

Bougouni

A strategy game about sustainable development in the Sahel

Rules of the Game





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Bougouni. A strategy game about sustainable development in the Sahel

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Rules of the game and scoring

1 Game structure and goals

The game centres on the question of how an extended family or household can apply a sustainable household strategy to best meet its needs in an ecologically, socially, and economically difficult context. Its setting is the Sahel zone in the country of Mali.

The game is played with **4 households** – the extended families Cissé, Ouattara, Maiga, and Touré. They begin with the same initial conditions. Using a skilful strategy, the households must secure their livelihood with limited means over several years, both taking advantage of opportunities and carefully preparing for possible risks. At the same time, they must try to improve the overall prosperity of the family and the living conditions of individual household members.

The **households** decide how they wish to secure their livelihood. They may choose to invest their resources in several different income-generating activities (activity cards) in the areas of “Crop production”, “Animal production”, and “Off-farm income”. By investing in “Precautions / Social security”, they can protect their households against possible risks. Investments in agricultural production mainly serve to meet households’ own needs (subsistence agriculture). The sale of surplus goods from “Crop production” or “Animal production” may enable a modest profit at the end of the year. Off-farm activities bear the potential to generate higher earnings, but they require higher investments of capital and labour. Investments in “Precautions / Social security” are necessary to minimize risks or reduce the negative impacts of possible events.

Over the course of several years (1 year = 1 round of play), households must confront a variety of social, economic, and ecological **events**. These decisively influence the economic development and living conditions of the families. If the families successfully apply precautionary measures to prevent harm from events that arise in the course of the game, they receive **risk-protection bonuses**.

At annual assemblies, the **community** – the collective of all households – may use strategically chosen investments (e.g. improvement of transport infrastructure) to advance the development of the whole community. On the one hand, with these measures, the community can influence the general conditions in which the households live and produce. On the other, they can serve a preventative function in relation to possible events and risks. Farsighted collective decisions and well-coordinated individual strategies can support the households and minimize their risks.

Successful households are those that use a sustainable strategy to protect themselves against risks as best as possible, take advantage of existing opportunities, and thus improve their living conditions. Relevant indicators include possessions in the form of investments and cash earnings – but also risk-protection bonuses.

Game pieces	
1	board
226	activity cards
13	community development cards
30	event cards: social, ecological, economic
4	steering cards for the game facilitator
4	nametags for households, nametag for game facilitator, nametag for community council
80	green chips, value: 1 Afro
70	yellow chips, value: 10 Afro
70	red chips, value: 20 Afro
20	risk-protection bonuses
4	information sheets: households
1	information sheet: community council
1	information sheet: game facilitator
	Game log
	Information sheets and game log may be downloaded at: www.hep-verlag.com/bougouni
	Additional game equipment (obtained separately): bell to convene the community assembly community treasury, e.g. small box

2 Actors

Game facilitator

The game facilitator (normally the teacher) must become well versed in the contents and processes of the game in advance. The game facilitator requires an assistant (student).

The **game facilitator** is responsible for introducing the contents, concept, and rules of the game. The facilitator leads the rounds of the game, ensures adherence to rules, and supports the assistant with selling activity cards and disbursing earnings to households. The facilitator records key moments in the game as well as observations of the individual household strategies. These provide important inputs for discussion and reflection rounds when evaluating the game.

The **assistant to the game facilitator** oversees the **game bank** (sale of activity cards, disbursement of earnings, etc.). After implementation of a particular measure, the assistant reads aloud its impacts based on the "Information sheet: game facilitator".

Households

To play, **4 households** are built comprising 3–6 participants each (depending on class size). The members of a household develop their strategy together by selecting activity cards, and make joint decisions about investments to undertake.

Community council

Each household delegates one person to sit on the community council, i.e. the community council comprises **4 people**. At the start of the game, the community council members must choose from their ranks a president and a financial administrator to manage the **community treasury**.

Those delegated have a dual role as both council member and household member. They represent the concerns and interests of their household in council discussions.

At each annual community assembly, the community council must submit two suggestions for how to advance community development while supporting the strategies and interests of individual households.

