2018

User Guide FRA 2020 Platform

FRA TEAM

Contents

FRA Platform Quick Guide

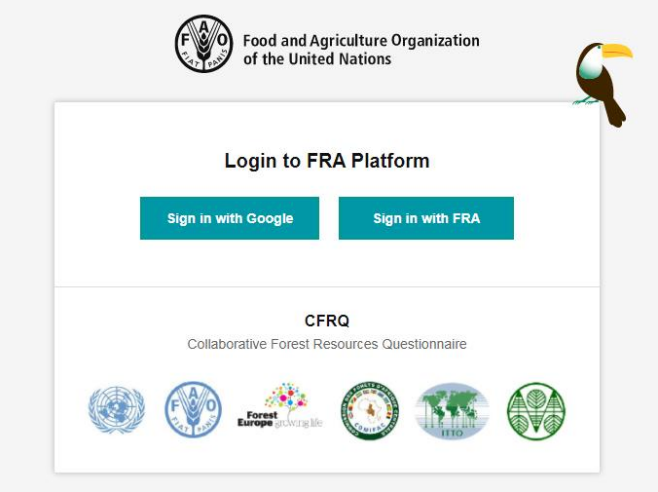
1. Login

To access the Platform the first time it is necessary to use the invitation link sent to your mail account.

It is preferable to use either Chrome or Mozilla Firefox browsers when accessing the Platform.

Two options of login are available:

- Option 1: Sign in with your Google account
- Option 2: Sign in with another email account and create a password (using one CAPITAL letter and 1 numerical digit



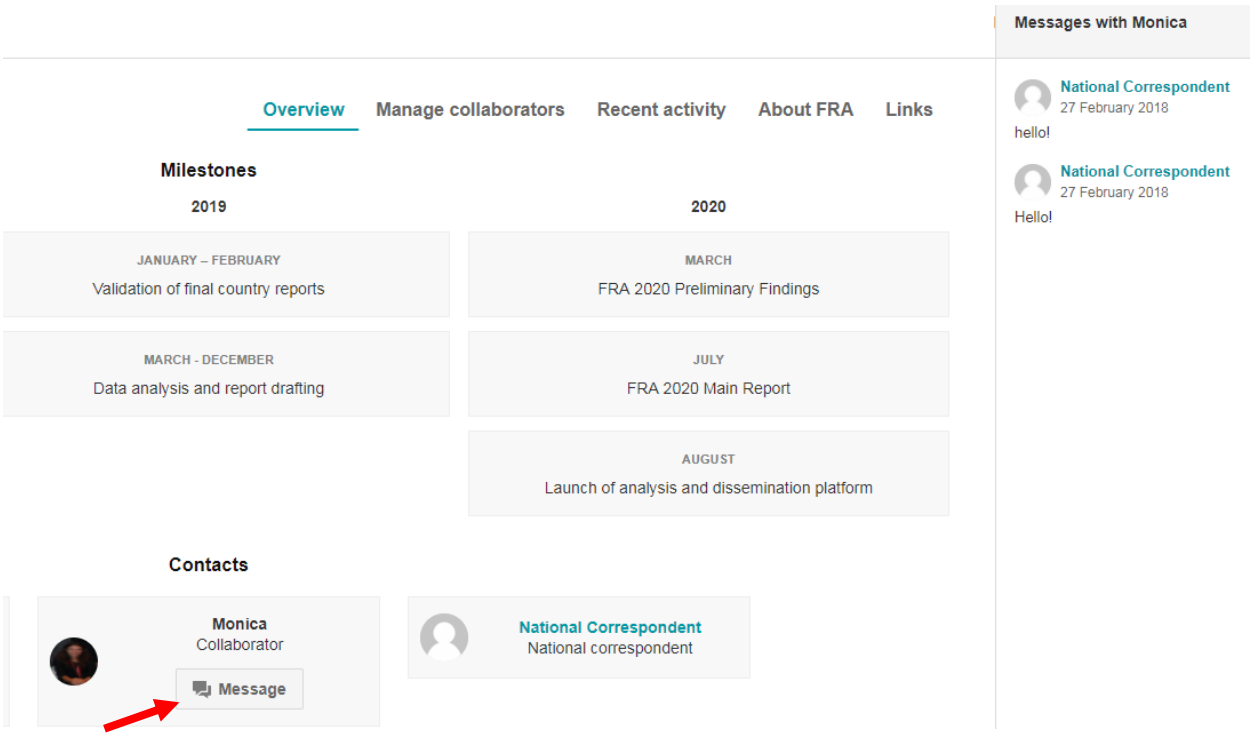
After your first login (authentication), it is possible to access the Platform using the following URL address:

fra-platform.herokuapp.com/login

Should you have any problems accessing the Platform, please contact fra@fao.org.

2. Home page

The '*Overview*' page contains the milestones for 2018-2019-2020, as well as Contacts (national collaborator and reviewers) with message icons which enables you to communicate directly with a reviewer and/or national collaborators.

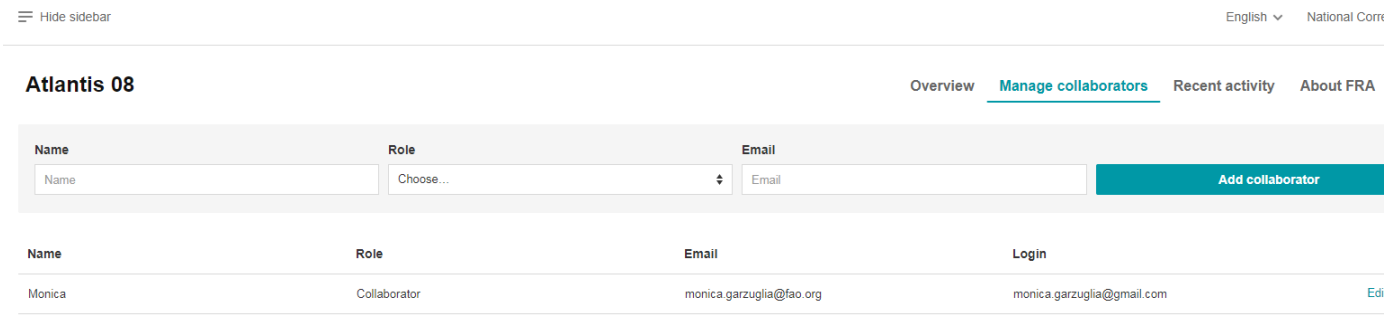


3. Manage collaborators

National correspondents can assign, edit and remove national collaborators.

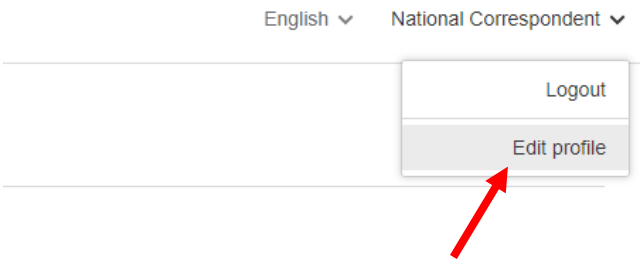
To do so, click on '*Manage collaborators'*, type in the name, role and the email of collaborator(s) and then press *'Add collaborator'*. Several collaborators can be added and can work on the report simultaneously, compiling different tables.

While collaborators can edit the report, only National Correspondents can submit the report for review.

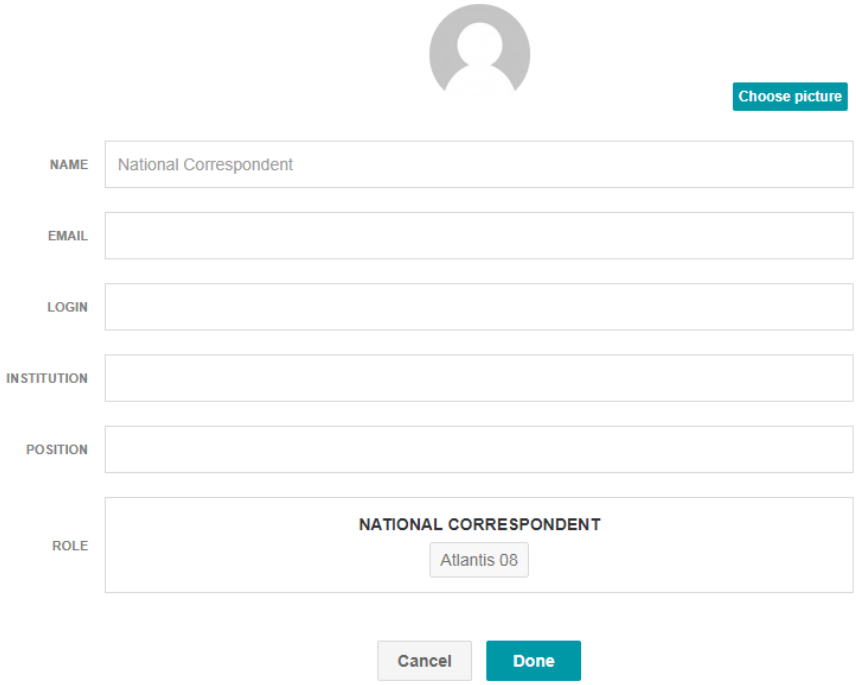


How to edit your profile

Click on '*Edit profile'* at the top right corner



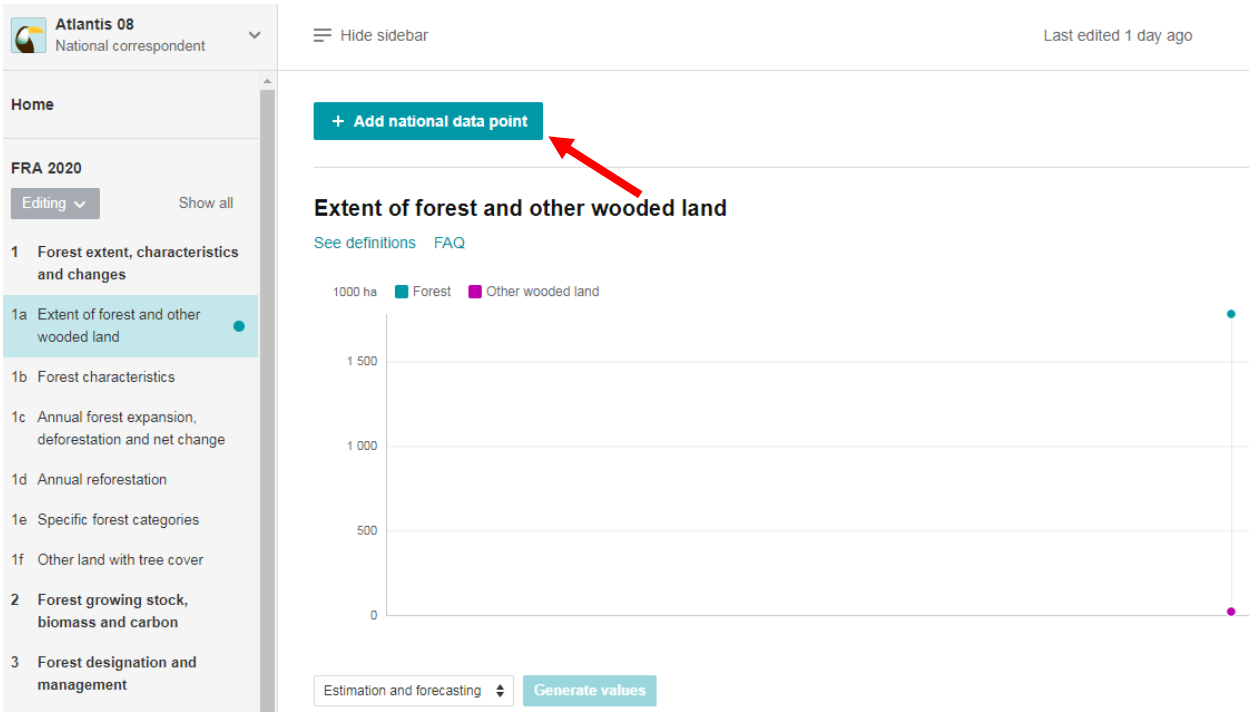
A profile picture and other information can be added.



