PLAYERS

This strategy game of 6 rounds is designed for 2-5 players aged 16-35.

GOAL

Earn the highest score (only the final round score matters) and win. By using technology (MACHINES) your aim is to support your animal- and/or agri-culture (RESOURCES), make PRODUCTS and increase your final score.
The most profitable product for each player is the local product designated in the Country Card (e.g. wine for Portugal). However, each player is free to choose their own strategy to earn more points.

LEARNING OBJECTIVE

Learn how technology in agriculture can produce financial benefits for the farmers and benefits for the environment.

PRINTING THE GAME

The game includes 85 cards (50 Resource, 8 MACHINE, 10 STEM and 17 Product Cards). 6 Country boards with their point sheets. They need to be printed before the beginning of the game.

Green STEAM Incubator
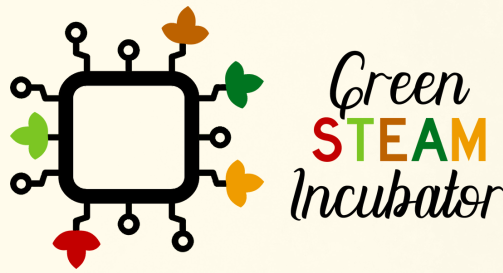
To print all cards the following printer settings are needed:

- Pages per sheet: 4
- Page order: Vertical
- Print on both sides of paper
- Flip on short edge
- Orientation: Landscape
- Note: The STEAM and Machine cards should be printed twice

SCORING

- Each player starts with 20 Water Points and 20 Labour Points.

- Labour and Water Points are earned through STEM and Machine Cards.

- Labour and Water Points are spent to maintain the Resource cards in each round.

- During the game the score is calculated as follows:

  + COINS
  + LABOUR BALANCE
  + WATER BALANCE
  + PRODUCTS

LABOUR BALANCE = LABOUR BANK - SPENT POINTS + EARNED POINTS

WATER BALANCE = WATER BANK - SPENT POINTS + EARNED POINTS

- The Labour and Water Balance are carried over in the Labour and Water Bank of the next round, respectively and so on.

- The coins from the previous round are carried over in the next round and so on.

- The Points earned from the Products you built are carried over and added in the next round and so on.

- The player who accumulates the most points at the last round wins.

SETUP - INITIATION

- Choose your Country Card and the corresponding Point Sheet. Each Country card has its own Point Sheet.

  Example: If you hold the Portugal board you earn 1.5 points per round if you hold the Tomato Resource card. You can win 2 extra points at the end of the game if you manage to

produce wine by the fourth and final round of the game.

- Roll the dice with your team players. The player who scores the highest number plays first, followed by the other players in a clockwise order.

- Resource Cards are reversed in front of the players, so their selection is random. (Note: this is the only time cards are reversed)

- Each player chooses one Resource Card starting from the first player, until all players have 4 cards each.

- The STEM and MACHINE cards are added in the First Round. Players choose one of each Card (1 STEM card and 1 MACHINE card).

- Product Cards are added in the Second Round.

- Collect the relevant MACHINE, STEM and Resources to build a Product. Once a Product is built you can collect the Product Card and earn the coins and points on it.

Example: To unlock the 2 coins from the "Flour product card," the player needs to have a "grain" Card and a "grinding machine" Card.

RULES

- One game has 6 rounds.

- Each player starts with 20 water points and 20 labour points, which can be spent during the game to maintain their resources.

- Coins and Points are earned in each round. Look for the coin and other symbols in all Cards.

- All Cards are displayed in front of the players, except in the first round when Resource Cards are hidden and picked randomly.

- All Cards become available from the Second Round and players continue building their STEM strategy to reach their Goal.

- Players can exchange up to max 5 Cards between players (or from the displayed cards that were not chosen) during one game. It is advisable to start exchanging cards after the second round, when all cards become available.

- When you spent labour and water points, remove them from your bank.

- Collect the relevant MACHINE, STEM and Resource to build a Product. Once a Product is built you can collect the Product Card and earn the coins and points on it.

Example: To unlock the 2 coins from the "Flour product card," the player needs to have a "grain" Card and a "grinding machine" Card

- In each round, a resource card can only be used for the production of one product!

- When a player produces a product, the player holds the product card only for one round. In the next round, the product card becomes again available for all players.

RESOURCE CARDS

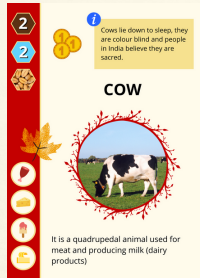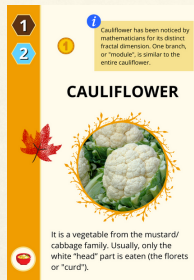**coins**

labour points

water points

Animal Cards

COW

Cows lie down to sleep, they are colour blind and people in India believe they are sacred.

