

An aerial photograph of a desert landscape. A prominent feature is a long, straight fence line that runs diagonally from the top left towards the bottom right. The terrain is a mix of reddish-brown soil and sparse, dry vegetation. There are several small, green, bushy plants scattered across the landscape. The overall scene suggests a managed or protected area in an arid environment.

A CALL FOR ACTION
GREEN DESERT



This is a request, a prelude to contact and possibly cooperation.

We are two organizations working in the Sahel zone in Mali on projects to counteract desertification, and support the creation of a new, green and sustainable environment for the people that live there. But the challenges we face are greater than the powers we have to meet them. We know a lot, can do a lot, have a lot of experience – but not enough. So we seek support, in the form of knowledge, practices and experience – anything that can help us help the people in Pays Dogon recreate their own, green and healthy environment. We have something to offer, too – our experience from 25 years of involvement with the people in this area, and 10 years of efforts to re-green the desert and create this new landscape.

Please allow us to introduce ourselves, the land and the peoples we work for, the challenges we meet, and to clarify the support we seek.

Saidou Temé, director Association Dogon Initiatives

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WHO ARE WE?



PPD and ADI

Partners Pays-Dogon (PPD) is a Dutch NGO aiming to improve the living conditions of people in Pays Dogon, in central Mali. PPD works in partnership with the local NGO Association Dogon Initiatives (ADI) and is active in around 80 villages in the Dogon area. PPD and ADI take an integrated approach towards local development by implementing projects through six closely related programs: education, water, green desert, culture, women and health. Our work is based on the principle of local leadership: in all our programs and projects, we work on local request and in partnership with local communities. We are familiar with the village structure of deliberation and decision-making and have a good connection with the local government (mayors, education authorities). We are connected to the local network of NGOs and experts in the field of agriculture and water. ADI has a dedicated team of 16 people working at the community level. Together, we directly involve 80 000 inhabitants in our activities.

Partnership as key

The work of ADI is coordinated from their central office in Sangha. The outreach to villages is done through team members based in four epicenters in Sangha, Koundou, Wadouba and Sogou Yaguem. In the partnership between ADI and PPD, the team of ADI is in the lead. The team of volunteers at PPD assists with network, fundraising and advise where needed. The annual budget of ADI/PPD is collected through fundraising, private donations and corporate sponsorships.



ADI team in Sangha

Six integrated programs

Our overall program has six components, which are all interrelated – moving one moves the others, too.

In our Green Desert program, we work with local communities by planting dunes, creating forest zones and market gardens. Our women’s program currently consists of 80 groups with a total of 8000 women, and is aimed at training, female leadership and cooperation. It also hosts a micro-credit program. In our health program we train women to become health advisers and give education to women’s groups on issues like reproductive health, nutrition and family planning. In our education program we have built numerous schools (most recently, the Practical Training School in Sangha) and organize teachers’ trainings in literacy (through the ‘Les Mots Imprimés’ approach) and in entrepreneurship. In our water program we execute local ‘water plans’ which include solutions for rainwater harvesting, the drilling of boreholes, the installation of ‘Blue Pumps’ and the building of solar-powered water towers. In our culture program we work together with local communities to restore UNESCO heritage sites and teach children about their cultural heritage.

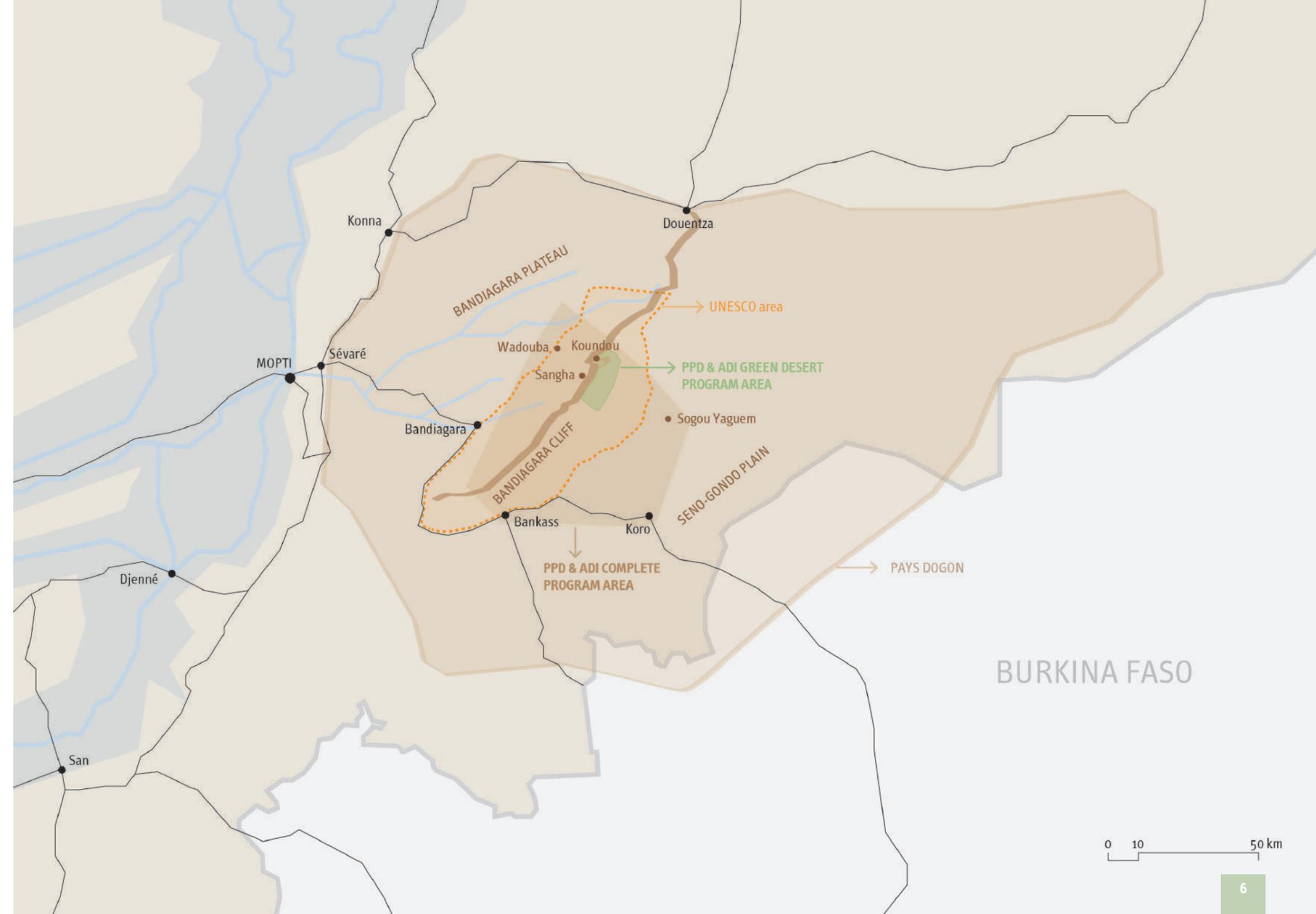


Program Area

Our programs focus on a large area around Sangha, both on the plateau west of the cliff and in the plain stretching from the foot of the cliff.

