

SAVE THE WATER

BOARD GAME ABOUT GROUNDWATER DEPLETION

INSTRUCTIONS



Play online



Created by

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Funded by



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

savethewater-game.com

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BASICS

STORY

Each player plays a Chinese farmer who struggles with the challenges posed by the need for profitable cropping under the issue of groundwater depletion.

The game is guided by a game master.

COMMON GOAL

The collective goal of all players is not to deplete the aquifer.

INDIVIDUAL GOAL

The individual goal of each player is to have more points than the other players.

GAME ENDING

- The final points of a player are the sum of
 - the cash amount of the player
 - the value of all his/her fields
 - and the value of all his/her extensions.
- The game ends after 4 rounds, each round representing one year. If the last water unit is removed from the groundwater all players have lost the game. The amount of water left after the 4th year can be compared to the amount left by another teams.
- A player leaves the game if he/she cannot pay the demanded costs, i.e. he/she does not find a player from whom he/she can borrow money.

GAME MATERIAL

- **Boards:** 1 phases circle, 1 groundwater pool, 18 fields
- **Cards:** 4 characters, 12 weather, 36 events, 9 policies
- **Water chips:** 100 blue, 50 yellow, 50 orange, 50 red
- **Coins:** 50 gold, 90 silver
- **Crops:** 20 single crop, 20 double crop, 10 vegetable
- **Other:** 2 3-sided dice, 1 red & 1 blue figure, 1 crown, 20 extension tokens

PREPARATION



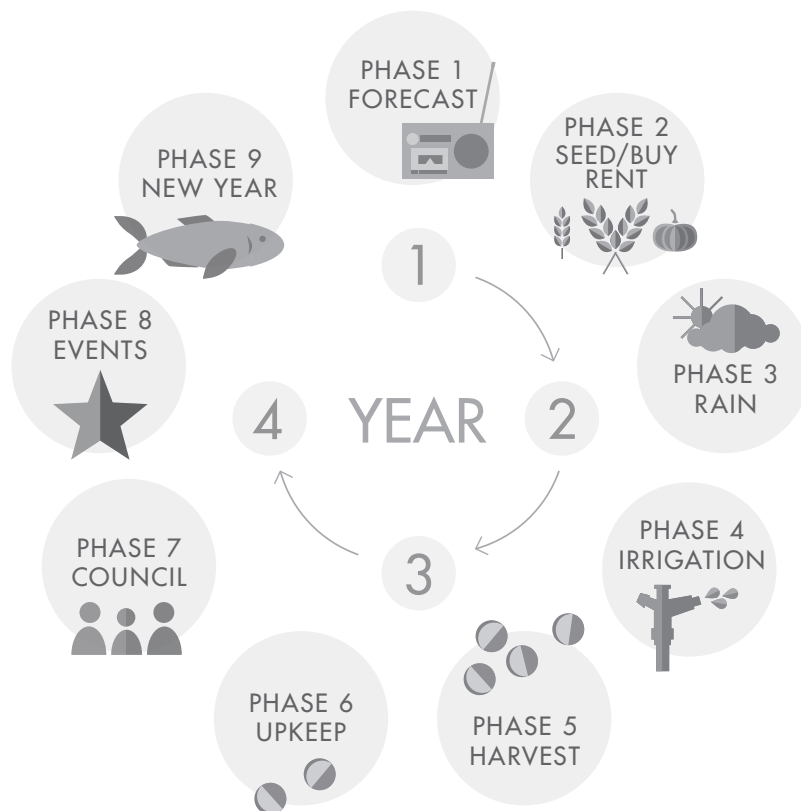
START OF THE GAME

The game master prepares the game as follows:

- The bottom 5 rows of the groundwater reservoir are filled with water units of the corresponding color.
 - To make the game more difficult you can start with only 4 or 3 rows.
- The event cards are shuffled and placed face down on a stack.
- Select randomly one dry, one wet and two normal weather cards. Shuffle them and put them in one stack, the forecast side up.
 - To make the game more difficult select more dry years than wet years.
- Each player receives 1 character card, 1 land card, 7 silver coins and a bag. (A silver coin has a value of 1 and a gold coin has a value of 5.)
- The oldest player receives the Start-Token, the crown, to mark who is the first player in a turn.
- The blue figure marks the current number of the year (round). To start we put it on Year number 1.
- The red figure marks the current phase. To start we put it on Phase 1 "Forecast".

Then the first year/round begins with the first phase.

