Afforestation

Efforts to green the region again with targeted afforestation have begun to pay off.

You benefit directly from wood for personal use and sale. You also benefit from the positive effects on the microclimate, soil moisture, and soil organic matter.

For each Afforestation card, you receive 20 Afro in added value.

Crop rotation

Crop rotation helps to maintain soil fertility and to reduce the risk of plant diseases.

Those who follow the rules of balanced crop rotation receive an added profit of **5** Afro for each set of cards combining *Millet*, *Peanuts*, and *Cassava*.

Those relying on monocultures, i.e. cultivating only one or two crops, suffer damage equal to 50 per cent of their annual earnings from all crops.

Disasters and conflicts

The region suffers the consequences of a late rainy season and an invasion of locusts. This exacerbates simmering conflicts.

If the community has established a *Peace Court*, then it succeeds in quickly solving the conflict and combatting the locusts. Production losses amount to only 10 Afro per household.

Without a *Peace Court*, the situation escalates. Besides production losses, major material and immaterial damage results from the violent conflict. Each household loses 25 Afro.

In addition, 40 Afro are needed from the community treasury to pay for repairs and measures to restore trust.

Drought

Persistent aridity causes meagre harvests and drought effects on animal herds.

Earnings from all cards in *Crop production* and *Animal production* are reduced by 50 per cent.

If the community invested in *Irrigation systems*, then its crop losses are negligible. In this case, the 50 per cent earnings loss only applies to animal production.

Those who have *Stocks and savings* profit from the current high prices and receive 15 Afro.

Livestock diseases

Poor climatic conditions promote the rapid spread of disease.

Cattle are particularly affected – especially if the community has no Veterinary services. The cattle population is decimated. The following rules apply to all households:

| Cattle | Damage | | |
|----------------|----------------------------------|--------------------------|--|
| (no. of cards) | Without veteri- nary services | With veterinary services | |
| 1–2 | Pay 10 Afro | Pay 7 Afro | |
| 3-4 | Give up 2 cards | Give up 1 card | |
| ≥ 5 | Give up 3 cards | Give up 2 cards | |

For *Sheep and goats*, the damage with or without veterinary services amounts to **2 Afro** per card.

Famine

The whole region is affected by crop failures. It is a consequence of the massive spread of plant diseases. The threat of famine looms.

Those possessing at least one of the following cards are spared:

- · Stocks and savings
- Solidarity
- Family planning

These households have developed a strategy to handle the risk of crop failure; they escape unharmed and receive a risk-protection bonus for each of these cards.

The others suffer damage in the amount of 40 Afro.

Cards Solidarity, Stocks and savings, Family planning

→ 1 risk-protection bonus

Food scarcity

Drought and disease cause major damage to crop production. Food prices are high and supplies are low.

Those producing enough to meet their own needs have an advantage. Everyone else must pay a lot for food.

Self-sufficiency is ensured for those producing food (Millet, Cassava, Peanuts, Sesame, Melons) in the following quantities:

| Round | Self-sufficiency ensured by (no. of cards) | Cost per missing card |
|-------------|--|--------------------------|
| 1 | 3 | 10 Afro |
| 2-3 | 4 | 10 Afro |
| 4-5 | 6 | 15 Afro |
| 6 and later | 7 | 20 Afro |

Investments in *Family planning* are rewarded with a risk-protection bonus.

Card *Family planning*→ 1 risk-protection bonu

Integrated agriculture

The skilled combination of activities in animal production and crop production promotes beneficial interactions and increases yields.

- Those who fulfil **both** of the conditions listed below receive a 50 per cent discount on *Intensification* cards (for the respective area):
- Crop production: Cultivation of at least 4 different products. The legume *Peanuts* must be among them
- Animal production: Keeping of at least 3 different types of animals (i.e. 3 different Animal production cards).

Overgrazing

Overgrazing damages plant cover and endangers the regeneration of vegetation. This causes soil erosion and decreases soil fertility.

If the cumulative livestock of all households – *Cattle* and *Sheep and goats* – exceeds 6 cards (valid in rounds 1 and 2) or 8 cards (round 3 and later), this means that grazing areas are subject to overuse.

For each card above this limit, every household must pay 10 Afro annually for conservation measures – up to the point when an ecological balance is restored (i.e. the specified limits are adhered to)

Supply shortfall

Many farmers were surprised by the premature start of the rainy season. Those who did not prepare the fields for sowing early end up falling behind and the seed develops poorly. This year's harvests are below average, causing supply shortfalls in many places.

Households whose production of *Millet* and *Cassava* does not comprise at least 3 cards (valid for rounds 1–3) or 4 cards (round 4 and later) must purchase food in the amount of 30 Afro.



Booming economy

The global market situation and current high demand for labour in the city are having a positive effect on economic development in the region.

Investments in a *Job in the city*, in *Crafts*, and in *Processing agricultural products* pay off in the amount of 6 Afro each in added earnings.

The community treasury receives **50 Afro** in budgetary surplus.

Diversified income

The region is characterized by climate variability. Households with a diversified strategy are at an advantage, since their economic success does not depend on individual activities. Their risk of suffering a total failure is small.