Did you know?

- With an area of 1 240 190 km², Mali is 30x bigger than the Netherlands.
- According to 2021 estimations, Mali has a population of 20 300 000.
- Pays Dogon is located in Mopti region, but its borders are not strictly defined. Roughly, Pays Dogon stretches through 4 circles: Bandiagara, Bankass, Koro and Douentza. Together, they have more than 1 600 000 inhabitants.
- The population reached through the projects of PPD and ADI is estimated at roughly 400 000, with 80 000 being directly involved through women's groups activities.
- Our Green Desert Program is mostly focused on the area between the cliff and dunes around Koundou, but our complete program reaches much farther.



LANDSCAPE IN LAYERS



Pays Dogon

Pays Dogon is located in central Mali, in the transition zone from dry savanna to desert: the Sahel.

The landscape consists of different layers. The plateau of Bandiagara rises from the Inner Niger Delta in the west to the low-lying plain of Koro in the east. The transition is the 200 kilometer long and 100 to 200 m high steep cliff, the Falaise de Bandiagara.

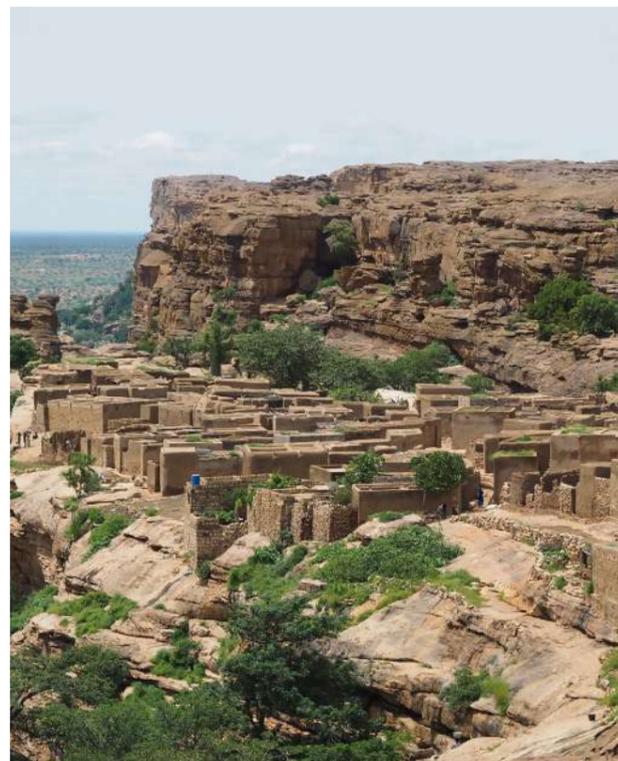


Schematic cross-section of the landscape



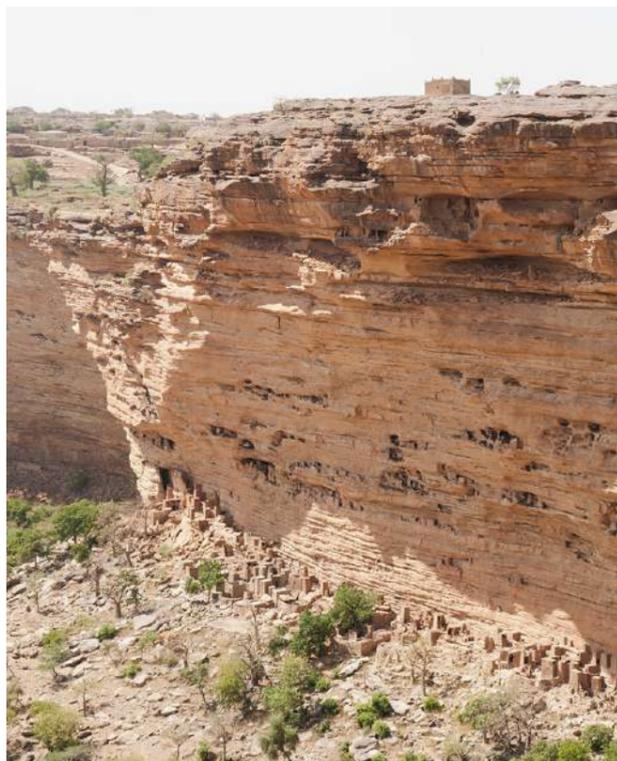
PLATEAU

The plateau is flat and rocky, gradually sloping up eastwards, intersected by waterways. There is hardly any soil on this bare rock, except along riverbeds. Agriculture is hardly possible here - if only because the little soil cannot hold enough water. Along the riverbeds a limited variety of vegetables and onions can be cultivated, mostly on a small scale. Here and there water can be found in the rock. Some streambeds hold water all year round, others fall dry during the dry season.



CLIFF

The cliff, a geological fault, is an almost vertical rock wall. The base of the cliff is covered in rock rubble and forms a steep slope. The rock continues underneath the plain floor. At the bottom of the cliff a temporary river appears during rainy season (August - October). Throughout the year it dries up again, leaving a series of lakes and ponds, some of which keep their water all year round. Water outlets from the plateau flush water onto the plain, cutting through the dune line.



PLAIN

The plain's soil consists of loam and clay, covered by a natural vegetation of scattered trees and shrubs, slow growers with great endurance, which regulate their water balance themselves. Grass and herbs partly cover the ground, but grazing and logging for firewood have reduced the vegetation cover. The soil is suitable for agriculture, but the great depth of the groundwater limits its use. Where water is available year-round, horticulture is possible, otherwise agriculture is limited to the rainy season.



DUNES

On the plain floor elongated sand dunes lie parallel to each other, and almost parallel to the cliff. The dune nearest to the cliff is the highest: several dozen meters high and a few hundred meters wide, leaving a narrow zone by the foot of the cliff, where the oldest fields of the Dogon lie. The dunes used to be vegetated and fairly stable. Nowadays, they are bare in many places - due to grazing - and prone to water erosion in case of heavy rainfall.



Climate

It is warm in Pays-Dogon. Temperatures can run up to 50 degrees Celsius in the dry season. Rains fall between August and October; it is dry the rest of the year. The country turns from green to yellow in just a few months. The amount of rain varies per year, one year 300 mm, the other 700 mm; with a decreasing tendency. After rain, the water infiltrates to the aquifer deep into the ground: in the plain near the cliff up to 25 meters below the surface, farther away up to 80-100 meters. Therefore, year-round large-scale agriculture is not possible. Crops are cultivated and harvested only during the rainy season.

Farmers and Herders

Since time immemorial the Dogon and Peul (or Fulani) have lived together in Pays-Dogon. The Dogon are predominantly sedentary subsistence farmers, mainly growing millet. Back in the 15th century they settled their villages high on the cliff slope, safe from threats from the plains. As the threats receded, the next generations of villagers descended to the foot of the cliff. The Peul are predominantly semi-nomadic livestock keepers. They used to travel far and wide but are now contained by borders and growing agricultural activity. Dogon owning livestock usually employ Peul to herd their cattle. After harvest, both Dogon and Peul peoples' cattle feed on what remains in the Dogon fields and fertilize the land. In theory, two ways of life in symbiosis, but in practice a fragile coexistence that is prone to conflicts over the use of available land.