Community assembly

A community assembly takes place at the end of each round of the game. In the run-up, the council consults and discusses which measures it would like to suggest at the year-end assembly. It must present **2 suggestions** (community development cards) each year based on sound argumentation.

The community assembly (= all household members, including those in the council) decides on measures by means of a vote. The voting procedure is described on page 8.

3 Household and community investments

Activity cards

By investing in activity cards, households develop their strategy. The following categories of activities are available to households for investment:

- **Income-generating activities** ("Crop production", "Animal production", "Off-farm income") lead to earnings, which are disbursed at the end of the given round. The respective investment costs and earnings are written on the playing cards.
- **Intensification measures** increase agricultural production ("Crop production" and "Animal production") and double the related annual earnings. Each intensification measure is valid for only one card "Crop production" or "Animal production" and must be placed with this card. It may not be moved!
- **"Precautions, Social security"** cards contain provisions for use in the course of the game in order to reduce possible risks and to exploit opportunities. Risks and opportunities emerge each year from ecological, social, and economic events (e.g. "Drought", "Political unrest", "Booming economy"). If an implemented provision succeeds in minimizing a risk or optimizing use of an opportunity in the course of the game, the investment is rewarded with a risk-protection bonus. The more bonuses a family obtains over the years, the higher its strategy is rated at the end of the game.

Community development cards

At the annual assembly, the community council submits suggestions for measures towards community development. The community development cards are designed for this purpose. Once measures are approved by the community assembly and implemented, the corresponding community development cards are placed on the playing board.

Financing for these investments comes from the **community treasury**, which the households fund with annual taxes. Additional funding may flow to the treasury as a result of events and measures towards community development. If the funds in the treasury are insufficient for a particular investment, households may agree to pay added taxes at the community assembly or may waive the investment.

4 Events

Event cards

The game is influenced by **social**, **economic**, and **ecological events**. These influences are introduced to the game with the event cards. Every round, each of the four households must draw an event card from the stack of its choice. The given event and related effects are described on the card. Some events only impact the respective household, but most of them affect the entire community. Events can give rise to disadvantages or advantages for the households.

Each event card must be read aloud by whichever household drew it, and then given to the game facilitator afterwards. Any costs or earnings resulting from the event must be calculated immediately and settled using the game bank, with the card placed aside after that.

Tip: The following event cards should not be at the top of the stack when beginning the game, since they make little sense if occurring first: “Livestock diseases” | “Food scarcity” | “Crop rotation” | “Financing community development” | “Population growth” | “Precautions pay off”.

Risk-protection bonuses

Several event cards (noted on cards) offer households the chance to earn risk-protection bonuses, if used as a targeted precautionary measure to protect against a particular danger. Bonuses provide recognition of successful protection measures and are included in the evaluation of household strategies at the end of the game.