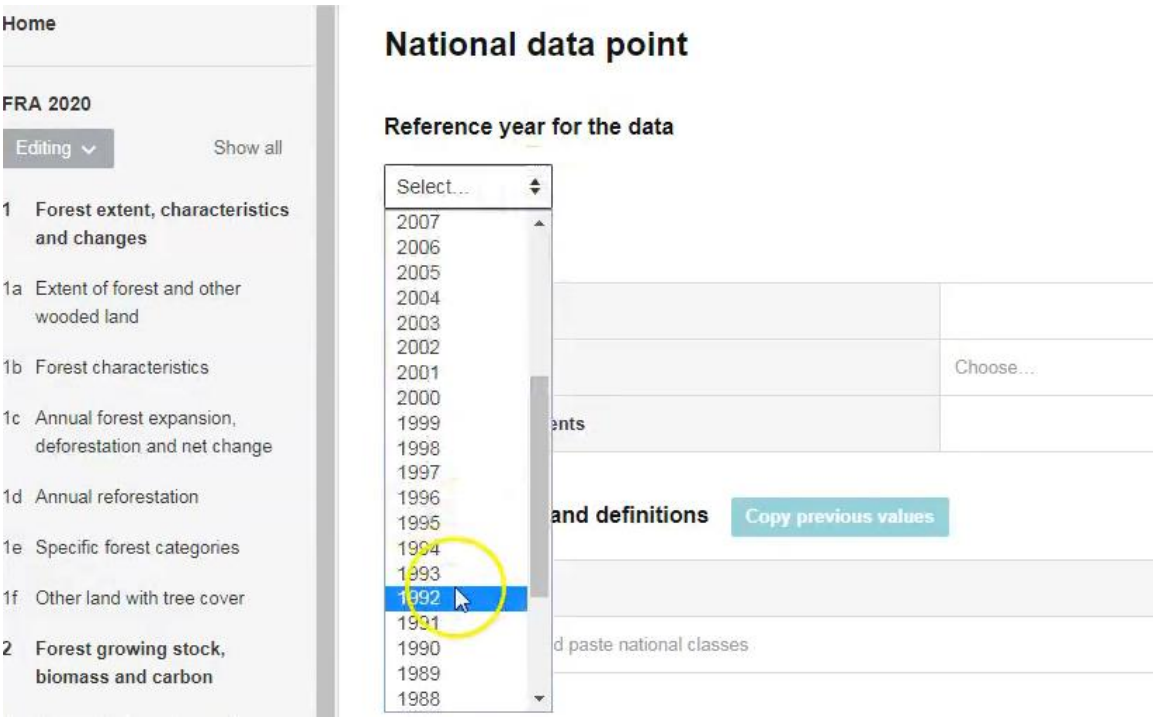
4. How to add a National Data Point (NDP)

(Only tables 1a and 1b)

Open the table 1a Extent of forest and other wooded land. Then click on '*Add national data point'*. Start with the oldest reference year (1992 in the example).



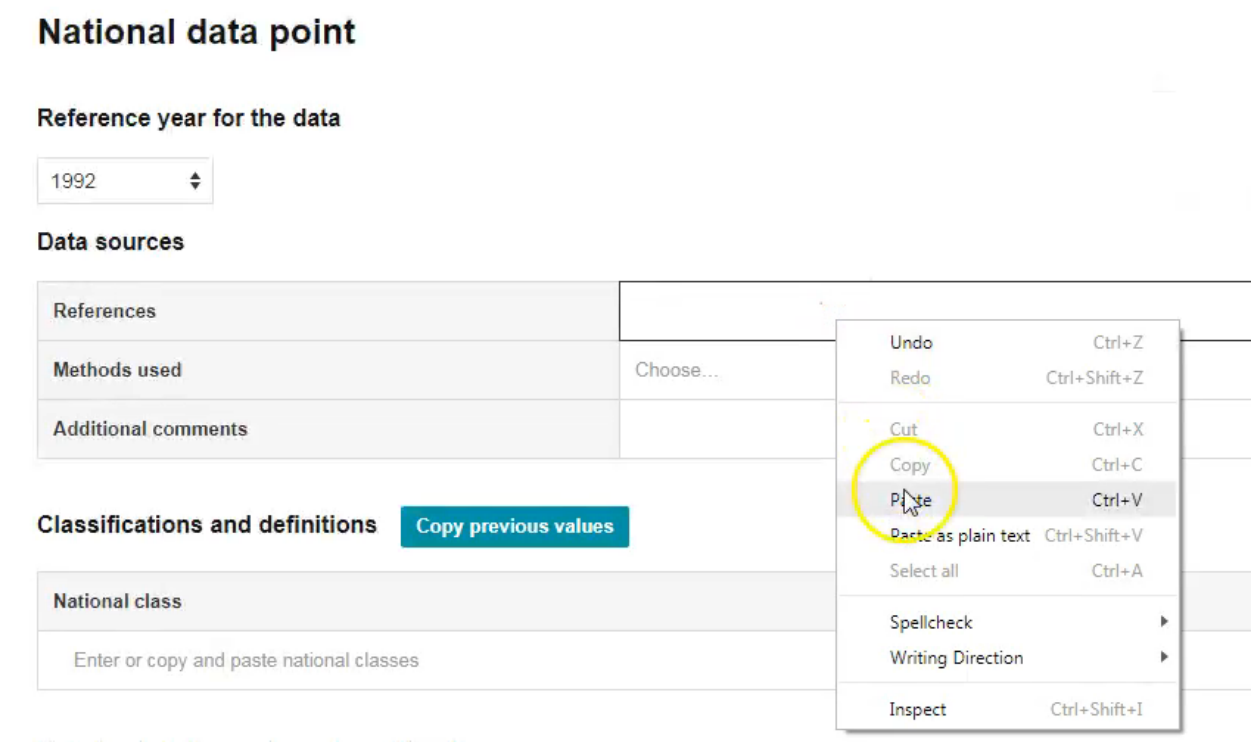
Select the reference year:



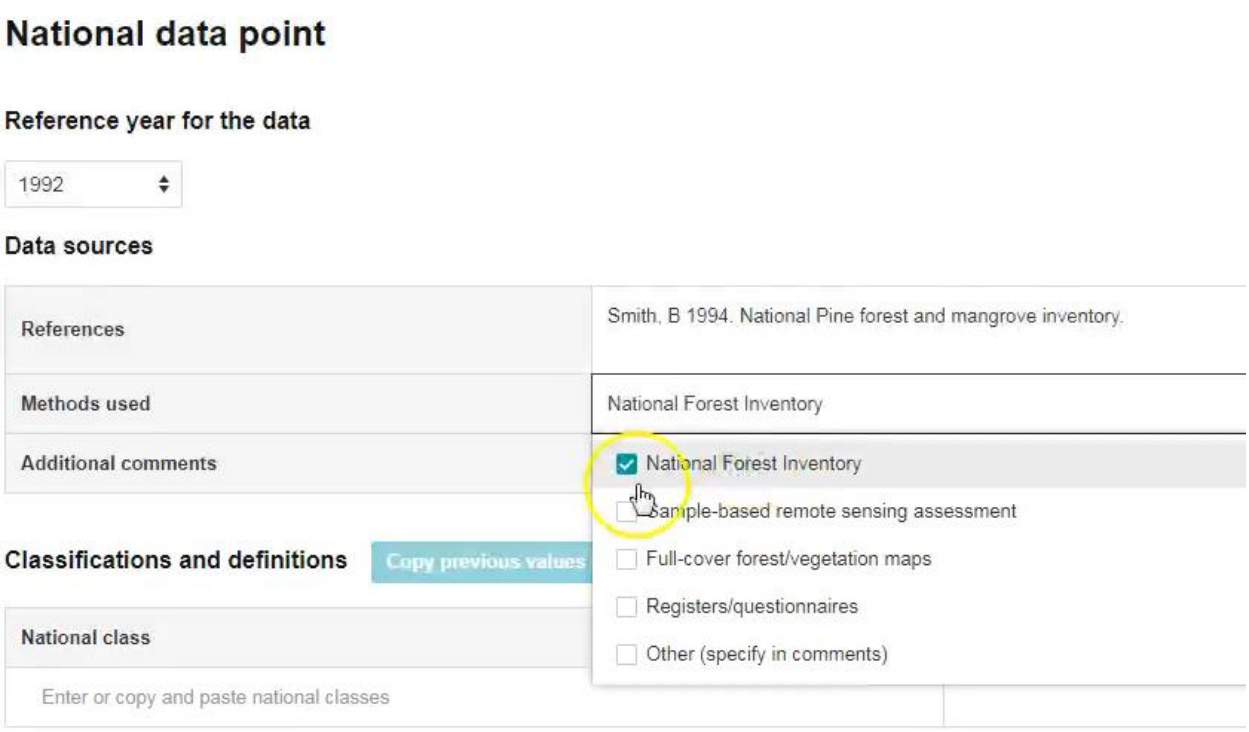
It is possible to copy and paste straight from your data source (Excel table in the example):

	A	B	C
1	**Data sources**		
2	**References to sources of information**	**Year(s)**	**Additional comments**
3	Smith, B 1994. *National Pine forest and mangrove inventory.*	1992	National inventory of pine and mangrove forests covering the whole country, using remote sensing.
4	Grove, N 2004. *Forestry national report on state of the forest.*	2002	Analysis of forest cover based on satellite images.

