

Income and Cost Budgets App version **V1.01/2020.07.14**

Introduction

The new Income and Cost Budgets app, also known as COMBUDS, has been overhauled to make user experiences similar – in looks and functionality – across multiple platforms. Previously, the desktop version of the app looked completely different from the web application.

Unity3D enables us to deploy the app on multiple platforms with only a few minor tweaks to accommodate the differences between technologies.

Platforms

The app is available on the following platforms:

- As a **download and install** on a Windows operating system, versions 7, 8, 8.1 and 10 64 Bit.
Download size: 17MB | RAM: 2GB | Minimum screen size: 1024 x 768 pixels
- For **online use in a WebGL compatible internet browser**, such as Chrome, Firefox, Edge, Safari and Opera. It may work on some mobile phones but it is not supported due to input methods used.
Download to browser is 10MB (compressed).
- **Android mobile app.**
Requirements: Smartphone with Android 4.4+

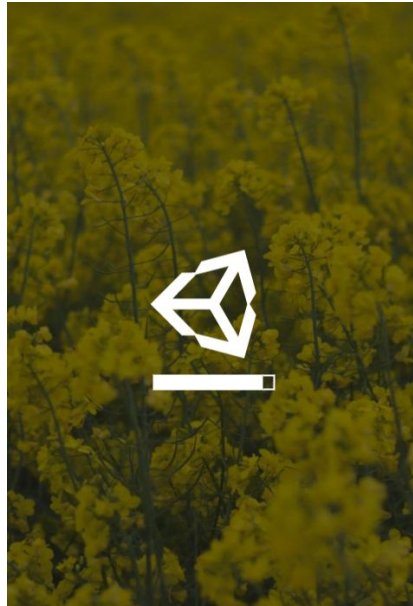
Cross platform compatibility

The Income and Cost Budgets app looks and works the same across all platforms with the following minor differences:

- The WebGL implementation is browser bound, which means that data is saved in the browser's cache. Should you uninstall the browser software for any reason, all values you entered will be lost. Also ensure that you use a browser that is not set to clear its cache every time it is closed.
- It is not possible to transport figures from one browser manufacturer to another, for example from Chrome to Firefox. All values must be re-entered manually again.
- Finally, if you format your computer all values entered will also be lost. Due to design constraints and privacy, no values entered are neither saved online nor captured by a third party.

Downloading and initializing

You should see the following screen after the initial web assembly code has been initialized in any WebGL compatible browser, for example Firefox, Chrome or Edge. This loading screen displays the progress as the app is downloaded to your browser's cache. Opening the app in the same browser a second time – and all consecutive times – will be much faster.



ONLY VISIBLE ON **WebGL** COMPATIBLE BROWSERS

The Welcome screen below is visible on all platforms while the app is being initialized. Depending on your hardware performance and available RAM it can be a few seconds before the logo fades and the app starts.



WELCOME SCREEN

Using the app

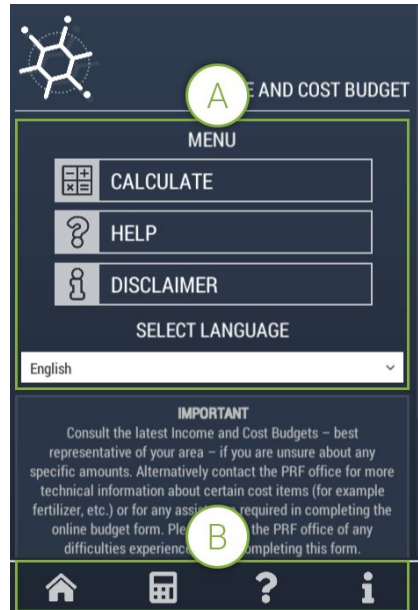
Menu options

The menu screen below is the main hub and is displayed on all platforms when you open up the app. The two most important links are the **CALCULATE** button and the **SELECT LANGUAGE** drop-down. The app is currently available in English or Afrikaans and the language preference can only be set here on the main menu screen. Your preference will be remembered automatically the next time you use the app.