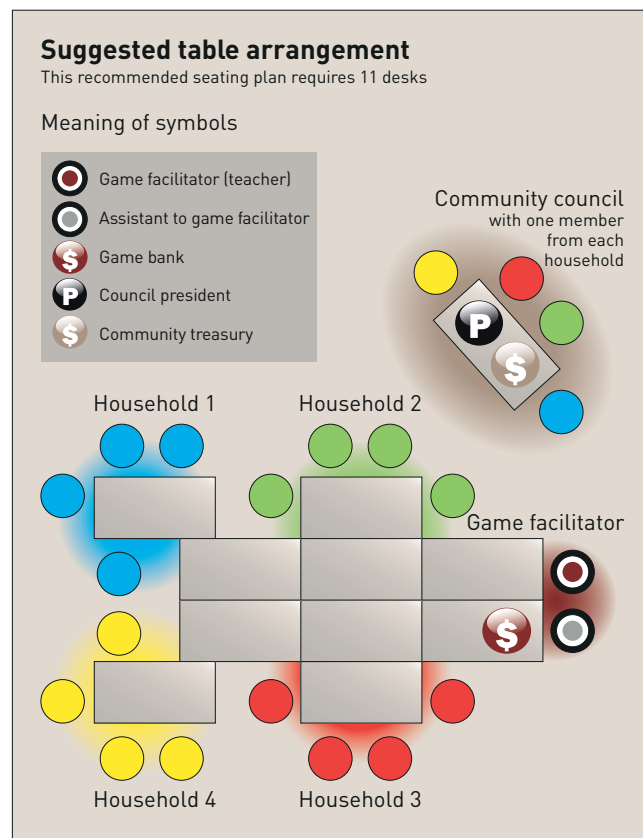
Steering cards for game facilitator

The game facilitator has four steering cards that may be used to influence the game. This is only necessary, however, in situations where the households are doing “too well” or “too poorly” overall, i.e. when they have so much money (Afro) that they can invest virtually without limit, or when multiple households are nearly bankrupt in only the second or third round of play (risking a premature end to the game). The steering cards can serve as an “emergency break”.

5 Game sequence

Preparation

- Set up the tables and arrange seating as suggested (see illustration).
- Place the playing board and stacked cards (3 stacks, face down) in the middle of the table.
- Give the assistant the “Information sheet: game facilitator”, which describes the effects of the community development cards.



Basic configuration of the households and the community

- Every **household** is given a nametag, an “Information sheet: households”, and a game log (see p. 7 for details). In addition, each household should receive **250 Afro** in starting capital (10 × 20 Afro, 4 × 10 Afro, 10 × 1 Afro) as well as 1 card each of “**Millet**”, “**Melons**”, and “**Poultry**”.
- On the **community council’s** table, lay out the “Community development” cards, the “Information sheet: community council”, and the community treasury, which should contain a starting capital of **250 Afro** (10 × 20 Afro, 5 × 10 Afro).

Designate roles

- The game facilitator selects an assistant.
- The class is divided up into four households (four groups of 3–6 people, depending on the class size).
- Each household chooses a **delegate** for the **community council**. The delegates stay connected with their household and regularly check in about their strategy.
- All members of the community council sit together at a table designated for them, study the “Information sheet: community council”, and allocate roles (**president** and **financial administrator**).

Introduction by the game facilitator

The game facilitator explains ...

- the structure of the game and the goals to be pursued by the households and the community (see also Game structure and goals, p. 2);
- the different categories of activity cards (see also Activity cards, p. 4);
- the possible ecological, social, and economic events (e.g. “Drought”, “Political unrest”, “Price collapse”) that could occur in the game (see also Event cards, p. 5);
- the tasks of the households and the community council as well as the purpose of the community assembly (see also Actors, p. 3–4);
- the game sequence, with each round comprising five steps: **1** investments, **2** events, **3** earnings, **4** taxes/payments, **5** community assembly (see also p. 8);
- how to fill out the game log (see also Explanation of the game report, below);
- the **tax system**, requiring each household to pay an annual land tax of 10 Afro into the **community treasury** as well as an earnings tax of 1 Afro per income-generating activity card;
- the meaning of risk-protection bonuses and how they can be obtained (see also Risk-protection bonuses, p. 5).

Game log

Each household must fill out a game log. It enables insight into each household’s strategy when evaluating the game. The log is used to record investments and earnings, as well as chosen strategies. Earnings and losses related to events are not recorded, as the log is mainly intended to provide an overview of the chosen strategy and adaptations.

Rounds of play

In essence, each round (= 1 year) consists of five steps, in which the households and the community council carry out their respective tasks in parallel (see Table).