Paste the text directly into the platform:



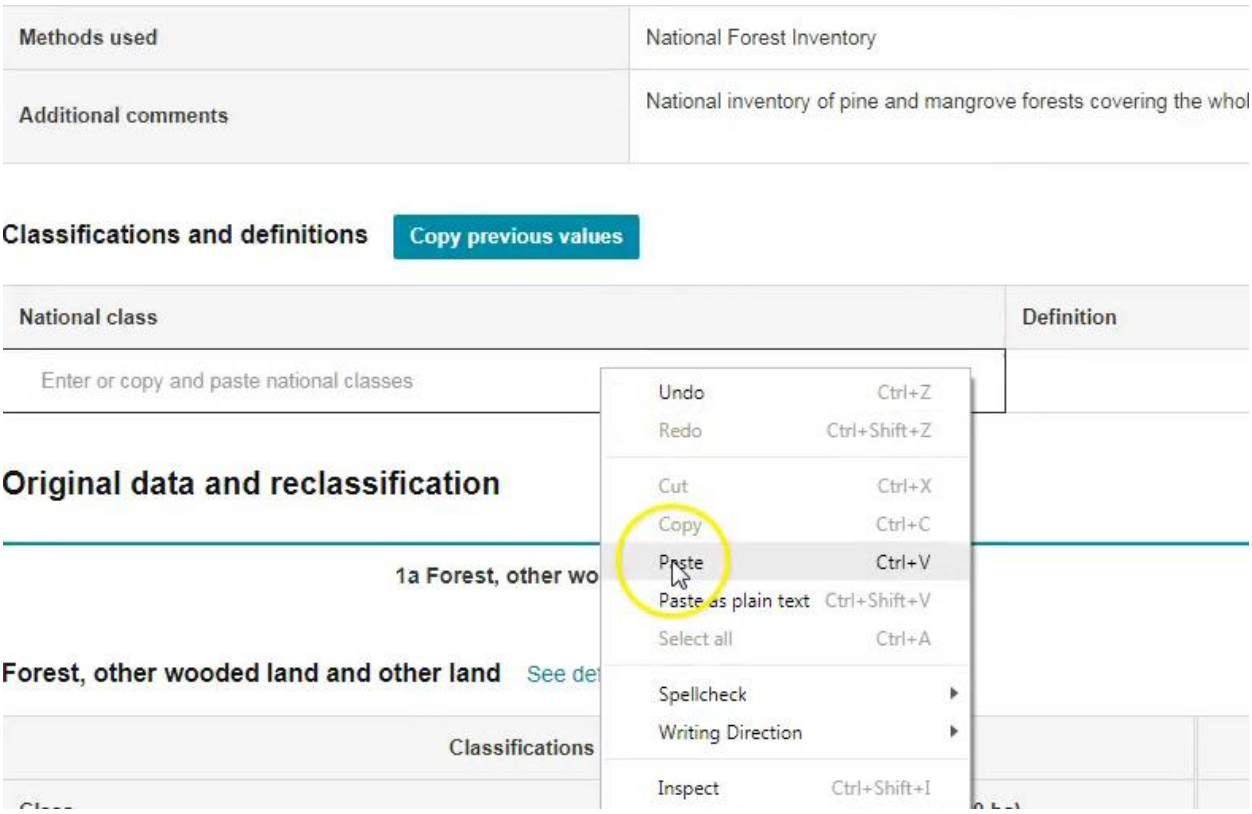
Select the methods used to derive national data:



Copy national classes:

E	F
National definitions	
National Class	Definition
Pine Plantations	*Man-made pine forests of Pinus spp.*
Closed Forest	Natural forest with crown cover by trees and / or ferns 40-100% and g
Open Forest	Natural forest with crown cover by trees and / or ferns 10-40% and gr
Hardwood plantation	Man-made forests with *Tectona grandis* .
Other land	Agricultural lands and built-up areas

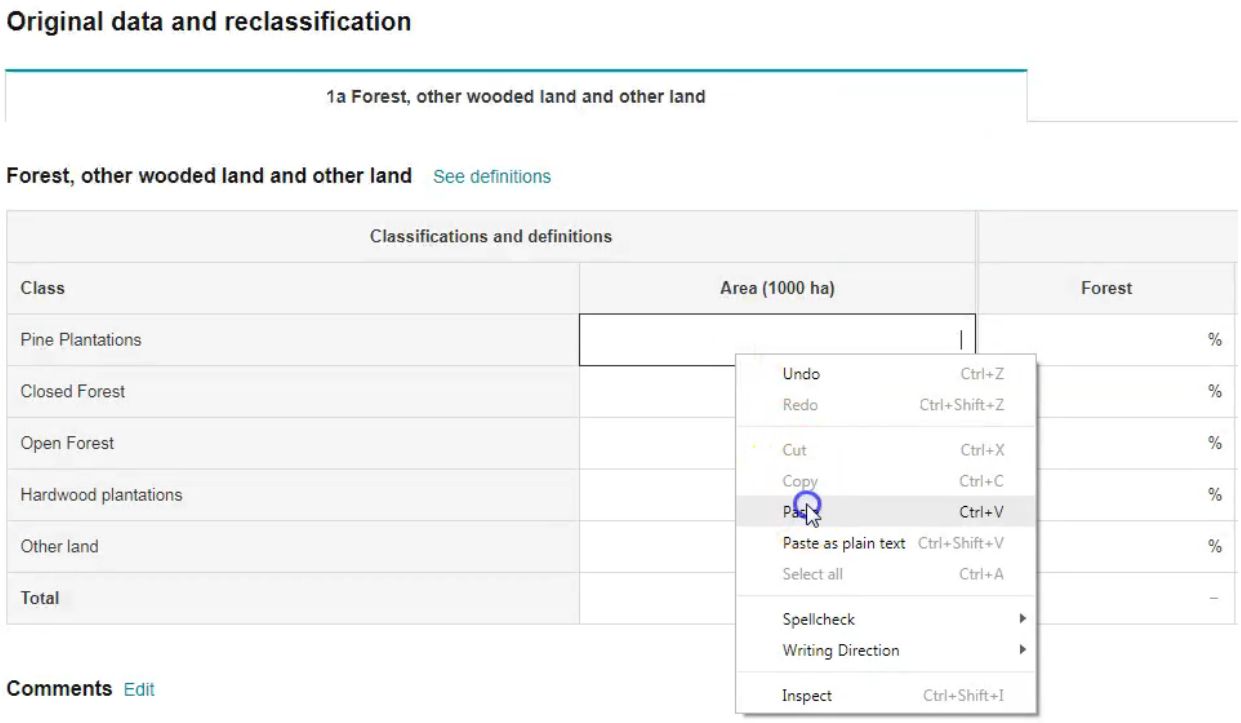
Paste the national data into the Platform:



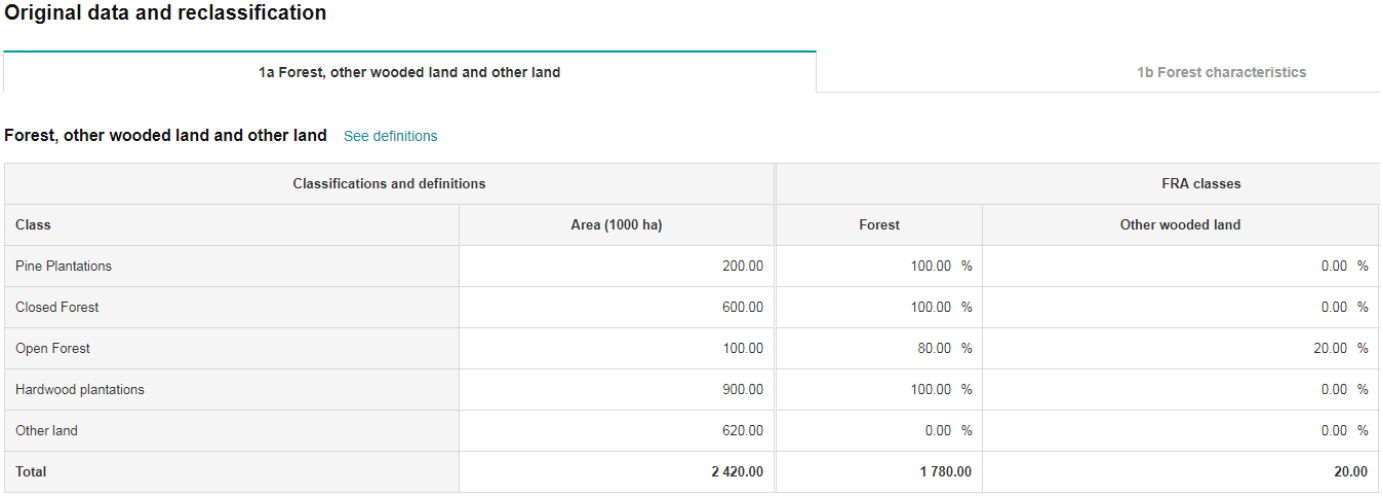
It is possible to copy and paste original data from your data source (Excel table in the example):

	A	B	C
1	**ORIGINAL DATA**		
2		**Area 1000 ha**	
3	**National class**	**1992**	**2002**
4	Pine Plantations	200	185
5	Closed Forest	600	600
6	Open Forest	100	100
7	Hardwood plantations	900	885
8	Other land	620	640

Paste the data into Platform.



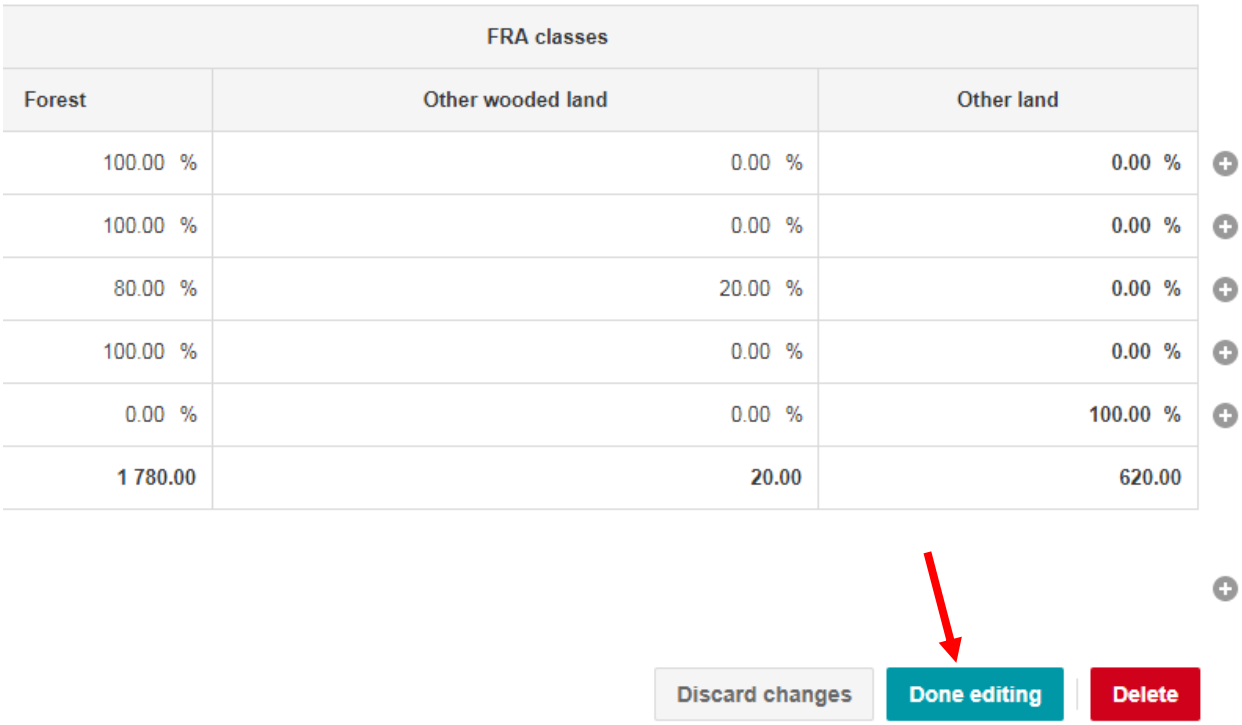
Assign percentages to reclassify your national classes into FRA classes:



Classifications and definitions		FRA classes	
Class	Area (1000 ha)	Forest	Other wooded land
Pine Plantations	200.00	100.00 %	0.00 %
Closed Forest	600.00	100.00 %	0.00 %
Open Forest	100.00	80.00 %	20.00 %
Hardwood plantations	900.00	100.00 %	0.00 %
Other land	620.00	0.00 %	0.00 %
Total	**2 420.00**	**1 780.00**	**20.00**

The Platform will automatically calculate the corresponding areas.

