

Concept Note

Building back better against climate shocks through the restoration of ecosystems and livelihoods of communities in the Dallol Fogah (Dosso) and Badaguichiri (Tahoua) watersheds

Niger | United Nations Environment Programme (UNEP)

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Simplified Approval Process Concept Note

Project/Programme Title:	Building back better against climate shocks through the restoration of ecosystems and livelihoods of communities in the Dallol Fogah (Dosso) and Badaguichiri (Tahoua) watersheds
Country(ies):	Niger
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Executing Entities:	Directorate of Sustainable Land Management, National Council of Environment for Sustainable Development, Africa Sustainability Center
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Please submit the completed form to sap@gcfund.org,
using the following name convention in the subject line and file name:
“CN-[Accredited Entity or Country]-YYYYMMDD”

A. Project / Programme Information (max. 1 page)			
A.1. Project or programme	<input checked="" type="checkbox"/> Project <input type="checkbox"/> Programme	A.2. Public or private sector	<input checked="" type="checkbox"/> Public sector <input type="checkbox"/> Private sector
A.3. Indicate the result areas for the project/programme	<p>Mitigation: Reduced emissions from:</p> <input type="checkbox"/> Energy access and power generation <input type="checkbox"/> Low emission transport <input type="checkbox"/> Buildings, cities and industries and appliances <input checked="" type="checkbox"/> Forestry and land use <p>Adaptation: Increased resilience of:</p> <input checked="" type="checkbox"/> Most vulnerable people and communities <input checked="" type="checkbox"/> Health and well-being, and food and water security <input type="checkbox"/> Infrastructure and built environment <input checked="" type="checkbox"/> Ecosystem and ecosystem services		
A.4. Estimated mitigation impact (tCO₂eq over lifespan)	TBD	A.5. Estimated adaptation impact (number of direct beneficiaries and % of population)	50,000, with 30 % of women
A.6. Indicative total project cost (GCF + co-finance)	USD 10,500,000	A.7. Indicative GCF funding requested (max 10M)	USD 10, 000,000
A.8. Mark the type of financial instrument requested for the GCF funding	<input checked="" type="checkbox"/> Grant <input type="checkbox"/> Loan <input type="checkbox"/> Guarantee Other: specify _____		
A.9. Estimated duration of project/ programme:	a) disbursement period: 5 years b) repayment period, if applicable: n/a	A.10. Estimated project/ Programme lifespan	5 years.
A.11. Is funding from the Project Preparation Facility needed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.12. Confirm overall ESS category is minimum to no risk¹	<input checked="" type="checkbox"/> C or I-3
A.13. Provide rationale for the ESS categorization (100 words)	<p>The activities of this project are those typically qualifying as Category C according to GCF policy. The project comprises soft and hard activities. Soft activities include capacity development, planning support, institutional development and strengthening, communication and outreach, and monitoring systems. Hard activities refer to household-level facilities and production without any additional footprint like smallholder agroforestry, and small-scale climate resilient agriculture, smallholder farm irrigation such as drip irrigation, shallow wells, small-scale community-based watershed and habitat management and rehabilitation, climate resilient agriculture, soil and water conservation, and community forest management.</p>		
A.14. Has the CN been shared with the NDA?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.15. Confidentiality²	<input type="checkbox"/> Confidential <input checked="" type="checkbox"/> Not confidential
A.16. Project/Programme rationale, objectives and approach of programme/project (max 100 words)	<p>Brief summary of the problem statement and climate rationale, objective and selected implementation approach</p> <p>The watersheds of Dallol Fogah and Badaguichiri in Niger face increasing frequency and intensity of rainfall, extreme winds and droughts. As a result, ecosystems and livelihoods are severely degraded. The vulnerability and poverty of local communities has been exacerbated. In response to these challenges, this project aims to promote a massive adoption of proven best practices for restoration of terrestrial and fluvio-lacustrine ecosystems. The project will be implemented through a participatory approach involving all stakeholders from the local, regional and national level.</p>		

¹ Refer to the SAP ESS Guidelines

² Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy ([Decision B.12/35](#)) and the Review of the Initial Proposal Approval Process ([Decision B.17/18](#)).

B. Project / Programme details (max. 3 pages)

B.1. Context and Baseline (max. 1 page)

Climate vulnerabilities and impacts

The ecosystems and livelihoods of the Dallol Fogah and Badaguichiri watersheds, which are respectively located in the Dosso and Tahoua regions of Niger, are affected by the increase of rainfall variability and temperatures, frequency and intensity of extreme rainfall, winds, droughts, and a decrease of annual cumulative rainfall (Third National Communication, 2016). These changes in climatic variables have resulted in significant changes in soil, water resources and vegetation cover (Third National Communication, 2016).