Step	Household	Community council
1 Investments	<ul style="list-style-type: none"> The households invest in different areas of activity: crop production, animal production, off-farm income, precautionary measures and social security. Existing activities may be sold or exchanged. Each household records its investments in a game log. 	<ul style="list-style-type: none"> The community council obtains an overview of possible measures of community development (cards on "Community development"). Council members individually consult with their respective household about its investments and strategy.
2 Events	<ul style="list-style-type: none"> Each household takes a turn drawing an event card from any stack, reads it aloud, and finally turns it over to the game facilitator. Costs or earnings resulting from the event are calculated immediately and settled using the game bank. 	<ul style="list-style-type: none"> The community council members sit together at the council table and monitor the events and their effects.
3 Earnings	<ul style="list-style-type: none"> Once all of the events have been accounted for, earnings are calculated for each activity card and paid out to the households from the game bank. Earnings are recorded by each household in its game log. 	<ul style="list-style-type: none"> The community council deliberates and decides which two measures it will suggest at the annual assembly and how it will justify them.
4 Taxes/payments	<ul style="list-style-type: none"> Each household calculates its taxes and pays the sum into the community treasury. The taxes consist of a land tax of 10 Afro and an earnings tax of 1 Afro for each income-generating activity card. The households may collectively agree to raise taxes at any time. 	<ul style="list-style-type: none"> The financial administrator collects the taxes from each household. The financial administrator counts the cash holdings in the community treasury.
5 Community assembly	<ul style="list-style-type: none"> The community assembly (= all households including members of the community council) votes on the suggestions of the community council. Each household member has one vote. If a measure is implemented, its card is laid on the board and the assistant to the game facilitator describes the effects of the measure (see Information sheet: game facilitator). Any resulting costs and earnings are calculated and paid. 	<ul style="list-style-type: none"> The financial administrator announces the community's total cash holdings. The community council suggests two collective investments and justifies them with sound arguments. The council president leads the vote. Voting procedure (based on simple majority each time): <ol style="list-style-type: none"> Should the community invest or not? Should one or two measures be implemented? If only one, which one? In case of a tie, the council president casts the decisive vote.

Step 1: Development of the household and community strategies

Each **household** discusses possible strategies and freely decides which activities to invest in. Careful thought should be given to what makes for a sensible strategy. In step 1, new investments may be undertaken and existing activities may be sold or exchanged (see conditions described under “Notes”, p. 10).

In the **first round**, each of the households – given 250 Afro in starting capital – may **invest a maximum of 100 Afro** to have enough left over for possible costs of events as well as to pay annual taxes.

Beginning in the **second round**, the households may invest their wealth **without restrictions** in order to expand their activities. However, they must remember that taxes will still be due at the end of the year and unexpected costs will arise.

At the same time, the **community council** members should sit together at the designated table to obtain an overview of the “community development” cards and to discuss which two suggestions to present and justify with sound arguments at the annual assembly.

The dual role of those in the community council, as a council member and a household member, means that they must continually commute between the council table, where they discuss suggested measures of community development, and their respective household table, where they inform themselves about the chosen household strategy. This enables them to balance the interests and goals of their household with those of community development, while promoting synergies and cooperation.

Steps 2 to 5

Steps 2 to 5 follow the same pattern (see Table, p. 8), with the households and the community council fulfilling specific tasks.

Sticking to the same game sequence, households will develop, change, and adapt their strategies over the years. A **minimum of four rounds** should be played to ensure that each household develops a more or less clearly identifiable strategy.

Notes

- **Sale of activity cards:** If a household gives an activity card back to the game facilitator – regardless of the reason – it will receive only 50 per cent of its investment value in return. However, the households are free to offer the cards to each other for sale or exchange, directly negotiating the sale price together.
- **Interest-bearing loan:** If a household becomes insolvent (and only in this case), it may take out a 60 Afro loan from the game facilitator (see activity card “Loan”) that must be paid back within 3 years including 10 Afro per year of interest. A household is considered insolvent when it no longer has enough money to pay taxes or other necessary costs. The households may also freely loan each other money and negotiate the terms on their own.
- **Cooperation:** The households may cooperate with each other as they wish, as long as they adhere to the other rules of the game. “Mergers” of separate households are not permitted.
- **Household bankruptcy:** If a household becomes insolvent, it may pursue any of the 3 possible courses of action described above. If all these possibilities have been exhausted and the household has failed to restore its solvency, then it is eliminated from the game. Despite this, the other households may continue playing.

End of the game

Since it takes some time for individual strategies and related impacts to crystallize, as many rounds as possible should be played. After concluding step 4 (taxes/payments) in the final round, play is stopped.

The households **take stock** of their living situation as follows:

- **Cash assets:** Contents of their household bank (Afro)
- **Investment assets:** Value of their activity cards (i.e. the value of their implemented investments)
- Number of acquired **risk-protection bonuses**

6 Evaluation of the game

At the conclusion of play, the participants engage in a discussion round to evaluate the game, consisting of the following:

- The strategies of the individual households, including strengths and specific risks
- Events that arose and how the households reacted
- How well did the community council fulfil its role?