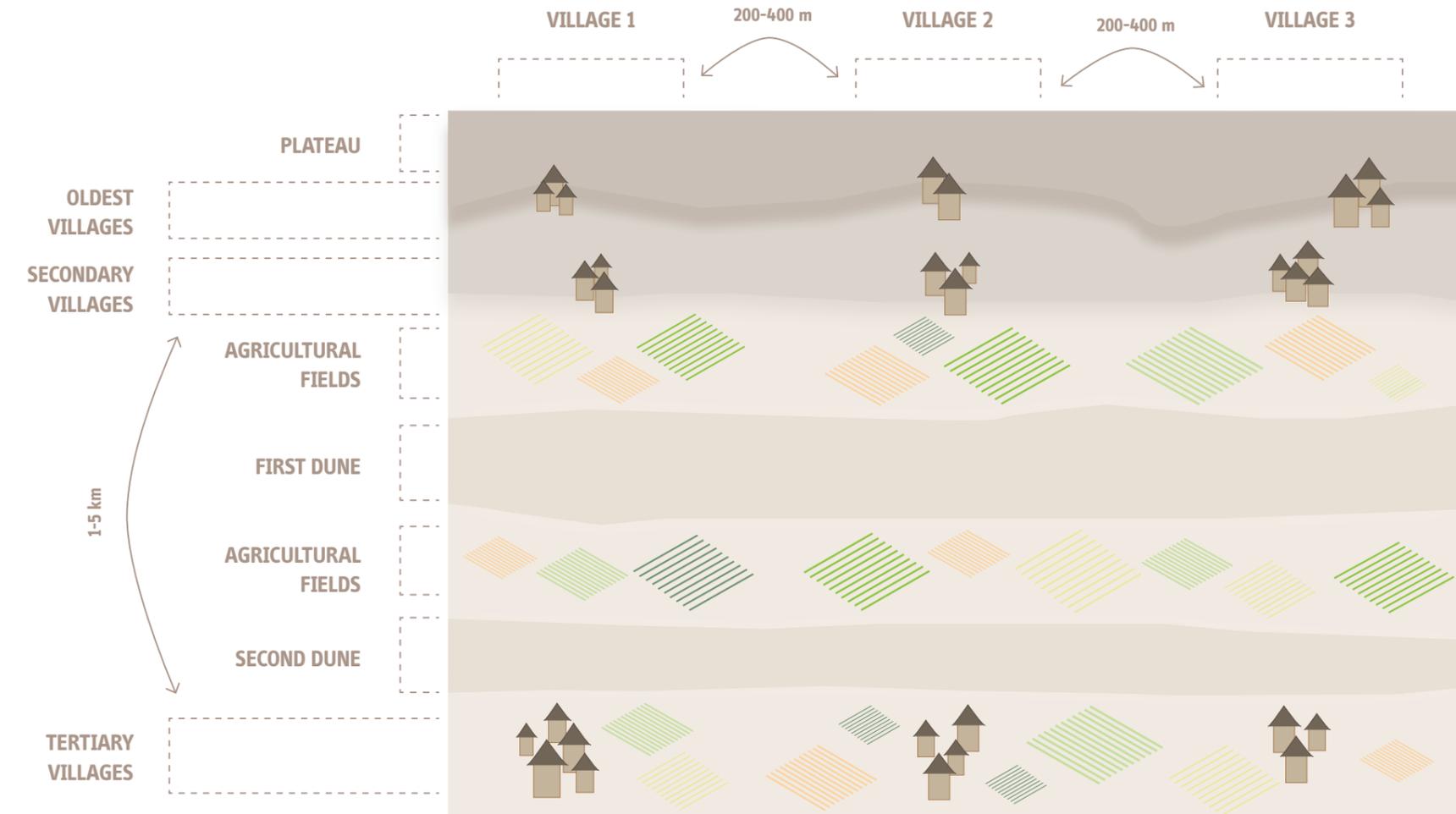
During the rainy season, temporary rivers are created at the foot of the cliff.

Cells – the landscape elements

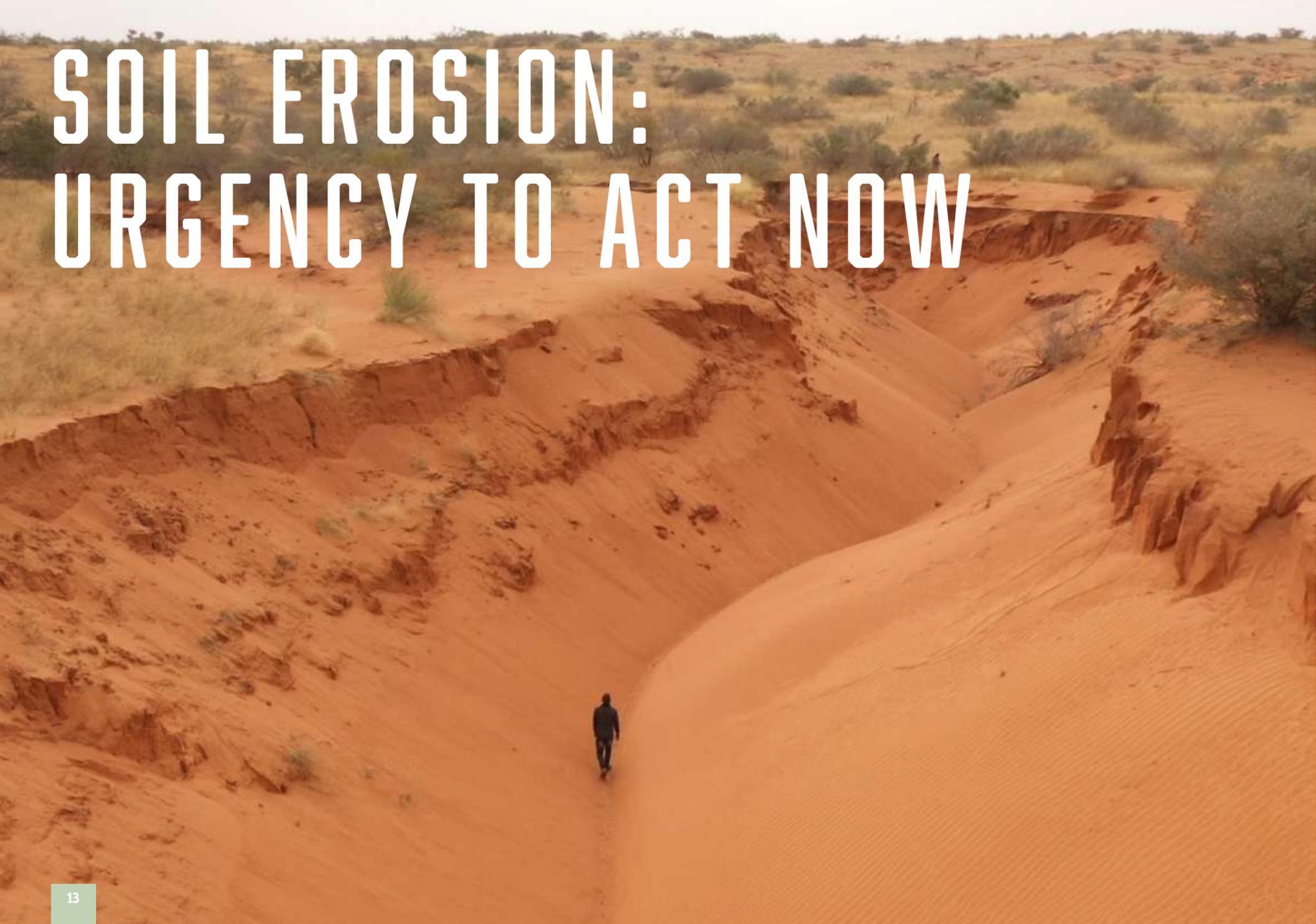
The landscape in the plain can be seen as composed from 'cells': socio-physical ensembles that repeat themselves along the cliff. Each cell has the oldest Dogon village and its sacred places in the cliff, with secondary village extensions at the foot of the cliff, followed by vegetable gardens, cattle lodgings and the oldest fields. Then follows the first dune, oldest and highest, after which lie secondary agricultural fields.