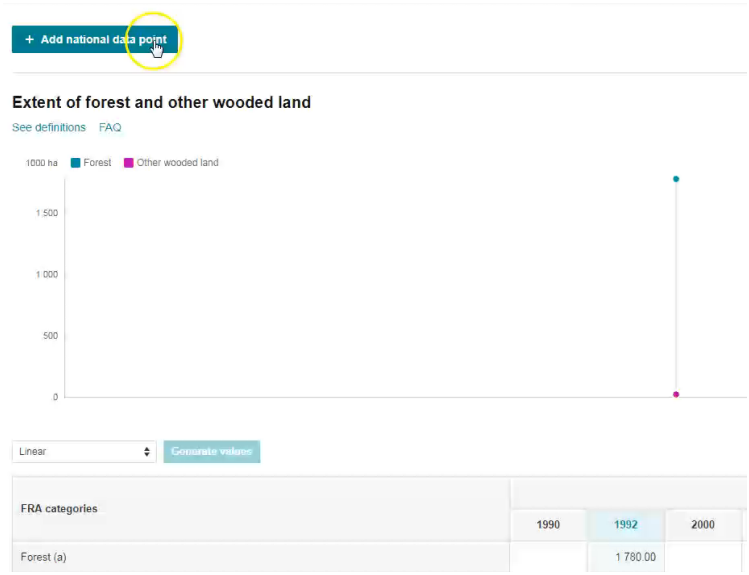
Then press '*Done editing*' button below the table.



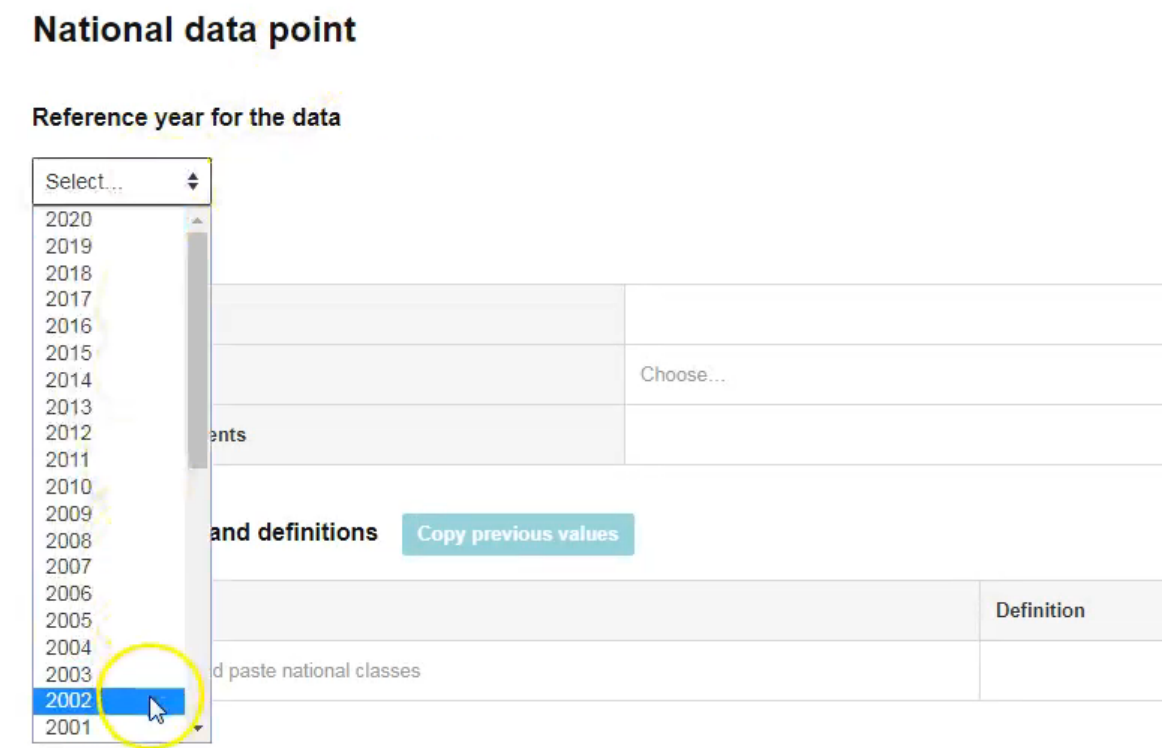
FRA classes		
Forest	Other wooded land	Other land
100.00 %	0.00 %	0.00 %
100.00 %	0.00 %	0.00 %
80.00 %	20.00 %	0.00 %
100.00 %	0.00 %	0.00 %
0.00 %	0.00 %	100.00 %
1 780.00	20.00	620.00

All entries are saved automatically. It is possible to enter as many national data points as you wish to use for the estimation and forecasting to FRA reference years.

To add a second national data point, repeat the same steps described above starting by adding the reference year (2002 in the example):



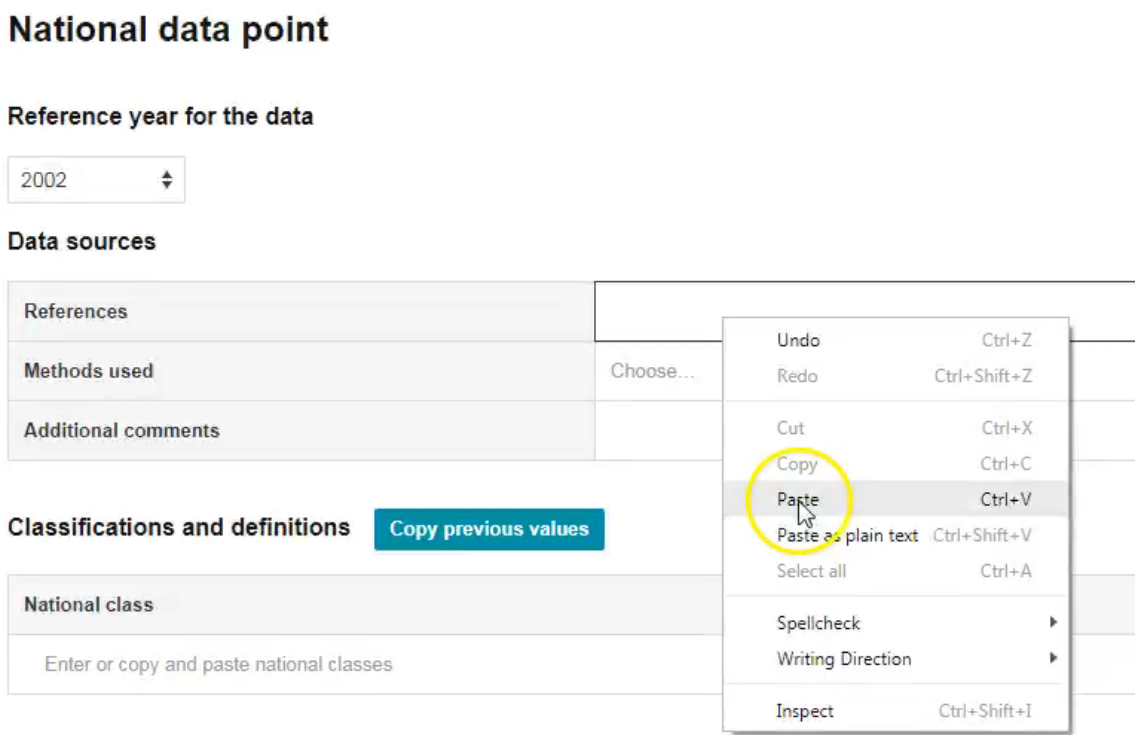
Select the reference year:



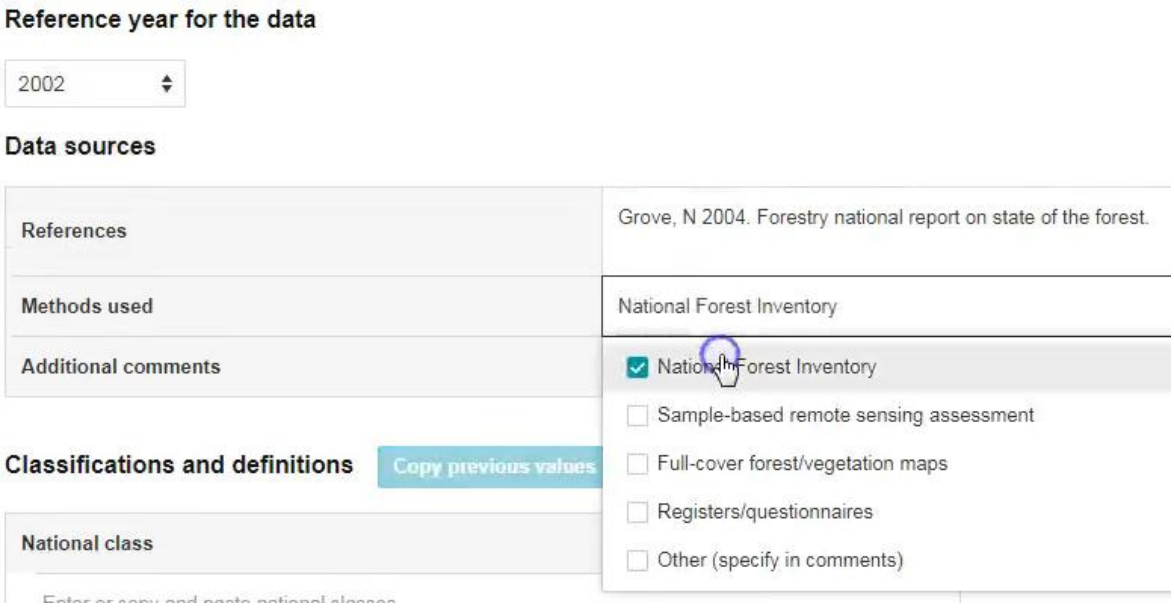
Copy the data source:

	A	B	C
1	**Data sources**		
2	**References to sources of information**	**Year(s)**	**Additional comments**
3	Smith, B 1994. *National Pine forest and mangrove inventory.*	1992	National inventory of pine and mangrove forests covering the whole country, using remote sensing.
4	Grove, N 2004. *Forestry national report on state of the forest.*	2002	Analysis of forest cover based on satellite images.