Evaluation of the game begins with each of the households presenting the results of their stocktaking (see the first key question below). If one household possesses both the most assets and the most risk-protection bonuses, then it is clearly the household with the most successful strategy. In most cases, however, no such clear result emerges, and the participants must discuss with each other to decide which strategies were successful and which were not.

The following **key questions** (bold) and follow-up questions can serve to stimulate discussion in evaluating the game. They may be adapted to the course of the discussion.

Households and the community take stock

What did your household achieve (result), what did or did not succeed?

- How many Afro are in your household bank and what is the investment value of your activity cards? How many risk-protection bonuses did you obtain?
- What strategy did you pursue? What did you achieve or fail to achieve with it? Did you change strategy in the course of the game?
- Who was the most successful? Was everyone successful? Why?

Household strategies and living conditions

What factors were decisive for your household?

- When did you lose a lot, and when did you gain a lot? Why?
- What difficulties did you struggle with in your household?
- What roles are played by diversification versus specialization, minimization of risk versus willingness to take risks, products for self-subsistence versus cash crops?
- What roles are played by investments in "Off-farm income" and in "Precautions / Social security"?

To what extent can the households shape their living conditions? To what extent are their living conditions externally determined?

- Where and when were you able to exert an influence on the "course of things"? When and why did you feel powerless? What might have helped you in such situations?
- How can households best adapt to a changing environment (ecological, economic, political, and social changes)?

Household strategies and decision-making processes

What decisions by the community contribute to successful household strategies? Which ones hinder the household strategies?

- Which households exerted the biggest influence on the decisions of the community? Why?
- What is the role of cooperation or competition between the households in terms of community development?

- Who succeeds in pushing through decisions at the community level and why? What role is played by sound, well-reasoned arguments in this?

How did the negotiation and decision-making processes go in the households?

- How did collaboration function within your household? Was everyone able to contribute?
- Who succeeds in pushing through decisions and why? What role is played by sound, well-reasoned arguments in this?

Household strategies and sustainable development

How would you judge your chosen strategy based on the dimensions of sustainable development?

- What environmental, social, and economic determining factors and resulting changes (events) greatly challenged your household?
- With what sort of sustainability strategy (investments/measures) did you react to the environmental, social, and economic determining factors and changes?

Suggestion: Ask each household to answer the second question using keywords written on sticky notes, which may be assigned to categories in the model of sustainable development. If desired, the first question may also be addressed in the same way.

Household strategies in the game and in reality

What are the similarities and differences between the game and real life in the Sahel?

- Are the ecological, social, and economic living conditions illustrated in the game comparable to the actual situation in the Sahel?
- How do the investment possibilities, events, role played by chance, and controllability of living conditions as well as the decision-making processes (household and community) in the game compare with the actual reality of life in the Sahel?

What are the most important differences between the living situation of families in the Sahel and the living situation of families in your country?

- What precautionary measures do families in the Sahel and in your country use to minimize existing risks (e.g. social networks and solidarity versus formal means of insurance)?

Household strategies and development cooperation

What needs to change in order to improve the situation of people in the Sahel?

- Who can exert an influence over possible improvements?
- How can development cooperation contribute? What do you consider to be key starting points? What forms of support are helpful? How must they be implemented?

Knowledge gained

What did you learn during the game and in the discussion?

- What became clear to you that you never considered before?
- What is your main insight from the game and from the discussion?

The editors

This game was jointly produced by four partner organizations.



Alliance Sud

Alliance Sud is the development policy umbrella organization of six Swiss non-governmental organizations: Swissaid, Swiss Catholic Lenten Fund, Bread for All, Helvetas, Caritas, and Heks. It actively conducts lobbying work in politics, administration, and business, as well as intensive public relations work on development-related issues of Swiss foreign and domestic policy. A Swiss-wide institution headquartered in Bern, it maintains regional offices in Lausanne and Lugano. In Bern and Lausanne, Alliance Sud also operates development-related documentation centres that are open to the public.

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