At 1-5 kilometers from the base of the cliff a third-generation Dogon village appears, linked through family lines and bearing the same name as the old (or first generation) village up the cliff. At some distance, fourth- or even fifth- generation Dogon villages can be found. Along the cliff, these socio-physical landscape elements repeat

themselves, their axes about 200 to 400 meters apart. Peul villages speckle this pattern, recognizable by the different architecture of their dwellings. In many villages Peul and Dogon live together – both keeping their own language and cultural lifestyle.



SOIL EROSION: URGENCY TO ACT NOW

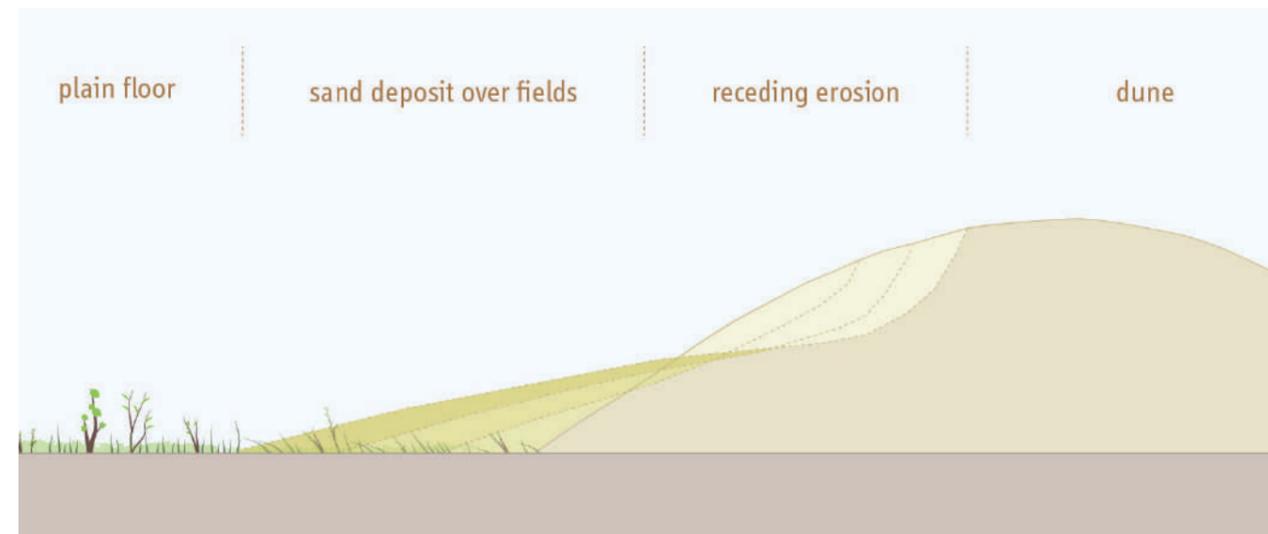


Time is running out

From the beginning we have been using a bottom-up and community-based approach for greening the desert and strengthening local agriculture. However, the environmental challenges in Pays-Dogon need a much larger response than our partnership alone can provide. Last year again massive erosion gullies were created by some of the heaviest rainfalls in years. In one area 115 millimeters of rain came down in just two days, destroying forest zones and heavily affecting agricultural lands. The need for larger interventions is obvious. We need to scale up our efforts to curb further environmental degradation in Pays Dogon. If we don't act now, we will not be able to prevent further loss of livelihoods, ultimately resulting in a time where Pays Dogon will simply become inhabitable.



Dune fixation against soil erosion. Community initiative and participation are at the core of our programs.



Soil erosion

Erosion begins near the top of the dune: water and wind move the sand to lower elevations where it covers agricultural fields. Heavy rainfall is especially a problem, as it creates deep erosion gullies on the dune face. The water rushes down and carries along the fine dune sand, which is then deposited on the fields.

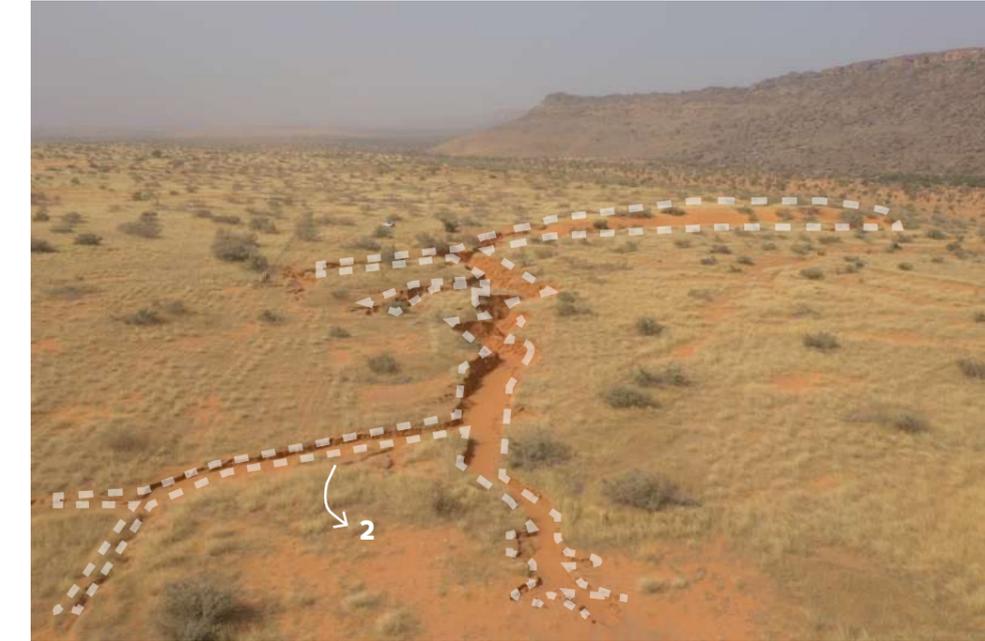


PROBLEM 1 DEEP GULLIES

Old and new erosion gullies scar the dune, eating away the fertile fields and threatening more fields further below. Last year, a 115 mm shower created 5 m deep erosion gullies. Our current efforts of planting euphorbias to fixate the dunes don't seem to be enough to fight the strong water stream caused by heavy showers. Even the trees, with roots that are 1-2 m deep can't stabilize the soil that has so little cohesion.

