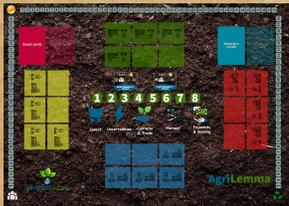


AgriLemma

You are a farmer in Europe. You have your own farm with fields to grow five types of crops on: potatoes, sugar beets, rapeseed, maize, wheat, and chickpeas. To grow crops on your field, you need resources, such as water, nutrients, workers, and seeds. Players have to run, invest into and improve a farm in 8 seasons. The objective of the game is to maximize farm health score which is dependent on environmental, financial, and social health of the farm. Players can achieve this by ensuring that environmental impact of the farm is positive, workers are satisfied, and the farm is profitable. The players need to strategize and balance these goals while withstanding uncertainties of weather and events such as pest attacks.

Game Materials



1 game board

50 coins with "value 1"



50 coins with "value 2"



30 coins with "value 5"



15 coins with "value 10"



1 technology dice



10 workers

4 player pawns



1 round tracker



1 round steps tracker



16 field cards



24 development cards (8 each)



15 event cards



4 player reference cards



120 water tokens



15 weather cards



36 crop cards (6 each)



80 tech cards (8 each)



120 nutrient tokens



Game Setup

- o Each player is in charge of one farm on the board that consists of 6 fields.
- o Each farm has the same starting conditions.
- o Players start with 5 nutrients, 5 water, 40 money tokens
- o If there are more than 4 players, teams of 2 can be made and they can collectively play as one player.

Place event cards face down on the right side. Once drawn, place the event card face-up on the left side.

Place the round tracker on 1 at the start of the game. Move the round tracker to the right as the rounds progress.

Initial position of player pawns on the financial sustainability score scale

Place weather cards face down on the right side. Once drawn, place the weather card face-up on the left



Place the round steps tracker on 'invest' at the start of the game. Move the tracker to the right as the steps within a round progress

After buying the crop cards, place them on the fields to sow them

Initial resources provided to each player

Initial position of player pawns on the environmental sustainability score scale

Initial position of player pawns on the social sustainability score scale

AgriLemna



Game Start

The player with the most experience in the farming/water sector starts the game.

Game Round



Invest

- Hire workers, buy development cards (max 2), crops, and tech cards



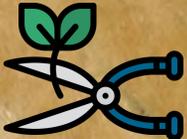
- Draw a weather card
- Draw an event card
- Implement/get impact of event, weather and tech cards.

Uncertainties



Cultivate & Trade

- Provide nutrients and water to crops sown in your field
- If the player does not have sufficient resources, try to trade them with other players. If required resources cannot be arranged, remove the crop from the field.



Harvest

- Harvest up to 2 fields without the worker and receive the yield amount.
For harvesting more, deploy one worker per field.



Payments & Scoring

- Pay the workers, maintenance cost of tech cards
- If workers cannot be paid, then you may keep the workers and decrease social points by 1.
- Adjust social, environmental, and financial score

Game currency



The game currency is represented by money tokens. Players can use this to buy and trade resources such as crops, tech cards, and development cards, and hire workers.

Resources



Water and nutrients are required to grow and cultivate the crops. In each round, players draw a weather card to see how much water and nutrients are available in this round for each player.

If players run out of water and nutrients, they can buy them from the bank.



Resource trading

Players can trade resources with each other. Players can trade resources for resources or resources for money. They can negotiate the terms of selling and buying.

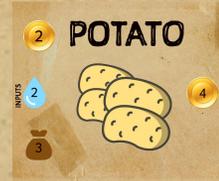
Bankruptcy

If players run out of money, they can take a one-time loan of 5 coins from the bank (with an interest of 1 coin). At the end of the game, players must subtract this loan from their financial points. If they become bankrupt again, then the player loses and has to exit the game.

Items to invest in



Development cards provide additional benefit to the farmers. A maximum of 2 development cards can be bought in a round. Once development cards are used or the specified benefits are obtained, they must be discarded



Players can choose from 6 crops to grow on their fields: maize, wheat, rapeseed, sugar beets, chickpeas and potatoes. Crops need water and nutrients to grow and provide a monetary benefit at harvest



Workers are required to harvest the fields. Hiring cost of a worker is 1 money token and payment (every round) is 1 money token. Players get one social point for hiring a worker. If players do not have the money to pay the workers, then they can keep the worker for that round but they will lose 1 social point in that round.



Technology cards are opportunities to invest in the farm. These provide players with nutrients or water savings, and the possibility to predict uncertainties. These cards have social/environmental consequences that impact the environmental and social score.

- Players can buy multiple technologies
- Each technology can be bought as many times as the player wants.
- Players need to pay the maintenance of some technologies every round. If players cannot pay the maintenance cost, they have to roll the technology dice.
- In the round that you buy the card you pay the “one-off” fee (fixed costs) and in subsequent rounds, you pay the “maintenance cost”

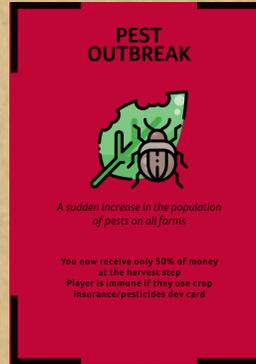
Uncertainties

Weather



Weather is a huge factor in how the crop will grow. Extreme temperature and precipitation can prevent crops from growing, destroy them or reduce yields

Events



Like weather, these are additional factors that are outside the control of the farmer. The uncertainties inherent in global markets, pest attacks, government policies, etc. can cause impact farm health.

Technology failure



Technology failure dice: If the maintenance of a technology/solution is not done regularly, there is a high chance that the technology can fail. The technology failure dice has a 50% chance of failure/success. If the technology failure dice shows fail (red), players need to lose the technology and buy it again. If it shows "no fail" (green), they can continue using the technology.

GameEnd

Game ends when 8 rounds are over

Score Tallying

The objective of the game is to maximize farm health score which is calculated as

Environmental points + Social points + Profit



Players earn environmental points by investing in sustainable technologies, or diversifying their crops



Players can earn social points by generating livelihoods through employment of workers providing them a consistent sources of income, or investing in technologies.



Players can earn financial points by generating profit. This is equal to the amount of money left with the players after the payments step in each round.

Monetizing resources at the end of the game

- 1 Water = 0.25 coins
- 1 Nutrient = 0.25 coins
- Any technology = 1 coin
- Any development card = 1 coin
- 1 worker = 1 coin

Winning Conditions

The player with the maximum farm health score at the end of the game wins

In case of a tie, apply the following tie breakers in order:

1. The player with the most technologies wins
2. The player with the highest environmental sustainability score wins
3. The player with the highest social sustainability score wins