

# Piloting the Nexus Approach in Water & Resilience interventions in Burkina

<p><b>Key results:</b>  <i>Outcome 1: The availability of water and irrigation services is improved in the intervention areas: Output 1.1: Completion of 28 very high-speed positive boreholes</i>  <i>Outcome 2: Improve local governance and capacities to manage water resources in target communities (IDP and host populations).</i>  <i>Outcome 3: Enhanced use of water resources for diversified productive use, improved livelihoods and income generation for the most vulnerable households in targeted communities (IDPs and host populations)</i>  <i>Outcome 4: Learning and sustainability of the project is ensured</i></p> <p><b>Justification for support:</b>  <i>The current food insecure population – level 3 or above in The Integrated Food Security Phase Classification (IPC) - is estimated at 2,6 million people, an increase of 59% compared to the same period last year. Moreover, during the lean season of 2023 (June-August) up to 3.53 million people are expected to be acutely food insecure and in need of emergency food and nutrition assistance. Burkina Faso is among the most vulnerable countries to the impacts of climate change. One third of the territory of Burkina Faso - over 9 million hectares of productive land - is degraded. Moreover, land degradation is estimated to expand at an average of 470,000 hectares per year. Natural resource management (land, water) and community-based governance systems at the local, regional, and national levels are not adequate to cope with the increase in demographic pressure, inadequate legal frameworks and enforcement, climate change, conflict, and forced displacement. The project match the Danish Strategy for Development Cooperation “The World We Share”, directly contributing its objective 1 “Prevent poverty, fragility, conflicts and violence and create sustainable alternatives to irregular migration and displacement”, as well as align with the Danish Government’s long-term Strategy for Global Climate Action and the United Nations Sustainable Development Cooperation Framework (UNSDCF) 2023-2026 for Burkina Faso.</i></p> <p><b>Major risks and challenges:</b>  <i>Given the recent developments in the country during 2022 and 2023, the main risk for this project is the risk of the deterioration of the security situation in the targeted regions. The politico-military context in the Centre-Nord region since the second quarter of 2022 has been marked by the continuation of armed group activities, as in the rest of Burkina Faso. Acts of terrorism and armed conflict continue and are getting closer to the main cities of the Centre-Nord.</i></p>	<p><b>File No.</b></p>	2021-38639																						
	<p><b>Country</b></p>	Burkina Faso																						
	<p><b>Responsible Unit</b></p>	Ambassaden, Ouagadougou																						
	<p><b>Sector</b></p>	14015 – Water resources conservation																						
	<p><b>Partner</b></p>	World Food Programme																						
	<p><i>DKK million</i></p>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Total</b>																	
	<p><b>Commitment</b></p>	35					35																	
	<p><b>Projected disbursement</b></p>	7	21	7			35																	
	<p><b>Duration</b></p>	3 years (36 months)																						
	<p><b>Previous grants</b></p>	None																						
	<p><b>Finance Act code</b></p>	06.34.01.40																						
	<p><b>Head of unit</b></p>	Kristian Kirkegaard Edinger																						
	<p><b>Desk officer</b></p>	Bo Jul Jeppesen																						
<p><b>Reviewed by CFO</b></p>	YES: Lars Kjær Knudsen																							
<p><b>Relevant SDGs</b> [Maximum 1 – highlight with grey]</p>																								
<table border="1"> <tr> <td> No Poverty</td> <td> No Hunger</td> <td> Good Health, Wellbeing</td> <td> Quality Education</td> <td> Gender Equality</td> <td> Clean Water, Sanitation</td> </tr> <tr> <td> Affordable Clean Energy</td> <td> Decent Jobs, Econ. Growth</td> <td> Industry, Innovation, Infrastructure</td> <td> Reduced Inequalities</td> <td> Sustainable Cities, Communities</td> <td> Responsible Consumption &amp; Production</td> </tr> <tr> <td> Climate Action</td> <td> Life below Water</td> <td> Life on Land</td> <td> Peace &amp; Justice, strong Inst.</td> <td> Partnerships for Goals</td> <td></td> </tr> </table>							 No Poverty	 No Hunger	 Good Health, Wellbeing	 Quality Education	 Gender Equality	 Clean Water, Sanitation	 Affordable Clean Energy	 Decent Jobs, Econ. Growth	 Industry, Innovation, Infrastructure	 Reduced Inequalities	 Sustainable Cities, Communities	 Responsible Consumption & Production	 Climate Action	 Life below Water	 Life on Land	 Peace & Justice, strong Inst.	 Partnerships for Goals	
 No Poverty	 No Hunger	 Good Health, Wellbeing	 Quality Education	 Gender Equality	 Clean Water, Sanitation																			
 Affordable Clean Energy	 Decent Jobs, Econ. Growth	 Industry, Innovation, Infrastructure	 Reduced Inequalities	 Sustainable Cities, Communities	 Responsible Consumption & Production																			
 Climate Action	 Life below Water	 Life on Land	 Peace & Justice, strong Inst.	 Partnerships for Goals																				

