tree icon and the text "Timber Industry Development Division (TIDD)".

Figure 1: Webclient Interface

After successfully launching the app, you will see the Timber Industry Development Division **DASHBOARD** shown as below (figure 2). On the left hand side of the Dashboard, are the Menu Items with the first one being the DashBoard followed by Vendor Management, DoTIC Management, etc in that order.

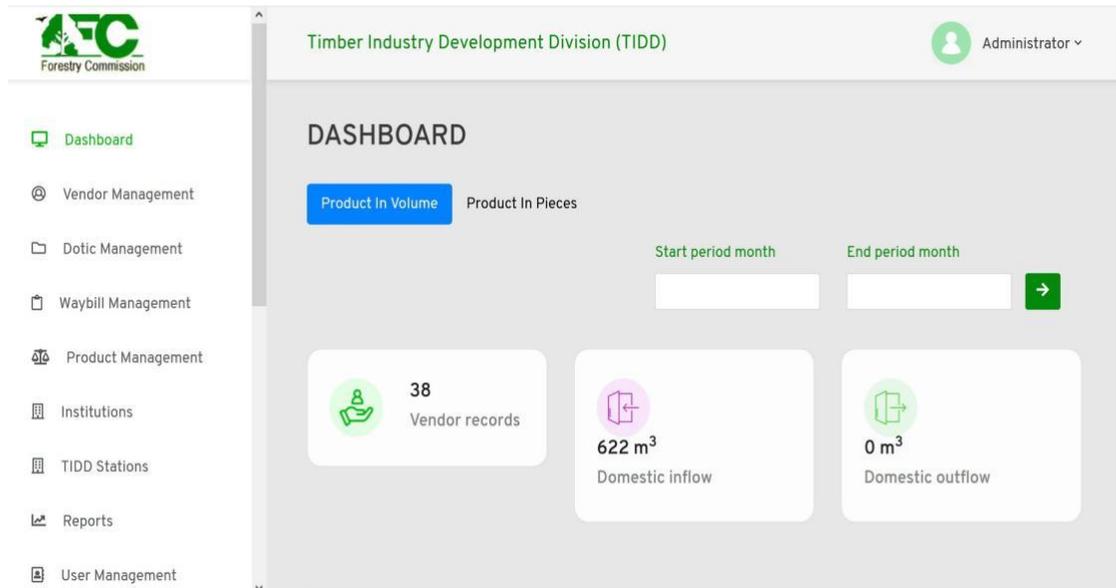


Figure 2: Dashboard

The DASHBOARD displays reports on Vendors, products in volume, product inflows and outflows and their reports, the best performing products by their volume, and buyers' history. The 'start period month' and the 'end period month' date fields are for filtering the reports on the dashboard.

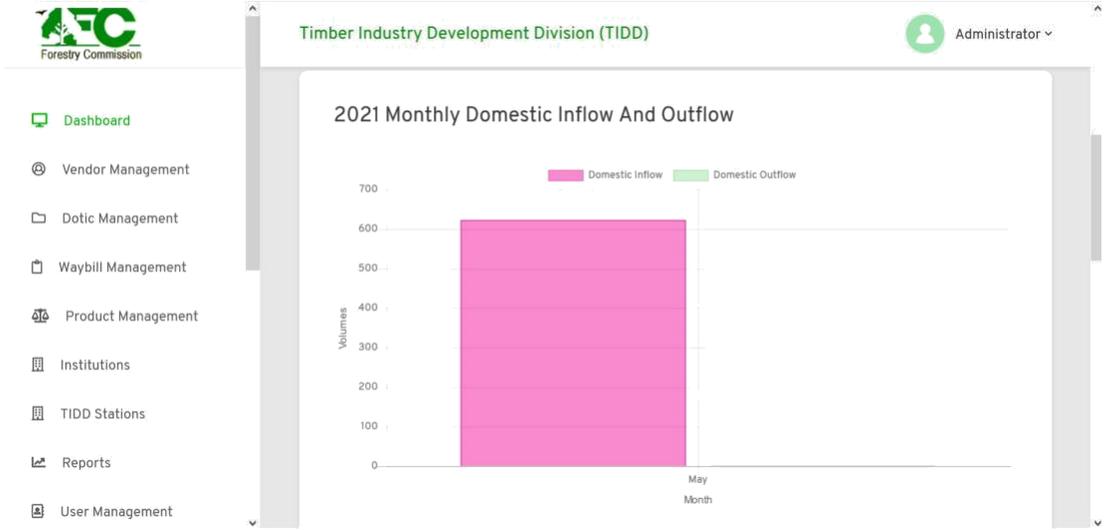


Figure 3: Dashboard TIDD

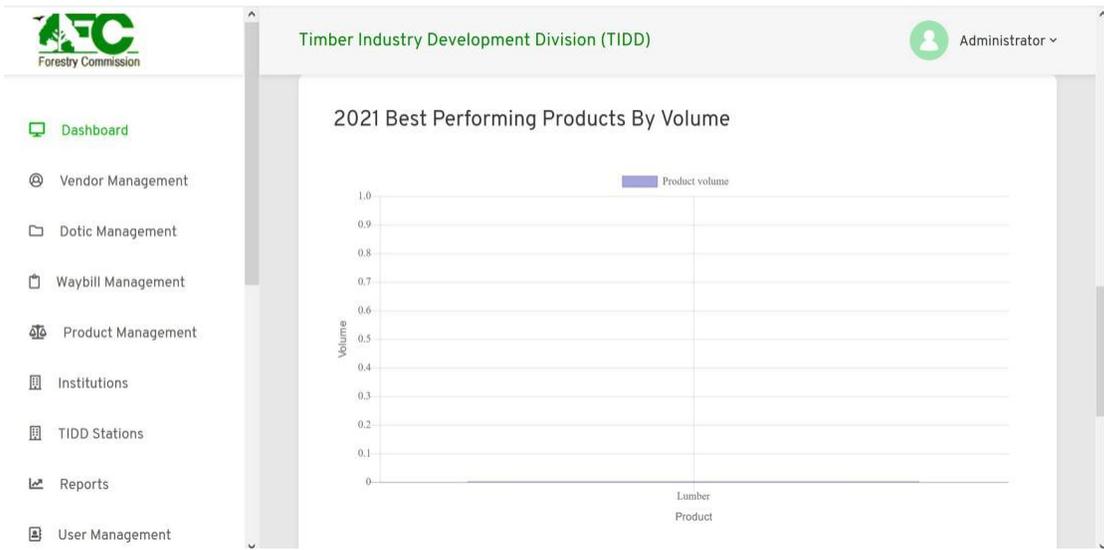


Figure 4: Dashboard 3

Forestry Commission

Timber Industry Development Division (TIDD)

Administrator

BUYER NAME	DATE	
Ben Danso	10/05/2021	View
Maxwell Doe	10/05/2021	View
kofi	07/05/2021	View
Theodore	07/05/2021	View
Kwabena	05/05/2021	View

- Dashboard
- Vendor Management
- Dotic Management
- Waybill Management
- Product Management
- Institutions
- TIDD Stations
- Reports
- User Management

Figure 5: Dashboard 4

CHAPTER 3 - VENDOR MANAGEMENT

A click on the Vendor Management menu reveals the **Vendor List** and **Add New Vendor** items as shown below. Click on the Vendor list to display the Vendor list form. On the top right of this form is the Green **ADD NEW VENDOR** button. This button is use to add a new vendor to the list. The form also has the Import button. The form displays the list of vendors in the system as shown in Fig 6 with action buttons on each of the vendor for editing, profile viewing, activity and deactivate. **The Search test field enables one to search for a Vendor.**

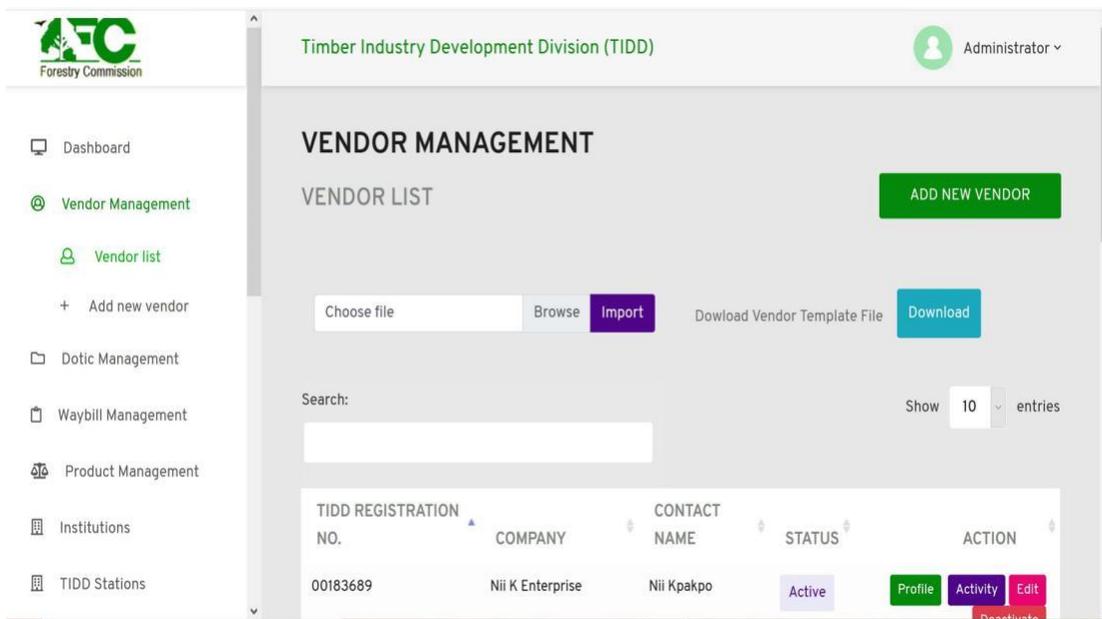


Figure 6: Vendor Management

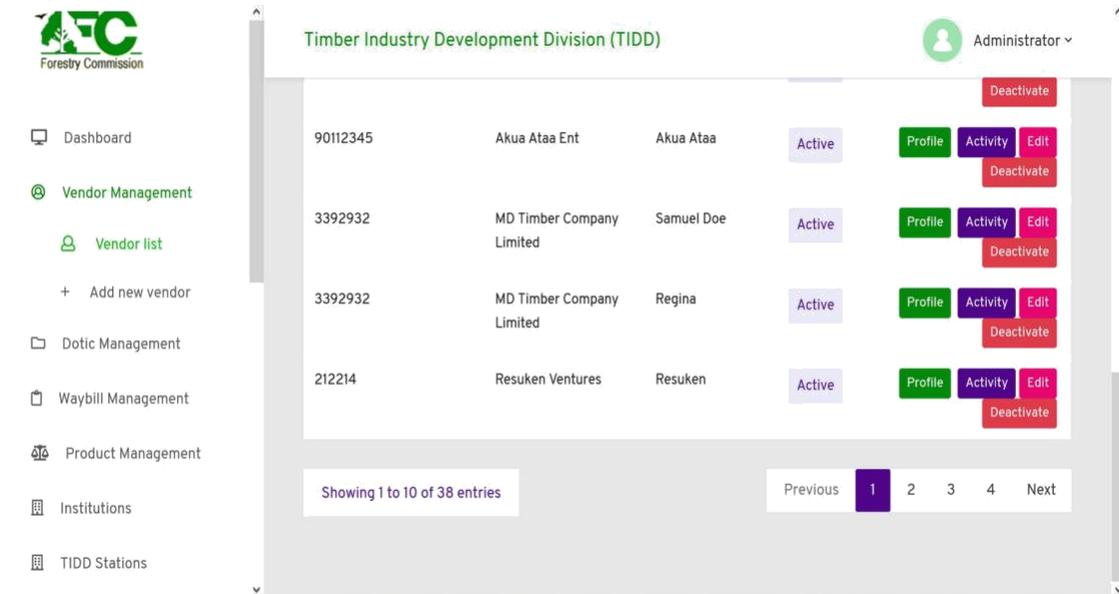


Figure 7: Vendor List

Adding a New Vendor

To add a new vendor, click on the **ADD NEW VENDOR** button on the top corner of the Vendor List form or **Click on the Add New Vendor** menu in the menu items to launch the form. Fill the details on that form as per the examples in each text field (Fig. 8). When done, click the Green **Add New Vendor** button on the bottom right to store the vendor, which will appear on the vendor list (Figure 9).