The occurrence of extreme rains and winds as well as frequent and intense droughts has led to unprecedented ecological degradation processes. The evolution of erosion has been so rapid and intense that it has led, in a few decades, to the high degradation of agricultural and pastoral lands, the silting up of rivers which has increased the turbidity of surface waters, reducing their quality. The density and floristic diversity of plant formations have declined. Plateau soils have lost their fertility and primary production has declined. Several ponds have disappeared and others have had their water retention capacity significantly reduced due to silting. Frequent droughts have aggravated the salinization of Dallol Fogah's water resources and alluvial plain. These climate related impacts are exacerbated by geomorphological, pedological, hydrological and phytological characteristics of the watersheds. Indeed, the relief in the two basins generally comprises a sandstone plateau generally covered with a ferruginous cuirass of the terminal continental with sandy veneers of aeolian origin which represents the first component of the relief. It is limited by cliffs more or less steep, cut by, among others, Dallol Fogah and Badaguichiri valleys (Dambo, 2001). The second component of the relief is an intermediate level consisting of sandy terraces, while an alluvial plain weakly flooded at the beginning, with a sandy predominance of North-South axis with low slope constitutes the third component of the relief. Soils follow the pattern of relief. Indeed, plateau soils are generally shallow and gravelly and are based on the terminal continental sandstone; the cuirassed plates are outcropping in places. The terraced soils at the foot of the plateau slope and at the edge of the dallols consist essentially of clay sands. The Dallol Fogah and Badaguichiri alluvial soils, mostly belonging to the group of ferruginous tropical soils, are, depending on the case, sandy-loamy or sandy-clayey. The beds of the old rivers, basins and shallows are hydromorphic, gray in color, and richer than the previous ones in organic matter (Parkans, 1969 cited by Lamine, 1997). The hydrography shows that alongside the valleys, a string of permanent and semi-permanent ponds are aligned which are fed by rainwater. The groundwater is also abundant because the areas have several aquifer systems (Geoconseil, 1998 cited by Dambo, 2001). The vegetation is divided into three groups (Lawali 1992). On the lateritic plateaus dominate the shrub savannas dominated by species such as *Anogeissus leocarpus*, *Combretum micranthum*, *Bombax costatum*, *Acacia macrostachya*, *Feretia apodenthera*, *Pterocarpus erinaceus*, *Loudetia togoensis*, *Thephrosia purpurea*, *Combretum glutinosum*, *Combretum nigricans*, etc. On the stabilized dunes, there are the shrubby and wooded savannah where we find species such as *Vitex doniana*, *Detarium microcarpum*, *Prosopis africana*, *Sclerocaria birrea*, *Balanites aegyptiaca*, *Vitelaria paradoxa*, *Ziziphus moritiana*, *Monechma ciliathum*, *Zornia glochitiata*, *Guiera senegalensis* etc. In the valleys, we find wooded savannahs and clear forests. The following species are among others: *Daniella olivera*, *Celtis integrifolia*, *Ficus spp.*, *Diospyros mespiliformis*, *Vitex doniana*, *Hyphaene thebayca*, *Parinari macrophylla*, *Borassus aethi opium*, *Acacia pennata*, etc. As for the rest of the country, these vegetation formations of the two watersheds have problems of continuous degradation (Gaya Environment Service, 2003). Overall, the vegetation formations in the departments (counties) of Tahoua and Dosso where the project areas are located consist largely of parks of *Faidherbia albida*, parks of *Combretum glutinosum*, parks of *Parinari macrophylla* with variable densities, in most of the area (Pelissier 1984, Saadou 1990, Ounteini 1993, Mahamane 1997)

These climate related processes of ecological degradation have resulted in lower forage production, yields in agriculture, livestock, salt exploitation and fisheries. The increased turbidity of the water has changed the habitat of aquatic fauna. This has resulted to lower reproduction and fish population. Silting has led to the disappearance of ponds, reducing water resources for livestock. Silting has also resulted to the extension of the flood wave of the rivers, which has triggered the permanent flooding of tree and gardening farms in the alluvial plains. This has destroyed several hundred hectares of market gardens and orchards. In total between 2015 and 2016, 2,427 mango trees, 50 date palms trees have been lost. In addition, 413 fields have been permanently flooded, 233 heads of households lost their fields. The disappearance of plant species is a cause of the increase in greenhouse gas emissions. The permanent flood has almost suppressed the activity of salt exploitation in the Dallol Fogah; a once-lucrative activity that attracted thousands of seasonal migrants.

Adaptation and mitigation needs to address

The ecological and socio-economic consequences of climate risks have increased the vulnerability and poverty of communities living in the Dallol Fogah and Badaguichiri watersheds. Women and young people are the most vulnerable groups and are the most numerous in the migratory movements resulting from the accentuation of social vulnerability. They are the most active in domestic and international migration that are emptying areas of their active workforce. With this increased poverty and vulnerability through climate risks, youth in both watersheds are also exposed to recruitment by religious radicalisation movements, fueling the already high insecurity risks in the region. These social, economic and

ecological consequences justify the urgent need for adaptation and mitigation of climate change in the project areas.

Ownership and consistency with the Niger's national priorities, action plans and programs

This project is in line with Niger's political and economic orientation documents, which are the Renaissance Act 2 Program and the General Policy Statement (DPG). Two of the eight priorities of the Renaissance Act 2 Program are supported by this project. These are: i) ensuring access to water for all, ii) ensuring food and nutrition security through the 3N initiative (Nigeriens feed Nigeriens). Components 1 and 2 are dedicated to the improvement of water resources availability and of food and nutritional security. In this respect, they contribute directly to these two priorities of the Renaissance Act 2 Program. With regard to the DPG, the present project supports its axis 3, namely "the promotion of an economy of growth and sustainable development". The "Building back better against climate shocks" project contributes to two of the four strategic areas of the Economic Guidance Document (DOE), which are promoting a competitive and diversified economy and food security and sustainable agricultural development. With regard to the Social and Economic Development Plan (PDES), two of its major reform areas namely "preservation and sustainable management of the environment and natural resources" and "promotion of mitigation and adaptation to climate change" are aligned with the current project. These areas of reform are broken down into axes and programs. Axes 3 and 5 of the PDES, through their respective programs "Food Security and Sustainable Agricultural Development" and "Sustainable Management of Land, Water and Biodiversity" are taken into account in this project. This project is also aligned with the priorities contained in the National Policy on Climate Change (PNCC), the Strategic Framework for Sustainable Land Management (CS-GDT), the National Strategy and Action Plan on Climate Change and Variability. (SNPA-CAC). This project is part of the adaptation and mitigation priorities of the NDC as those focus on improving the resilience of the AFOLU sector, including the agriculture, livestock and forestry sub-sectors. The Water Resources, Fisheries, Wildlife, Health, and Capacity Building sectors are among the Niger adaptation priorities included in the documents mentioned, notably the PNCC and the SNPA / CVC