Image interpretation

- 1 - Euphorbia bushes planted in the past decade don't seem to be able to resist the heaviest water flows
- 2 - The erosion always starts gently higher up in the dunes. How can we stop the problem at its source?



PROBLEM 2 SAND DEPOSIT OVER FIELDS

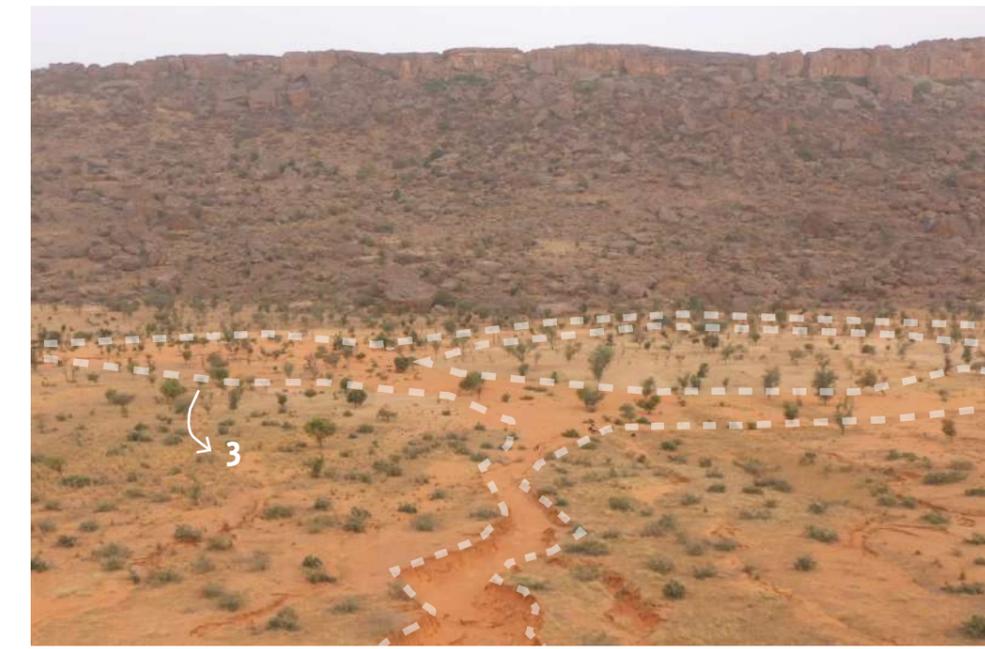
As the rainwater created gullies through the dunes, the sand is brought further and further down. At the foot of the sand dunes, erosion deposits sand over the clay valley floor. This non-fertile sediment first destroys the existing yield, covering it almost completely, and furthermore makes the field unusable for the next agricultural season.

Image interpretation

1 - The sand sediment almost completely covers the field, destroying the yield and making the land unusable for next season.

2 - The strength of rainwater streams rips the crops out of the soil.

3 - A line dividing different soil colours clearly shows that the sand sediment already reached inhabited villages.



FOOD AND NUTRITION INSECURITY

A complex challenge

In the last decade, food and nutrition security has steeply fallen in Pays Dogon, due to a combination of factors. Erosion-driven sand deposits on the fertile fields and temporary fast-flowing rivers have diminished the surface of arable lands. As the population grows, more mouths have to be fed from less available land. The effects of climate change also impact nutritional security. The duration of the rainy season has shortened over the years, and heavier showers fall in a shorter time span, causing great damage to the landscape. The shortened rainy season also shortens the time crops can grow, which results in lower yields and makes it hard to retain rainwater for later use in irrigation. To make things worse, the frail safety situation in the region has affected local production. Working the fields has become a hazardous endeavour. Consequently, not all arable land is in use now. Having a smaller harvest not only effects the food supply for the coming months but also next year's production, as part of the harvest is used as seed. The combination of a diminished agricultural time slot, a decreased agricultural area and decreased productivity has led to a steep fall in food security. With a growing number of internally displaced people, there is simply not enough food to feed all inhabitants. This leads to a growing reliance on emergency food aid.



1. REVERSING ENVIRONMENTAL DEGRADATION

In 2012, ADI started its Green Desert Program mobilising local communities to help fight the advancement of the Sahara Desert by planting Euphorbia to fixate the dunes, creating forest zones, starting tree nurseries, taking preventive measures to curb soil erosion, and organising trainings in agro-forestry. Since 2017 the Green Desert Program also includes the creation of school gardens for primary schools and women's gardens for women's groups. In addition, ADI has been implementing an extensive water program. In collaboration with the local communities, evaluations are made of the available water supplies and 'water plans' are executed to improve the availability of both drinking and irrigation water. The ADI 'water team' installs the so-called Blue Pump (a heavy duty and durable yet affordable water pump), creates or improves boreholes and water wells, repairs and builds

rain harvesting dams and is currently executing the build of eight solar energy driven water towers. The Green Desert projects started from scratch: community requests generated ideas for solutions, fed by local knowledge and expertise, and by scientific examples; an experimental approach, under the motto 'learning by doing'. Over the years successes led to enhancements, and failures to new ways – we have learned what works and what doesn't. ADI now has vast experience with plant species adapted to the physical circumstances, of erosion and water flow, with feasible crops and garden produce – all integrated into the ways of the local communities, including transport, markets and education. This also includes experience with what does not work, as many generic best practices are not applicable in Pays Dogon.

REVERSING
ENVIRONMENTAL
DEGRADATION

FOOD AND
NUTRITION
SECURITY

2. IMPROVING AGRICULTURE

Since the beginning of 2020, PPD and ADI are supported by a consortium of Dutch and Malian partners (financed by the Dutch Ministry of Foreign Affairs through Nuffic), with the aim to actively strengthen resilience to nutritional insecurity. With a combination of formal education, a non-formal train-the-trainer program and the development of a peer-to-peer education platform, 'Projet DJAM' aims to increase and diversify local production in agriculture, introduce techniques for adding value to local produce and stimulate small-scale entrepreneurship in agriculture.

IMPROVING
AGRICULTURE

OUR AIMS

1 THRIVING SOCIETY



We wish to find ways to enable the Dogon and the Peul, who have lived here for ages and are culturally deep-rooted, to continue living in a happy and thriving society.

2 HEALTHY ENVIRONMENT



A thriving society can only be realized in a healthy green environment, with basic human needs satisfied: enough water and food for everybody.

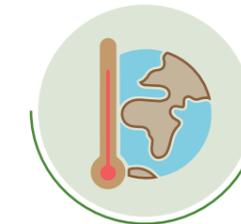
OUR CHALLENGES

1 EROSION



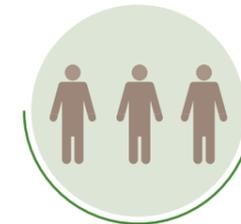
Erosion leads to a loss of agriculturally viable area. Surface runoff caused by heavy rain showers cuts deep gullies into the dunes, and dune sand is laid across the farmland.