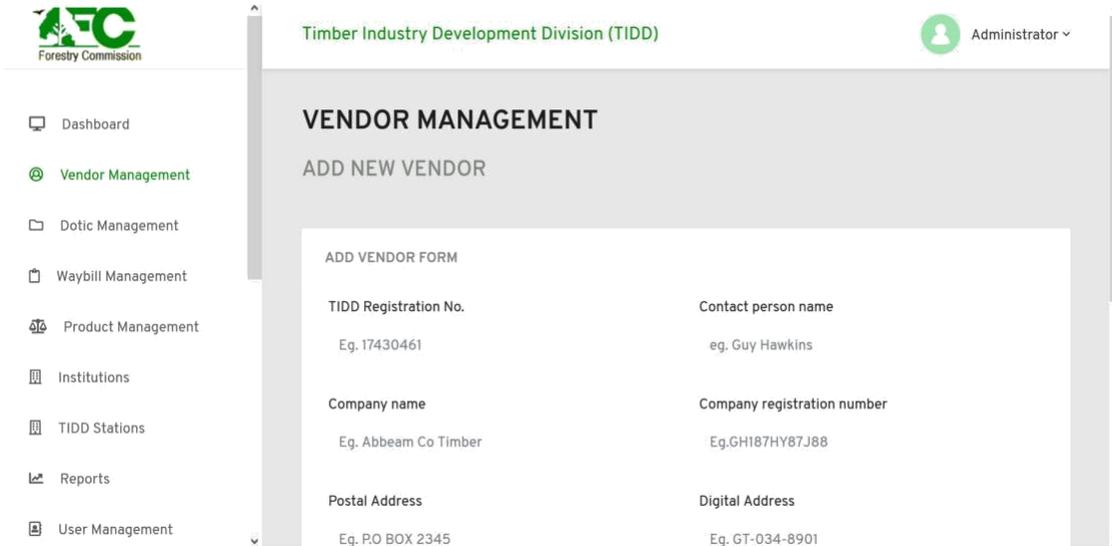


Figure 8: Adding New Vendor 1

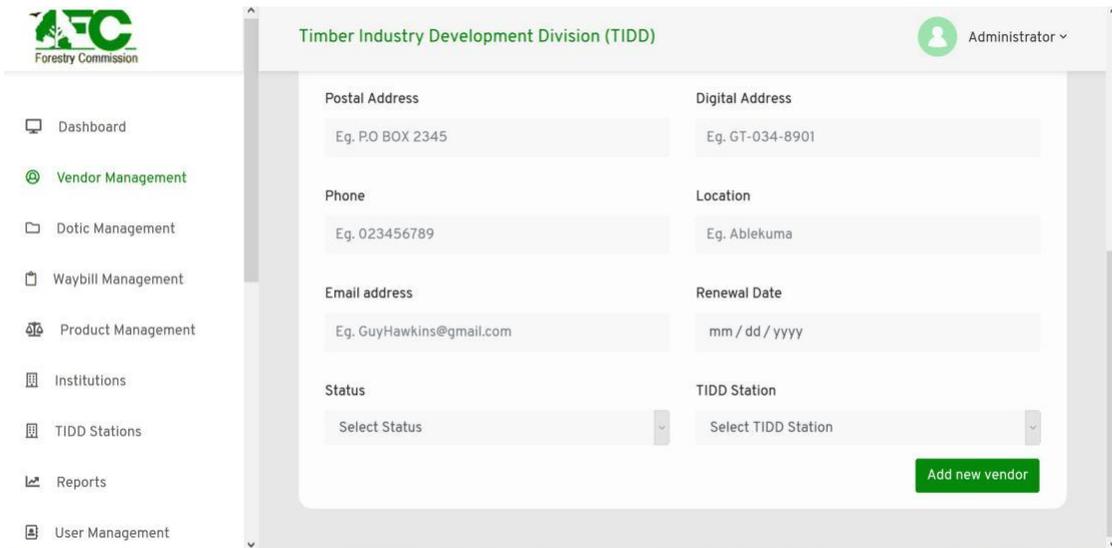
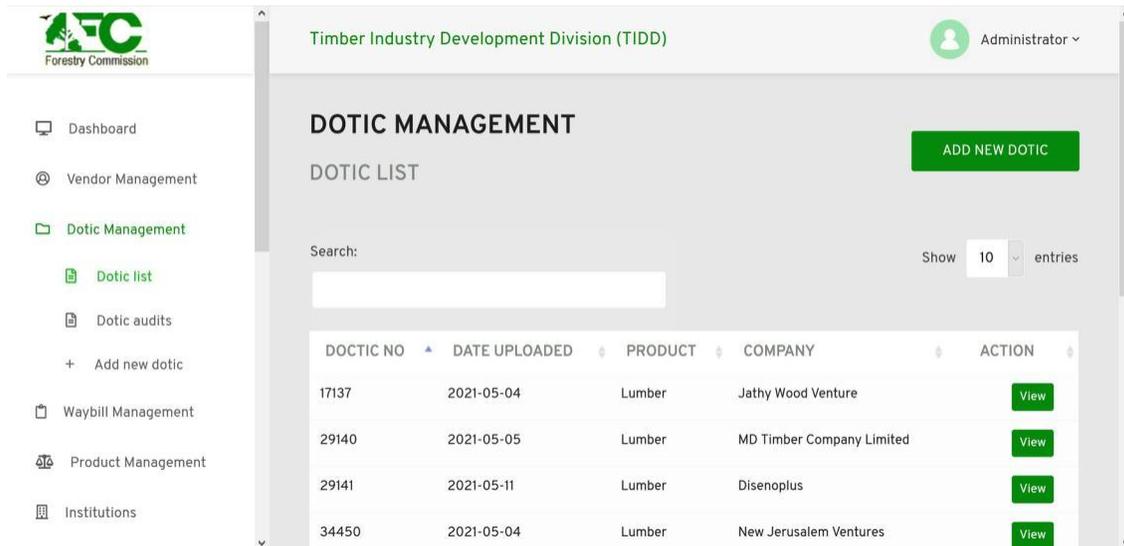


Figure 9: Adding New Vendor 2

CHAPTER 4 - DoTIC MANAGEMENT

This form displays the Domestic Timber Inspection Certificate (DoTIC) list, DoTIC Audits. New DoTIC are also uploaded into the system from this menu as shown in figure 10 and figure 11.

When the DoTIC Management form is launched (open), it displays the list of DoTIC in the system as shown in Figure 11 below. Click on the **Green view** button to display the details of a DoTIC. This DoTIC can be printed after showing the details.



The screenshot shows the 'DoTIC MANAGEMENT' interface. On the left is a navigation menu with options: Dashboard, Vendor Management, Dotic Management (selected), Dotic list (selected), Dotic audits, Add new dotic, Waybill Management, Product Management, and Institutions. The main content area is titled 'DOTIC MANAGEMENT' and 'DOTIC LIST'. It features a search bar, a dropdown for 'Show 10 entries', and a table of DoTIC entries. Each entry has a 'View' button.

DOCTIC NO	DATE UPLOADED	PRODUCT	COMPANY	ACTION
17137	2021-05-04	Lumber	Jathy Wood Venture	View
29140	2021-05-05	Lumber	MD Timber Company Limited	View
29141	2021-05-11	Lumber	Disenoplus	View
34450	2021-05-04	Lumber	New Jerusalem Ventures	View

Figure 10: DoTIC Management

ID	Date	Product	Vendor	Action
34450	2021-05-04	Lumber	New Jerusalem Ventures	View
41309	2021-05-06	Lumber	Non-Vendor	View
41363	2021-05-10	Lumber	Non-Vendor	View
41368	2021-05-10	Lumber	Yaw Gyamfi Ltd	View
41760	2021-05-04	Lumber	John Addo Enterprise	View
41777	2021-05-04	Lumber	Jack Joe Enterprise	View
41800	2021-05-04	Lumber	Nyame Ay3 bi Enterprise	View

Figure 11: DoTIC List

DoTIC Audits

DOTIC NO.	FIELD CHANGED	VALUE CHANGED FROM	VALUE CHANGED TO	CHANGED BY	DATE CHANGED
29143	Remarks	GRADES/KNOTS, STAINS, SURFACE CHECKS.	GRADES/KNOTS, STAINS, SURFACE CHECKS.	Administrator	01/Apr/2021
29143	Vendor	Non-Vendor	Brekke Inc	Administrator	01/Apr/2021

Figure 12: Displays the DoTIC audits

The DoTIC audit form enables regulatory agencies to audit DoTICs that are in the system using the parameters provided in the form as shown in Figure (12).

Adding a new DOTIC

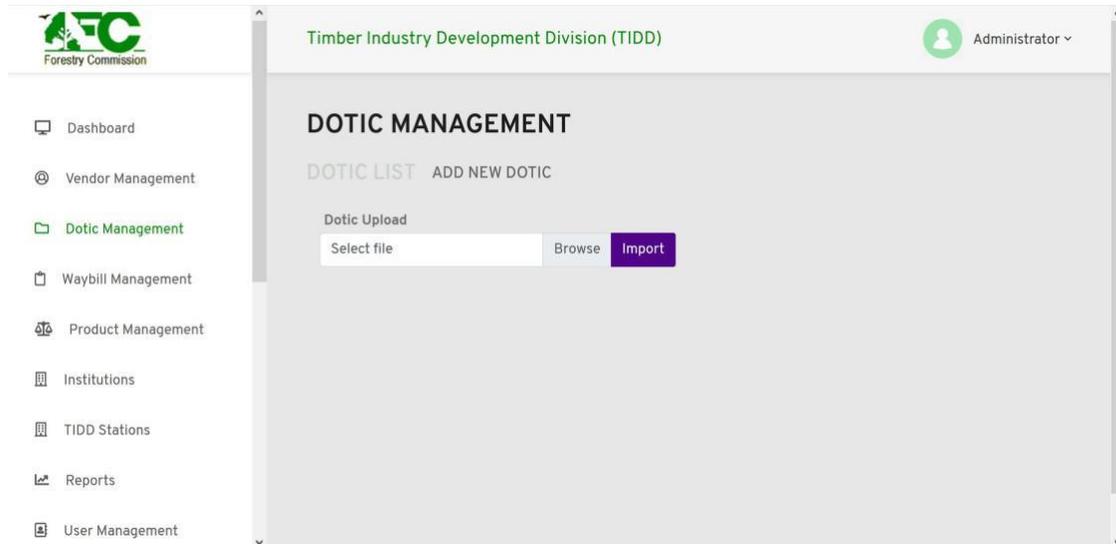


Figure 13: Add New DOTIC

To add a new DoTIC, ensure that an approved DoTIC has been saved in a PDF file format exported from the Ghana Wood Tracking System (GWTS). In future, an Application Programming Interface (API) will be developed to interface with the GWTS so that all DoTICs could be uploaded directly into the TIDD-DWMM/ Waybill Management System. Please refer to **Annex 1** on how to save a DoTIC in a PDF format.

To upload a DoTIC from a file, click on the **Browse** button or the Select file text box, a dialogue box will open to enable you select the file for upload as shown in Fig 13.

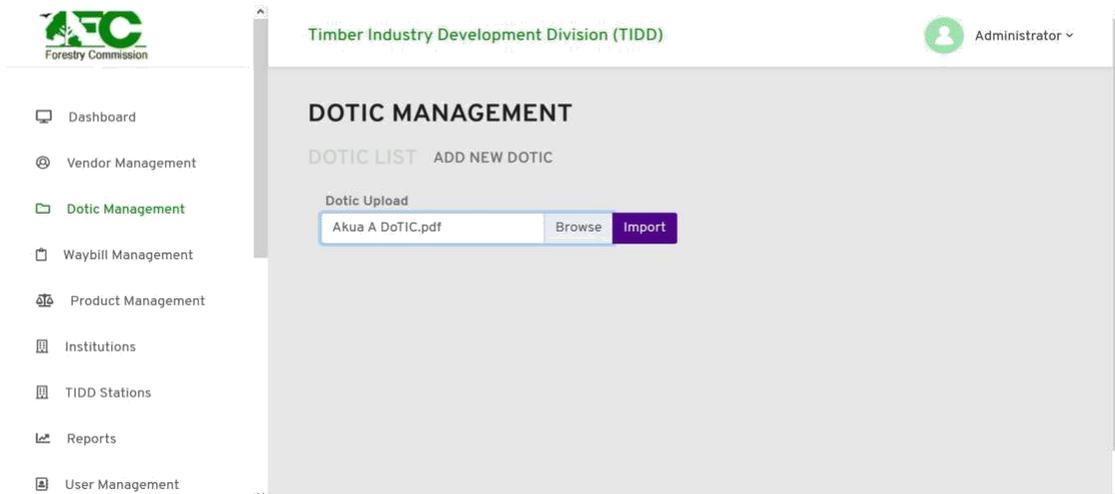


Figure 14: Add New DoTIC 2

After clicking on the open button in the Dialogue box, the file name will be saved in the Add New DoTIC form as shown in Fig. 14. Click on the **Import** button to upload the file into the system.

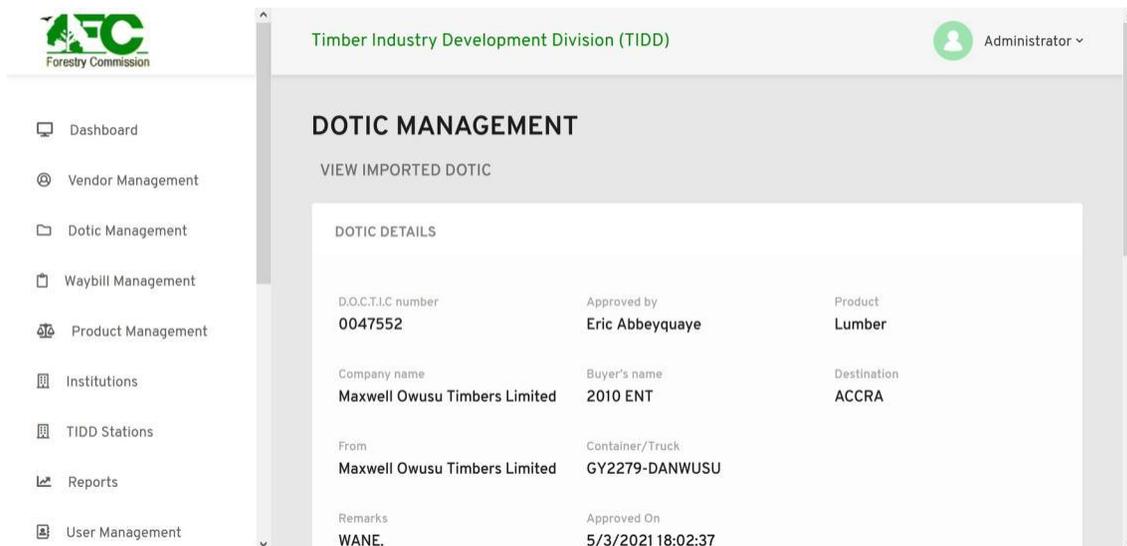


Figure 15: Imported File

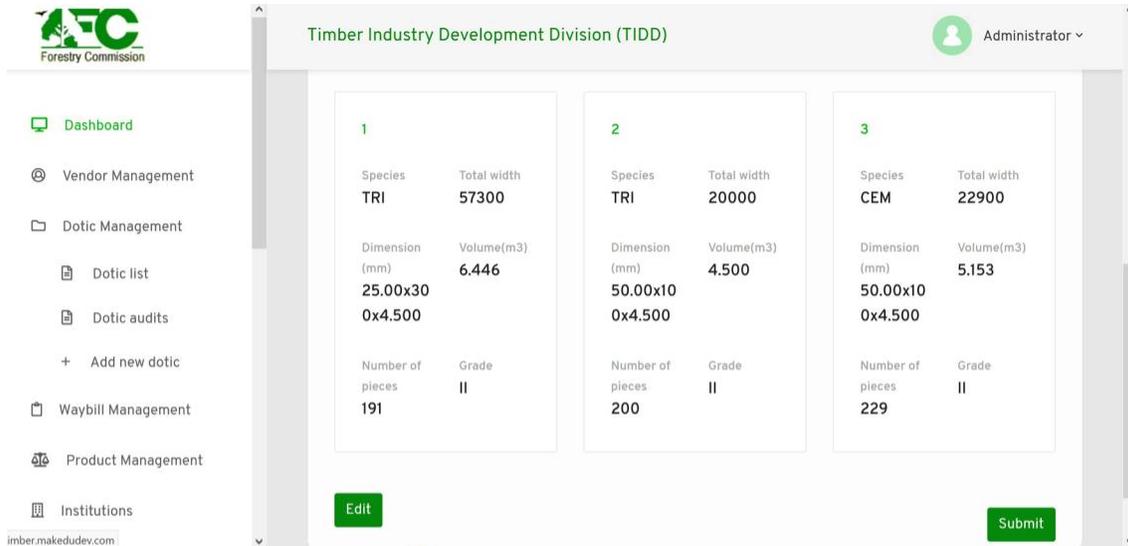


Figure 16: Imported DoTIC Form

A form as shown in FIG 16 will appear showing the details of the DoTIC to be uploaded. **Please note that at this point the DoTIC is not yet assigned to a Vendor so you should not submit it.**

