



INSTITUTE *of*
TECHNOLOGY

CARLOW

Institiúid Teicneolaíochta Cheatharlach

Name : Damien Doran

Student Number : C00221791

Project title : Teagasc app

Document : User Manual

Date : 2020/2021

This part of the document will give a step by step guide on how to use the application when logged in as an advisor:

1. Once an account is made, login in with unique user name and password

Login

Username:

Password:

Figure 1: Login

2. The advisor will then 'Create an assessment'. He will need the following information off a farmer
 - a. Name
 - b. Full Address
 - c. Herd Number

Farmer name:	jack hall
Farmer address line 1:	Mayo Road
Farmer address line 2:	Tuam
Farmer address line 3:	Galway
Date:	30 / 04 / 2021 <input type="button" value="📅"/>
Please select a County :	Galway <input type="button" value="▼"/>
Herd no:	y7894587

Figure 2: Conduct an assessment

3. The date will be inputted when creating an assessment- this will allow for a year to year comparison for future assessments.
4. The advisor will then press submit. This will bring the advisor to the next part of the application.
5. The advisor will need the following information off the farmer
 - a. Total land he owns
 - b. Total land he rents

- i. How long he rents this for
- c. How much tillage (if any)
- d. How much land was reseeded (if any)

Owned land hectares:	4
Rented land hectares:	8
Time rented months:	3
Total tillage area hectares:	2
Area reseeded hectares:	1

Figure 3: Conduct an assessment

- 6. The advisor will then press submit and will then be brought to the next section of the assessment.
- 7. The advisor will need the total number of the following animals off the farmer:
 - a. Dairy cow
 - b. Suckler cow
 - c. Cattle (0-1 year)
 - d. Cattle (1-2 years)
 - e. Cattle (2 +)
 - f. Mountain ewe and lamb(s)
 - g. Lowland ewe and lamb (s)
 - h. Mountain hogget
 - i. Lowland Hogget
 - j. Goat
 - k. Horse (3 years +)
 - l. Horse (2-3)

If the animal is not on the farm then the total will remain at 0

Type of Livestock	Nitrogen	Phosphoros	Number of Animals
Dairy Cow	89.0	13.0	15
Suckler Cow	65.0	10.0	3
Cattle(0-1 year old)	24.0	3.0	3
Cattle(1-2 year old)	57.0	8.0	2
Cattle > 2years	65.0	10.0	3
Mountain ewe & lambs	7.0	1.0	4
Lowland ewe & lambs	13.0	2.0	3
Mountain hogget	4.0	1.0	0
Lowland hogget	6.0	1.0	0
Goat	9.0	1.0	0
Horse (>3 years old)	50.0	9.0	0
Horse (2-3 years old)	44.0	8.0	0

Figure 4: Number of animals present on farm

8. The advisor will then submit and will then be brought to a results page. The following information will be viewed here:

- a. Total Nitrates
- b. Total Phosphates
- c. Total land area
- d. Grassland Stocking Rate
- e. Whole Farm Stocking Rate
- f. Livestock unit per hectare

Total Nitrates	Total Phosphates	Total Land Area	Grassland Stocking Rate	Wholefarm Stocking Rate	Livestock unit per Hectacre
1978.0	290.0	8.0	329.67	247.25	24.1

Figure 5: Results

9. The advisor can now adjust the livestock unit per hectare if the farmer decides he wants to buy/ sell animals.

Type of Livestock	Nitrogen	Phosphoros	Number of Animals
Dairy Cow	89.0	13.0	25
Suckler Cow	65.0	10.0	3
Cattle(0-1 year old)	24.0	3.0	3
Cattle(1-2 year old)	57.0	8.0	2
Cattle > 2years	65.0	10.0	3
Mountain ewe & lambs	7.0	1.0	10
Lowland ewe & lambs	13.0	2.0	3
Mountain hogget	4.0	1.0	0
Lowland hogget	6.0	1.0	0
Goat	9.0	1.0	3
Horse (>3 years old)	50.0	9.0	0
Horse (2-3 years old)	44.0	8.0	0

Figure 6: Amending livestock unit per hectacre

10. The advisor will then submit. The livestock unit per hectare will update to reflect the updated data.

Total Nitrates	Total Phosphates	Total Land Area	Grassland Stocking Rate	Wholefarm Stocking Rate	Livestock unit per Hectacre
2937.0	429.0	8.0	489.5	367.12	35.0

Figure 7: Amended results

11. The farmer can then select import/ export or storage.
12. For the purpose of this step by step guide I will go to the import/ export section
13. The advisor must select which farmer is he working on from the drop down list
14. The farmer must declare the following information to the advisor:
- a. If he planning to do an import/ export
 - b. If the import/export is farmyard manure or slurry
 - c. How much (in tonnage) will be either exported

Option:	Import ▼
Farmer name:	jack hall - y7894587
Farmyard manure:	100
Slurry:	0

Figure 8: Import Export

15. The advisor will then press submit. This will redirect the advisor back to the results page which will show the affected organic Nitrates and Whole farm stocking rate.

Total Nitrates	Total Phosphates	Total Land Area	Grassland Stocking Rate	Wholefarm Stocking Rate	Livestock unit per Hectacre
2442.0	429.0	8.0	489.5	305.25	35.0

Figure 9: amended Results

16. The advisor will then go to the storage option.
17. The advisor will need the following information from the farmer:
- a. Type of storage he has- slurry/ farmyard manure storage
 - b. If the facilities are indoor/ outdoor
 - c. Dimensions (length x breath x height)

Farmer name:	jack hall - y7894587
Choice:	Slurry ▼
Option:	Indoor ▼
Length:	4
Breadth:	3
Height:	2
Add another container:	<input type="checkbox"/>

Figure 10: Add a slurry/ farmyard manure tank

18. The advisor can add multiple tanks for the farmer

Farmer name:	jack hall - y7894587
Choice:	Slurry ▼
Option:	Indoor ▼
Length:	4
Breadth:	3
Height:	2
Add another container:	<input checked="" type="checkbox"/>

Figure 11: add additional tank

Farmer name:	jack hall - y7894587
Choice:	Slurry ▼
Option:	Indoor ▼
Length:	3
Breadth:	8
Height:	4
Add another container:	<input type="checkbox"/>

Figure 12: multiple tank (s)

19. Once all tanks are submitted the advisor will then be brought to the final results page which will show if the farmer has legally enough storage or not. Figure 13 shows that this farmer has insufficient storage and will need to build more tanks

Total Slurry Manure	Total Storage	Maximum Storage Available	Space Available
11.16	22.2	178.56	-156.36
11.16	86.4	178.56	-92.16

Figure 13: Storage results

20. This final results page will contain all the results generated prior also.

Total Nitrates	Total Phosphates	Total Land Area	Grassland Stocking Rate	Wholefarm Stocking Rate	Livestock unit per Hectacre
2442.0	429.0	8.0	407.0	305.25	35.0

Figure 14: Final Results Page

Total Slurry Manure	Total Storage	Maximum Storage Available	Space Available
11.16	22.2	178.56	-156.36
11.16	86.4	178.56	-92.16

Figure 15: Final Results Page

Note:

1. Steps 1-10 must be completed for every farmer.

2. This information can be the final report if the farmer has no other assessment (s)he would like done.
3. Imports/ exports and slurry can also be done in the reverse order of above
4. Reports can be printed at any time
5. For the purposes of this demonstration real farmer data has not been used due to GDPR.