2 CLIMATE CHANGE



During rainy season too much rain falls all at once, and the season is getting much shorter, so crops have less time to grow and ripen. Harvests are decreasing.

3 POPULATION GROWTH



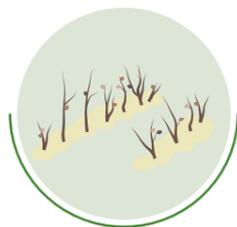
The population in Pays Dogon is growing, despite many people leaving to find employment elsewhere. A decreasing agricultural area has to feed more and more people.

4 CATTLE



The number of Dogon cattle has grown over the last decennia. They graze in the plain and cause the vegetation cover to break, a prelude to erosion and soil degradation. The recent insurgencies have lowered the cattle number; immediately vegetation comes back.

5 SOIL DEGRADATION



Logging and grazing have denuded the dunes, which led to soil degradation, especially on the dunes. As organic matter disappears, the capacity to hold water goes down, too, triggering the vicious circle of nutrient loss and erosion.

6 WATER MANAGEMENT



A recent shower dropped 115 mm in a few days – the following streams are so violent that they are impossible to manage. The water cannot be contained or preserved. Flooding and water shortage alternate: in the dry season surface water evaporates and ground water is too deep to be reached by dug wells.

7 INFRASTRUCTURE



The communities are poor and have no access to technology, fuel and machinery. Roads are scarce and in bad condition; in the rainy season roads in the plain are practically impassable.

8 COMMUNITY INVOLVEMENT



Scaling up our efforts can only be done in close cooperation with the local communities living in Pays Dogon. Any chance of success depends on the involvement of both Peul and Dogon inhabitants.

9 ECONOMIC OPPORTUNITY



Fighting the desert with volunteers only will not be possible. Our current projects are implemented by villagers themselves and there is a limit to what they can do besides work and daily responsibilities. How can greening the desert become an economic opportunity, especially for youths?

FUTURE LANDSCAPE: WE NEED YOUR EXPERTISE



Specific knowledge

The Green Desert Program is composed of eleven connected projects – all based on local knowledge, examples from practice elsewhere and experimentation. Problem-solving (e.g. erosion and flood control) and development (e.g. farming, gardening) go hand in hand.

For a greater impact, the landscape restoration projects need to be applied on a much larger scale (along the whole cliff), following a knowledge- and experience-based, area-wide, community plan – yet to be made.

So we need help: we are seeking more knowledge and

practices, integrated with one another and with the terrain specifications. We want to open up long-term strategic perspectives. Counter-desertification programs can be found in many places; there are many approaches. But many of them are bound to environments so different that they cannot be applied here (e.g. the absence of stones and solid materials on the dunes prevents the applicability of many soil reinforcement strategies).

The problems are growing, so we are urgently searching for custom-made strategies and practices.



Partnerships for long-term impact

To create a large-scale and long-term strategy, PPD is looking for partners for planning, research and execution. How to scale up our efforts while working together with the local communities? We need a wider range of partnerships to create an area-wide approach.

We envision partnerships in the form of alliances of local communities, governmental institutions, NGOs, the private sector, and environmental-, water- and agricultural experts.

Together we could create a long-term strategy to research and develop measures for reforestation, dune fixation, erosion control, water management, infrastructure, agriculture and nutritional security – and find a way to realize the implementation of it.

DEVELOPING A STRATEGIC PLAN

This is our vision

The future landscape in Pays-Dogon, as we envision it, is not a restoration of the past – as the conditions of the past have changed. Tradition goes together with modern times, education and access to the wider world have grown, mobility reaches far and wide – and the landscape will have to sustain this modern population through a resilient nature, safety from climate change disasters, and a moderated and manageable water system.

The base of our vision lies within the communities: the Pays-Dogon landscape is now and in the future owned by the people that inhabit it. It cannot be changed or adjusted without the people who live there. They provide us with knowledge we don't have or don't even know is needed. The Dogon and Peul have an enormous amount of knowledge from their everyday life: knowledge of land ownership and -rights, traditions and sacred areas and items, hidden landscape features, knowledge of plants, soil, water and climate etc. Our vision aims at opening up possibilities for the future. The communities choose what it is going to be. We envision this landscape to be a much-needed brick in The Great Green Wall, the continent-wide project to re-green the Sahel zone and moderate the climate.



What actions are needed to replicate this view all along the dunes?

How do we get there?

To be able to meet the many challenges facing the people of Pays Dogon, our strategy must not only include the current program area of ADI, but also the surrounding areas along the whole cliff. Based on our current knowledge we see opportunities to upscale our efforts along three lines:

1. Intensifying

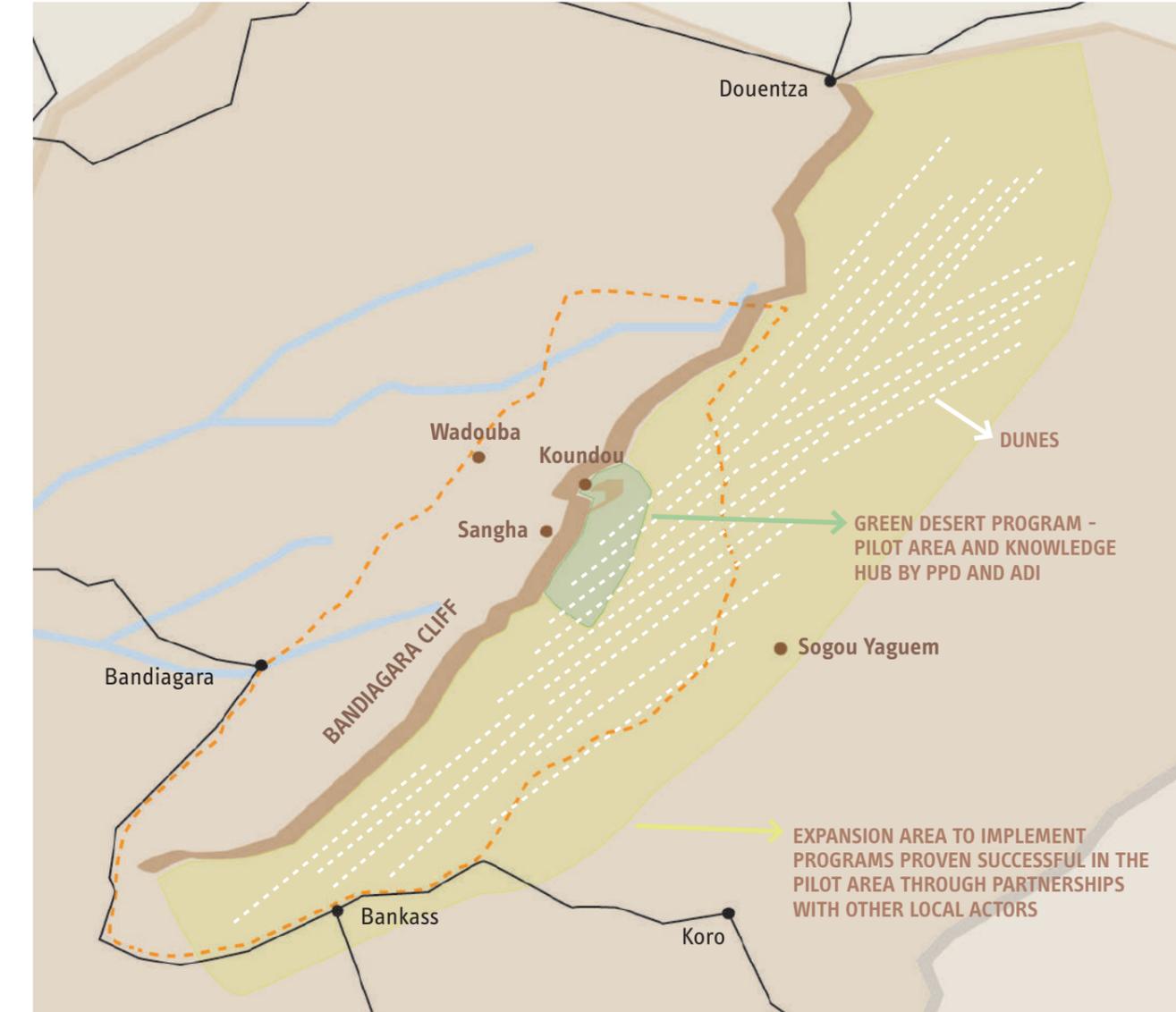
This comes down to improving our existing Green Desert Program by scaling up projects in our current program area – do more of the same, and turn our work area into a pilot for other areas. For instance, by planting more trees, creating more forest zones, extending dune fixation and erosion prevention, but also by introducing new methods and techniques and by developing economic opportunities connected to the Green Desert activities. In this way we can cover more ground and create more cohesion between the different elements within the whole program.