To assign an imported DoTIC to a vendor, click on the **Edit** button on the left hand bottom of the View Imported DoTIC form (Arrowed) to display the **Edit Extracted DoTIC form** (Fig 17)

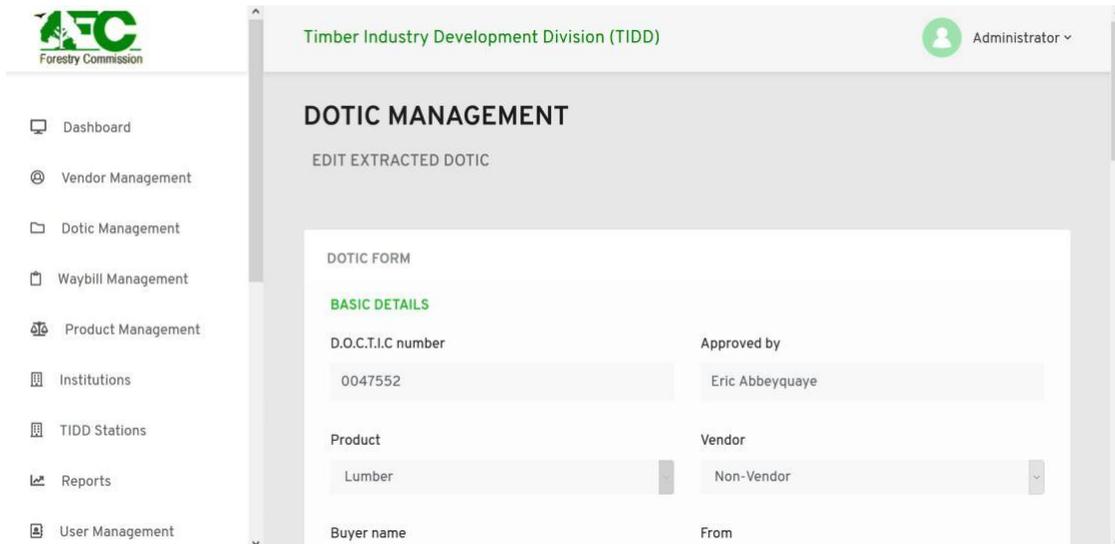


Figure 17: Edit Extracted DoTIC form

The screenshot shows a web application interface for the Timber Industry Development Division (TIDD). On the left is a navigation menu with items: Dashboard, Vendor Management, Dotic Management, Waybill Management, Product Management, Institutions, TIDD Stations, Reports, and User Management. The main content area is titled 'Timber Industry Development Division (TIDD)' and contains a form with the following fields:

- DOTIC FORM
- BASIC DETAILS**
- D.O.C.T.I.C number: 0047552
- Product: Lumber
- Buyer name: 2010.ENT
- Remarks: WANE.
- Approved on: (empty)
- Vendor: A dropdown menu is open, showing a list of vendors. 'Akua Ataa Ent' is highlighted in blue.
- From: Maxwell Owusu Timbers Limited
- Container/Truck: GY2279-DANWUSU
- Destination: (empty)

Figure 18: Selecting a Vendor

Click on the Drop-down arrow of the Vendor to select the name of the vendor and the DoTIC is to be assigned (FIG. 18). Then click on the Green **Submit** button on the bottom right of the form (Fig. 19).

The screenshot shows the same web application interface as Figure 18, but now the 'Vendor' dropdown is closed. The form fields are populated with the following values:

- 200
- 20000
- 4.500
- Species: CEM
- Grade: II
- Thickness: 50.00
- Width: 100
- Length: 4.500
- Number of pieces: 229
- Total Width: 22900
- Volume: 5.153

A green 'Submit' button is visible at the bottom right of the form. The user profile 'Administrator' is shown in the top right corner.

Figure 19: Click on Submit

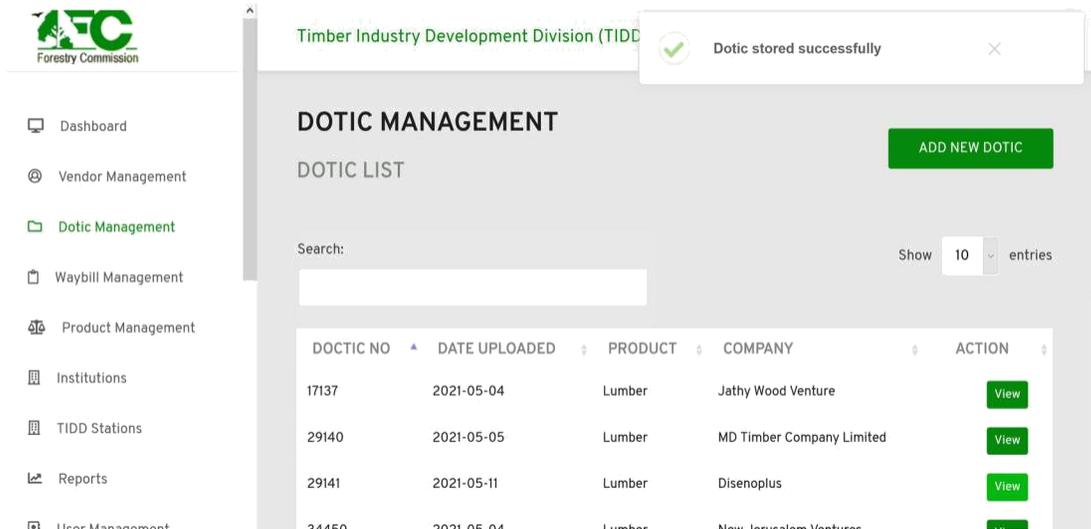
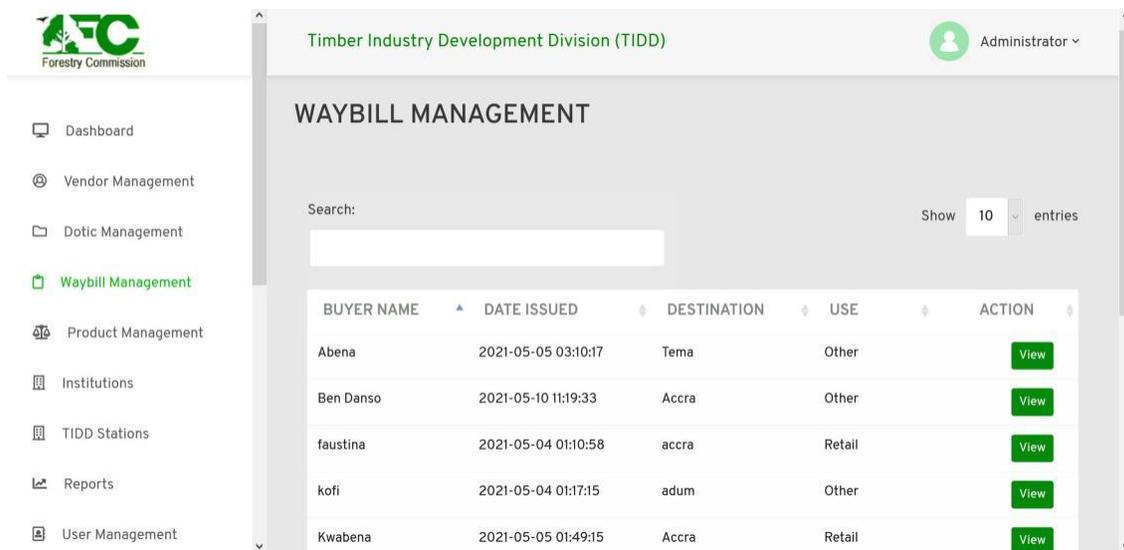


Figure 20: DoTIC Stored Successfully

After successfully uploading an assigned DoTIC, a pop-up message” *DoTIC stored successfully* will pop up at the top right side of the form as shown in Fig. 20

CHAPTER 5 - DOMESTIC WOOD TRACKING SYSTEM MANAGEMENT

This Domestic wood tracking system management menu displays the Sales of wood products sold by vendors to clients. **Please note, these transactions are performed on the mobile app and they are managed over here.** This Domestic wood tracking system management form gives an idea of sales made and the domestic wood tracking systems that has been issued (Figure 21). To view the details of a domestic wood tracking system, click on the Green View Button on each displayed domestic wood tracking system to get the details as shown in Figure 22



BUYER NAME	DATE ISSUED	DESTINATION	USE	ACTION
Abena	2021-05-05 03:10:17	Tema	Other	View
Ben Danso	2021-05-10 11:19:33	Accra	Other	View
faustina	2021-05-04 01:10:58	accra	Retail	View
kofi	2021-05-04 01:17:15	adum	Other	View
Kwabena	2021-05-05 01:49:15	Accra	Retail	View

Figure 21: Domestic wood tracking system Management Interface

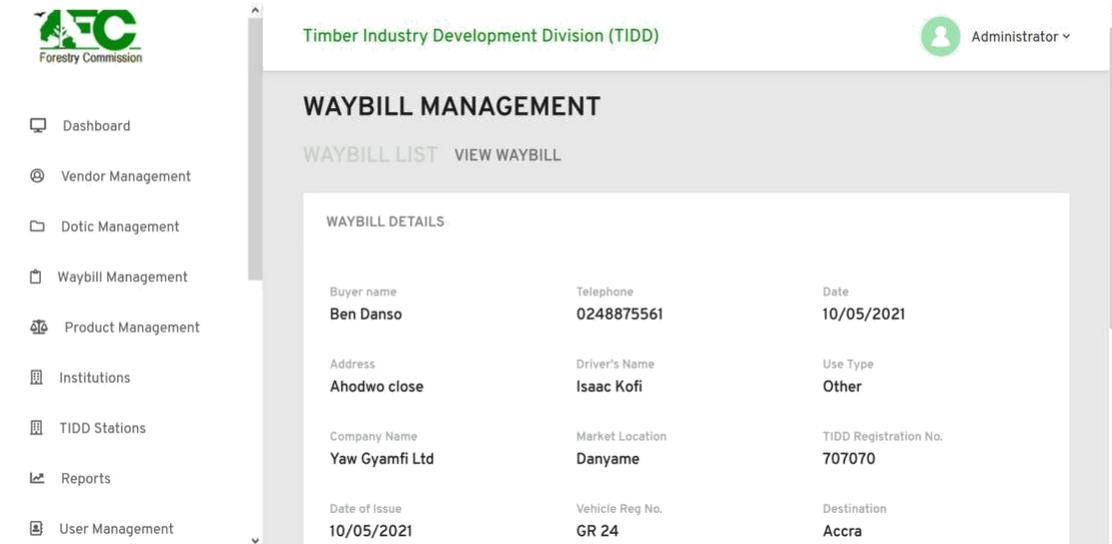


Figure 22: View Domestic wood tracking system Interface 1

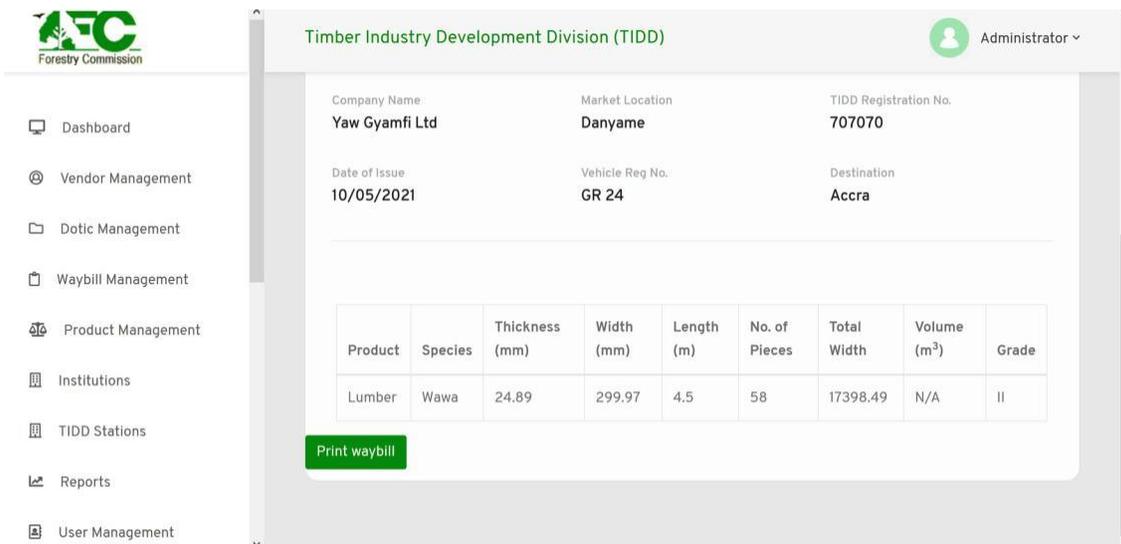


Figure 23: View Domestic wood tracking system Interface 2

The waybill can be printed by clicking on the Green **Print Waybill** button.

CHAPTER 6 - PRODUCT MANAGEMENT

The product management menu displays two forms, the product and species. The first form displayed is the PRODUCT Form as shown in Fig. 24.