PHASES



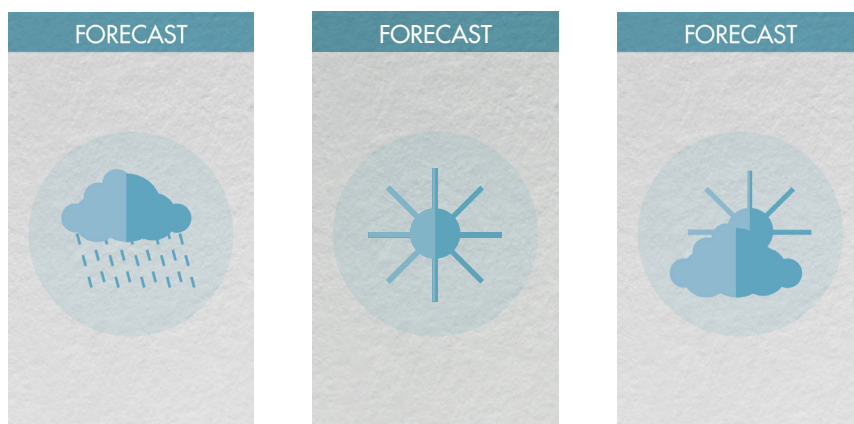
Each year/round consists of 9 phases.

IN GENERAL

Buying, renting, selling, trading, borrowing money and discussing is always allowed. Items can be sold for half of the price (amount always rounded up).

1. WEATHER FORECAST

- The top card of the weather card stack shows the current forecast: wet, dry or normal weather.



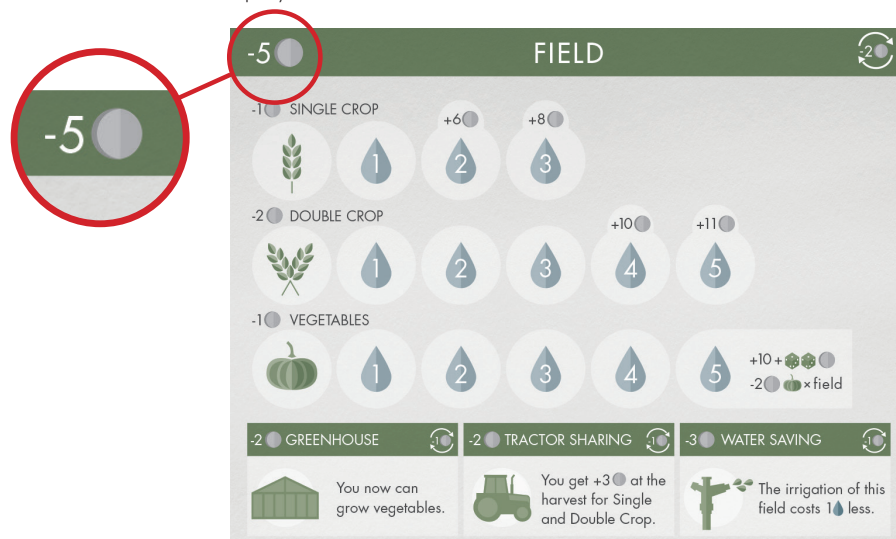
2. SEEDING AND BUYING

The player with the crown token begins. He/she can take the following actions. Then it's the turn for the player next to him/her, etc. until all of the players have taken these actions:

- Rent new fields
- Buy crop seeds
- Buy field extensions
- Buy player extensions

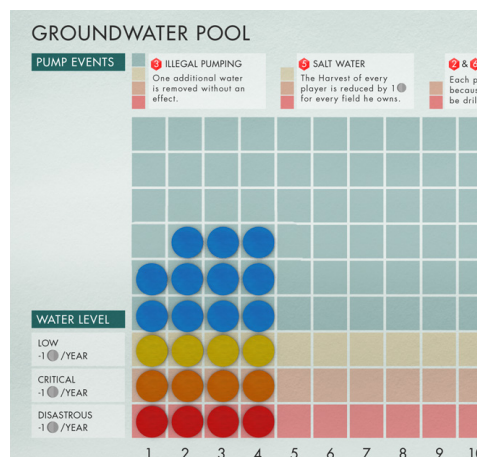
Rent new fields

To rent a new field pay 5 silver coins and take the new field card.

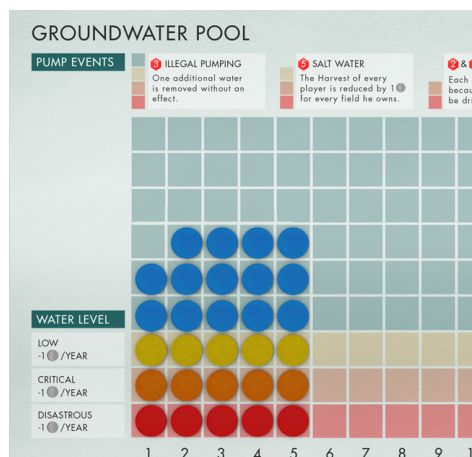


For each new field a new column of water units is added in the groundwater pool.