2. Expanding

This is: extending our bottom-up community-based approach to other areas along the Bandiagara Cliff in collaboration with local partners and communities, using the knowledge gained in our 'pilot' area to cover a much-needed wider area.

It's not our aim to expand our current program area by ourselves. Our current focus lies on strengthening the capacities of our partner ADI to make sure the organization is able to meet the growing needs and requests of the population.

But the experience of ADI and their operational model could serve more communities in Pays Dogon, as well as other local NGOs. This step in expanding also requires a comprehensive plan of action which focuses on bringing together all communities along the Bandiagara Cliff.



3. Transcending

On this third level techniques and interventions are introduced that transcend the capacities and scale of our projects, to meet challenges for the whole of Pays Dogon. This could include large-scale erosion prevention and control, improving roads and infrastructure, and measures for improved water management and rainwater harvesting. Can 'thinking big' help guide our small-scale endeavors? Perhaps a much larger scope would lead to more informed decisions within our current approach. Here we need expert advice and knowledge. We are used to working bottom-up, but could acting on a larger level help us explore new opportunities? Could an overall master plan for Pays-Dogon be the solution?



WHAT DO WE NEED?

COHESIVE MASTER SCHEME

For all three mentioned lines of action we need a cohesive master scheme, projected on the Pays Dogon topography – a strategic map of the area. This master scheme is set up to guide the yearly spatial decisions, by showing how projects can be allocated relative to one another. It derives from a long-term vision that secures the cohesion of these yearly interventions, from the perspective of a desired future land use. For example: forest zones will be allocated in such a way that now scattered wooded areas coagulate to larger zones amidst open space for free-roaming cattle. The master scheme gives at the same time precision and flexibility to decisions, which may vary with the dynamics of opportunities and limitations.

KNOWLEDGE

Secondly, we need knowledge, tools and techniques to improve our current projects (chapter 5). What are we missing? How we can add new elements to our approach, be it techniques, e.g. for agriculture, reforestation, water management, or for education and community development? What actions can be undertaken that we have not considered so far?

ECONOMIC MODELS

Thirdly, we need new economic models and opportunities. How can planting trees, fighting erosion and fixating dunes become economic opportunities for those involved? How can we keep local communities engaged and enthusiastic while waiting for trees to grow amidst an everyday struggle for survival?



GREEN DESERT PROGRAM: OUR CURRENT EFFORTS



Dune fixation

Dune fixation is an effort to control water erosion in the wet season. Dune fixation involves planting, by the local population, of cattle resistant Euphorbia bushes to slow down the dune dynamics and create micro-climatic conditions that enhance natural rejuvenation. This includes installing windscreens and damming beginning erosion channels. The result is vegetation where there is now barren ground, plant barriers where there is now uninterrupted water runoff and wind drift, and moisture where there is now drought.

Our experience derives from efforts to contain the dunes with plant projects: species, distances, contour relation, preparation and protection, maintenance. And experience comes from efforts to prevent water erosion: dams, sandbags, ridges and terraces.

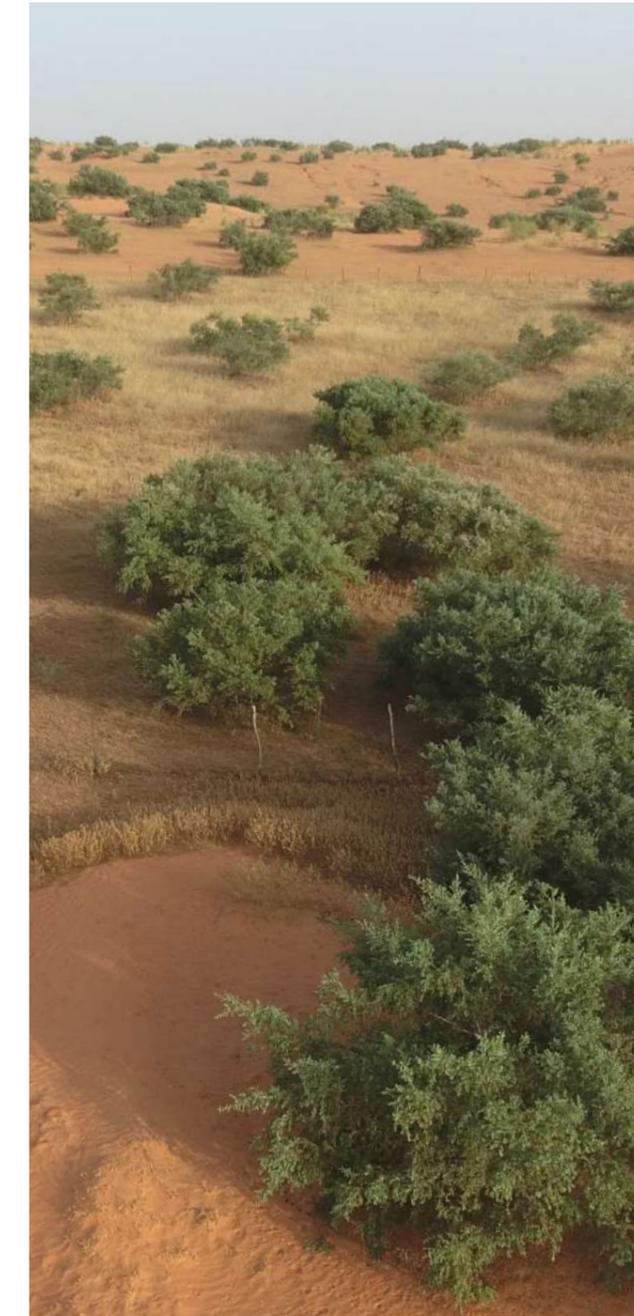
But the rains are too violent – erosion is slowed down but not prevented. This project needs a thorough evaluation to be able to figure out what will really work.