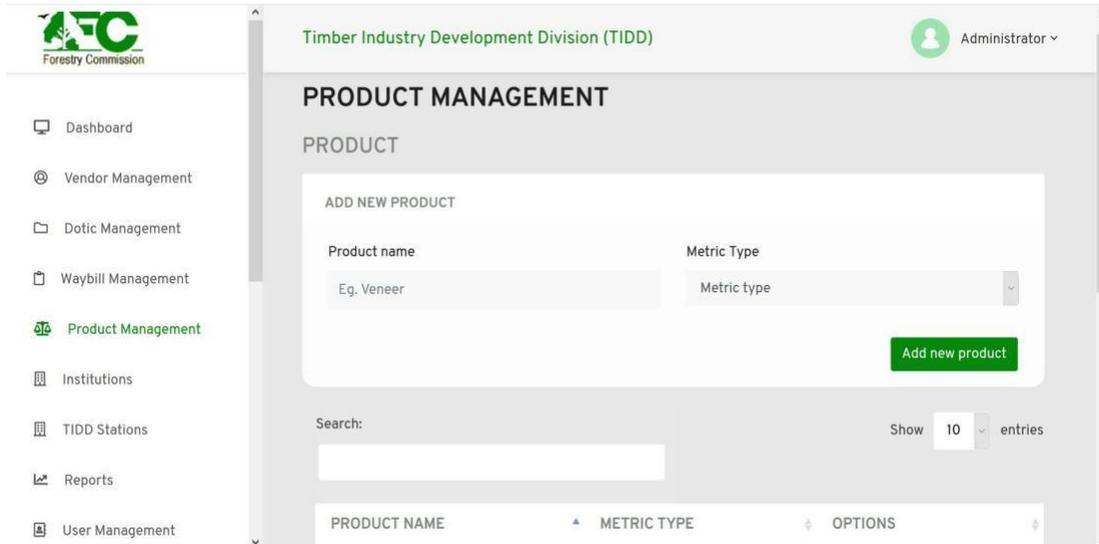


Figure 24: Product Management Interface 1

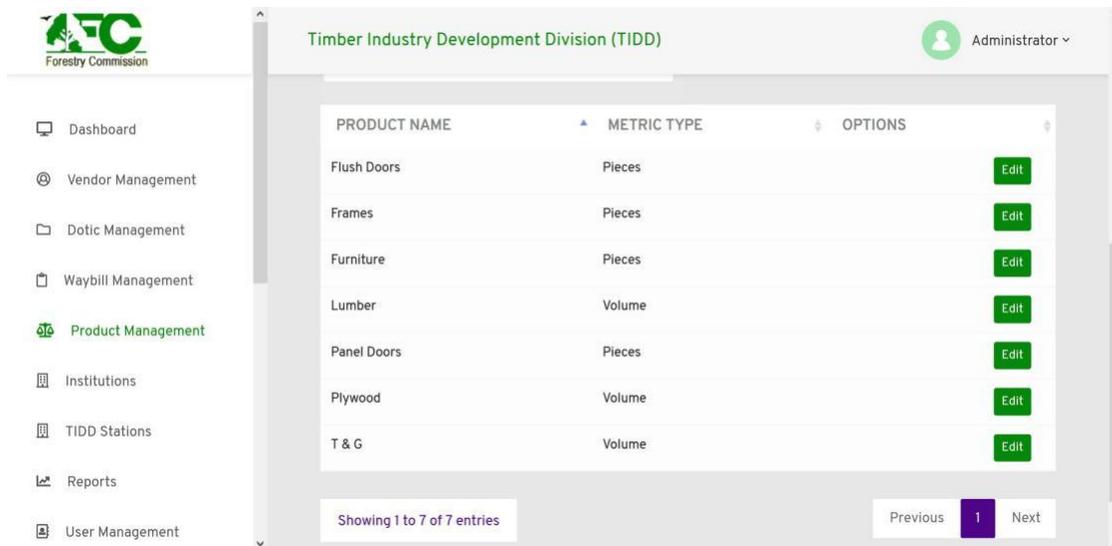


Figure 25: Product Management Interface 2

This form (Figure 24) is where new wood products are added but only the Administrator can perform this function. All wood products registered in the system are display here. The Green Product **Edit** button (figure 25) will be available depending on one's privilege settings.

A click on the small block arrow (Δ) on the left side of the **METRIC TYPE** changes the unit measure of quantity from metric volume of pieces or vice versa. The **Search** test field is used to search wood products that are in the system.

Adding a New Wood Product

To add a new wood product, type the product name at the Product name text box and select the metric type from the dropdown menu after that, click on the green **Add new product** button to store the product (figure 24). A pop-up message “product stored successfully” will be displayed at the top right of the form once the product is added. Please note, the **Add New product** button will be available depending on your privileges settings.

Species Tab

The Species form is the second menu item under the Product Management.

The functionalities are just the same as on the Product form (Fig. 24)

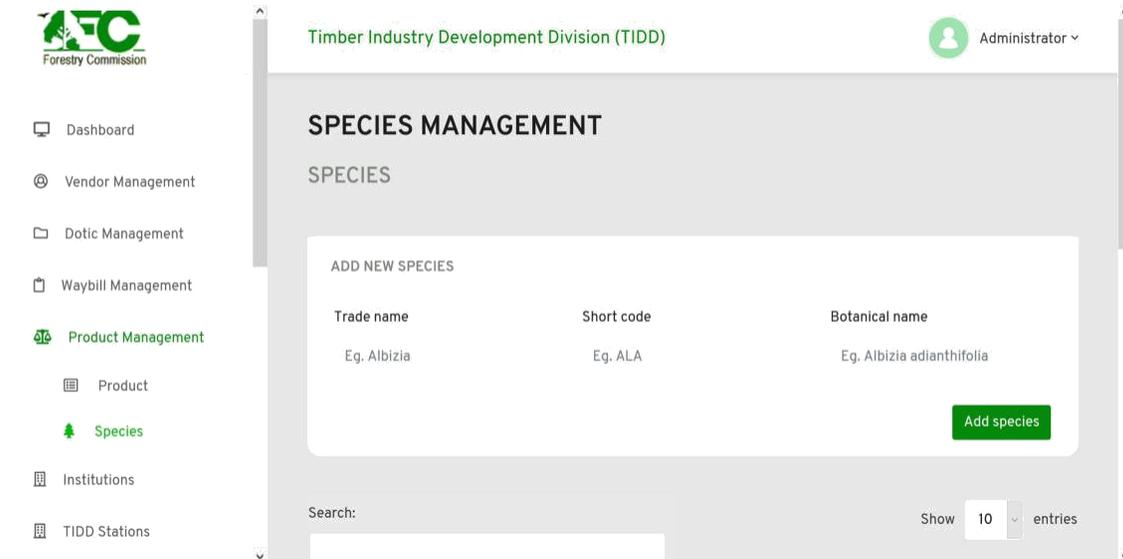


Figure 26: Species Management Interface 1

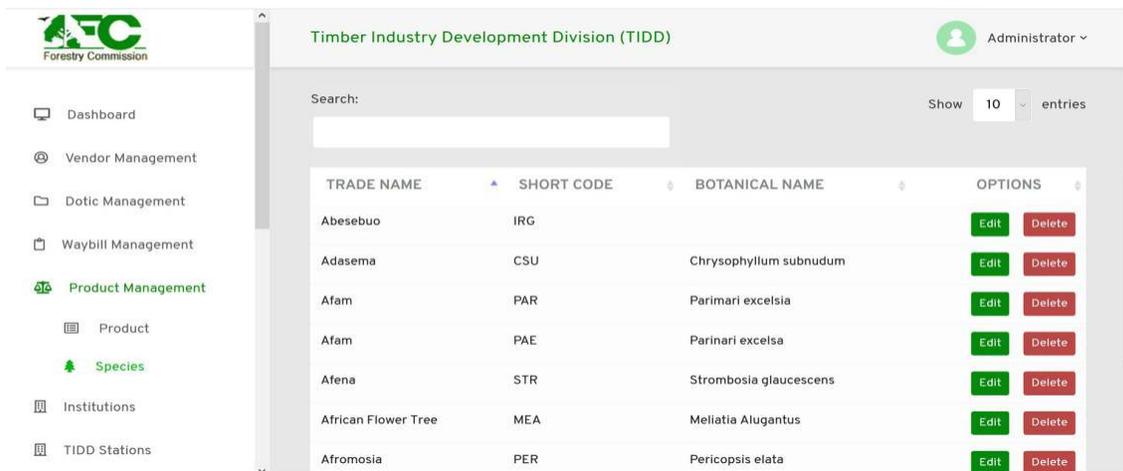


Figure 27: Species Management Interface 2

The Species form (Figure 26) is where new species are added but only the Administrator can perform this function. All species registered in the system are displayed here also. The Green **Edit** and the Red **Delete** buttons will be available depending on one's privilege settings.

A click on the small block arrow (Δ) on the right side of the **TRADE NAME**, **SHORTCODE**, **BOTANICAL NAME** and **OPTIONS** changes the species arrangements. There is also **Search** test field use to search species and other species parameters that are in the system.

Adding a New Species

To add a new species, type the species name, Short code and the Botanical name, click on the **Add Species** (coloured Green) to store the species. A pop-up message “Species stored successfully” will be displayed at the top right of the form once the species is added. Please note, the **Add New Species** button will be available depending on your privileges settings.

CHAPTER 7 - INSTITUTION MANAGEMENT

A click on the Institutions menu displays the institution management form (Fig. 28). It gives the list of stakeholder institutions. There is a Search Text Field for searching for registered institutions in the system. Depending on one's privilege settings, an institution can be edited by clicking on the Green **Edit** button or deleted by clicking on the Red **Delete** button.

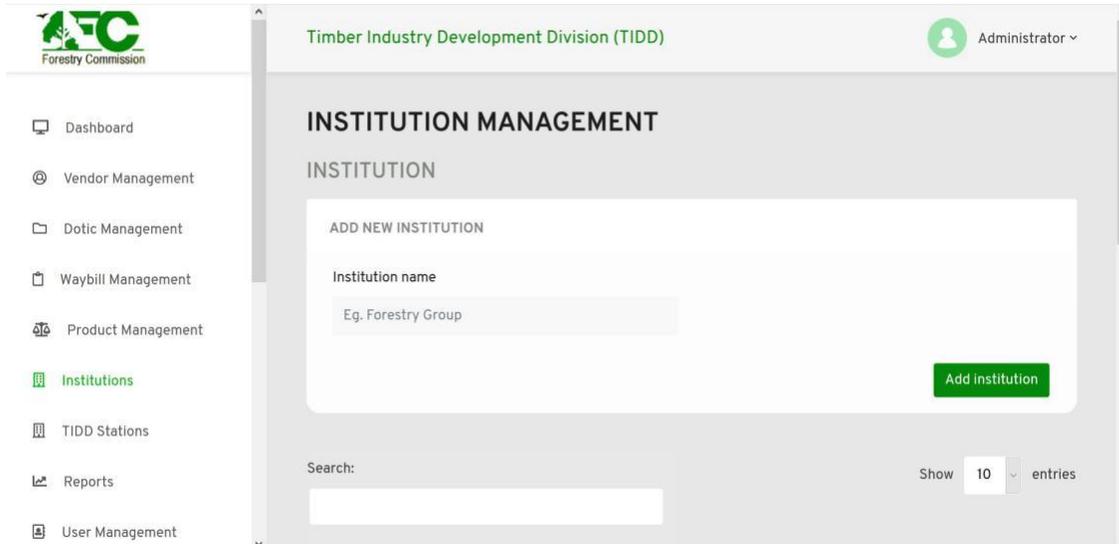


Figure 28: Institutions Interface 1

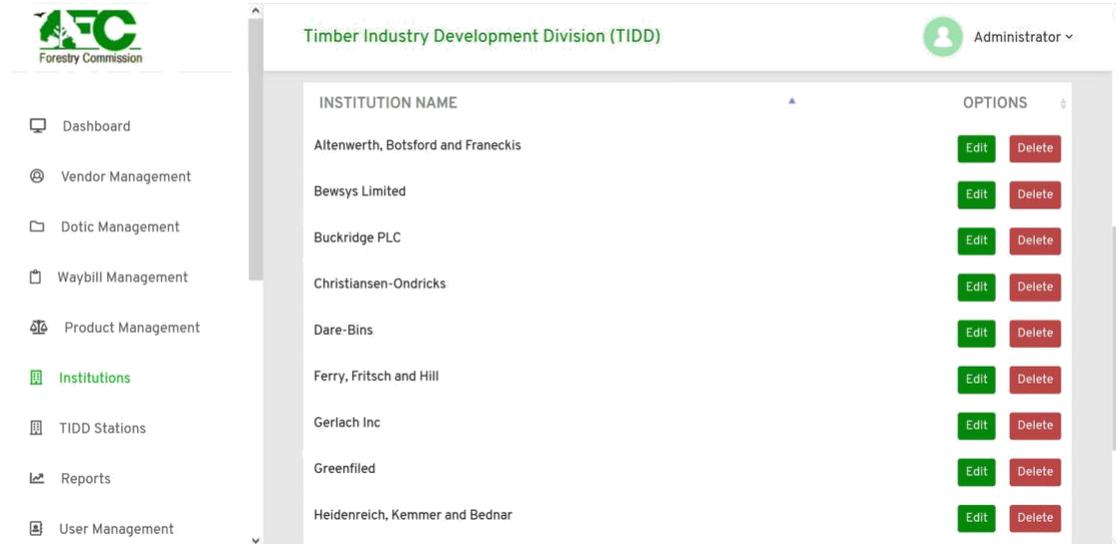


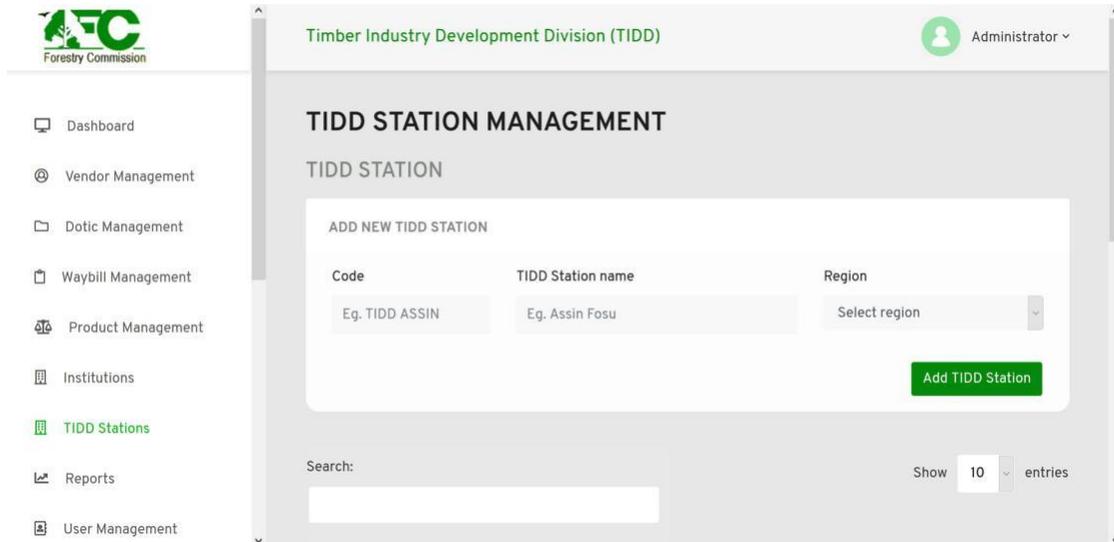
Figure 29: Institutions Interface 2

Adding an Institution

To add an institution, type the name of the institution on the Institution name Text field and then click on the Green **Add Institution** button (Figure 28) to store or register the institution in the system.