Main root causes and barriers to address

The barriers that this project seeks to overcome in order to enhance resilience to climate shocks are of several types:

Institutional barriers . Institutional barriers refer to anything that hinders the proper functioning of the institutions involved in the fight against climate change. The landscape of institutions engaged in climate action in Niger is characterized by a lack of coordination, deficit of technical, human and financial capacities. While Niger's institutional framework shows that the appropriate institutions for climate action are in place, it must be emphasized that most of the interventions / actions of the institutions are not coordinated. Institutions operate in silos, which does not promote efficiency in the fight against climate change. Institutions committed to Niger's climate action are also poorly equipped to carry out their mission. The majority of their staff do not have adequate knowledge and skills to understand and provide appropriate responses to the impacts of climate change. The texts and regulations are elaborated without taking into account climate change. Finally, the budget of these institutions is often too low to ensure the upgrading of staff and climate-smart texts and regulations.

Environmental barriers . The environmental issues that the project seeks to address are related to the degradation of land by erosion due to wind and runoff. The decline in agricultural land fertility is also reflected in the environmental challenges that the project aims to achieve. Silting, eutrophication and degradation of river water quality in project areas as well as permanent flooding of riverside farms, followed by the loss of thousands of tree species fruit trees constitute an important barrier to strengthening the resilience of rural communities in the project area.

Technical barriers . The resolution of the environmental problems described above requires a certain technical knowledge from the communities directly affected by these problems. However, the communities living in the Dallol Fogah and Badaguiuchiri watersheds do not have the skills to put into practice the techniques needed to solve environmental problems. This justifies community capacity building activities.

Economic and financial barriers .Communities living in rural areas, according to the Third Communication of Niger (2016), are among the most vulnerable and poorest. They do not have required financial resources to adopt appropriate restoration practices to fight against ecosystem and livelihoods degradation trend. The government of Niger, whose mission is to provide the necessary investments to overcome this financial bottleneck, is experiencing a significant deficit in covering its financial needs. This is why this project is submitted to the Green Climate Fund.

Organizational barriers . Addressing the environmental challenges mentioned above requires a high level of organization from grassroots communities side. Indeed, the complexity of the environmental problems renders ineffective any individual strategies, which are hitherto predominant in the intervention approaches in the project areas. Communities are very poorly organized. This organizational deficit constitutes a real obstacle to strengthen resilience to climate extreme of social-ecological systems in the project areas.

B.2. Project / Programme description (max. 1 page)

Expected components and activities to address the above barriers

This project includes five components, four of whom are technical. The fifth component focuses on project administrative and knowledge management.

COMPONENTS	ACTIVITIES
Component 1: Community capacity building in degraded land restoration	Activity 1.1. Communities organizational development
	Activity 1.2. Strengthening communities technical
Component 2: Restoration of the bed and alluvial plain of silted rivers	Activity 2.1. Dredging the Dallol Fogha river
	Activity 2.2. Water weed cutting
	Activity 2.3. Construction of retaining and anti-salt dykes
	Activity 2.4. Deepening of ponds and digging wells
Component 3: Restoration of plateaus/upper lands	Activity 3.1. Regreening degraded plateau lands
	Activity 3.2. Rehabilitation of rangeland
	Activity 3.3. Establishment of defensive zones
	Activity 3.4. Firewall construction
	Activity 3.5. Development and implementation of community natural resources management agreements
	Activity 3.6. Production of bricks / briquettes with Typha
Component 4: Farm soil amendment	Activity 4.1. Popularization of compost production and use
	Activity 4.2. Popularization of flat or compartmentalised plowing
	Activity 4.3. Introduction of improved crop varieties
	Activity 4.4. Adoption of micro dosing of mineral fertilizers
	Activity 4.5. Practice of crop rotation
Component 5: Institutional Support and Project and Knowledge Management	Activity 5.1. Raise awareness and build capacities of state technical structure agents, local NGOs and communities' organizations on climate change
	Activity 5.2. Mainstreaming of climate change into planning documents
	Activity 5.3. Ensure proper administrative, financial and technical management of the project
	Activity 5.4. Knowledge Management and Communication

COMPONENT 1: COMMUNITY CAPACITY BUILDING ON LAND DEGRADED RESTORATION

This component is proposed to address the community capacity gap barrier to reverse the ongoing pattern of ecosystem degradation caused or exacerbated by extreme climates. In general, two types of key capacities are needed by communities to combat ecosystems degradation processes, namely organizational capacities and technical capacities. Organizational capacity development involves better structuring communities around organizations (creating new or strengthening existing community organizations). In addition, communities in these organizations will be trained on the functioning and management of a community-based organization dedicated to development, especially environmental actions. The goal is to ensure community participation and leadership in the design, implementation and maintenance of the project's soft and hard activities. With regard to the technical capacity building activity, it consists of community training sessions, through their established organizations, sustainable management of agricultural and pastoral lands, early warning system, monitoring climate risks, including floods. The activity seeks to fill the gap related to the lack of experience of communities in the techniques of combating ecosystem degradation. Component 1 activities are expected to ensure that beneficiary communities have the organizational and technical knowledge and skills to provide leadership in the fight against climate related ecosystem degradation.