Diversified strategies are rewarded.

Areas: Crop production, animal production,

off-farm income

Activities: ALL cards that generate income, e.g. millet, cassava, livestock, bees, day

labour, crafts

| Round | No. of areas, no. of different activities Area Different activities | | Bonus (Afro) |
|--------|--|------|-----------------|
| 1 | 2 | 5-6 | 10 |
| | | ≥ 7 | 15 |
| | 3 | ≥ 6 | 20 |
| 2 | 2 | ≥ 9 | 10 |
| | 3 | 8 | 15 |
| | | ≥ 9 | 20 |
| 3 | 3 | 9 | 10 |
| onward | | ≥ 10 | 15 |

Energy prices

Fossil fuel prices have risen sharply. The households are forced to replace use of gas, kerosene, and petrol with use of wood or charcoal, wherever possible.

Investments in afforestation pay off, since increasing demand also drives up the prices of wood and charcoal. Each *Afforestation* card achieves added earnings of 15 Afro.

The high energy prices cause added costs of **5 Afro** per *Transport service* card and *Grain milling* card.

If the community has invested in *Electricity supply*, then part of the fossil fuel energy use may be replaced by electricity and all the households save 10 Afro (amount paid out by the game facilitator).

Export opportunity

A newly developed product made from sesame and honey enjoys great success in the European market, in turn affecting your local market. Demand for honey and sesame rises sharply.

Sesame, Bees, Retail trade and Processing agricultural products immediately achieve additional earnings of 4 Afro per card.

Fair trade certification

The regional cotton cooperative has signed a contract with a European importer committed to fair trade. Thanks to expert support, the cooperative succeeds in making the necessary changes for sustainable cotton production as well as addressing labour issues. With that, it fulfils the requirements for fair trade certification and may sell its goods with the Max Havelaar label.

From now on, all cotton producers receive a fair price for their cotton, i.e. added annual earnings of 3 Afro per *Cotton* card.

In addition, 40 Afro in fair trade premiums are received by the community treasury.

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Financing community development

The community council has a unique opportunity to take out a loan on very good terms, in order to fund community development.

If all the households agree, then the community council takes out a loan of 100 Afro. The loan must be repaid within the next 2 years. The total interest amounts to 6 Afro.

Repayment starting next year: **53 Afro** per year over 2 years, due at the start of the community assembly.



Heavy demand

Due to heavy demand, the market price for grains has risen sharply.

If you produce *Millet* AND have *Stocks and savings*, you can sell the surplus at a profit. You receive **20 Afro**.

If you produce *Millet* but do not have any *Stocks* and savings, then you cannot profit because this year's crop has not yet been harvested.

If the community has invested in *Modernizing the village market*, then 30 Afro in market taxes are received by the community treasury.

Poor road conditions

A good road network requires constant maintenance. Due to drastic state budget cuts, the road network threatens to fall into ruin.

The need for frequent vehicle repairs makes transportation more expensive. Each *Transport service* card suffers a loss of 4 Afro, each *Retail trade* card a loss of 2 Afro.

If the community has invested in *Road construction* and maintenance, then the costs are reduced to 1 Afro per card. In addition, the local market profits from higher turnover, bringing in 25 Afro in market taxes to the community treasury.

Price collapse

In the fast-growing Asian countries, cotton production is heavily supported by state subsidies and the area under cultivation continuously grows. This causes an oversupply in the world market and a sharp fall in price.

Under such conditions, local cotton production fails to earn even enough to cover costs.

Cotton does not record any profits this or next year.

Due to the high price of pesticides, you lose an additional **3 Afro** for each *Cotton* card.

School uniform

You greatly value enabling your children to go to school and are willing to make sacrifices for this. In addition to the school fees you must pay, this year you must manage high costs for the purchase of new uniforms.

If you keep *Sheep and goats*, you can now profit from their function as a means of savings. You can easily sell a couple of young animals in order to pay for the uniforms.

If you have *NO Sheep and goats*, then you must pay 10 Afro for the purchase of uniforms. These costs do not apply, however, if you have already invested in *Education*.



Infectious diseases

Malaria, like other infectious diseases, is a constant danger to the health of your family. Due to the long and intensive rainy season, there are more cases than usual this year.

If you've been careful and invested in *Health*, then no additional costs arise for you. You receive a risk-protection bonus.

If you don't have this card, you must pay 20 Afro for medical treatment and sacrifice 3 Afro per *Off-farm income* card as a result of lost earnings.

If the community has a *Health system*, then the losses per household cannot exceed **25 Afro**.

Card *Health*→ 1 risk-protection bonus

Information advantage

Having reliable, up-to-date information is essential to respond adequately to new situations and take advantage of new opportunities

If you have already invested in *Information resources*, you may take an advance look at the next event card in each stack – this gives you an information advantage, enabling preparation for coming events.

Timing of advance look: After all of the event cards in the current round have been played.

Valid only for this household!

Labour migration

For years, young people have been leaving the village in search of paid work. Many go to the closest city, while others go abroad. This leads to labour shortages in the villages. As a result, many fields have been left fallow for two years.