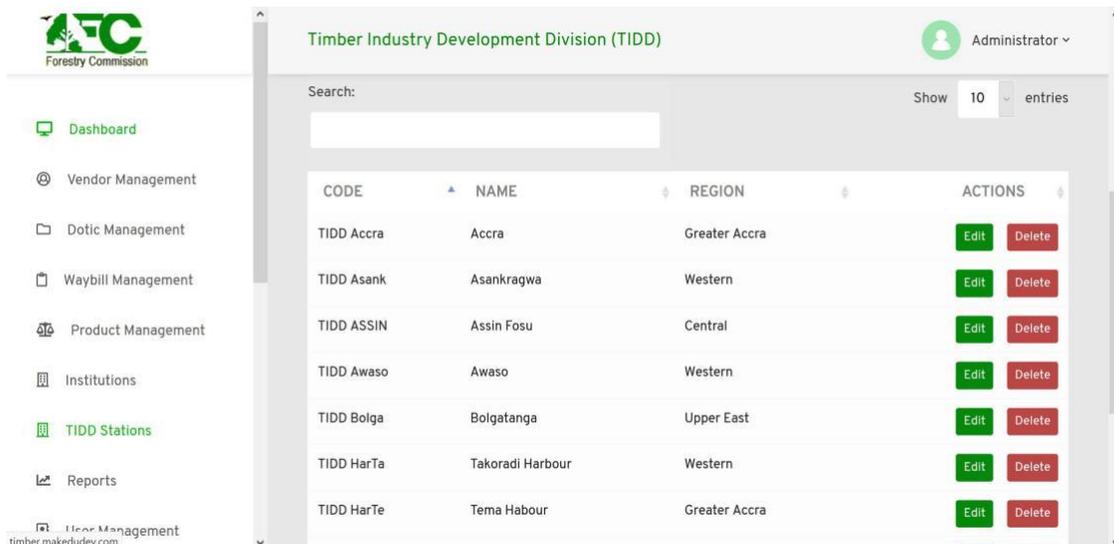
CHAPTER 8 - TIDD STATION MANAGEMENT

This menu is to be managed by TIDD Area Offices. Since every DoTIC is issued in an Area Office, it is important to have the Officer enter it into the System (Database) for easy management and tracking of DoTIC



The screenshot shows the 'TIDD STATION MANAGEMENT' interface. On the left is a sidebar menu with options: Dashboard, Vendor Management, Dotic Management, Waybill Management, Product Management, Institutions, TIDD Stations (highlighted), Reports, and User Management. The main content area is titled 'TIDD STATION MANAGEMENT' and 'TIDD STATION'. It features a form to 'ADD NEW TIDD STATION' with three input fields: 'Code' (with example 'Eg. TIDD ASSIN'), 'TIDD Station name' (with example 'Eg. Assin Fosu'), and 'Region' (a dropdown menu with 'Select region'). A green 'Add TIDD Station' button is at the bottom right of the form. Below the form is a search bar and a 'Show 10 entries' dropdown.

Figure 30: TIDD Station Interface 1



The screenshot shows the 'TIDD STATION MANAGEMENT' interface displaying a list of TIDD Stations. The sidebar menu is the same as in Figure 30. The main content area shows a table with columns: CODE, NAME, REGION, and ACTIONS. The table contains 8 rows of data. Each row has 'Edit' and 'Delete' buttons in the ACTIONS column. A search bar and 'Show 10 entries' dropdown are at the top of the table area.

CODE	NAME	REGION	ACTIONS
TIDD Accra	Accra	Greater Accra	Edit Delete
TIDD Asank	Asankragwa	Western	Edit Delete
TIDD ASSIN	Assin Fosu	Central	Edit Delete
TIDD Awaso	Awaso	Western	Edit Delete
TIDD Bolga	Bolgatanga	Upper East	Edit Delete
TIDD HarTa	Takoradi Harbour	Western	Edit Delete
TIDD HarTe	Tema Harbour	Greater Accra	Edit Delete

Figure 31: TIDD Station Interface 2

A click on the TIDD Stations menu in the menu item list on the left sides displays TIDD Station Management form as shown in Figure (31). It displays a list of all the TIDD Area offices in the system. Depending on one's privilege settings, an Area office can be edited by clicking on the Green **Edit** button or deleted by clicking on the Red **Delete** button. There is a **Search** Text Field for searching for TIDD Area offices in the system.

Adding a new Area Office

An Administrator can only perform the function. To add a new Area office, enter **the Office code, TIDD Station name** and the **Region** which the station falls in.

CHAPTER 9 - REPORT MANAGEMENT

A click on the Reports menu displays the Reports Management form. This form has two sets of reports. A pre-designed report (Figure 32) and Report Generation form (Figure 33)

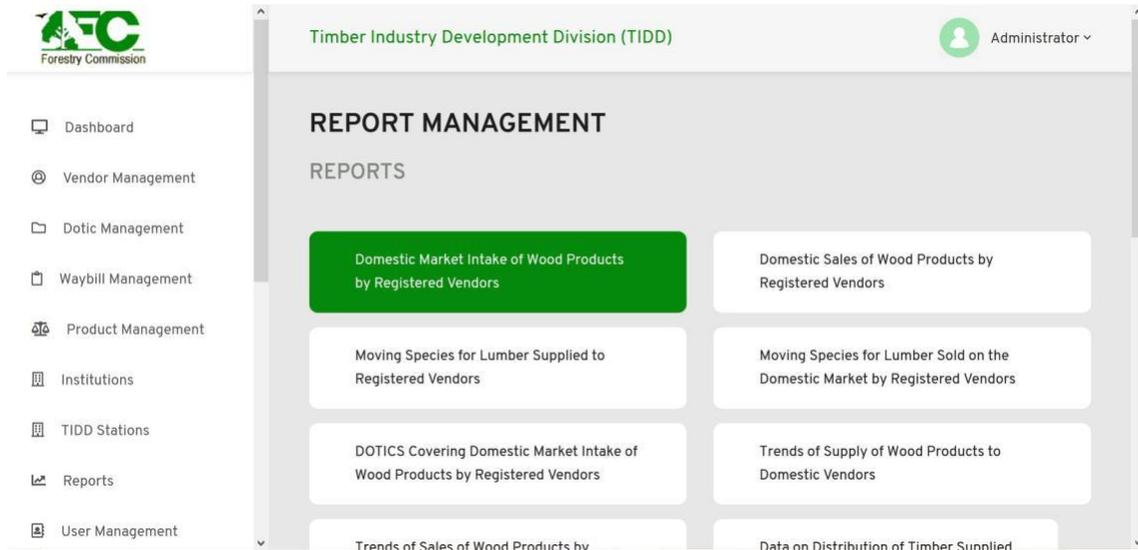


Figure 32: Report Management Interface

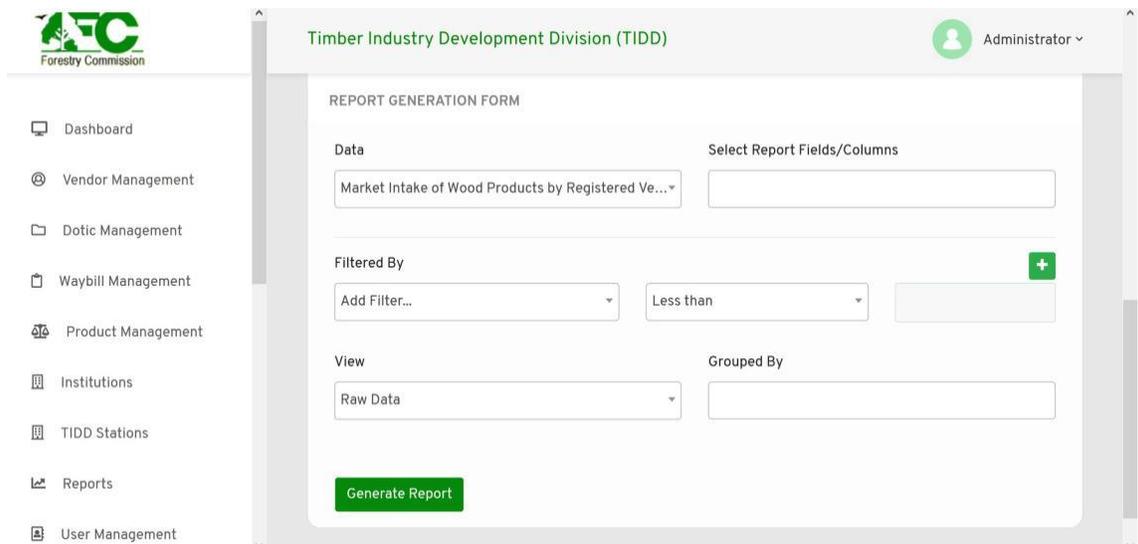


Figure 33: Report Generation Form Interface

There are nine canned reports in the system (figure 32). To display any of these reports, click on the tab of the report you would like to view.

There is a Report Generation Form that users could use to generate customize reports. To do so, enter the parameters of the report in the text fields and then click on the **Green Generate Report** button (Figure 33).

CHAPTER 10 - USER MANAGEMENT

The User Management menu is used by the Administrators to create users, assign user roles and privileges setting. There are four items under this menu namely User list, Role list, Add New user and Add New Role.

A click on the User Management menu displays these items. The default form of the menu is the User list as shown in Figure 33. This is a list of all users of the system. There is a **Search** field for searching a user. On the User list is also a Green button **ADD NEW USER** for adding new users.

Adding a New User

Two options are available; you can add a new user by either clicking the **ADD NEW USER** button on the User list form (Figure 34) or by clicking the **Add new user** menu item from the menu list. A click on any of these will display the ADD NEW USER form (Figure 36). Fill the details in the form following the examples provided in the text field and then click on the Green Add New User button on the bottom right to store it. Once saved, a pop-up message “*user saved successfully*” will appear at the top-right corner of the form.

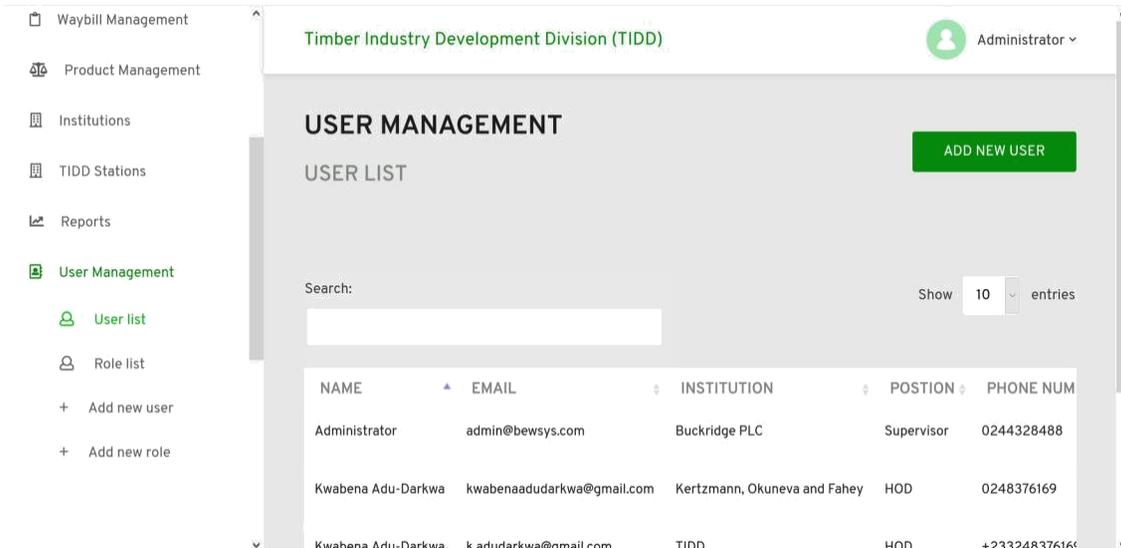


Figure 34: User List Interface

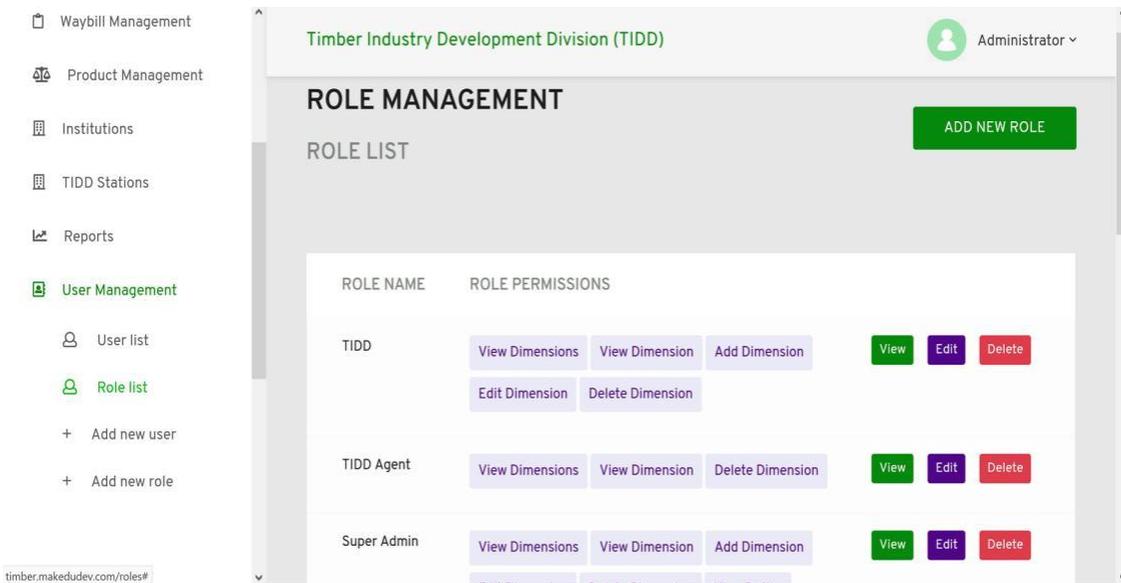


Figure 35: Role List Interface

A click on the Role list item in the menus displays the Role list form. It gives information on the Role Name and Role Permissions (Fig 35). There are three action buttons on the side of the Role permissions; the Green **View** button, the Mauve **Edit** button and the Red

Delete button. A click on the View button displays all the permissions under a Role name. To edit any of the permissions, click on the Edit button to display the role permissions. To delete any role, click on the Delete button. Since the delete process is irreversible, a dialogue box will appear for you to confirm or cancel the deletion. Please note, only Administrators are permitted to perform any of these processes enumerated above. The User Management form is only visible to Administrators of the System.