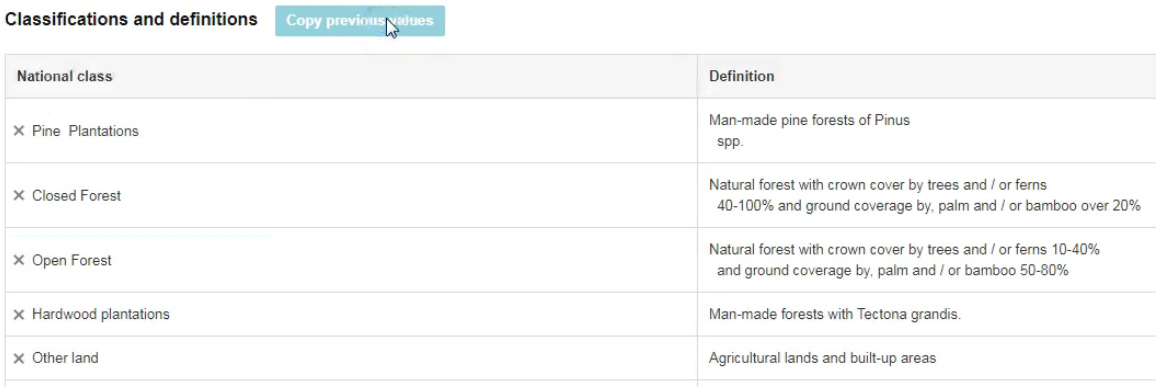
Paste the text into the Platform:



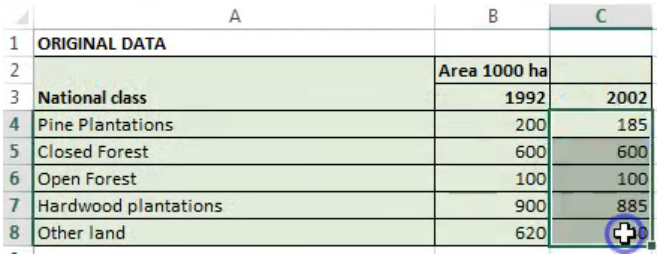
Select the methods used to derive national data:



It is possible to copy previous classifications and definitions entered in the Platform, by selecting '*Copy previous values'* (if the national classes are the same as for the previous data point):



Copy and paste data from your data source (Excel table in the example):



	A	B	C
1	**ORIGINAL DATA**		
2		**Area 1000 ha**	
3	**National class**	**1992**	**2002**
4	Pine Plantations	200	185
5	Closed Forest	600	600
6	Open Forest	100	100
7	Hardwood plantations	900	885
8	Other land	620	0

Original data and reclassification

1a Forest, other wooded land and other land

Forest, other wooded land and other land See definitions

Classifications and definitions		
Class	**Area (1000 ha)**	**Forest**
Pine Plantations		100.00 %
Closed Forest		100.00 %
Open Forest		80.00 %
Hardwood plantations		100.00 %
Other land		0.00 %
Total		–

Undo Ctrl+Z
Redo Ctrl+Shift+Z
Cut Ctrl+X
Copy Ctrl+C
Paste Ctrl+V
Paste as plain text Ctrl+Shift+V
Select all Ctrl+A
Spellcheck

Then press '*Done editing*':

0.00 %	100.00 %
20.00	**640.00**

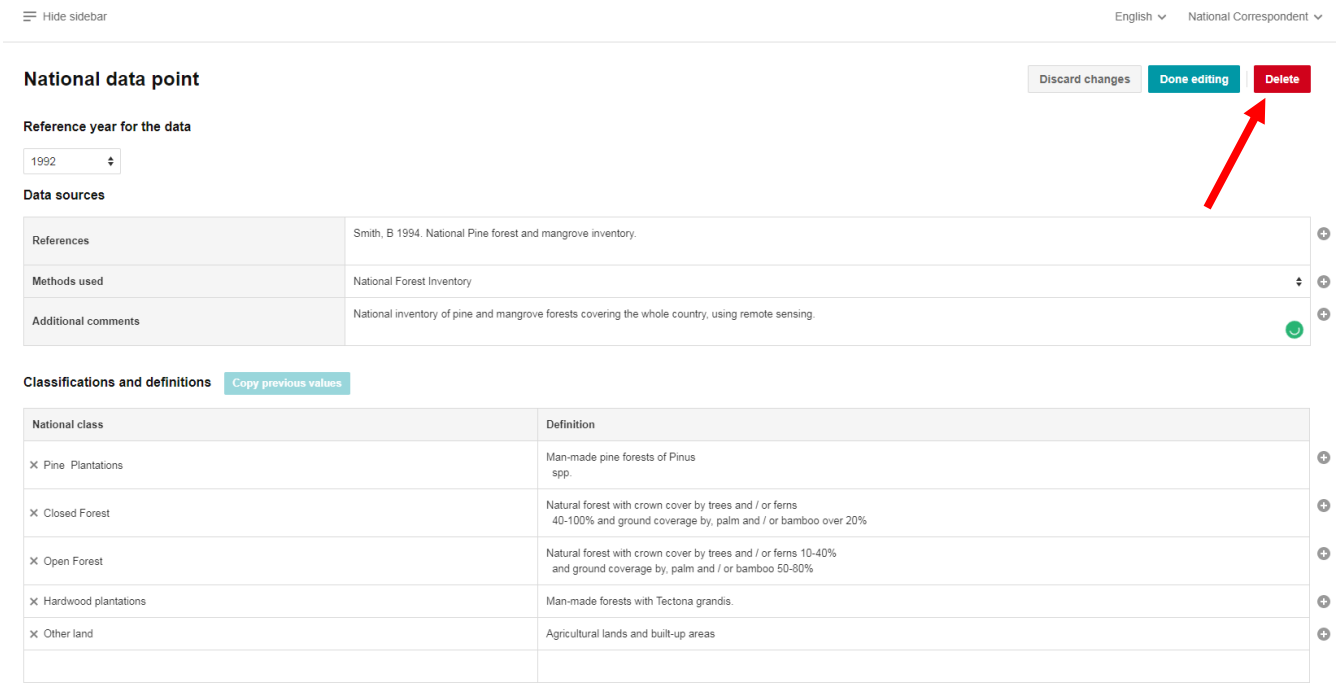
Done editing

5. How to edit and delete national data point

You can edit/delete a national data point by clicking on the reference year of the NDP in the table 1a Extent of forest and other wooded land.

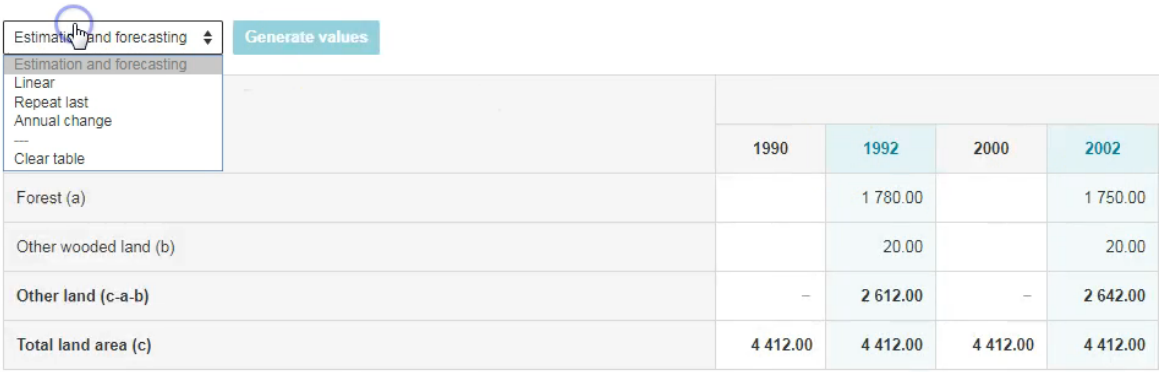
FRA categories	Area (1000 ha)					
	1990	1992	2000	2002	2010	2015
Forest (a)		1 780.00		1 750.00		
Other wooded land (b)		20.00		20.00		
Other land (c-a-b)	–	**2 612.00**	–	**2 642.00**	–	–
Total land area (c)	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**

Then it is possible to edit previously entered data or delete the entire NDP.



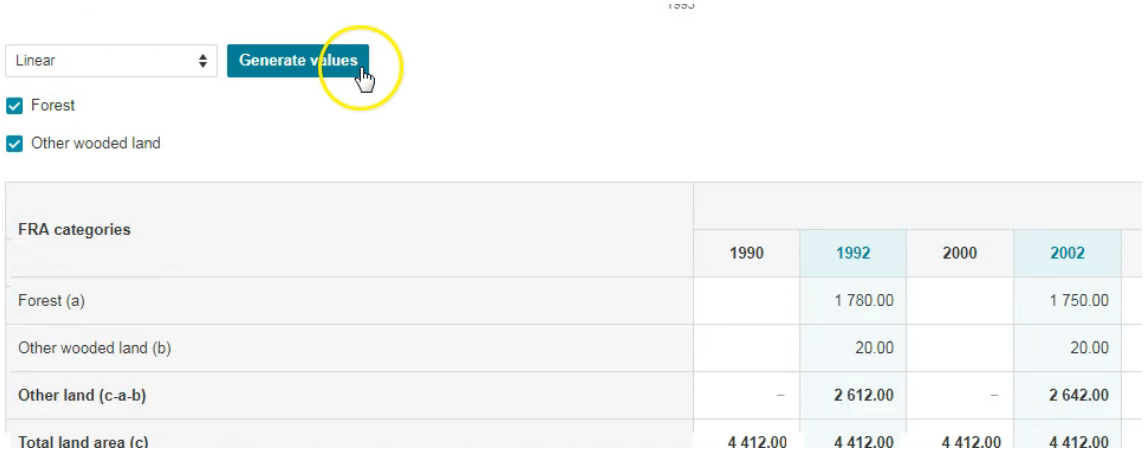
6. Estimation and forecasting

The Platform provides the possibility of selecting the preferred estimation and forecasting method:



	1990	1992	2000	2002
Forest (a)		1 780.00		1 750.00
Other wooded land (b)		20.00		20.00
Other land (c-a-b)	–	**2 612.00**	–	**2 642.00**
Total land area (c)	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**

Once selected, press '*Generate values*':

