RELEASE NOTES

Version: 3.0.1

Build Number: 3.0.1.1

Release Date: 15-02-2024

Bug Fixes:

- Fixed bug where transaction details were not cleared from the display after transactions were completed.
- Fixed bug where mitigation for the crop hazard *fusarium wilt* was specified incorrectly as 'pesticide', rather than 'fungicide'.
- Fixed minor bug in the display of transaction statistics.

Version: 3.0

Build Number: 3.0.0.8

Release Date: 19-12-2023

What's New:

- **Town Work:**
    - Employment and earnings for adults in town are now reviewed at the start of each season.
    - Seasonal updates on town work are now provided when no money is sent home.
    - Players are no longer able to send adults to town unless at least one healthy adult remains at home.
- **Market:**
    - Market stocks now replenished at the start of each year.
    - The maximum allowable price fluctuations for inputs and food have been reduced.
    - Market price changes (based on harvest yields) now occur after food allocation for single planting and after Early Harvest and Food Allocation for the two planting seasons option.
- **Households:**
    - Non-viable warning**:** In a situation where all adults at home become hospitalized, players are now given a warning and opportunity to remedy the situation before the household is declared non-viable and closed.
    - When a household member dies, any outstanding HIV medical fees are now cancelled.
- **Nutrition:**
    - With basic nutrition, diet costs are now calculated on the assumption that the proportion of food grown by the household is equal to the proportion of fields planted with food crops. The cost of home-grown food is set at the market buy price (i.e. the loss of the income from selling the food). The cost of food not grown by the household is set at the market sell price.
    - Added an 'X' level diet to speed plate clearing when using the standard and advanced nutrition models.
- **Apple computer keyboards**:
    - Support for Apple computer keyboards is improved. The "Remove Key", pressed to remove tasks, resources and goods from the market counter can now be set to the OPTION, COMMAND or CONTROL keys. The quantity added or removed from the market counter in a single click or drag can be set by holding down the numbers 0-9 (0 = 10) on the keyboard or numeric keypad.
- **Game Settings:**
    - The Game Feature 'Randomize H/H' now works between gameplay sessions. If selected, a household with different starting conditions will be assigned to the player for the next game. If unselected, the player will begin the next game with the same starting household composition and assets.
    - Out of range numeric settings are flagged for correction rather than simply ignored.

- **Statistics Screen:**
  - 'Non-Farm' data added showing education and town work statistics.
  - 'Labour' data added showing seasonal labour allocation (adult, child, hired) by category (household, school, farm, town), labour lost through illness, and unused labour.
  - Market transaction data expanded to include all financial transactions: market transactions loans, payments (loan repayments, medical fees, funeral costs) and town work income.
  - Weather statistics now include yearly weather reports.
  - Added System and version information data to Settings Screen.
  - Statistics screens now automatically update when new data becomes available.
  - The Game statistics save function now saves only player and global stats data by default. All game stats data can be downloaded if the option is selected in the dialog window. Players are no longer prompted to set the target directory for the data to be saved.
  - Improved formatting of saved statistical data.
- **Agents:**
  Coding for the agents has been significantly revised, with the following updates:
  - The ordering of task execution for agents and the player is randomized for season tasks, where necessary interrupting agents' market transactions and task setup until the player has completed his or her actions for the seasons. This gives the player fairer access to limited market resources such as land.
  - Agents are better at budgeting their yearly plans.
  - Agents are more likely to send household members to town.
- **Tutorials:**
  - Web link for online tutorials updated for new African Farmer website.

Bug Fixes:

- Fixed bug which could cause game to hang during food allocation if all village-based household members died while others are in town.
- Fixed bug where household food allocations were not updated correctly if nutrition screen was open during 'New Births & Ageing' game stage.
- Fixed bug in the two planting seasons option, where the market buy and sell prices for food and cotton would increase to their maximum values if no fields were early planted.
- Fixed bug where agents' fields were not checked for crop hazards.
- Fixed where pressing the ESC key from the Tutorials screen could cause the application to hang.
- Fixed bug where land sold to the market was not added to the market stock for sale.
- Fixed bug where dashboard assets panel could become blank when scrollbar position changed.
- Fixed regression where the game crashed if a player navigated from Market Screen with Field Selector panel open.
- Fixed bug which allowed hired labour to be over allocated.
- Fixed bug where Dashboard Activity Log recorded duplicate entries if a Stage alert (e.g. planting or weeding alert) was issued.
- When 'Confirm' button pressed for field sale with the field to sell unspecified, the Field Selector panel will now be redisplayed.
- Labour statistics now included when Game statistics data saved.
- Added checks to prevent a screen update initiating after player navigates to another screen.

Version: 2.2

Build Number: 2.2.0.1

Release Date: 01-03-2022

What's New:

- **Weather:**
    - Updated weather system with new 'Late Rains' weather category. Weather probabilities updated, significantly reducing the likelihood of flash floods.
    - Climate change option revised. Now the detrimental effects of climate change increase with each passing year. The *severity* setting adjusts the magnitude of the increase (1= low, 5 = high).