**Strategic objectives** [for projects under a Country Strategic Framework]/**Objectives** [for stand-alone projects] – **Choose as relevant.**

The overall objective of this project is to strengthen the resilience of vulnerable populations in the Centre-Nord to shocks. The core approach is to improve access to water resources for private consumption and economic activity, mainly agriculture.

**Environment and climate targeting - Principal objective (100%); Significant objective (50%)**

	Climate adaptation	Climate mitigation	Biodiversity	Other green/environment
Indicate 0, 50% or 100%	100%	50%		
<b>Total green budget (DKK)</b>	<b>35 million</b>			

**Justification for choice of partner:**

The selection of WFP as the main implementing partner is based on WFP’s experience working in the area, synergy with its existing resilience programme, and the pilot component leading to scale-up of WFP activities and inspiration for other organisations. WFP has extensive experience working in fragile contexts in the region of implementation, as well as working with national authorities and local organisations in Burkina Faso

**Summary:**

This project aims to pilot a model for humanitarian-development-peace (HDP) nexus investments in Burkina Faso focused on sustainable access to water for agricultural use and sustainable food security. The project intervenes around water resources in a joint manner (access to the resource, management of the resource, sustainability of the resource, considering its use for both production and human utilisation), with the aim of optimizing its performance at all levels (household, communities, agriculture, income generation, etc.)

**Budget** (engagement as defined in FMI):

Engagement 1 – the development project	DKK 31 mio.
Engagement 2 - auxiliary activities, such as advisors, M&E and reviews (repeat as relevant)	DKK 1 mio.
Engagement 3 – Support costs	DKK 3 mio.
<b>Total</b>	<b>35 mio.</b>

# **Project Document for *Piloting the Nexus Approach in Water & Resilience interventions in Burkina Faso (NAWAR)***

## **Contents**

Project Document for .....	1
List of Acronyms.....	2
1. Introduction & Overview .....	3
2. Context, strategic considerations, and problem identification .....	3
2.1 Country Context .....	3
2.2 Food security and nutrition situation.....	4
2.3 Problem identification and rationale.....	4
2.4 Climate change and sustainability .....	6
3. Operational response .....	6
3.1 Operational response and alignment.....	6
3.2 Links with priorities in international, national development plans, and Danish strategic interests.....	7
3.3 Area of intervention and beneficiaries.....	7
3.4 Synergy with WFP Resilience Programme .....	9
3.5 Implementation arrangements and partners.....	11
4. Project Components and Outline.....	13
Component 1: Climate-smart Infrastructure and Improved Access to Water .....	13
Component 2: Governance and local water management .....	14
Component 3: Climate-smart Agriculture, Food Production & Income Generation .....	15
Component 4: Learning and Progression .....	17
5. Theory of change (TOC) – The HDP Nexus Approach .....	18
6. Project Objectives and Results Framework .....	22
7. Budget .....	28
8. Partner assessment .....	29
9. Planning and reporting .....	29
10. Risk management .....	30
11. Closure and progression strategy .....	32
ANNEX 1 - Context Analysis / Burkina Faso’s Water Sector Profile .....	35
ANNEX 2: Project beneficiaries’ table .....	39
ANNEXE 3 - Climate and environmental analysis of the project.....	40
12. Annex 4 – 7 .....	51