The screenshot shows a web application interface for 'Timber Industry Development Division (TIDD)'. The user is logged in as an 'Administrator'. The main heading is 'USER MANAGEMENT'. Below this, there are two options: 'USER LIST' and 'ADD NEW USER'. The 'ADD NEW USER' option is selected, leading to a 'USER FORM'. The form contains the following fields:

Field Name	Example Value
Fullname	Eg. John Ackin
Email	eg. john@gmail.com
Institution	Select Institution (dropdown)
Position	eg. HOD
Phone number	Eg. 0245361178
Role	Select role (dropdown)

An 'Add new user' button is located at the bottom right of the form.

Figure 36: Add New User

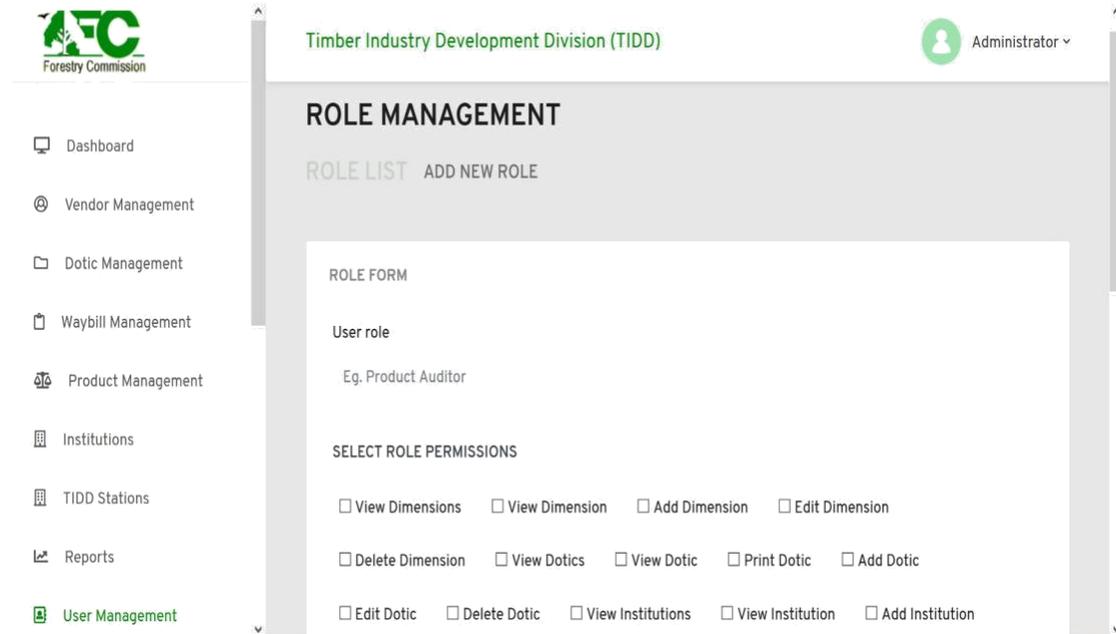


Figure 37: Add New Role 1

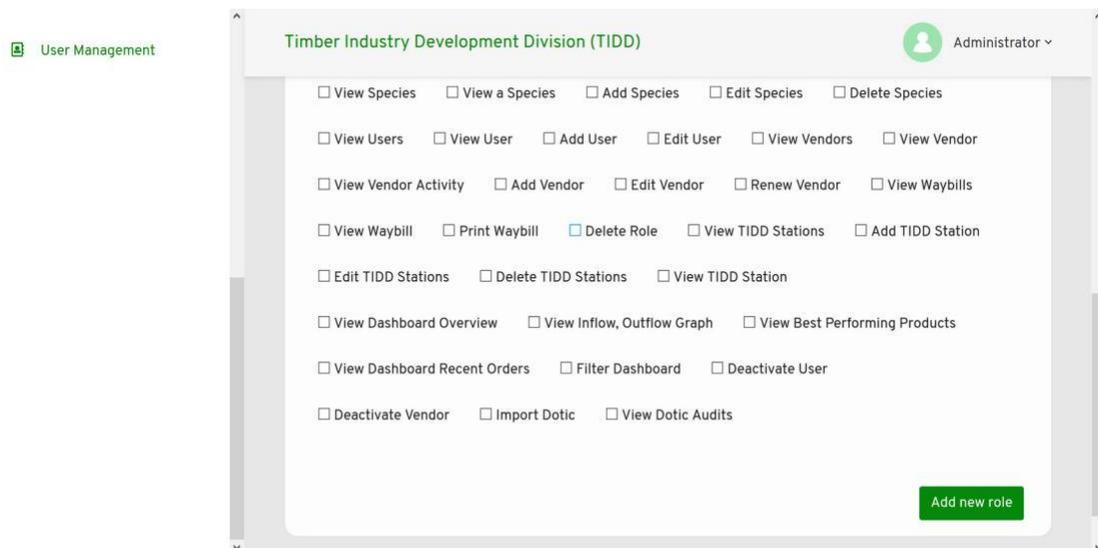


Figure 38: Add New Role 2

Adding a New Role

Two options are available; you can assign a new role by either clicking the **ADD NEW ROLE** button on the Role list form (Fig 38) or by clicking the **Add new role** menu item from the menu list. A click on any of these will display the ADD NEW ROLE form

(Figure 37). Enter the User role in the form following the example provided in the text field, then select the Role permissions applicable to this Role name and click on the Green **Add New Role** button on the bottom right to store it. Once saved, a pop-up message “*role saved successfully*” will appear at the top-right corner of the form.

CHAPTER 11 – DOMESTIC WOOD TRACKING MANAGEMENT SYSTEM MOBILE APP

Introduction

The Mobile App of the TIDD-DWMM is the platform the vendors will use to transact the business. A vendor registered with TIDD may access a DoTIC issued to him or her from the Mobile App account. It provides the vendor easy access to his/her DoTICs to prove the legitimacy of wood products/ stocks and show them as evidence when demanded by authorized regulators. The Vendor will not have access to the Web Client but only the Mobile App. The mobile app can be found on Google Play store. However, you can still install with the apk which is shared below. Only Registered Vendors can access the mobile App since the passcode could only be received once a vendor has been successfully registered in the TIDD Domestic Wood Tracking Management System.

(Mobile App apk:

https://drive.google.com/file/d/1UMKQU5s6JeU9QuruPoUE_eQYgAuKGGHGR/view?usp=sharing)

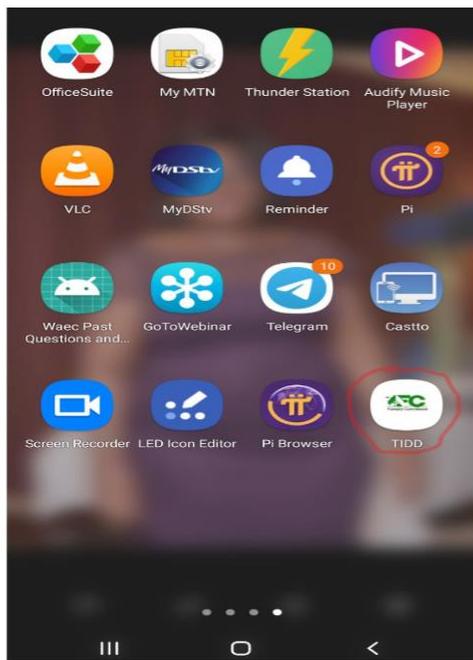


Figure 40: Image 1 (Device screen)



Figure 39: Image 2 (Login Screen)

To install the mobile app (available to Android devices only), Go to Google Play store and search for the TIDD-DWMM App.

Click on install and follow the steps to get it installed.

Once it is done, a white Icon with the FC logo and having TIDD as inscription below it as shown in Image 1 (Cycled Red) will appear on your mobile screen.

Click on the App to access it. You will need to enter a **TIDD number** that is, the Vendor's TIDD Registration number assigned to the vendor E.g 00183689 and the **Pin**, the four-digit code the Vendor received through text message when he/she was registered in the web client (Figure 40 (Image 2)).

After successfully logging in, the first page that will be displayed is the Dash Board; the Home screen having **Overview** as its heading (Image 3). It displays the opening and Closing stocks over a period.

The dashboard icons

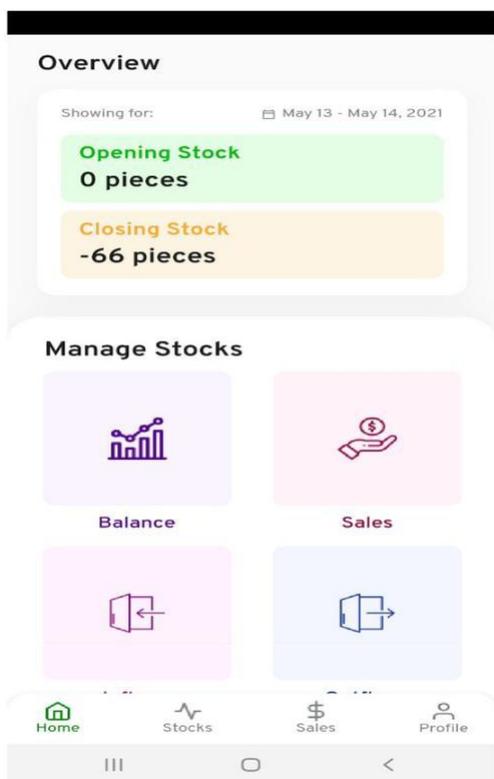


Figure 41: Image 3 (Home Screen)

There are four icons for managing stock; Balance, Sales, Inflows and Outflows. There is a Date field, which is for filtering information (reports). Information on Inflows and Outflows are display on the Dash Board. The bottom of the Dash Board are the Home, Stock, Sales and Profile Icons.

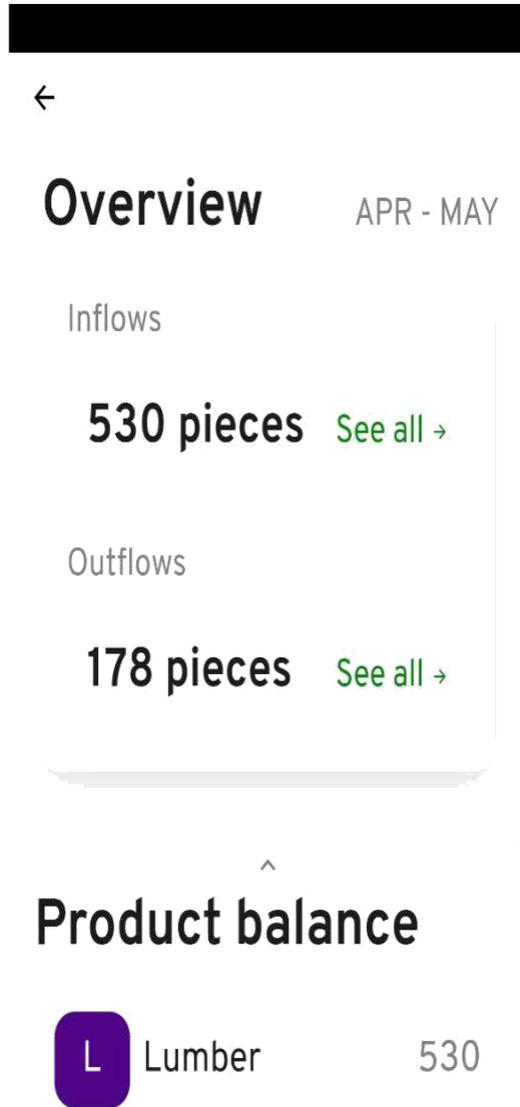


Figure 42: Image 4 (Product Balance)

To check product balance in detail, look for the balance icon, click on the icon to display product balance (Image 4).