- **Crop Yields:**
    - Adjustments made to make crop yields variations with planting and fertilizer options more consistent.

- **Household Closure:**
    - Households are closed if they become non-viable i.e. there are no adults available to carry out tasks.
    - Village screen updated with "N" closure label, indicating household has become non-viable. Mouseovers added to huts of closed households indicating closure year and reason for closure.
    - Household stats updated when household closed.

- **Village Screen:**
    - Village screen household closure labels updated with "N" label, indicating household has become non-viable.
    - Mouseovers added to huts of closed households indicating closure year and reason for closure.
    - Village screen data and closure labels update immediately after any changes to village population.

- **Market Screens:**
    - Market stocks are updated immediately after assets are bought or sold.

- **Food Allocation Screens:**
    - Applied allocations are cleared at start of the new year.

- **Game Settings Screen:**
    - 'Agents' and 'Max Game Cycles' removed from settings: Agents will always run; game cycles are unlimited.
    - 'Climate Change Severity' option added.
    - Minor tweaks to layout.

- **Statistics Screen:**
    - 'Game Settings' data now includes Traction, Post-harvest losses and UI Selection.
    - In Finance Statistics, final line added to closed households indicating year closed and reason for closure.

- **Agents:**
    - Agents have the option of buying contraception.

Bug Fixes:

- Fixed bug which could cause game to hang when household tasks refreshed in household with no children.
- Fixed bugs in Basic Nutrition where, in some circumstances, set A, B and C level diets were applied when insufficient cash available.
- Fixed bug in Chance Events which could cause skewed probabilities or the game to hang.
- Fixed bug where Dashboard Labour Panel hospitalized total not immediately updated after person released from hospital.
- Fixed bug in Statistics Screen 'Game Settings' where Chance Events status not shown when Chance Events unset.

- Fixed bug in agent players where, in some circumstances, an agent would allow household to die of malnutrition, rather than sell land.
- Other minor bug fixes.

Version: 2.1.3

Build Number: 2.1.3.1

Release Date: 10-11-2021

Bug Fixes:

- Fixed bug where game could hang in task management screens when a household member is removed from the labour pool (through illness or death).
- Other minor bug fixes and optimisations.

Version: 2.1.2

Build Number: 2.1.2.1

Release Date: 26-10-2021

What's New:

- **Nutrition Screens:**
  - The operation of the "click to remove" functionality for Standard and Advanced Nutrition is now consistent with the functionality in other screens.
  - In Standard and Advanced Nutrition, adding a diet to a plate now replaces the current contents, rather than adding to the existing contents.

Bug Fixes:

- Fixed Basic Nutrition bug where allocation and allocation costs were incorrectly applied when player had insufficient cash to cover selected allocation costs.
- Fixed Basic Nutrition bug where selected diet is set to 'X' level when a diet is removed from allocation.
- Task labour selector display now updates if a household member dies or hospitalization status changes.
- Allocation display now updates if a household member dies.
- Addressed issue where, in some circumstances, game could hang in task management screens.
- Other minor bug fixes.

Version: 2.1.1

Build Number: 2.1.1.2

Release Date: 13-10-2021

What's New:

- **Tasks Selection:**
  - Strengthened selected icon highlight filter.

Bug Fixes:

- Fixed issue where Assets Panel quantity roundup could be confusing in certain circumstances.
- Fixed bug where farm resources with fractional quantities (< 1 unit) were included in the Resource Selection Panel.
- Fixed bugs in icon highlighting when deselecting labour or resource icons.

Version: 2.1

Build Number: 2.1.0.1

Release Date: 07-10-2021

What's New:

- **Click to Select Option:**
  - 'Click Select' added as an alternative to 'drag and drop' for item selection and removal in the market, tasks, and nutrition screens.
  - The keyboard key to be pressed when removing 'Click Select' items can be set to either CTRL (default) or SHIFT in the Game Settings *User Interface* folder.
  - 'Click Select' is now the default selection method, though it can be changed to 'drag and drop' in Game Settings.

  Game Settings:
  - A config button has been added to the dashboard to enable changes to the User Interface and Help settings during gameplay.
  - The land market settings are now located in a new 'Market' folder.
  - Minor layout tweaks.
- **Documentation:**
  - The *Single Player Guide* and *Educator Guide* updated to reflect these changes.

Bug Fixes:

- Minor UI and help system bug fixes.

Version: 2.0.3

Build Number: 2.0.3.1

Release Date: 02-11-2020

What's New:

- **Chance Events:**
  - The year at which Chance Events (if selected) become active can be set between 1 and 5 in *Game Settings*.
- **Documentation:**
  - *Single Player Guide* and *Educator Guide* updated to reflect changes to Chance Event options.

Version: 2.0.2

Build Number: 2.0.2.1

Release Date: 15-02-2020

What's New:

- **HIV Infection:**
  - Buying contraception now protects all household members from HIV infection for the year.
- **Game Analytics:**
  - Percentages for disease incidence now displayed to two decimal places.
- **Documentation:**
  - *Single Player Guide* updated to reflect changes to HIV infection.