## List of Acronyms

<b>3PA:</b>	Three-pronged Approach
<b>AEP:</b>	Adduction d'eau potable (water facilities)
<b>AUE:</b>	Water Users Associations
<b>CSA:</b>	Climate Smart Agriculture
<b>CS:</b>	Capacity Strengthening
<b>CH:</b>	Cadre Harmonise
<b>CU5:</b>	Children Under Five
<b>FFA:</b>	Food for Asset
<b>HDP-Nexus:</b> Nexus	Humanitarian-Development-Peace
<b>IDP:</b>	Internally Displaced People
<b>INO:</b>	National Inventory of Drinking Water Installations
<b>IPC:</b>	The Integrated Food Security Phase Classification
<b>ONEA:</b>	National office of water and sanitation
<b>PCP / CBPP:</b> Planning	Participatory          Community-based
<b>PLW:</b>	Pregnant and Lactating Women
<b>SAMS:</b>	Smallholder Agricultural Market Support
<b>SCOOP:</b>	Simplified Cooperative Societies
<b>SBCC:</b>	Social Behavior Change Communication
<b>VSLA:</b>	Village Savings and Loans Associations
<b>WFP:</b>	World Food Programme

## 1. Introduction & Overview

The present project document outlines the background, justification, objectives, and management arrangements for development cooperation concerning a 35 million DKK pilot project named "***Piloting the Nexus Approach in Water & Resilience interventions in Burkina Faso (NAWAR)***" as agreed between the parties: World Food Programme (WFP) Burkina Faso Country Office and the Embassy of Denmark in Ouagadougou.

The project implementation phase will run from September 2023 to August 2026 (36 months – 3 years) and will target the Centre-Nord region of Burkina Faso. This project document is an annex to the legal bilateral agreements between the implementing partners and constitutes an integral part hereof, together with the documentation specified below.

"The Documentation" refers to the partner documentation for the supported intervention, which is the project document with annexes and the management agreement.

This project aims to pilot a model for humanitarian-development-peace (HDP) nexus investments in Burkina Faso focused on sustainable access to water for agricultural use and sustainable food security. The project will build on WFP's integrated resilience approach<sup>1</sup> and expand it to encompass other aspects of the HDP-nexus. It will combine WFP's expertise in the field of resilience with Denmark's expertise on water management.

The overall objective of this project is to strengthen the resilience of vulnerable populations in the Centre-Nord to shocks. The core approach is to improve access to water resources for private consumption and economic activity, mainly agriculture. The areas of intervention are experiencing a considerable influx of Internally Displaced Population (IDPs), which is why the project has the specific purpose of addressing the needs of local communities as well as IDPs.

This project is a pilot of an integrated water approach in the semi-arid regions of Burkina Faso. The aim is to intervene around the water resource in a joint manner (access to the resource, management of the resource, sustainability of the resource, considering its use for both production and human utilisation), with the aim of optimizing its performance at all levels (HH, communities, agriculture, income generation, etc.). The use of green energy such as solar energy allows to ensure sustainability of the intervention by ensuring a reduced ecological impact and fits in the strategy of future development of the WFP intervention around energy for food. The project takes a holistic approach to increasing the resilience of vulnerable populations to climate change, encompassing preparedness, risk reduction, and climate-resilient resource management. Through resilience building, communities are equipped for sustainable exploitation of a scarce resource base. This approach will seek to combine interventions for local communities and IDPs to ensure long-term sustainability of local communities and the inclusion and self-sufficiency of IDPs.

After the conclusion of the project, the ambition is for the concept to become a model to be replicated by WFP and its partners in other fragile contexts, where access to water is scarce and generally considered a root cause of instability and a potential source of conflict.

## 2. Context, strategic considerations, and problem identification

### 2.1 Country Context

*An extensive context analysis of the country is available in **Annex 1***

Burkina Faso is a landlocked country with an arid climate and a scarce resource base, affected by sudden and deep insecurity and human-made climate crises. With 40 percent of its population of 21.5 million living below the poverty line, Burkina Faso is ranked 184

---

<sup>1</sup> Including food assistance for assets (FFA), support to small producers (SAMS), school feeding, social protection, malnutrition prevention, and cross-cutting capacity strengthening of national partners.

out of 191 on the Human Development Index 2022<sup>2</sup>. Since 2018, Burkina Faso has experienced growing insecurity in several regions caused by frequent attacks by non-state armed groups (NSAG), causing an unprecedented humanitarian crisis in the country. The expansion and intensification of NSAG activities exploiting pre-existing inter-communal tensions, has caused 2 million people to flee their homes in search of safety, with a great toll on already vulnerable populations. These challenges are exacerbated by rapid population growth, inflation, climate change, and other shocks such as the COVID-19 pandemic and subsequent socio-economic crisis. In addition, the conflict in Ukraine is worsening this unprecedented humanitarian situation by increasing supply chain and food commodity prices.