COMPONENT 2: RESTORATION OF THE BED AND ALLUVIAL PLAIN OF SILTED RIVERS

This component addresses the problem of rivers silting up which degrades the quality of surface water resources and modifies the habitat of aquatic fauna through the increasing of turbidity, eutrophication, flood and salinity. This component helps combating the silting up of rivers, ponds and valleys, as well as the permanent flooding of tree farms and market gardens in the floodplains. To do this, dredging, water weed cutting, construction of dikes, and overcrowding ponds and digging wells will be carried out. River dredging involves the removal of sandy deposits that have clogged the bottom of rivers which are one of the building blocks of local economies. The expected result is the increase in the water retention capacity, the decrease of flooding, the revival of several economic activities such as fruit growing, market gardening, salt exploitation and fishing which depend exclusively on the rivers. The deposits collected will be used as fertilizer on farms. The water weed cutting is to weed the banks and some places of the rivers beds invaded by the Typha. This activity is intended to fight against eutrophication which led to the colonization of rivers by Typha which resulted in a decrease in the population of aquatic fauna. The antisal and retaining dike will be built with local material, with the active participation

of the populations and will limit the process of salinisation and flooding of agricultural land and finally improve the volume and quality of the water in rivers and revive fish production. Overcrowding and well drilling consists of removing sand from the ponds and creating new water points for the water supply of populations and livestock. This activity aims to address the water resource deficit for livestock and for human populations. It will also reduce the flood of several hectares of vegetable and arboreal farms, by reducing the amount of superficial flow towards the rivers.

COMPONENT 3: RESTORATION OF UPPER LANDS

This component includes proposed activities to combat soil erosion due to runoff and wind in agricultural and pastoral plateau and slope areas. It also addresses the issue of wood density and diversity reduction observed in plateau areas. It also aims to reduce the pressure exerted on wood resources, through the levies for fuelwood. To this end, the following activities will be carried out. Regreening of degraded plateau lands which consists of the implementation of biological techniques (reforestation and natural assisted regeneration etc.) and mechanical (construction of stony cords, half-moons, etc.) anti-erosive in fields and rangeland. Techniques that have been proven for many decades in similar ecological environments in Niger and Burkina Faso will include zai, half-moon, stony cord bund, filter dike, grass band, and so on. The second activity is the rehabilitation of pastoral rangelands, which consists in sowing pasture areas and passage corridors through the introduction of the appetizing herbaceous species. Seeding is done by local forage species like *Andropogon gayanus*, *Schoenefeldia gracilis*, *Alysicarpus ovalifolius*. This technique is justified by the fact that it responds to one of the effects of climate change on forage resources, namely the invasion of new non-palatable species to the detriment of the palatable species. The third activity is the deforestation which will be focused on particularly sensitive areas such as plant formations developed on lateritic soils. The goal is to increase wood density and diversity. In the medium term, it is expected a reduction of the power of runoff and the intensity of soil erosion and silting of rivers. The fourth activity is the development of firewalls. This is to scratch and maintain strips of land with a minimum width of 25 meters to stop the spread of fire which is exacerbated by biological droughts. In order to get populations to find an immediate interest in the maintenance of firebreaks, they could develop annual crops there. Preventive control actions can also lead people to find a form of valuation of the herbaceous layer to ensure that the firewall is cleared from the herbaceous layer. The fifth activity refers to the development and implementation of natural resource management agreements. It is a matter for farmers and breeders organized in cooperatives responsible for the introduction and massive adoption of conservation practices of natural resources, to agree on a number of natural resource management rules that also govern the practices of sustainable management of degraded lands. The sixth activity of component 3 is the production of Typha bricks / briquettes. This activity aims to reduce the pressure on wood resources in terms of firewood removal. It contributes to the reduction of greenhouse gas emissions by Niger. It also contributes to improving the quality of the surface water resources of rivers colonized by Typha. This practice will thus allow the return of the practice of fishing.

COMPONENT 4: FARM SOIL AMENDMENT

This component is proposed to improve the quantity of organic matter but also the structure of soils particularly affected by the effects of extreme rainfall and wind events. Soil amendment involves a package of good practices including, inter alia, composting, flat or partitioned tillage, adoption of adapted varieties, micro-dosing of mineral fertilizers and crop rotation. To do this, compost will be made through compost production units by farmers' organizations or households. This practice consists in putting the vegetable and animal organic matter in fermentation during a certain period and to spread it in fields in order to counteract the trend of declining soil fertility associated with the effects of water and wind erosion resulting from frequent and strong winds. The objective of this activity is to increase i) the amount of soil organic matter and ii) the agricultural production. Finally the practice is to improve the physicochemical and biological properties of the soil. The extension of flat or partitioned plowing is planned to address the problem of low water and plant root infiltration following soil compaction due to the removal of the fertile soil by runoff water. It is also effective in dealing with soil water deficiency, controlling the spread of weeds and invasive species, and increasing agricultural yields. The use of improved varieties is an activity planned in this project to valorize the nutrients brought for the success of integrated soil fertility management. The use of micro dosing of mineral fertilizers is an activity to be carried out in this project to improve the level of availability of nutrients and to compensate for the weak points of organic amendments. Current micro-dose techniques are one method that allows crops to enhance the value of fertilizers by avoiding environmental pollution at a relatively low cost for farmers. Mineral fertilizer micro-dosing involves the use of small amounts of fertilizer in the seedlings or planting holes of crops during planting or post-emergence. The rotation of cultures is a practice to alternate in the same space cereal crops, leguminous crops and possibly cover crops or fodder. It aims to reduce the risk of parasitism, disease and invasion of weeds and parasitic plants. Where availability of land does not permit full rotation, intercropping is recommended.

COMPONENT 5: INSTITUTIONAL SUPPORT AND PROJECT AND KNOWLEDGE MANAGEMENT

This component is dedicated to supporting institutions involved in the fight against climate change and to project management and sustainability activities. In this regard, an activity to sensitize / strengthen the capacity of State

technical structure agents, local NGOs and communities organizations on climate change is planned. This involves organizing training sessions to fill the knowledge gaps of stakeholders including local communities on the challenge of climate change. Mainstreaming climate change into planning documents is an activity proposed to overcome the barrier of low integration of climate change in local and regional policy and strategic documents. Planning documents for municipalities and regions in the project areas will be climate sensitive. The second activity consists in ensuring the administrative, financial and technical management of the project. This is the daily monitoring of project activities that will be carried out and financial and technical reports will be produced by semester. The third activity of Component 5 is knowledge management and communication. This activity consists of identifying and documenting all knowledge, best practices and lessons learned in ecosystem and livelihood resilience building. All will be shared in the project areas, nationally and internationally, during fora, conferences on the theme.