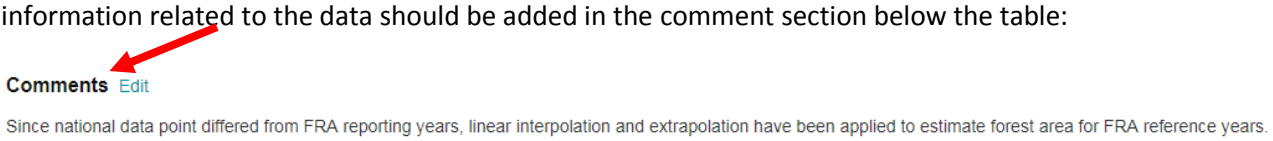


FRA categories	1990	1992	2000	2002
Forest (a)		1 780.00		1 750.00
Other wooded land (b)		20.00		20.00
Other land (c-a-b)	–	**2 612.00**	–	**2 642.00**
Total land area (c)	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**

The Platform automatically calculates the data for FRA reporting years and generates results in graphical and tabular form:

FRA categories	Area (1000 ha)					
	1990	1992	2000	2002	2010	2015
Forest (a)	1 786.00	1 780.00	1 756.00	1 750.00	1 726.00	1 711.00
Other wooded land (b)	20.00	20.00	20.00	20.00	20.00	20.00
Other land (c-a-b)	**2 606.00**	**2 612.00**	**2 636.00**	**2 642.00**	**2 666.00**	**2 681.00**
Total land area (c)	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**	**4 412.00**

Comments explaining how the estimation and forecasting were performed, as well as any other relevant information related to the data should be added in the comment section below the table:



7. 1b Forest characteristics

It is possible to use the same national data points entered for table 1a, in order to estimate area figures for table 1b on Forest characteristics. To edit the National Data Point and start working at table 1b click on the data point in the main table:

Estimation and forecasting | Generate values

FRA categories	1990	1992	2000
Forest (a)	1 780.00	1 780.00	1 780.00
Other wooded land (b)	20.00	20.00	20.00
Other land (c-a-b)	**2 612.00**	**2 612.00**	**2 612.00**
Total land area (c)	**4 412.00**	**4 412.00**	**4 412.00**

Assign percentages to the national classes to reclassify into FRA forest characteristics classes:

Original data and reclassification

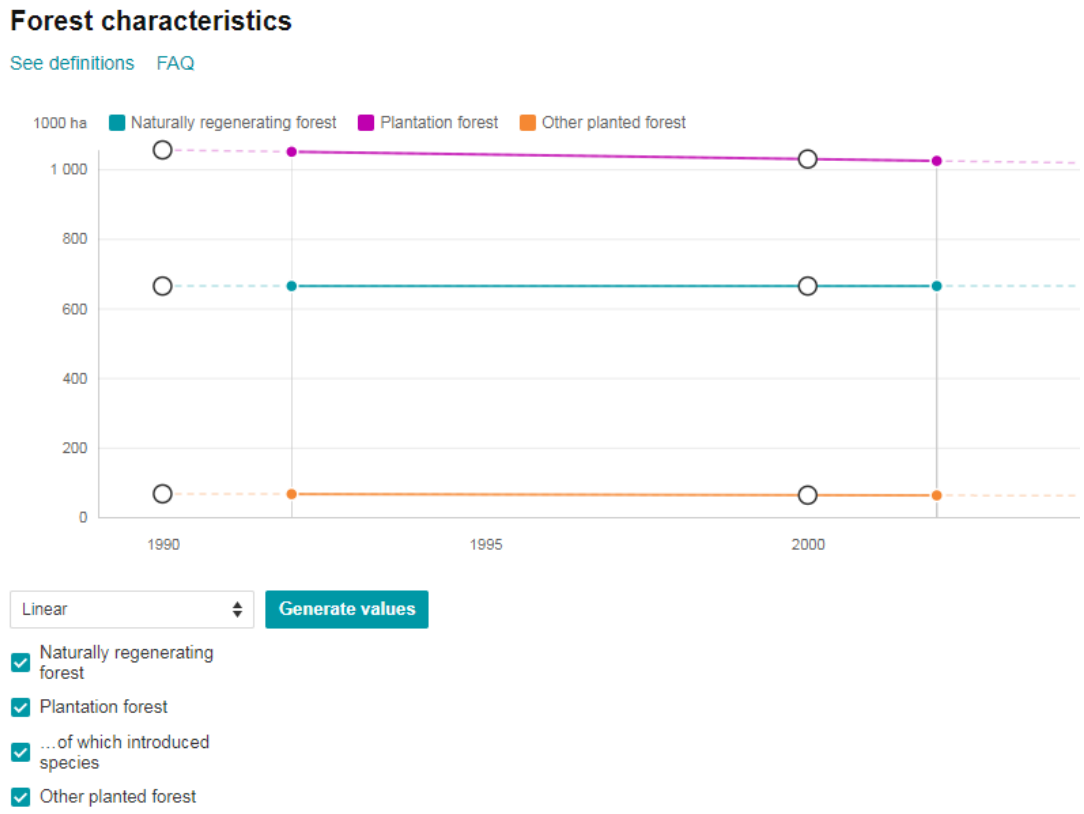
1a Forest, other wooded land and other land | 1b Forest characteristics

Forest characteristics See definitions

Classifications and definitions		FRA classes		
Class	**Area (1000 ha)**	**Naturally regenerating forest**	**Plantation forest**	**Other planted forest**
Pine Plantations	200.00	0.00 %	75.00 %	25.00 %
Closed Forest	600.00	100.00 %	0.00 %	0.00 %
Open Forest	80.00	80.00 %	0.00 %	20.00 %
Hardwood plantations	900.00	0.00 %	100.00 %	0.00 %
Total	**1 780.00**	**664.00**	**1 050.00**	**66.00**

Then click '*Done editing'* and the FRA forest characteristics classes will be automatically calculated. Choose an estimation and forecasting method and click on '*Generate values*':

FRA categories	Forest area (1000 ha) Copy values								
	1990	1992	2000	2002	2010	2015	2016	2017	2018
Naturally regenerating forest (a)	664.00	664.00	664.00	664.00	664.00	664.00	664.00	664.00	664.00
Planted forest (b)	**1 122.00**	**1 116.00**	**1 092.00**	**1 086.00**	**1 062.00**	**1 047.01**	**1 044.02**	**1 041.03**	**1 038.04**
Plantation forest	1 055.25	1 050.00	1 029.00	1 023.75	1 002.75	989.63	987.01	984.39	981.77
...of which introduced species									
Other planted forest	66.75	66.00	63.00	62.25	59.25	57.38	57.01	56.64	56.27
Total (a+b)	**1 786.00**	**1 780.00**	**1 756.00**	**1 750.00**	**1 726.00**	**1 711.01**	**1 708.02**	**1 705.03**	**1 702.04**
Total forest area	**1 780.00**	**1 780.00**	**1 780.00**	**1 750.00**	**1 780.00**	**1 780.00**	**1 780.00**	**1 780.00**	**1 780.00**



8. Reporting on all the other tables

National Data Point approach for reporting is an option available only for tables 1a and 1b. For reporting on all the other tables of the FRA 2020 Country Report, it is important to document the national data and the analysis and processing of national data in the corresponding boxes in the Platform. Below an example for table 2a:

National Data

Data sources + type of data source eg NFI, etc Edit

References to sources of information	Year(s)	Additional comments
Smith, B 1994. *National Pine forest and mangrove inventory.*	1992	National inventory of pine and mangrove forests covering the whole country.
Grove, N 2004. *Forestry national report on state of the forest.*	2002	Analysis of forest cover based on satellite images.

National classification and definitions Edit

National Class	Definition
Pine Plantations	*Man-made pine forests of Pinus spp.*
Closed Forest	Natural forest with crown cover by trees and / or ferns 40-100% and ground coverage by, palm and / or bamboo over 20%
Open Forest	Natural forest with crown cover by trees and / or ferns 10-40% and ground coverage by, palm and / or bamboo 50-80%
Hardwood plantations	Man-made forests with *Tectona grandis.*
Other land	Agricultural lands and built-up areas

Original data Edit

National class	Growing stock/ha	
	1992	2002
Pine Plantations	150	160
Closed Forest	210	210
Open Forest	80	80
Hardwood plantations	160	180

Analysis and processing of national data

Estimation and forecasting Edit

Reclassification into FRA 2020 categories Edit

National class	% of growing stock		
	Naturally regenerating forest	Plantation forest	Other planted forest
Pine Plantations	0	75	25
Closed Forest	100	0	0
Open Forest	80	0	20
Hardwood plantations	0	100	0

FRA Categories	Growing stock total million m3	
	1992	2002
Nat. reg.	132.40	132.40
Plantation	166.50	181.50
Oth Plant.	9.10	9.00

Growing stock

See definitions FAQ

Please make sure you have entered data in tables 1a & 1b before editing this table

FRA categories	Growing stock m³/ha (over bark) Copy values								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest	199.40	199.40	199.40	199.40	199.40	199.40	199.40	199.40	199.40
Planted forest	**153.85**	**171.72**	**190.60**	**200.45**	**202.45**	**204.46**	**206.49**	**208.52**	**210.57**
...of which plantation forest	154.94	173.47	192.97	203.11	205.17	207.23	209.32	211.41	213.51
...of which other planted forest	136.63	143.17	150.55	154.58	155.41	156.25	157.10	157.96	158.83
Forest	**170.78**	**182.19**	**193.99**	**200.04**	**201.26**	**202.49**	**203.73**	**204.96**	**206.20**
Other wooded land	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00

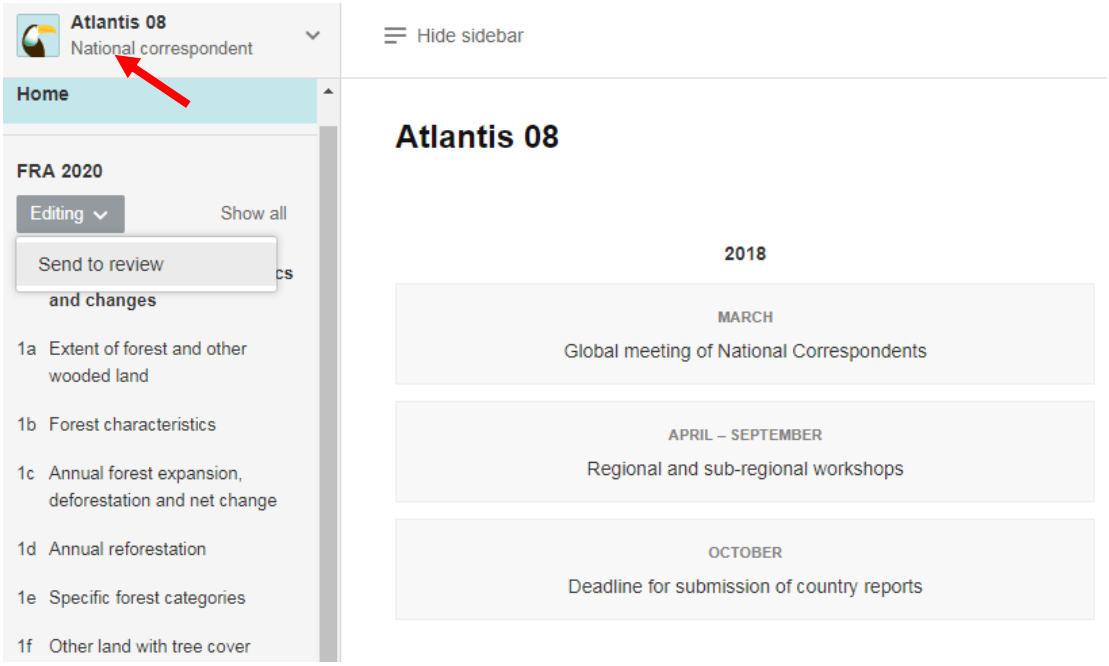
FRA categories	Total growing stock (million m³ over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest	132.40	132.40	132.40	132.40	132.40	132.40	132.40	132.40	132.40
Planted forest	**172.62**	**187.52**	**202.42**	**209.87**	**211.36**	**212.85**	**214.34**	**215.83**	**217.32**
...of which plantation forest	163.50	178.50	193.50	201.00	202.50	204.00	205.50	207.00	208.50
...of which other planted forest	9.12	9.02	8.92	8.87	8.86	8.85	8.84	8.83	8.82
Forest	**305.02**	**319.92**	**334.82**	**342.27**	**343.76**	**345.25**	**346.74**	**348.23**	**349.72**
Other wooded land	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

Comments Edit

Estimation and forecasting was performed using linear extrapolation of available data. Volume of other wooded land was estimated considering an average volume of 25m3/ha.