MAIN MENU SCREEN

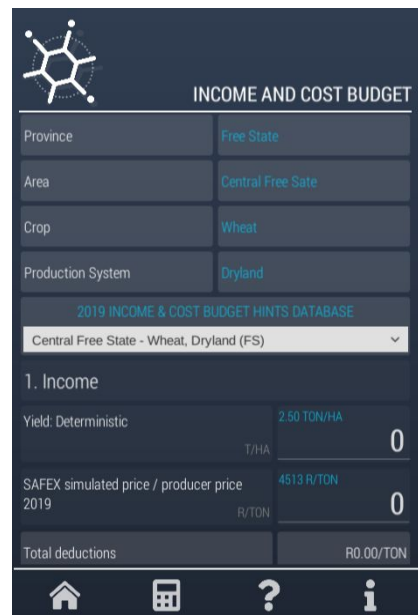
As indicated in the outlined areas below, all app options can be accessed via the main menu screen (**A**) or by using the icon button shortcuts (**B**) near the bottom of the screen.



MENU BUTTONS AND ICON BUTTON SHORTCUTS

Populating fields

The main purpose of the Income and Cost Budgets app is to assist you in calculating budget figures according to your specific requirements and situation. Left-clicking (with your mouse) or tapping (with your finger on a touch screen) the CALCULATE button or icon will load the budget calculator screen below.

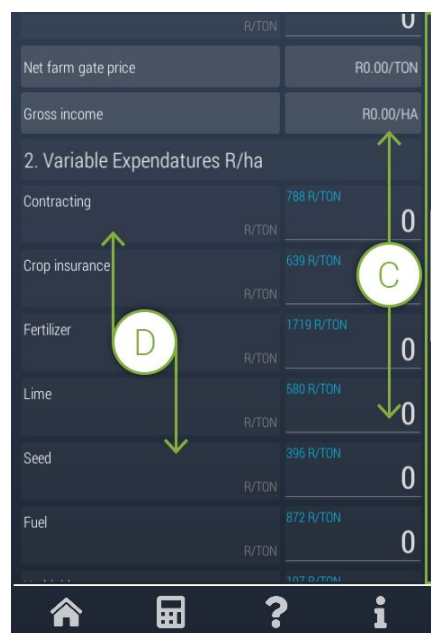


CALCULATOR SCREEN

This screen contains a lot of information but it is easy to navigate up and down:

- On a desktop computer, scroll up and down using your mouse scroll wheel. You may also move the screen up and down by clicking and dragging the scroll bar (C). A third option is to click and drag with the mouse pointer anywhere on the left side of the screen (D).
- Moving the screen up and down in a web browser functions the same way as on desktop computers.
- On touch screen devices it is recommended to drag the screen up and down by placing a finger on the non-input area of the screen (D).

The screen content will not move up or down if you try to scroll, click or drag over the right-hand column where the input fields are located.



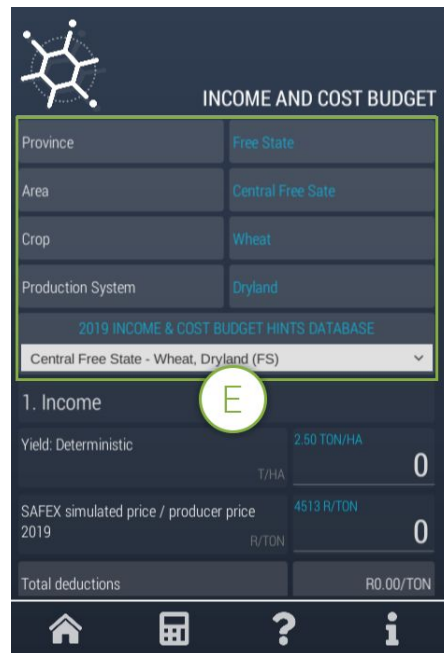
NAVIGATING THE CALCULATOR FORM

Hint values

The top portion of the calculator screen displays hint value details** (E) retrieved from a database containing actual values taken from the most recent figures available on the Protein Research Foundation website:

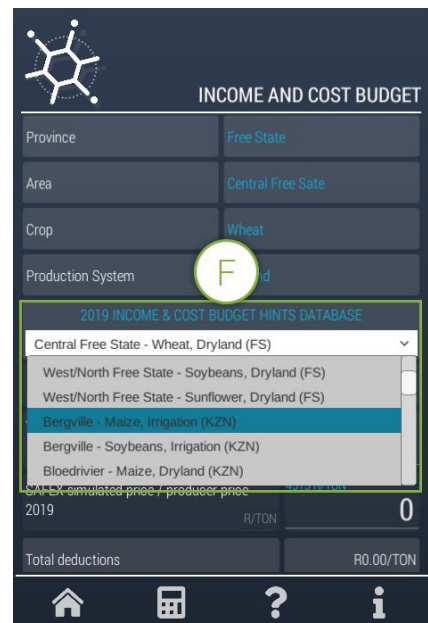
- Summer crops: [Dryland 2019/2020](#)
- Summer crops: [Irrigation 2019/2020](#)
- Winter crops: [Dryland 2019/2020](#)
- Winter crops: [Irrigation 2019/2020](#)

** Historical values are not available in the app but can be accessed through the Protein Research Foundation website by going to INCOME & COST BUDGETS in the left menu and selecting the desired season.



HINTS DATABASE

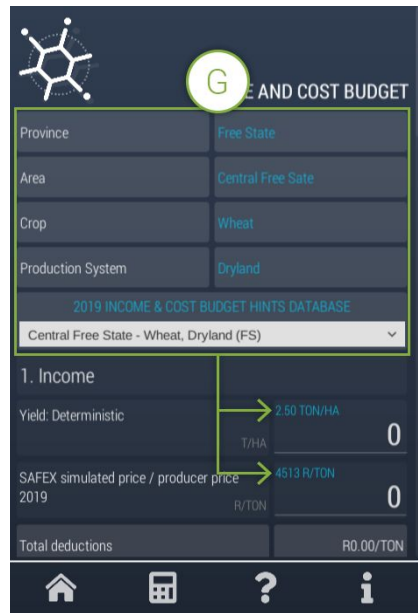
Select the area and crop most relevant to your area from the drop-down (F). Please note that we provide data from South Africa only and as such, all values are represented in South African Rand (ZAR). These values may not be applicable to your region if you are using the app outside of the borders of South Africa.



SELECT YOUR CROP AND AREA

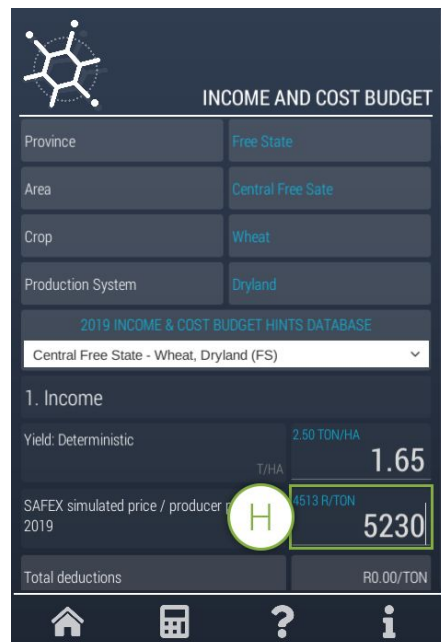
When you choose a different area and crop from the hints drop-down all the hint values on the screen will be replaced with values from the newly selected region (G). These values will assist you to calculate realistic figures for your crop and area. If you exit the app halfway through completing the form, it will remember

your last selection when you open it up again. The hint values can be used as is or you can enter values that are more representative of your region and crop.



HINT VALUES UPDATED UPON SELECTION

To enter a new value simply left-click with your mouse or tap with your finger on the appropriate field in the right column (**H**).



ENTER YOUR OWN VALUES

The fields only accept decimal numbers, which are saved as you type. If you reopen the app after exiting it, you will be able to continue from your last entry. Take note that the app calculates final totals as you complete the form so make sure you enter all applicable fields to get a realistic end result.

Important links

- The [history of COMBUDS](#) (computerised budgets) and explanatory notes.
- [End User License Agreement](#) (EULA).
- [Conditions of use](#).

Download, launch and install links

- Download [Windows app](#)
- Launch [Browser app](#)
- Install [Android app](#) from Google Play Store

Conclusion

We hope you enjoy the new experience. Please send your feedback for changes and/or suggestions for future enhancements to maria@proteinresearch.net or support@tigme.com.

Also take the time to familiarise yourself with our [Privacy Policy](#), [Cookie Policy](#) and [Mobile App Policy](#).