The project readiness for scaling up and potential for transformation

Readiness for scaling up. This project is ready for scale-up for the following reasons:

- The techniques and practices selected have been tested in Tilabéri, Tahoua, Zinder communities in Niger.
- The need of Dallol Fogah and Badaguichiri communities for these land restoration practices is enormous. Soils are particularly degraded and yields are significantly reduced. What places these communities in a situation of real need that makes any practice to redress the trend of resource degradation is awaited with great interest.
- The practices / techniques use local materials and therefore available and accessible, which ensures their durability. These are practices that do not generate additional costs for farmers and breeders. They use materials and equipment that already exist in the project areas.
- The ecological conditions in both basins lend themselves well to practices selected for scaling up.

Potential for transformation of the Project

The transformational potential of the project lies on the fact that technically the practices / techniques used in this project are within reach of the majority of communities living in rural in Niger. Financially, these practices do not generate significant additional costs for communities. Culturally, these are acceptable practices in the area because they do not conflict with the values and beliefs of local communities. Another parameter that determines the transformational nature of a practice is relative to its effectiveness. In this respect, it should be emphasized that these practices have been tested in the regions of Tahoua, Tillabéri, Maradi, Zinder and in countries such as Burkina Faso. Their success and reputation are essentially their ability to solve the environmental problem in question. Institutionally, this project is transformational insofar as the practices proposed in this project will be carried by the producers themselves, who will rely on their organizations and the regulations that they will elaborate to insure the inlay in their habits of these practices. All of these conditions predispose the project to up scaling.

Appropriateness of UN Environment and implementation arrangements.

UN Environment is an entity accredited of the Green Climate Fund. In addition, this institution has a long and solid experience that has made it a world leader in the implementation of projects in environment, and in particular in ecosystem restoration. The project will be implemented in accordance with UN Environment policies and procedures and in accordance with those of the GCF and the Government of Niger (GoN). The SAP GCF project has been officially approved by the National Designated Authority (NDA), the National Council for the Environment for Sustainable Development (CNEED) which will chair the Steering Committee and monitor the implementation of the project for management of good practices with a view to their scaling up. The project will be housed in the Sustainable Land Management Directorate and will be supported by Africa Sustainability Center (ASCENT). The Sustainable Land Management Directorate is responsible to UN Environment for project management, including monitoring and evaluation of project interventions, achievement of project objectives and the effective use of UN Environment resources. In its role as NDA, the CNEED will ensure that the project is implemented in accordance with applicable national policies. Implementation arrangements will be structured around the steering committee, the project management unit, the operational partners and the implementing agency which is UN Environment.

Brief overview of the key financial and operational risks and mitigation measures identified.

The major financial risks could be related to the non-availability of the government counterpart. Operational risks could be associated with an absence or weak collaboration of implementing partners at the national and local levels. To mitigate them, the government counterpart should be in kind. As for mitigating weak participatiuon of implementing partners, it will be achieved through implementation of an inclusive stakeholders cobsultatiuons at the early beginning of the project documents development.

Expected impacts aligned with the GCF investment criteria

Impact potential. The project has a significant climate impact potential as it makes an important contribution to the advent of a low-carbon development, as it would make it possible to sequester CO₂ through the sustainable land managements of soil amendment practices. In the field of adaptation to climate change, the potential impact of the project is measured through its contribution to the promotion of sustainable development resilient to climate change. Indeed, the project increases such a development insofar as tens of thousands of people will benefit directly from the reinforcement of their means of action against extreme climates. By including women and youth in empowering action on climate change, the project will reduce social inequalities and at the same time strengthen resilience. Also, the mechanical and green infrastructures will be built so as to withstand the effects of extreme climatic hazards. In addition, the sensitization and training sessions on practices to combat the effects of climate extremes on the ecosystems and livelihoods that the project will organize will increase the level of awareness of climatic change, its effects and the necessary adaptation measures.

Paradigm shift. In order to catalyze the impact of the project beyond the investment of the Green Fund, it is essential that the impacts of the project be multiplied and replicated elsewhere without necessarily mobilizing the same volumes of investment. It is expected that the beneficiaries of the project, with the revenues collected through the impacts of the project, invest in other activities less climate-sensitive to increase their income. This upscaling will be promoted by the knowledge sharing activities that will be implemented. Strengthening the level of communities' organization provided for by the project will increase their resource mobilization capacities. By realizing this, other producers in other regions and sectors will be able to replicate the experience. The fact that several activities of the project use local materials allows a replication and upscaling of these structuring activities in other regions and other sectors of social life. The project will be innovative in many ways. The massive adoption of degraded land recovering and sustainable land-use practices that the project will achieve will be based on innovation / social engineering. It is about ensuring proper identification and participation of the real actors in the activities. Then, they will be involved and made responsible at every stage of the process. This promotes the appropriation of the proposed technologies. So it is not the degraded land reclamation technologies per se that are innovative, but the approach to integrating these technologies into people's practices that is innovative. The arrangements and provisions relating to the development of regulations on the management of built structures are taken to allow sustainability of project results and impacts. These arrangements will further promote the sustainability of results as the technical services of the State are key stakeholders in the development of these mechanisms.