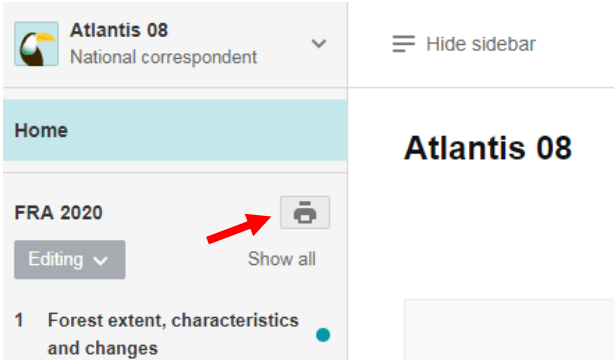
11. Submitting the report

When the report is ready for review, , click on the '*Editing*' icon in the left menu and select *'Send to review'*.
When submitting the report, it is possible to add a comment for the reviewer.
Once submitted for review, the report cannot be further edited. If it is necessary to edit the report after submission, contact the reviewer.



If after the review, more work or additional inputs are needed, the reviewer will change back the status into editing, and the National Correspondent will be notified that the report is back for editing.
Comments left by Reviewers will be visible in the Platform (orange dot: unread comments, blue dot: read comments/active discussion, grey dot: resolved comments).

It is possible to print the whole report by clicking on the print icon on the left sidebar menu.



For best results, select page layout "Landscape" in the printer properties.

Annex 1 Biomass Calculator Guide

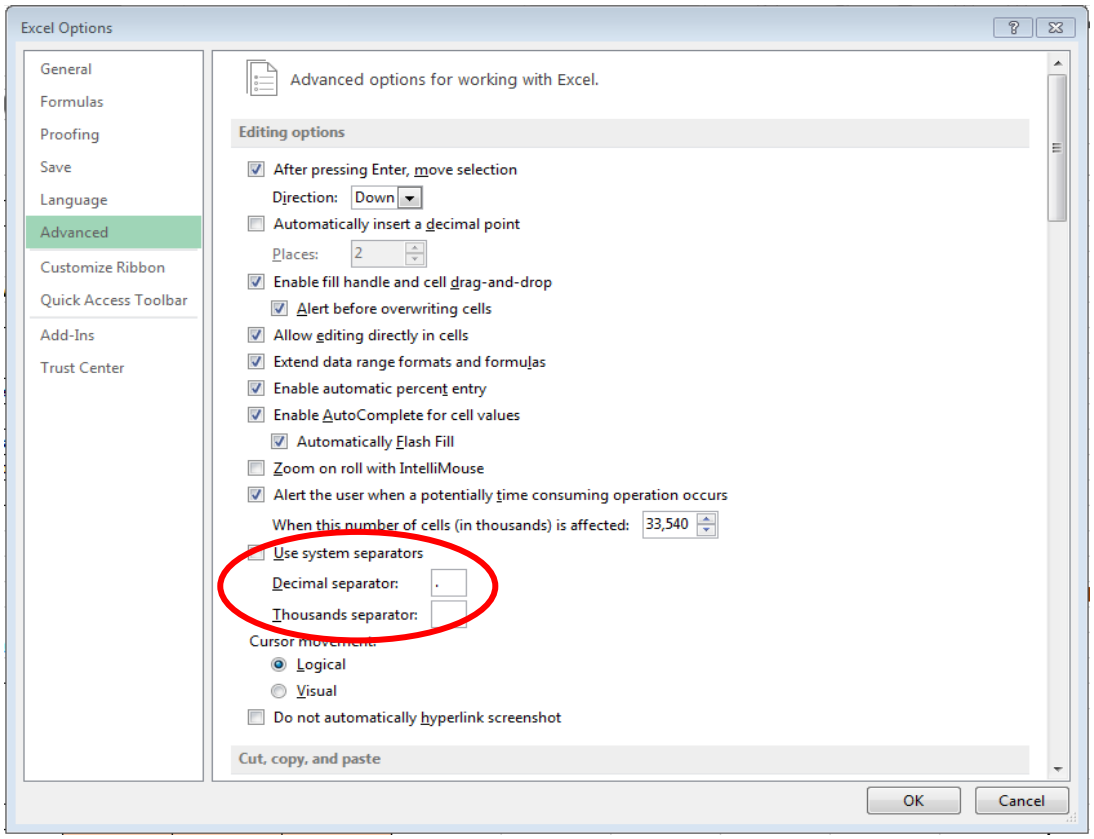
The Biomass Calculator is aimed at facilitating the estimation of above and below-ground biomass and the carbon in these biomass components. It uses the default biomass conversion and expansion factors, as well as root-shoot ratios published in the 2006 IPCC guidelines. It is particularly aimed at those countries that do not have their own biomass equations or conversion factors and that fully rely on using the IPCC default factors for their estimates. The Biomass Calculator is NOT intended for countries that have their own estimates based on national factors or biomass equations, or estimates based on a more detailed analysis of subnational geographical units, they should instead make the biomass and carbon estimates separately and report the results directly in the platform.

Setting up Excel for using the Biomass Calculator

The Biomass Calculator is an Excel workbook. In order to work correctly, Excel has to be configured so that it uses the dot "." as decimal separator and the "space" as thousands separator.

If the Excel configuration has to be changed, it is done the following way:

- Click File, Options, Advanced
- Deselect "Use system separators"
- Put a "dot" in the Decimal separator box
- Put a "space" in the Thousands separator box



How it works

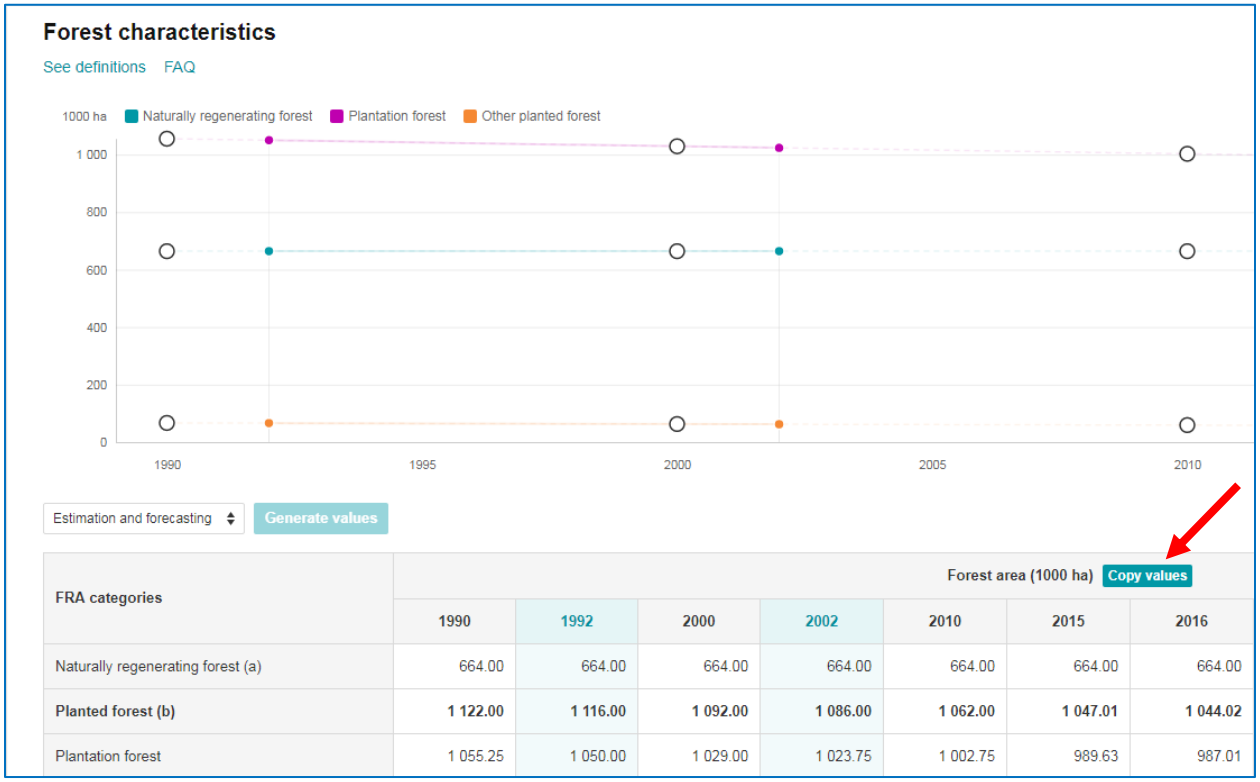
The Biomass Calculator uses data already entered in the FRA platform on forest characteristics (Table 1b) and growing stock (Table 2a). It further requires user input on how the map the IPCC forest types to the FRA categories. It also provides the option to introduce a carbon fraction different from the IPCC default of 47%. Below is a guide how to proceed, step by step.