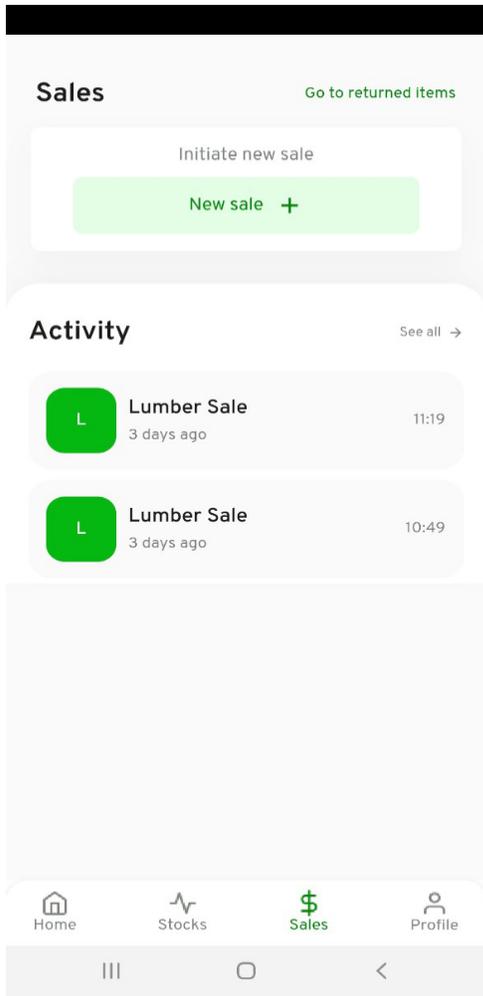


Figure 44: Image 5 (Sales)

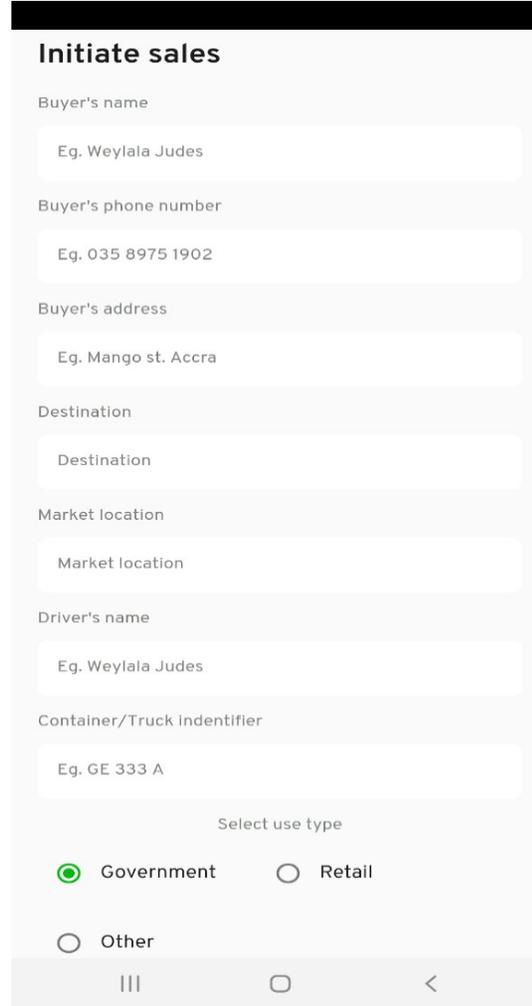


Figure 43: Image 6

Sales Icon

This icon is used to manage the sales of wood products by a vendor.

Selling of Wood Product

To sell wood product,

- click on the **New sale** icon (Image 5) to display the **initiate new sales screen** (Image 6).
- Enter the buyer details as demonstrated in the text field (Image 6)

Select the use type; Government, Retail or Others

- Click on the Product Specification tab (+ **New species**) as shown in Image 7 to display the Add Products text fields as shown in Image 8 following the examples in the text fields.

When filling the product details, the user can select the products, dimensions and Grade from the drop-down list. The list displays the **products, dimensions and Grade** available to the Vendor.

Also, note that the **quantity** a buyer can purchase depends on the available stock in the system.

- When all is done, click on the “**correct sign**” (✓) on the top right of the Product Specification dialogue box (Image 8) to return to the Initiate Sales screen (Image 6)

Click on the Green **Issue Waybill** button at the bottom. A pop-up message “Waybill issued successfully” will appear when the process is completed. You will be directed to send the Waybill to the electronic platform of your choice. (WhatsApp, Twitter, Telegram, Bluetooth, etc)



Figure 46: Image 7(New Species)

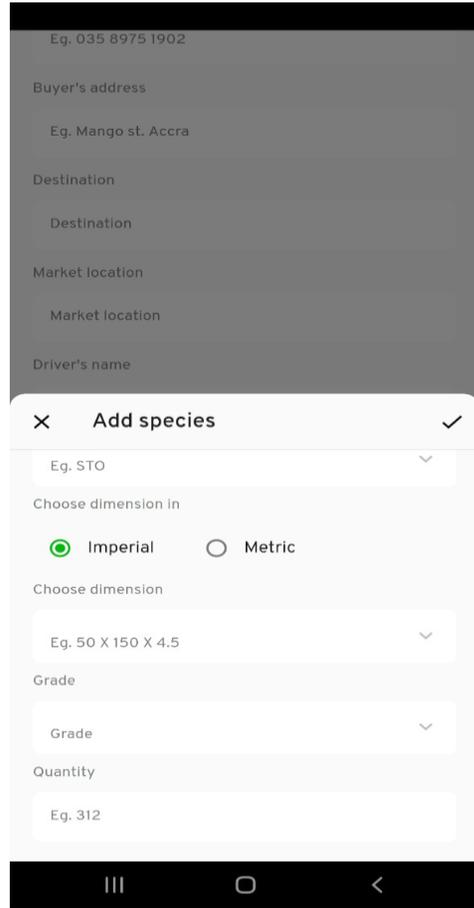


Figure 45: Image 8

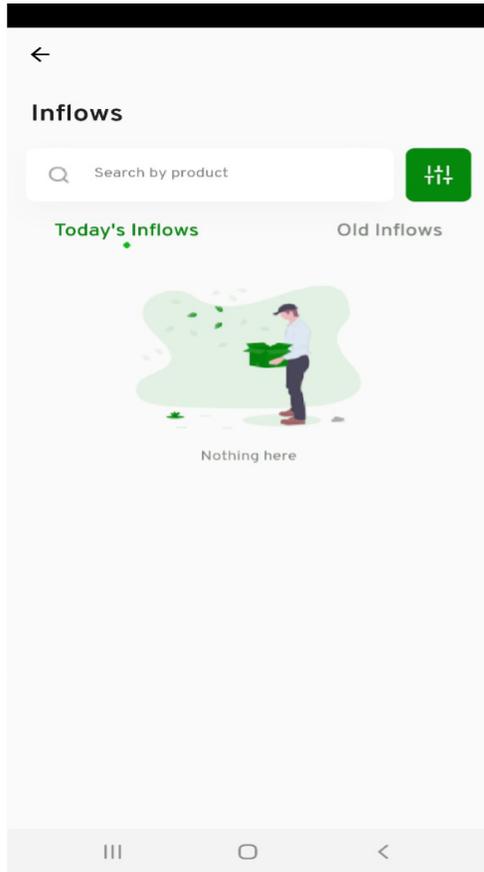


Figure 47: Image 9 (Inflows)

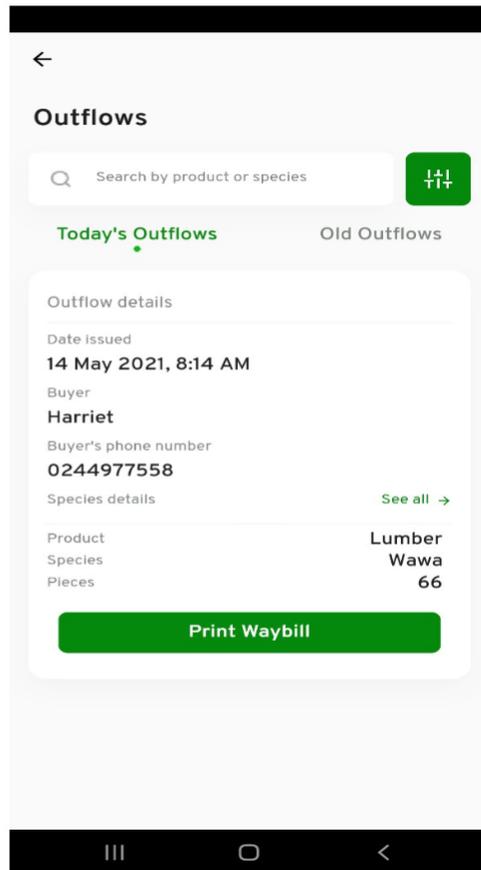


Figure 48: Image 10

Managing Inflows – This icon is used to manage stocks received. The stocks are specified on the DoTIC. A click on the Inflows Icon displays the Inflows screen as shown in Image 9.

The default screen in Today's inflows. To see previous inflows, click on the **Old inflows** icon.

The **Search** field enables the vendor to search by **Date** for all stocks received.

Managing Outflows- – This icon is use to manage sales. A click on the Outflows icon on the dashboard displays the Outflows screen as shown in Image 10. It gives information of sales. The default screen in Today's outflows. To see previous sales, click on the **Old outflows** icon. The waybill can be printed from here by clicking on the Green **Print Waybill** icon.

The **Search** field enables the vendor to search by **Date** all sales performed using the Domestic Wood Tracking Management System.

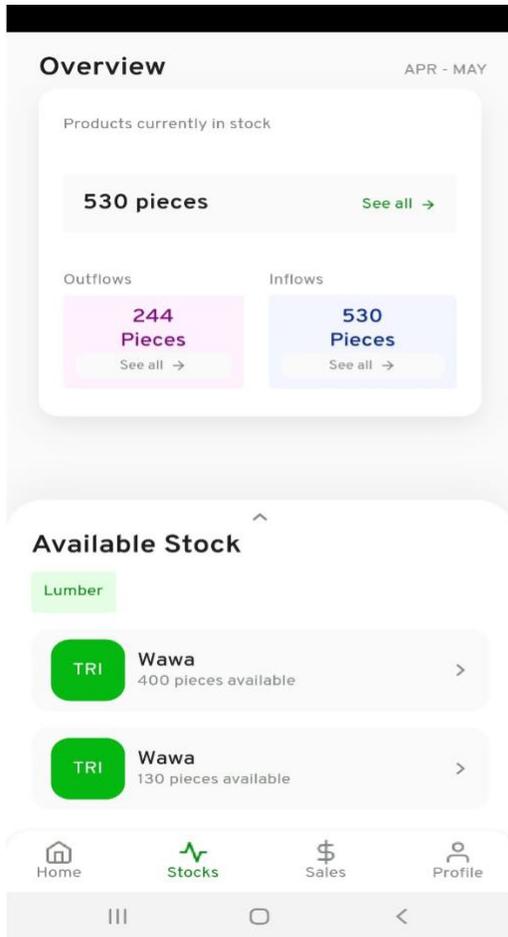


Figure 50: Image 11 (Stocks)

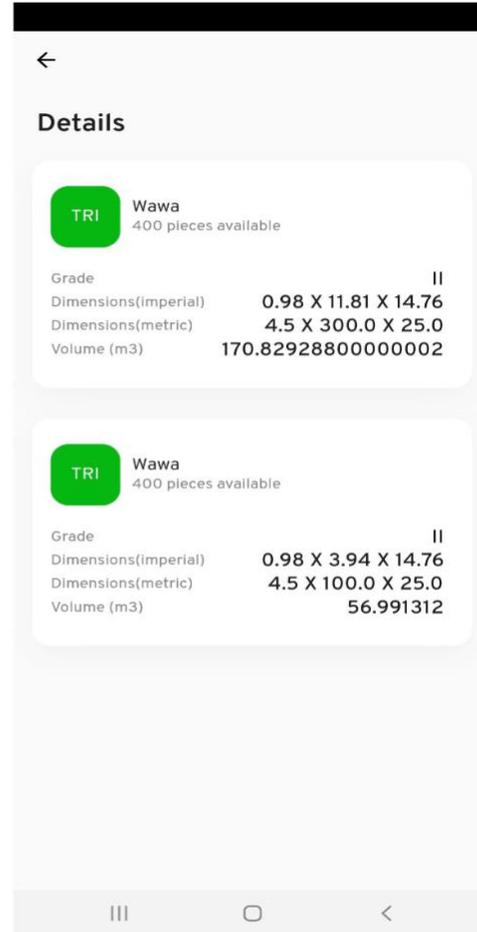


Figure 49: Image 12

Stocks Available- A click on the stock icon on the bottom of the Dash Board displays the Product Currently in stock screen. To view the wood product details, click on the product name icon (Image 11). For example, In Image 11, there are two wawa products available so a click on any of them will give the product details as shown in Image 12.

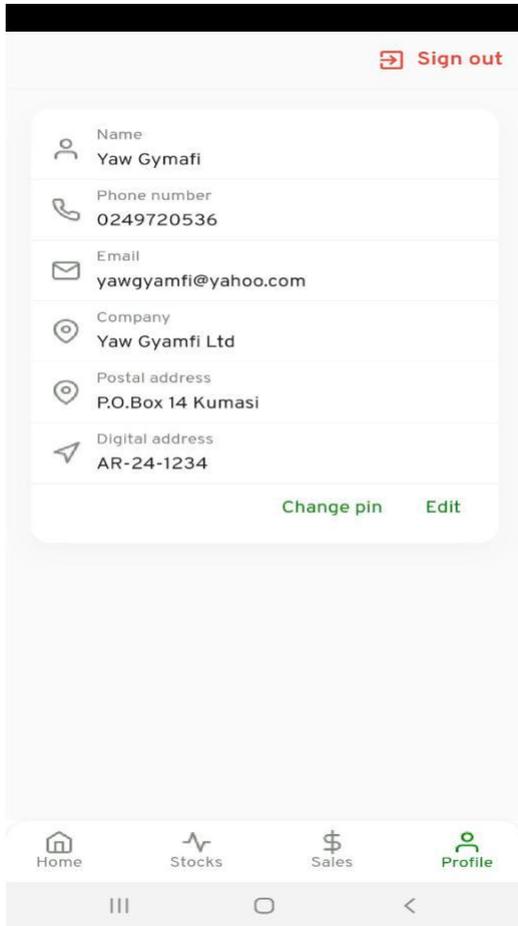


Figure 51: Image 13 (Profile)

Profile Icon: A click on the Profile icon on the extreme bottom right gives information about the Vendor. (Image 13)

Profile Management.

A click on the **Change pin** button allows the Vendor to change his/her Pin.

A click on the **Edit** button allows the Vendor to make changes to his/her Profile.

Sign out- To log out from the Way Bill Management system, click on the Red sign out button on the extreme top right. Please note that it is always important to log out if the application is not in use.

ANNEX 1

This is a step by step process of saving an approved DoTIC from Ghana Wood Tracking system (GWTS)

Step 1

In the Mill processing menu items of the GWTS, Click on **DoTIC** and search for the DoTIC you would like to upload or save and open the form as shown below (Exhibit 1).