E.g. if the group had four fields and a player rents a fifth field, a fifth column with water units is added with the same amount of water units as the fourth column:



Before: with 4 columns

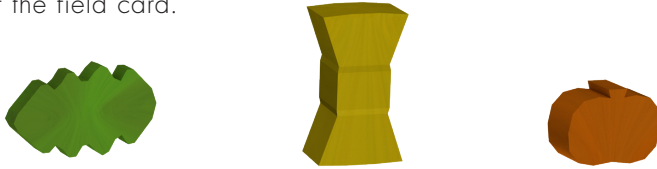


After: with 5 columns

Buy crop seeds

The Player can plant one crop per field. The options are: Single Crop, Double Crop or Vegetables. (To plant vegetables a "Greenhouse" field extension is necessary.)

To mark the purchase of a seed, put the appropriate token on the specific place of the field card.



Single Crop Token Double Crop Token Vegetable Token

Buy field extensions

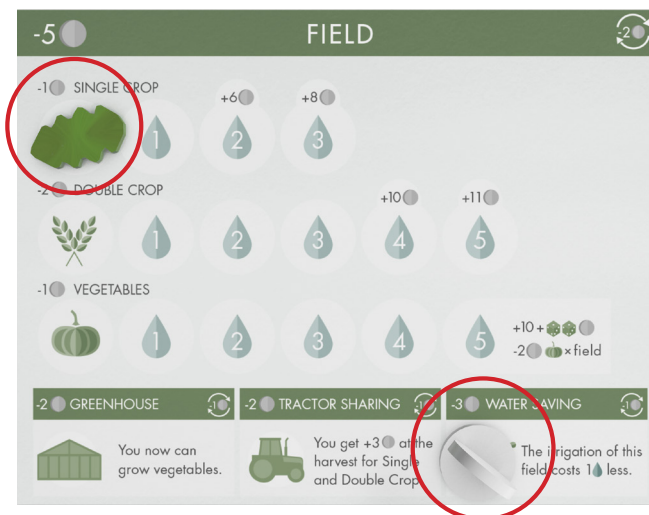
The player can buy multiple field extensions per field, but only one of each type per field. The options are: Greenhouse, Tractor Sharing, Water Saving

To mark the purchase of an extension, put the Extension Token on the specific place of the field card.



Extension Token

E.g. if you choose Single Crop and Water Saving you pay 4 coins in total (1 for Single Crop seeds and 3 for the Water Saving). Your field looks like that with the two tokens marked in red on it:



Greenhouse

Fields with a greenhouse can only carry vegetables.

Tractor sharing

Fields with a greenhouse can not use tractor sharing.

Water saving

Water saving also works on fields with a greenhouse.

Buy player extensions

The player can buy multiple player extensions per player, but only one of each type. The options are shown on the character card: Big Water Pump, Insurance, Water Tank

To mark the purchase of an extension, put the Extension Token (same as for the field extension) on the specific place of the field player card.

CHARACTER



-4 ●

BIG WATER PUMP



Per pumping turn you can take +1 .

-3 ●

INSURANCE



4 times you can avoid a bad event of any kind.

1

2

3

4

-2 ●

WATER TANK



In wet and normal years the water tank fills up:

 1 

 2 





PLAYER EXTENSIONS

Big water pump

During each round in the irrigation phase you can take one additional water per round.

Insurance

Insurance protects against 4 bad events of any kind. After buying insurance for 3 coins, put 4 tokens on the insurance option of your character card. Each time you use the insurance remove one token.

Water tank

If the weather is "wet" or "normal", the watertank fills up during the rain phase. This water can be used during the irrigation phase. The water tank can not contain more than 2 water units.

3. RAIN

The current weather card is turned over and it shows how many water units are added by recharge to the groundwater reservoir:

- Dry weather: 1 groundwater row
- Normal weather: 2 groundwater rows
- Wet weather: 3 groundwater rows

Put the new water units in the groundwater reservoir.

4. IRRIGATION

In turn every player can pump 2 water units from the groundwater pool and put the water tokens on any of his/her fields to irrigate it. (The player can also use the water units from the player extension "Water Tank" to irrigate his/her fields.)

Pumping costs

- Pumping from the normal groundwater level (blue) does not cost anything.
- Pumping from the other groundwater levels (yellow, orange and red) costs 1 coin the first time the player enters this layer in the current year. The next times it does not cost anything for this particular year.

Bad groundwater events

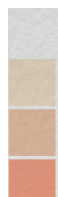
Each time after pumping, the player rolls two 3-sided dice to determine the negative pumping effects. (Note: If the player pumps 3 water units with a "big water pump" extension he/she only casts the two 3-sided dice once.)