Forest zones

Reforestation: we create areas where no cattle come – “safe havens” for vegetation, as a starting point for landscape restoration in the area. Inside the fence we plant cattle resistant Euphorbia hedges, which in time will replace the fences – which can then be reused. In these spaces trees are planted, creating collective forest zones. The fences protect the growing trees against cattle and allow endemic herb and grass vegetation to create cover – which sometimes is harvested to feed cattle. The growing trees provide shade and wood, retain moisture, and moderate the micro-climate. Different types of indigenous trees are planted in the forest areas, such as the local Acacia senegal. Ultimately, the result will be a tree savanna: vegetated land with scattered trees.

Our experience refers to species choice, seedling care, planting techniques (waterbox, compost, rhizome grafting), care, pests, growth, water need and supply, the possibilities of combinations with grass and shrubs, or even agriculture, and the sustainable methods for fencing.



Water

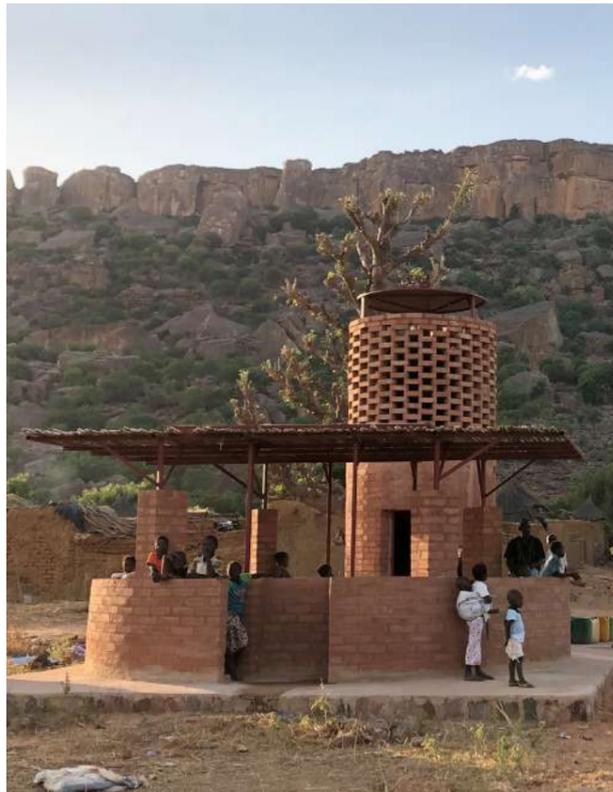
With wells and forages, and solar and hand-driven pumps, we support the water supply in villages and gardens. Damming the rock fissures that transport water in the wet season helps to store water for drier times – but evaporation counteracts this strongly.

Farmers' trees

Every year we lend Groasis water boxes and tree protectors to trained farmers, who then plant trees themselves in their own fields. The farmers keep the water box for two years; then it goes to the next family.

Trees on farmland create shade, lower the ground temperature and improved moisture management. The trees provide wood, fruits and leaves that can be used. In the dry season, cattle rest in the shadow and manure the fields.

Experience has been collected on different species – both indigenous and exotic, on cattle protection, on grafting, harvesting, cutting and pruning.



Tree nurseries

In the villages of Banani and Koundou women's groups have set up nurseries in which plants for dune fixation and forest zones are cultivated. These mostly consist of trees, but also include the local shrub *Guiéra senegalensis* and seeds for trees in women's gardens and school gardens. Experience is built up around seed preparation, nutrition, seedling care, transport and planting.



Wood-saving stoves

The project involves the introduction, manufacture and distribution of wood-saving stoves: cut-up used steel drums in a clay casing, which are made locally. The families buy the ovens; we support the sale of these ovens financially, so that they become affordable. The ovens use less fuel, so the natural landscape benefits: fewer trees are being cut. And the women benefit: they spend less time collecting wood. The techniques are simple and locally invented; the experience refers to improving the efficiency of these ovens.



Women's gardens

The project includes the creation of fenced market gardens for women's groups, which entails the creation of a water supply and fencing. Market gardens are situated in or next to villages at the foot of the cliff and provide diverse food and income. The women grow carrot, tomato, beetroot, cabbage, lettuce and other crops. The gardens enable year-round use of land, following the season: during the rainy season the gardens are transformed into fields for staple food production (millet), then they become gardens again. Experience has been gathered about usable and marketable vegetables, amount of water needed, sizes of plots and availability of work time, use of microcredits and, as a spin-off, facilities and techniques for conservation and storage.

School gardens

School gardens are being added to schools, along with education in gardening. Children learn about agriculture, but also about nutrition and health in a playful way – and they eat the food they produce.

The garden education is directly linked to the ‘Les Mots Imprimés’ tutorial approach: curiosity-driven education with a direct connection to children’s own experiences.

The experience is comparable to that of the market gardens; the greatest result is in the field of education.



Agricultural education

In the village of Sangha, the center of our work-field, the Lycée Professionel has been built and equipped: a technical school for middle-level education that trains craftsmen and -women in construction (bricklaying, restoration), and (solar) electrical engineering - knowledge and skills that are scarce in Pays-Dogon.

An agriculture department plus curriculum will be added in 2021, with the help from the Dutch-Malian consortium DJAM, in which PPD and ADI participate, and which Nuffic and the ministry of Foreign Affairs are financing.

The teachers work alongside experienced professionals who can “show” the students the work, so both knowledge and skills are brought into the program.

Ecotraining

As part of this program, women’s groups are taught compost-making, grafting, pruning, and similar techniques. Training leads to skills: to deal with and intervene in the ecosystem of the plain in a sustainable way. The programs improve the capacity of the local population to tackle the problems of desertification.

This project brings knowledge and skills in the area, from which the ADI staff also benefits. The most valuable part is that people come together and learn from one another.

Monitoring and research

The projects in the Green Desert Program are set up with local knowledge, skills and expertise, supplemented with knowledge that we (PPD and ADI) collected from other, similar projects: learning by doing. We chose this practical approach because extensive scientific preliminary research would be too expensive and time-consuming, because this approach aligns with what people know works, and because this alignment created willingness among the communities to carry out the planting projects and management themselves.

In 2017, collaboration was sought with Wageningen University. Master students conducted a desk study based on a research question drawn up by PPD and ADI as part of the Academic Consultancy Training (ACT, with supervision by scientific staff). On this basis, we are trying to formulate a series of more precise research questions that can be included in the ACT program.



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May 2021

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Association Dogon Initiatives, LEVS architecten,
Partners Pays-Dogon, Yamarou Photo

Follow the QR-code to see a 3-minute video about the
effects of erosion in Pays Dogon.

Credits: Viewpoint Productions



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