Sustainable development. The potential for sustainable development, in other words the opportunities this project provides for co-benefits of sustainable development are important and can be measured in terms of environmental and socio-economic benefits. The benefits of this project in terms of improving air, soil, forests and biodiversity quality are due to the fact that component 3 of the project aims, inter alia, to recover land degraded by reforestation and therefore to increase the area of arable land. Beyond this economic benefit, the restoration of vegetation cover will improve the quality of the air because of the role of air purification that plays the trees. These will improve soils by protecting them from: i) the splash effect of raindrops, especially at the beginning of the rainy season, ii) solar rays, iii) runoff water. At the same time, they increase the humidity and soil fertility. The biodiversity gains that the project allows are associated with the establishment of community defenses zones. This is to rehabilitate the habitat and thus promote the strengthening of biodiversity. The activities of Component 4, through sustainable agronomic practices, have an interesting environmental impact potential in that the loss of land due to bad practices will have been halted. Which improves soil fertility. Health and safety gains for women and men, youth and adults. Components 3 and 4, by improving the productivity of agricultural and pastoral lands, will contribute to increasing yields and hence to food and nutrition security. This impact of the project is all the more important as it will improve children's health. From a security point of view, this project by setting the youth against migrations, protects them from the risks associated with the integration of religious radical movements that spread insecurity in the West African region. These gains affect men, women, adults and young people alike.

Needs of recipients. This project is among Niger's priorities in terms of vulnerability and adaptation to climate change defined in national strategic documents, in particular NDC. It also meets the financing needs of Niger as expressed in the CDN. Of the USD 1.27 billion needed to scale up SLM good practices, Niger has unconditionally planned to raise only 107.67 million USD to 2029, or 10 percent. This project will therefore counteract the reduction of the funding gap for climate action in Niger.

Country ownership. The Project's approach fits in perfectly with the national priorities and the poverty reduction objectives defined by the PDES, particularly in the area devoted to the preservation and management of environmental resources. In this context, it is envisaged to ensure sustainable management of biodiversity, by slowing down the process of widespread land degradation with a view to preserving forest, pastoral and agricultural areas, promoting infiltration and the efficient and effective use of water, contribute to the development of forest production, safeguard the biodiversity of animal and plant species and improve the management of the urban environment. The project supports one of the

priorities of the Sustainable Land Management Investment Framework, namely "the expansion of SLM practices in Niger to restore, maintain and enhance the productivity of natural resources, combat land degradation, loss of biodiversity and contribute to adaptation to climate change ". This project is well aligned with the National Forest Action Plan (NFP) as it addresses one of the priorities of this Plan, in this case "Soil Conservation and Erosion Control" which one of the four programs of the NFP.

Efficiency and effectiveness. The financing plan including the instruments is adapted to the national context of the least developed country which characterizes Niger. In fact, given the recurrent budget deficit, the financial instrument chosen, namely the grant, is the most appropriate for achieving the project objectives. The co-financing ratio is 4.76%. In addition, the project has a certain efficiency which is appreciated by the environmental and economic gains related to the restoration of ecosystems and rural livelihoods and which will result in the increase of yields and incomes.

C. Indicative financing / Cost information (max. 2 pages)

C.1. Financing by components (max ½ page)

Estimate of the total cost per component and disaggregate by source of financing.

Component	Indicative cost (USD)	GCF financing		Co-financing		
		Amount (USD)	Financial Instrument	Amount (USD)	Financial Instrument	Name of Institutions
Component 1: Community capacity building in land degraded restoration	USD 350,000	USD 325,000	Grant	USD 25,000	In kind contribution	Government of Niger
Component 2: Restoration of the bed and alluvial plain of silted rivers	USD 4,800, 000	USD 4,500, 000	Grant	USD 300,000	In kind contribution	Government of Niger
Component 3: Restoration of upper lands	USD 3,550,000	USD 3,300,000	Grant	USD 250,000	In kind contribution	Government of Niger
Component 4: Farm soil amendment	USD 1,300,000	USD 1,200, 000	Grant	USD 100,000	In kind contribution	Government of Niger
Component 5: Institutional Support and Project and Knowledge Management	USD 700,000	USD 1 million	Grant	USD 50,000	In kind contribution	Government of Niger
Indicative total cost (USD)	10,500,000	10,000,000		500,000		

C.2. Justification of GCF involvement (max 1/2 page)

Rationale of GCF support

Niger has a particularly high level of vulnerability because of its geographical position. Niger is a landlocked country in the Sahelian zone characterized by recurrent rainfall deficits. The country is subject to strong climatic variability and climate extremes that are increasingly frequent and intense. The main contributors to GDP formation, namely agriculture and livestock, are affected by these climatic hazards. All these factors place Niger at a level of vulnerability all the higher as the country belongs to the group of least developed countries (LDC). Farmers and breeders who make up the majority group suffer from considerable damages during droughts and floods. The challenges are many, huge and complex. The multiplicity of challenges means that the required resources for Niger to cope with these climatic stressors are largely insufficient. In fact, Niger's financial needs, which are valued in the INDC, at USD 8,667 billions in ten years, are beyond the country's capacity as it represents 48% of the GDP.

Therefore, in order to achieve the objectives set in the National Determined Contribution (NDC), Niger expects a lot from its external partners. Local governments, whose mandate is to develop local communities, do not have resources and are waiting for government budget support to address only a few challenges. This is why climate change is poorly taken into account. Few projects intervene on the restoration of the agricultural and pastoral lands in the targeted zones of this project.

In this context, GCF resources are crucial in overcoming the barriers that hinder the Government of Niger's capacity to increase resilience of ecosystems and livelihoods to climate change impacts in the project areas. These barriers include: limited institutional, financial, organizational and technical capacity of communities to reverse the trend of worsening land degradation, declining yields and communities incomes. Farmers and breeders are also not equipped to halt the deterioration in quality and quantity of agricultural production. Barriers also relate to limited knowledge and low awareness of climate change risks, and to weak application of adaptation solutions. The weakness of institutional and cross-sectoral coordination to implement a systemic approach, the weak financial capacity of the national government and local governments to sustainably cope with the additional costs of adaptation demonstrate how crucial is the Green Climate Fund's support.