The negative events affect all players:

- If the player rolls a 3, a bad event happens no matter in which layer he/she is pumping: One additional water unit is removed from the groundwater (e.g. due to illegal pumping).
- If he/she rolls a 5, a bad event happens, if he/she is pumping from the yellow, orange or red layer: The harvest of every field is reduced by 1 coin.
- If he/she rolls a 2 or 6, a bad event happens, if he/she is pumping from the orange or the red layer: Each player pays 1 coin.
- If he/she throws a 4, a bad event happens, if he/she is pumping from the red layer: rolls player loses the crops of one field. It yields no harvest.



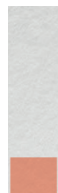
3 ILLEGAL PUMPING
One additional water is removed without an effect.



5 SALT WATER
The Harvest of every player is reduced by 1 ● for every field he owns.



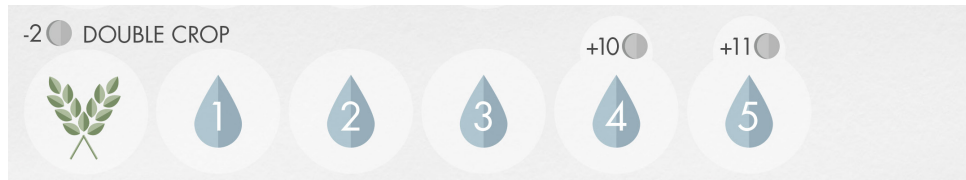
2 & 6 DRILLING COSTS
Each player pays 1 ●, because the wells had to be drilled deeper.



4 SUBSIDENCE
Each player loses the crops of one field. It yields no harvest.

This process is repeated until nobody wants to get more water.
Single crop and double crop can be irrigated sparingly (deficit irrigation) or fully, vegetables must be irrigated with 5 units to yield a harvest.

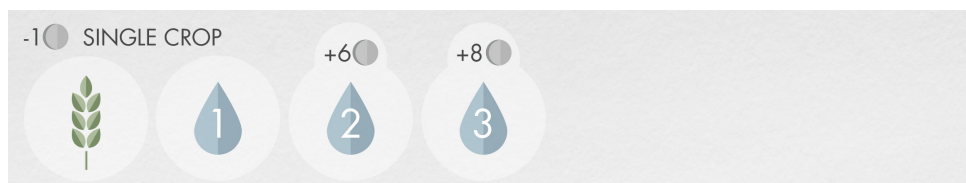
E.g. Double Crop can be irrigated with 4 or 5 water units.



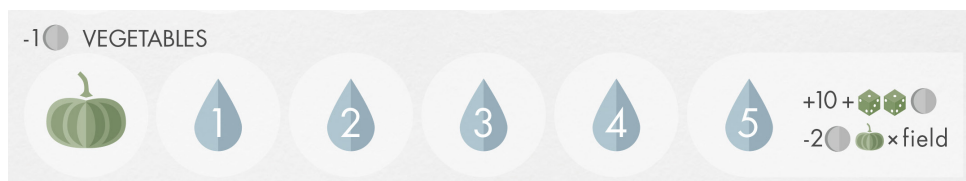
5. HARVEST

Every player earns coins depending on the crop and the applied water units in the irrigation. E.g. for Single Crop irrigated with 2 water units a player earns 6 coins. If the player irrigated with 3 water units, he/she earns 8 coins.

If the field has a Water Saving extension, one water unit less is needed. E.g for Single Crop you earn 6 coins with 1 water unit and 8 coins with 2 water units.



With a Vegetable field the player earns 10 coins plus the result from rolling two 3-sided dice. The ☒ can be treated as 4 coins. This represents the volatility of the vegetable market. The earning is reduced by 2 coins for every other player planting vegetables field. This represents the falling prices if there is oversupply.



After the calculations, the tokens of the crops are removed and the used water units are put in your bag.

(Next year the players have to buy new seeds, invest new labour and pump new water.)

6. UPKEEP

Every player pays his/her upkeep. The total upkeep cost is calculated by adding up the upkeep costs of all fields and all extensions. Every field has an upkeep cost of 2 coins and every field extension has an upkeep cost of 1 coin.

For example, the upkeep cost of the Water Saving is 1 coin (indicated by the red circle).



7. COUNCIL

Together the players discuss the last year and the coming year. They can talk about a common strategy (e.g. concerning which crops to buy) or decide upon a water pumping policy.

Policies

The players can choose one of the predefined policies or create a custom one. If all players unanimously agree on a policy, this policy counts from now on. (In the next year's Council the policy can be removed again with a unanimous vote.) The game master can enforce policies if he likes to.

8. EVENTS

In turn every player draws a card and reads it in private. If the bottom of the card indicates an instant effect, the card is played immediately. Otherwise the player can keep the card covered and can play it whenever he/she decides to.

9. NEW YEAR

The game master advances the year token (the blue ring) one year further and moves the start token (the crown) to the next player.

After year 4 the game finishes. For more information on the game ending please see the beginning of this document.