1. Choose the Biomass Calculator sheet according to climatic domain

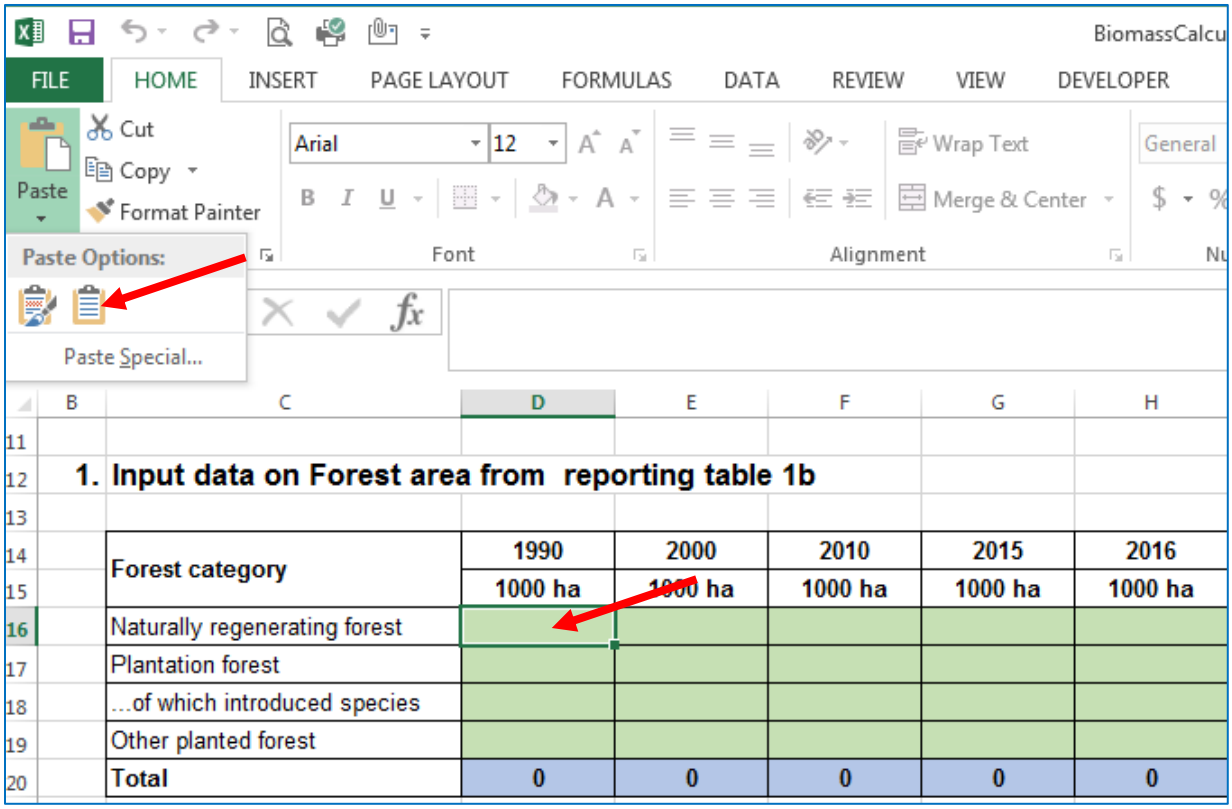
There are four different Biomass Calculator sheets for different climatic domains (tropical, subtropical, temperate and boreal). In the platform under Table 3c, select and download the Excel file for the domain that represents the majority of the forests in your country. Open the Biomass Calculator in Excel.

2. Copy data on forest characteristics from Table 1b

In Table 1b in the platform, make sure that it has been fully completed. The line "...of which introduced species" is optional and not used by the Biomass Calculator. Press the button "Copy values", then go to the Biomass Calculator, position the cursor in cell D16, press paste, and choose the paste option "Match Destination Formatting". If you paste directly (not using destination formatting), the cells will become read-only and you cannot change or edit them further.

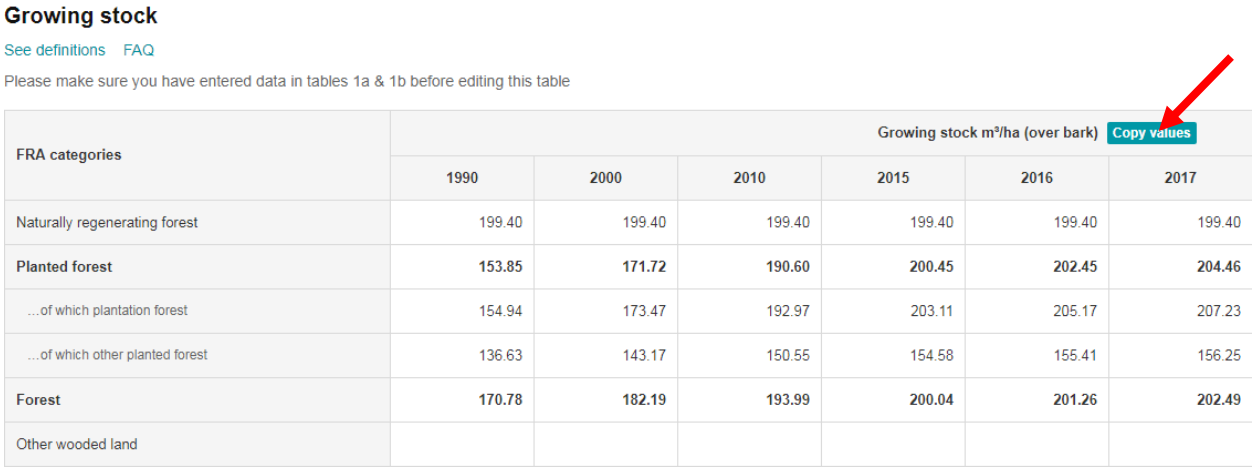


FRA categories	1990	1992	2000	2002	2010	2015	2016
Naturally regenerating forest (a)	664.00	664.00	664.00	664.00	664.00	664.00	664.00
Planted forest (b)	**1 122.00**	**1 116.00**	**1 092.00**	**1 086.00**	**1 062.00**	**1 047.01**	**1 044.02**
Plantation forest	1 055.25	1 050.00	1 029.00	1 023.75	1 002.75	989.63	987.01



3. Copy data on Growing stock from reporting table 2a.

In Table 2a in the platform, make sure that it has been fully completed. Press the button "Copy values", then go to the Biomass Calculator, position the cursor in cell D27, press paste, and choose the paste option "Match Destination Formatting".



	B	C	D	E	F	G	H
23		**2. Input data on Growing stock from reporting table 2a**					
24							
25		**Forest category**	**1990**	**2000**	**2010**	**2015**	**2016**
26			**m^3/ha**	**m^3/ha**	**m^3/ha**	**m^3/ha**	**m^3/ha**
27		Naturally regenerating forest					
28		Planted forest					
29		...of which plantation forest					
30		...of which other planted forest					
31		**Total**					

4. Assign the percentage distribution of IPCC forest types by FRA categories.

   In the area marked with orange color beginning at cell D42, insert for each FRA category (column) how it is distributed by the IPCC forest types. The distribution should be based on growing stock, not area. This information is usually not available, so expert estimates will be necessary. Note that all three columns should be filled in and that the column total must be 100%.

	FRA forest categories		
	Naturally regenerating forest	**Plantation forest**	**Other planted forest**
IPCC forest types	**% of Growing stock**		
Broadleaved humid	70%	50%	30%
Broadleaved dry	20%	10%	50%
Coniferous	10%	40%	20%
	100%	*100%*	*100%*

5. In case that the country wishes to use another carbon fraction than the IPCC default (47%), it can be inserted in cell D50.

Insert Carbon fraction used by country (IPCC default = 0.47)				
Carbon Fraction	47%			

6. **With the input from steps 1 to 5, the above and below-ground biomass as well as the carbon in these biomass fractions are calculated.** First, BCEF and Root-shoot ratios are retrieved based on climatic domain, forest type and stock levels, using the IPCC default values. Then weighted BCEF and root-shoot ratios are calculated. Finally, these weighted factors are applied to the growing stock estimates to generate biomass estimates, and further by multiplication with the carbon fraction, to generate carbon estimates.

7. **The biomass values can now be copied from the Excel sheet and pasted into the FRA platform**, Table 2c. Similarly, the carbon values can be copied and pasted in the FRA platform, Table 2d.

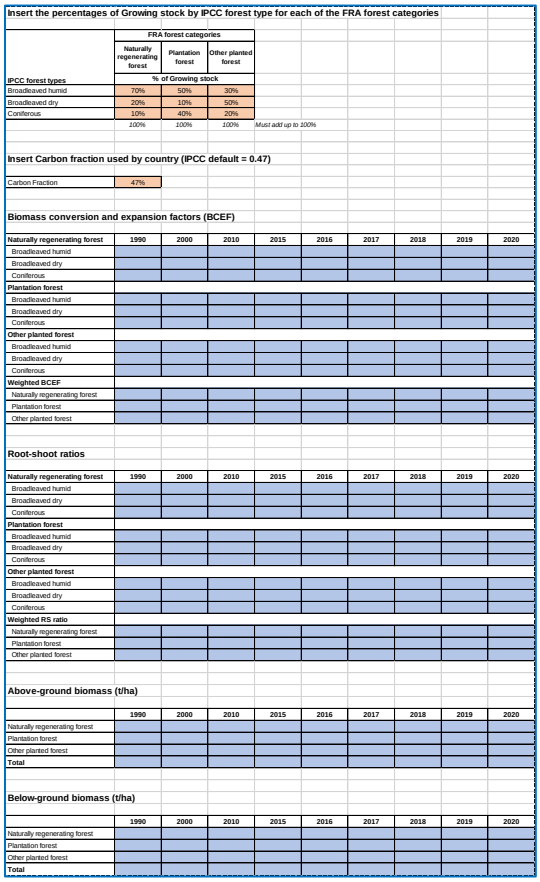
9. Copy highlighted biomass values into FRA platform table 2c

Forest biomass (tonnes/ha)	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass									
Below-ground biomass									

10. Copy highlighted carbon values into FRA platform table 2d

Carbon in Forest biomass (tonnes/ha)	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass									
Below-ground biomass									

8. **Finally, in order to document the calculations made, the marked area, beginning in cell C37, should be copied** and pasted into the section Analysis and processing of national data in table 2c in the FRA platform.



Insert the percentages of Growing stock by IPCC forest type for each of the FRA forest categories

IPCC forest types	FRA forest categories: Naturally regenerating forest (% of Growing stock)	Plantation forest (% of Growing stock)	Other planted forest (% of Growing stock)
Broadleaved humid	70%	50%	30%
Broadleaved dry	20%	10%	50%
Coniferous	10%	40%	20%
	100%	100%	100% Must add up to 100%

Insert Carbon fraction used by country (IPCC default = 0.47)

Carbon Fraction	47%

Biomass conversion and expansion factors (BCEF)

Naturally regenerating forest	1990	2000	2010	2015	2016	2017	2018	2019	2020
Broadleaved humid									
Broadleaved dry									
Coniferous									
Plantation forest									
Broadleaved humid									
Broadleaved dry									
Coniferous									
Other planted forest									
Broadleaved humid									
Broadleaved dry									
Coniferous									
Weighted BCEF									
Naturally regenerating forest									
Plantation forest									
Other planted forest									

Root-shoot ratios

Naturally regenerating forest	1990	2000	2010	2015	2016	2017	2018	2019	2020
Broadleaved humid									
Broadleaved dry									
Coniferous									
Plantation forest									
Broadleaved humid									
Broadleaved dry									
Coniferous									
Other planted forest									
Broadleaved humid									
Broadleaved dry									
Coniferous									
Weighted RS ratio									
Naturally regenerating forest									
Plantation forest									
Other planted forest									

Above-ground biomass (t/ha)

	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest									
Plantation forest									
Other planted forest									
Total									

Below-ground biomass (t/ha)

	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest									
Plantation forest									
Other planted forest									
Total									