C.3. Sustainability and replicability of the project (exit strategy) (max. 1/2 page)

Project sustainability

One of the first steps taken in the context of this project to ensure its sustainability is related to the re-organizing of farmers in order to strengthen their level of organization. The project will ensure establishment of organizations that communities will be able to appropriate and manage. The upgrading of communities capacities on organizational management will contribute to sustainability of this project activities. In addition, the technical capacities strengthening activities that aim to skill producers with techniques for sustainable ecosystem management and improvement of generating activities are one of the necessary conditions for the sustainability of the project's impacts. The fact that the project intends to combine the community approach (community organizations) and individual (support of households in the implementation, at the farm scale, of soil amendment techniques) fosters the appropriation by grassroots communities of the practices / techniques introduced. This will guarantee their sustainability. The fact of having included a knowledge capitalization / management activity and that this activity will be conducted by the NDA, namely the CNEDD, is also a guarantee of sustainability of the project.

C.4 Stakeholders engagement in the project or programme (max ½ page)

Stakeholders Engagement so far

The stakeholder engagement process involved at this stage of drafting the concept note, in addition to the CNEDD, the Directorate of Sustainable Land Management, the communities of the project areas, some organizations of the civil society and certain key research institutions. These key stakeholders were consulted to integrate their views and concerns into the project activities. Two field visits to the Dallol Fogah and Badaguichiri watersheds were conducted in March and April 2018.

During the development phase of the full funding proposal, a broader engagement with stakeholders will continue. Non-governmental organizations and civil society groups, especially those involved in agriculture and forestry projects, will also be consulted. In addition, further consultations will be conducted at the village level, especially with women and youth, to ensure that the project activities are relevant to the needs of local communities and contribute to women and youth's empowerment and reduction of their livelihoods vulnerability to climate change. Appropriate and climate-resilient agricultural technologies and EbA interventions in Sudanese's ecosystems will be identified in consultation with technical experts and local communities in Niger.

C.5 Monitoring and Evaluation and reporting plans (max ¼ page)

M&E and reporting plan

The project will be monitored through the following M & E activities.

Project's start:

A project launching workshop will be held in the first two months of project start-up with project staff, UN Environment, other partners. The kick-off workshop is essential to strengthen ownership of project results and plan the first year's annual work plan. A launch workshop report is a key reference document and should be prepared and shared with the participants to formalize the different agreements and plans decided at the meeting.

Periodic follow-up via site visits:

UN Environment will visit the project sites according to the agreed schedule in the project's annual start-up / workplan to assess project progress. Other members of the Steering Committee may also participate in these visits. A field visit report will be prepared by UN Environment and will be circulated at least one month after the visit of the team and members of the project management unit.

Mid-term review:

The project will be subject to an independent mid-term review at mid-term of project implementation. The mid-term review will identify progress towards the achievement of results and identify corrections where necessary. It will focus on the effectiveness, efficiency and timeliness of the project; highlight issues that require decisions and actions; and present the first lessons learned from project design, implementation and management.

End of the project:

An independent final evaluation will take place three months before the final meeting of the project steering committee and will be conducted in accordance with the guidelines of UN Environment and the Green Climate Fund. The final evaluation will focus on the production of project deliverables as originally planned (and corrected after the mid-term review, if such a correction has occurred). The final evaluation will examine the impact and sustainability of the results, including the contribution to the six Fund investment criteria.

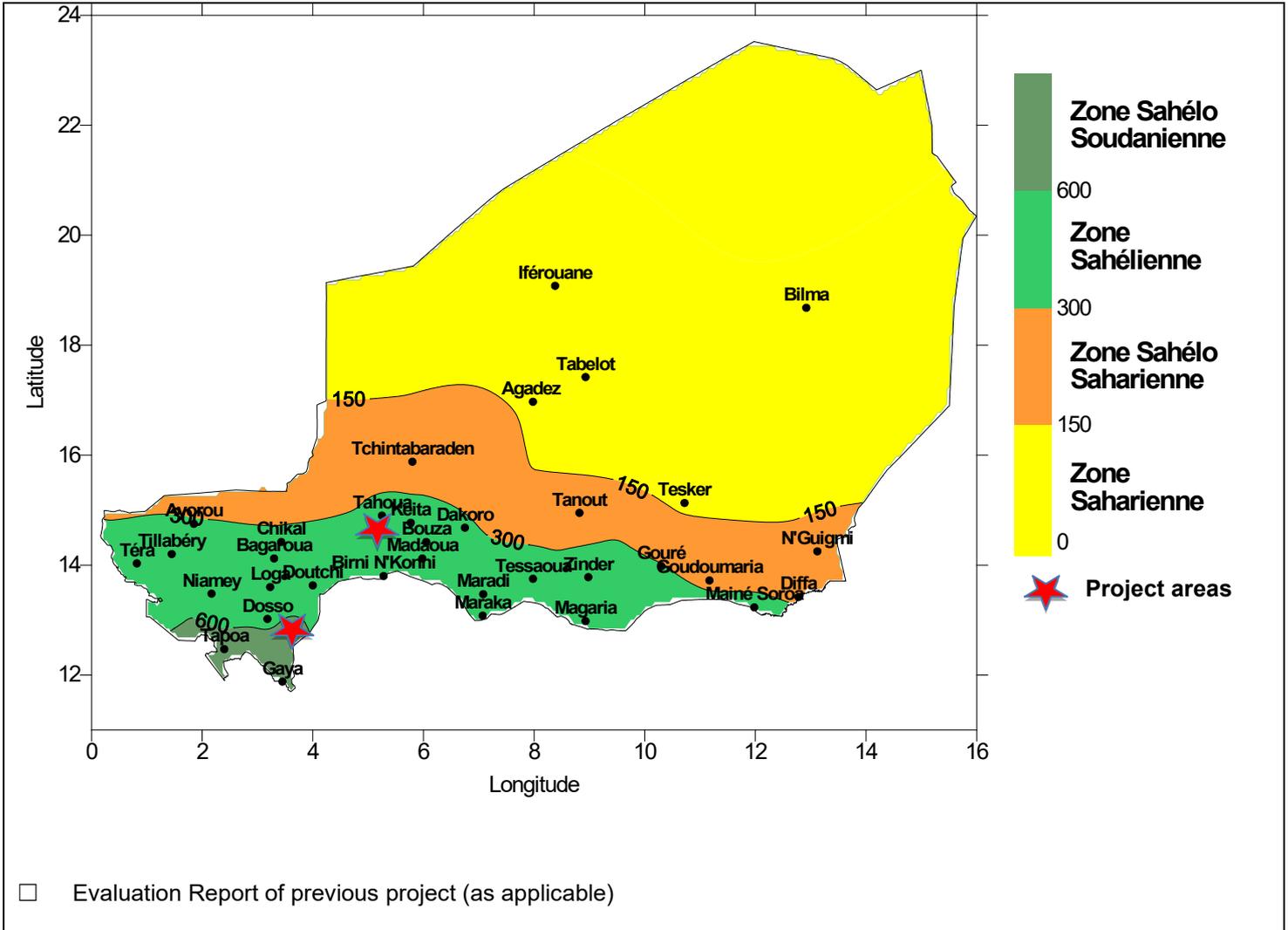
Relevant monitoring and evaluation tools will also be completed during the final evaluation. During the last three months, the project team will prepare the final report of the project. This comprehensive report will summarize the results achieved (objectives, results, outputs), lessons learned, problems encountered and areas in which the results may not have been achieved. It will also provide recommendations for any further steps to be taken to ensure the sustainability and replicability of the project results.