Version: 2.0.1

Build Number: 2.0.1.1

Release Date: 25-05-2016

What's New:

- **Town Work:**
  - Any money saved is now sent home in instalments by M-Pesa at the start of the second, third and fourth seasons. Town workers may also bring back additional cash when they return home at the end of the year.
  - All adults in the household can no longer be sent to town - at least one healthy adult must remain in the village to manage the household.
  - Babies born in town now return home with their mothers at the end of the year and are no longer included in the household food allocation for that year. The baby's diet level will be the same as the mother's for its first year.
  - The rewards of town work have been slightly reduced.
- **Documentation:**
  - *Single Player Guide* updated to reflect changes to Town Work.
- No more than one flash flood will occur in any year with the CLIMATE CHANGE option unset.
- The game difficulty setting has been adjusted.

Bug Fixes:

- In some circumstances, babies with healthy mothers were born HIV positive.
- The "Detail" food allocation view was disabled.
- Medical expense descriptions now correctly display the names of newborn babies set after the debt was incurred.

Version: 2.0

Build Number: 2.0.0.1

Release Date: 04-05-2016

What's New:

- **User interface:**
  - A dashboard comprising Asset, Labour and Activity Panels, an Advance button with rolling game stage ticker, an Activity Log and News Ticker has replaced the lower communications section of the user interface. This enables players to more easily track assets & labour and better control the game's progress.
  - The game automatically progresses to the next stage when player intervention not required.
  - The *Task Management*, *Market*, *Village*, *Game Statistics* and *Game Settings* screens have been redesigned.
  - Additional checks added to prevent errors during task creation.
  - All dropdown menus replaced by drag & drop or point & click selections.
  - Numerous minor tweaks and style changes.
- **Farming Changes:**
  - A new *One Planting Season* game option allows the game to be played with a single planting season (in this case the seasons are *Planting*, *Main Rains*, *Harvest* and *Post Harvest*).
  - Crop yields recalibrated for Early and Late planting.
  - Mechanised traction option added for clearing all household's fields (costs less per field than animal traction.
  - Manual Weeding icon added to farm fields.
  - Harvest status icons added to farm fields.
  - Land can be constrained by setting fields available for sale and rent in Game Settings.

- The game *difficulty level* can be modified – this changes each household's starting cash and the achievable crop yields.
- **Town Work:**
  - Town work now brings greater rewards for educated household members.
  - Town workers require bus tickets to go to town.
  - New "Imprisonment" and "New Job" chance events added for town workers.
- **Nutrition:**
  - A new *Basic Nutrition* model has been added where the player simply selects the desired diet level (A, B, C or X) for each household member and the cost of the diets (based on market prices at food allocation time) are deducted.
  - Sample A-, B- and C-level diets created for *Standard* and *Advanced* Nutrition options.
  - New diet level icons.
- **Market:**
  - Contraception, bus tickets and mechanised traction are now available.
  - School vouchers now purchased singly.
  - Land prices now vary with availability.
  - Crop yield data added to market information.
  - All buying and selling is now drag & drop.
- **Game Alerts extended to cover:**
  - Failure to set important farming tasks (planting, weeding, harvesting) or allocate food.
  - Insufficient resources available to cover the food allocated.
  - Debts due for payment at the bank (covers loan repayments and funeral expenses).
  - Land shortages.
  - Task execution failure.
- **Households Setup:**
  - The *Chungwa* household has been added to the village.
  - Household members now have differing amounts of education at the start of the game.
  - Pairs of households are now given one of five starting configurations of household members, land and starting cash to make post-game comparisons of strategy more useful (the pairings are Nyanya/Ndizi, Mahindi/Nanasi, Matango/Embe, Mboga/Kabechi, and Tikiti/Chungwa).
- **Game Settings:**
  - *Level Settings* added to enable settings to be quickly adjusted to match the learning context and players' experience.
  - Settings can now be reset to the default state.
  - Settings changes are automatically saved and reloaded at next game launch.
  - Settings can be saved to a file that can be loaded by other players.
  - New option to check for *African Farmer* updates.
- **Help and Documentation:**
  - Video tutorials covering key aspects of the game have been created. These can be installed as part of the game installation or viewed online.
  - A new *Educator Guide* has been created for lecturers and teachers, giving background information on the game and guidance on running a game workshop.
  - The *Single Player Guide* and *Getting Started* documents have been revised and updated.
- Weather types have been rationalised; *Heat Wave* is now a possibility when the *Climate Change* option is selected.
- The *Chance Events* module has been expanded to include additional events.
- Post-harvest losses no longer apply to food that cannot be planted.
- Game Statistics now include market transactions, game settings and additional financial data. The statistics data can be saved to file for post-game review.

- Fertility reduced for women over 35 years of age; zero probability of women becoming pregnant in the year after giving birth.
- Game codebase completely rewritten, fixing numerous bugs.