It is a quadrupedal animal used for meat and producing milk (dairy products)

Cereal Cards

SPELT

It is often considered to be 'the caviar' of cereals.

Spelt is a species of wheat that has been cultivated since approximately 5000 BC.

Fruit Cards

APPLE

Raw apples are an excellent natural toothpaste that cleans and whitens the teeth.

There are more than 8000 varieties of apples. It is the largest variety of fruit to exist.

Vegetable Cards

CAULIFLOWER

Cauliflower has been noticed by mathematicians for its distinct fractal dimension. One branch, or "module", is similar to the entire cauliflower.

It is a vegetable from the mustard/ cabbage family. Usually, only the white "head" part is eaten (the florets or "curd").

- **Water and Labour points found on the left top corner of the Resource cards need to be spent to keep the resources alive in each round. In the case of animal cards, a grain, vegetable or fruit card is also needed for maintaining the animal.**

- Each card has water points and labour points that the player needs to give in each round to maintain their resources.

- The coins on the resourse cards can be earned in each round, only if you can keep resources alive every time in each time.

- The cards also indicate the number of coins that the players can accumulate if they have what is required to maintain the card.

- The points are accumulated each round.

- Players can keep track of points on the country's points sheet that they have choosen at the beginning of the game.

Points need to spent to keep resources alive.

Coins that can be earned

CHICKEN

Chickens have a great memory! They can recognize faces, dream, and they are the closest living relative to the magnificent T. rex.

It is a bird (poultry) used for meat and laying eggs that can be used for making products.

PRODUCT CARDS

- **Using a product card blocks the resources (the player does not earn any coins from the resources card used to produce a product, and they do not spend any labour and water points to maintain those resources).**

- **Each card has a certain number of points and requires some "STEM" or other cards to be unlocked.**

FLOUR

Any grain cereal

+

©

Up to 20 000 flour particles are made from one whole grain of wheat.

Eating whole wheat flour decreases the risk of developing type II. diabetes.

Example: To unlock the "FLOUR" card, you need the Grain Resource card and the Grinding Machine card. Pick the card up and earn the 2 coins as a reward.

HOW TO KEEP SCORE

- See the Scoring Section and the Example Point Sheet for more information on the formulas.

- An example of Player's Point Sheet can be seen below, with the arrows showing how you carry over the balance from the previous round.

- On the Point Sheet, the labour and water points spent in each round to maintain the Resourse Cards are marked in the corresponding "SPENT" column so that they are deducted from the final balance.

- Only the final balance that is accummulated shows the winner of the game. The player with the highest score wins.

This game is an original production of the Green STEAM Incubator partnership, and it requires several testing sessions until it is perfect. If you have suggestions on improving the game, please contact us through the project.

Facebook page
https://www.facebook.com/greenSTEAMincubator

Project Webpage
https://steam-incubator.org/

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PLAYER POINTS SHEET SAMPLE FOR POINTS

	①	LABOUR BANK	SPENT (-)	EARNED (+)	LABOUR BALANCE*	WATER BANK	SPENT (-)	EARNED (+)	WATER BALANCE**	WINE	TOMATOES	ROUND TOTAL
INITIATION												
ROUND 1												
ROUND 2												
ROUND 3												
ROUND 4												
ROUND 5												
ROUND 6												

PRODUCTS TABLE

WINE=GRAPES+BOTTLE MACHINE

OLIVE OIL=OLIVES+BOTTLE MACHINE

BEER=BARLEY+BOTTLE MACHINE

JUICE=ANY FRUIT+BOTTLE MACHINE
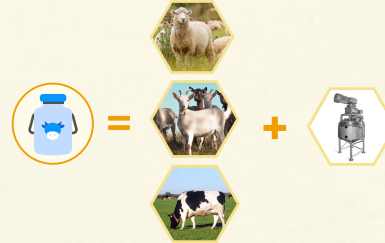

HONEY=BEE+JAR MACHINE

CREAM=GOAT/SHEEP/COW +PROCESSING MACHINE

SOUP=ANY VEGETABLE+JAR MACHINE

MILK=GOAT/SHEEP/COW+PROCESSING MACHINE

BUTTER=GOAT/SHEEP/COW+ PROCESSING MACHINE

CHEESE=GOAT/SHEEP/COW+ PROCESSING MACHINE

MEAT=ANY ANIMAL+ PROCESSING MACHINE

FLOUR=ANY GRAIN CEREAL+ GRINDING MACHINE

SUGAR=SUGAR BEET + GRINDING MACHINE

TOMATO PASTE = TOMATOS + JAR MACHINE

JAM=ANY FUIT+ SUGAR+JAR MACHINE

ICE CREAM=CREAM+ANY FRUIT+ SUGAR

COOKIES=BUTTER+FLOUR+ SUGAR