Learning and Knowledge Management:

Project results will be disseminated within and outside the project intervention area through existing networks and information sharing fora. The project will identify and participate, in a relevant and appropriate manner, in scientific, policy and / or other networks that could be useful in implementing the project by learning from it. The project will identify, analyze and share lessons learned that could be beneficial for the design and implementation of similar future projects. Finally, there will be an exchange of information between this project and other projects of the same theme.

D. Annexes

- ESS screening check list (Annex 1)
- Map indicating the location of the project/programme (as applicable)



Annex 1: Environmental and Social Screening Checklist

Part A: Risk Factors

The questions describe the “risk factors” of activities that would require additional assessments and information. Any “Yes” response to the questions will render the proposal not eligible for the Simplified Approval Process Pilot Scheme. Proposals with any of the risk factors may be considered under the regular project approvals process instead.

Exclusion criteria	YES	NO
Will the activities involve associated facilities and require further due diligence of such associated facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities involve trans-boundary impacts including those that would require further due diligence and notification to downstream riparian states?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities adversely affect working conditions and health and safety of workers or potentially employ vulnerable categories of workers including women, child labour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities potentially generate hazardous waste and pollutants including pesticides and contaminate lands that would require further studies on management, minimization and control and compliance to the country and applicable international environmental quality standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities involve the construction, maintenance, and rehabilitation of critical infrastructure (like dams, water impoundments, coastal and river bank infrastructure) that would require further technical assessment and safety studies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the proposed activities potentially involve resettlement and dispossession, land acquisition, and economic displacement of persons and communities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities be located in protected areas and areas of ecological significance including critical habitats, key biodiversity areas and internationally recognized conservation sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities affect indigenous peoples that would require further due diligence, free, prior and informed consent (FPIC) and documentation of development plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the activities be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part B: Specific environmental and social risks and impacts

Assessment and Management of Environmental and Social Risks and Impacts	YES	NO	TBD
Has the AE provided the E&S risk category of the project in the concept note?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the AE provided the rationale for the categorization of the project in the relevant sections of the concept note or funding proposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any additional requirements for the country?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are the identification of risks and impacts based on recent or up-to-date information?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Labour and Working Conditions	YES	NO	TBD
Are the proposed activities expected to have impacts on the working conditions, particularly the terms of employment, worker’s organization, non-discrimination, equal opportunity, child labour, and forced labour of direct, contracted and third-party workers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed activities pose occupational health and safety risks to workers including supply chain workers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Resource Efficiency and Pollution Prevention	YES	NO	TBD
Are the activities expected to generate (1) emissions to air; (2) discharges to water; (3) activity-related greenhouse gas (GHG) emission; and (5) waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the activities expected to utilize natural resources including water and energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will there be a need to develop detailed measures to reduce pollution and promote sustainable use of resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Community Health, Safety, and Security	YES	NO	TBD
Will the activities potentially generate risks and impacts to the health and safety of the affected communities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will there be a need for an emergency preparedness and response plan that also outlines how the affected communities will be assisted in times of emergency?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will there be risks posed by the security arrangements and potential conflicts at the project site to the workers and affected community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Land Acquisition and Involuntary Resettlement	YES	NO	TBD

Will the activities likely involve voluntary transactions under willing buyer-willing-seller conditions and have these been properly communicated and consulted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Biodiversity Conservation and Sustainable Management of Living Natural Resources	YES	NO	TBD
Are the activities likely introduce invasive alien species of flora and fauna affecting the biodiversity of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the activities have potential impacts on or be dependent on ecosystem services including production of living natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Indigenous Peoples	YES	NO	TBD
Are the activities likely to have indirect impacts on indigenous peoples?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will continuing stakeholder engagement processes and a grievance redress mechanism be integrated into the management / implementation plans?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural Heritage	YES	NO	TBD
Will the activity allow continuous access to the cultural heritage sites and properties?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will there be a need to prepare a procedure in case of the discovery of cultural heritage assets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sign-off:

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