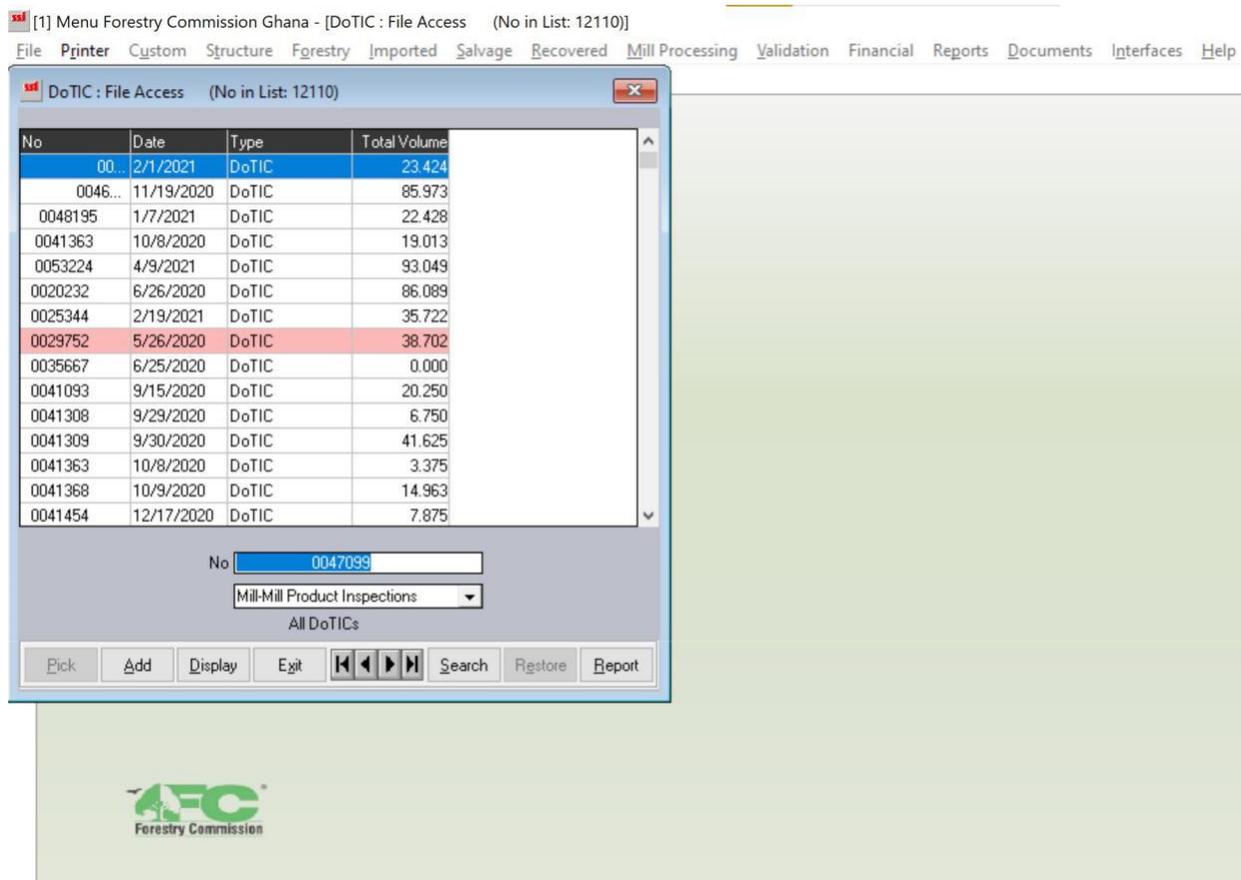


Figure 52: Exhibit 1

After searching and displaying the DoTIC, click on the **Format Print** button on the bottom right on the DoTIC: Enquire/Change form (Exhibit 2). A dialogue box “Process Document Print” will appear (Exhibit 3), click on the **Approve Print** button. The DoTIC will be approved with your username, approval date and the Print version appearing. Check the **Export box** and click on **Print**.

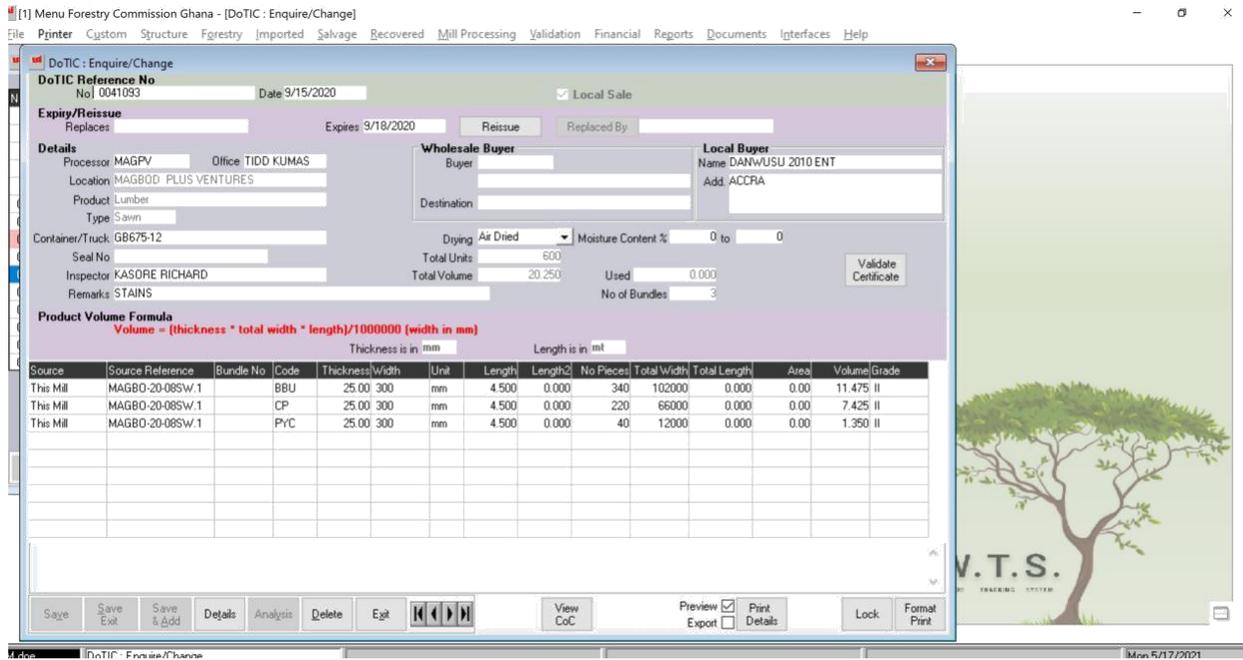


Figure 53: Exhibit 2

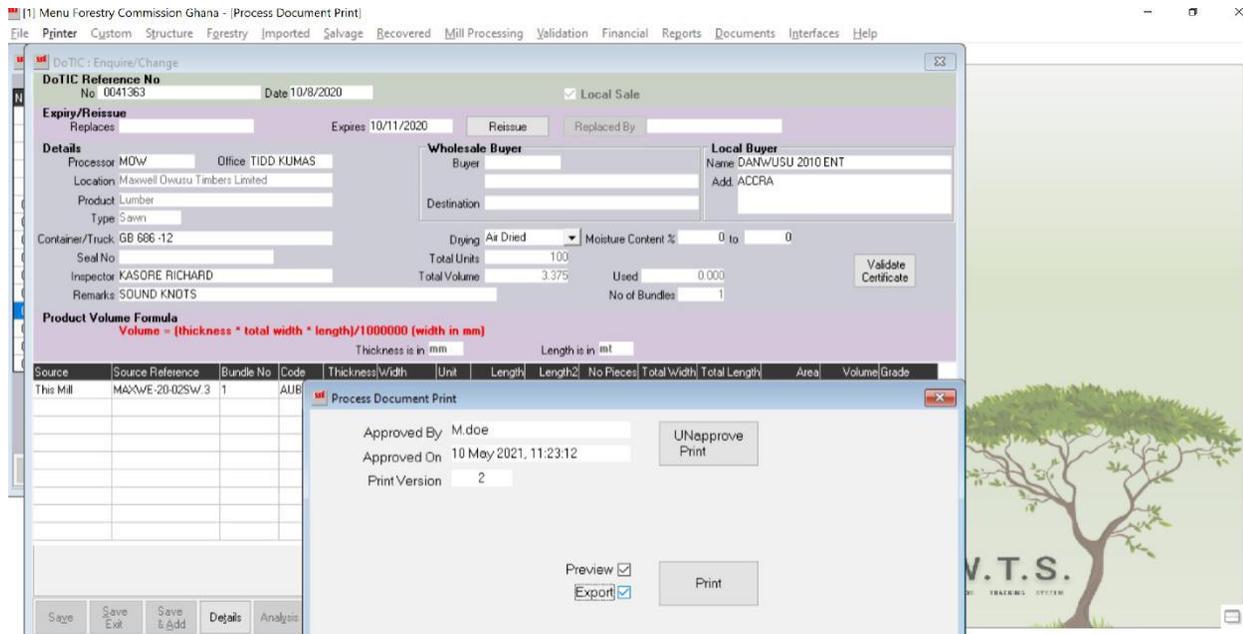


Figure 54: Exhibit 3

Step 2

On the Export dialogue form as shown in Exhibit 4, there are three file types displayed, Tab Separated Text, Excel File and PDF. Since, the Domestic Wood Tracking Management System accepts only files saved in PDF, click on the PDF tab to access the location where you want to save the file. (Exhibit 5)

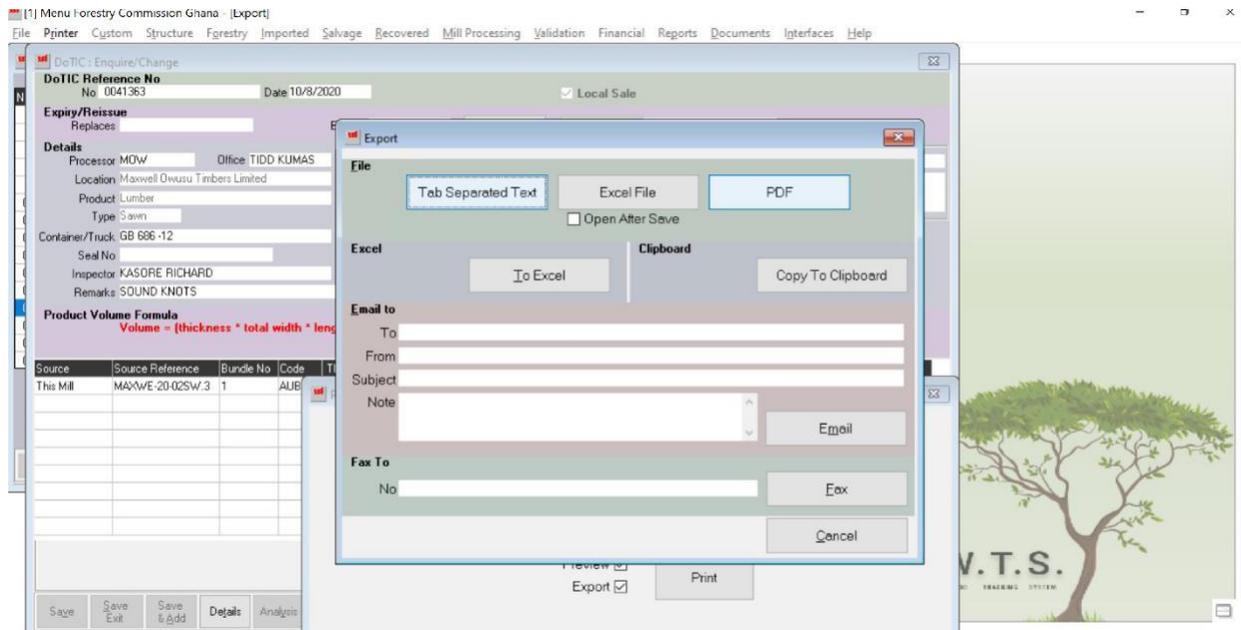


Figure 55: Exhibit 4

Step 3

Browse to the location you want to save the file. Name the file and click on the save button on the bottom right as shown in Exhibit 5

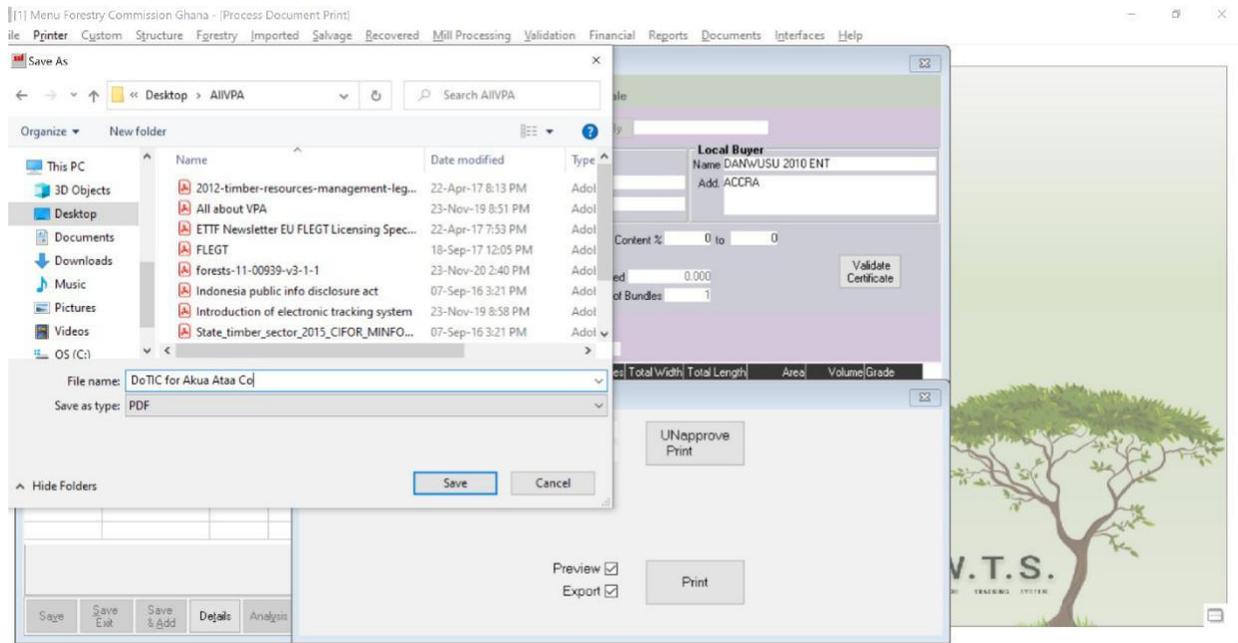


Figure 56: Exhibit 5