For each Job in the city card that a household has, it must return 2 of its Crop production or Animal production cards to the game facilitator; for each Day labour card held, 1 Crop production or Animal production card must be returned.

Political unrest

Political unrest is destabilizing the country. Local administrators have ceased working, and the climate of uncertainty fuels growing corruption.

If the community has failed to invest in *Fighting corruption*, it must bear social and political costs in the amount of **70 Afro**.

Rumours and the unstable situation negatively affect *Retail trade, Crafts,* and *Processing agricultural products*. Each of these cards suffers 2 Afro in lost earnings.

Those who invested in *Information resources* possess reliable information and can respond more quickly. Their earnings loss is reduced to 1 Afro per card. They also receive a risk-protection bonus.

Card *Information resources*→ 1 risk-protection bonus

Population growth

Despite increasing yields in recent years, food production cannot keep pace with population growth. Growing numbers of households face shortages and food scarcity.

Anyone not currently practising *Family planning* must begin paying 10 Afro to the game facilitator EACH YEAR for the purchase of staple foods. This cannot be undone by future investments in family planning.

Those who are currently practising *Family plan-ning* receive a risk-protection bonus.

Precautions pay off

What precautionary measures and how much risk can a household afford?

This question arises repeatedly and can never be answered definitively, due to all the factors in play.

Today, however, all investments in *Precautions / Social security* pay off. You receive a bonus of **5 Afro** for each such card.



Card *Family planning*→ 1 risk-protection bonus

Skilled labour

Thanks to good training and positive economic development, increasing numbers of young people are finding skilled, well-paid jobs in various enterprises. Your children express gratitude for your enabling them to get a good education.

Every investment in *Education* or *Information resources* results in a one-time bonus of 15 Afro.

If the community invested in the *School system*, then the bonus increases to 20 Afro and the community treasury receives revenues of 40 Afro in earnings taxes.

Stroke of fate

A family member has been seriously injured and taken to the hospital. The doctors are refusing to perform surgery without advance payment. You are in desperate need of help.

If you have invested in *Solidarity*, you can now count on the generous support of relatives, neighbours, and friends. Each household contributes 10 Afro in solidarity to the 40 Afro advance payment. In addition, you receive a risk-protection bonus.

If you cannot count on the solidarity of others, then you must cover the ${\bf 40~Afro}$ payment on your own.

Valid only for this household!

Card *Solidarity*→1 risk-protection bonus

Wedding

Your son wants to marry. Your family's social status requires that you present a bride price of 50 Afro to the family of your future daughter-in-law.

If you can afford to turn over the **50** Afro to another household (of your choice), then you will gain in social prestige and secure the loyalty of the other household. The game facilitator gives you a *Solidarity* card (or – if you already have one – **30** Afro instead).

Prerequisite: Your household must remain in possession of assets worth at least 200 Afro (cash and investments)

If this is not possible for you, then your son must leave the village and you must invest in a *Job in the city*.

Valid only for this household!

Women's group

The women in the community have formed a women's group and applied to an aid organization for support. They want to get more out of what they produce and to sell their goods more profitably. The aid organization supports them in developing new products, enhancing cultivation, improving storage and processing of agricultural products, and establishing new marketing channels. The women successfully raise their household income.

In this round, the following cards earn an additional **2 Afro** each:

- · Millet, Peanuts, Cassava, Sesame, Melons
- Poultry
- Processing agricultural products
- Grain milling
- Retail trade
- Crafts

Steering cards: Game facilitator

Ethnic conflict

A long-simmering ethnic conflict over land resources breaks out. It goes back to the days before the country's independence, but has resurfaced due to rumours that the government intends to lease disputed land to a foreign investor.

Despite government appeals and intense engagement by councils of elders, mediation efforts fail between the conflicting parties.

The armed conflict causes immense suffering and destruction.

Each household loses 2 *Crop production* cards as well as its *Off-farm income* card with the highest investment value.

Steering cards: Game facilitator

Protection of biodiversity

The national government regularly receives money from the "International Fund for Protection of Biodiversity". It uses the funds to support biodiversity protection projects that are initiated and implemented by communities.

Your community has implemented a very successful and creative information and education campaign on the importance of biodiversity. It received lots of media attention and won a competition for innovative biodiversity protection projects sponsored by the "Fund for Protection of Biodiversity".

A portion of the prize money is used to continue the project. The other part is used to compensate the households for their significant engagement. Each household receives 30 Afro (or 50/100, at the discretion of the game facilitator).

Steering cards: Game facilitator

Agricultural extension services

Your community lies in the intervention area of a large agricultural support project led by an international organization. The newly established agricultural extension services are efficient and competent. They support the introduction of higher-yielding farming methods and the marketing of production surpluses.

All households benefit from this. Each household receives 30 Afro (or 50/100, at the discretion of the game facilitator).

Steering cards: Game facilitator

Economic crisis

A poorly functioning government, corruption, and bad economic policy decisions drive the country into a severe economic crisis. As a result of inflation, all households lose a portion of their value, equal to 30 Afro (or 50/80/100, at the discretion of the game facilitator).

The households must turn over the corresponding amount to the game facilitator.