Despite the progress made over the past two decades, Burkina Faso faces numerous development and humanitarian challenges and the difficulty of meeting basic needs, including food and nutritional security, access to water, health, education, gender equality, social cohesion and peace. 77% of Burkina Faso's population lives in rural areas, and 73% of these households practice agriculture on increasingly degraded land. Agriculture and livestock employ 85% of the active population and generate two-thirds of the national economic production.

## **2.2 Food security and nutrition situation**

According to the last *Cadre Harmonisé* (November 2022), the current food insecure population – level 3 or above in The Integrated Food Security Phase Classification (IPC) - is estimated at 2,6 million people, an increase of 59% compared to the same period last year. Moreover, during the lean season of 2023 (June-August) up to 3.53 million people are expected to be acutely food insecure and in need of emergency food and nutrition assistance. For the second time in the country, the *Cadre Harmonisé* identifies potential IPC 5 (Disaster level) areas in its prospective, located in the Sahel Region.

The project intervention region of Centre-Nord is one of the most affected areas. More than 575,000 people in the region of Centre-Nord are expected to be food insecure during the 2023 lean season.

The consequences of COVID-19 pandemic, the war in Ukraine and the spike in food prices have added an additional layer of vulnerability to an already fragile situation. Furthermore, 9.7 percent of children aged 6 months to 5 years suffer from acute malnutrition<sup>3</sup>. According to the last IPC Acute Malnutrition Analysis (August 2021 – July 2022), an estimated 699,000 (10%) children aged 6 months to 5 years suffered from acute malnutrition during the period (July 2021- August 2022). There is also a 25-percentage point increase in malnutrition among pregnant and lactating women compared to the previous year, with a total of 163,000 suffering from acute malnutrition between August 2021 and July 2022.

## **2.3 Problem identification and rationale**

Burkina Faso is among the most vulnerable countries to the impacts of climate change. One third of the territory of Burkina Faso - over 9 million hectares of productive land - is degraded. Moreover, land degradation is estimated to expand at an average of 470,000 hectares per year.<sup>4</sup> In addition, agricultural production and therefore the food insecurity situation is aggravated by the country's high exposure to risks and shocks such as reduced rainfall, droughts, floods, dust storms, temperature spikes and other climatic shocks.

Part of the Centre-Nord region of Burkina Faso is part of the Central Sahel, and thus even more exposed to water shortage and droughts. These specific areas receive less than

---

<sup>2</sup> PNUD, Rapport IDH 2022 <https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22overviewfrpdf.pdf>

<sup>3</sup> 2021 SMART National Nutrition Survey

<sup>4</sup> [Burkina Faso LDN Country Commitments.pdf \(unccd.int\)](#)

500mm average annual rainfall, negatively affecting agricultural productivity and self-reliance of local and rural populations.<sup>5</sup>

To respond to the food and nutrition emergency in Burkina Faso, Mali and Niger, WFP declared the maximum Level 3 emergency in the three Central Sahel countries in September 2019 and remains an area under corporate attention and prioritization since early 2022.<sup>6</sup> The first sizeable population displacements in Burkina Faso took place in 2019 and have continued to rapidly increase since, leaving some IDPs displaced for up to three years with no immediate, medium or long-term return solutions. Moreover, the large amount of IDPs dramatically increases the needs of local communities.

Fragmented agricultural production means that risks to agricultural production is a direct risk to livelihoods and nutritional status. This is exacerbated by the fact that only around 50,000 hectares across the country (6 % of agricultural land) is irrigated. That means that 94% of agricultural production is dependent on rainfall, which is less and less predictable due to climate change. Agriculture in Burkina Faso is therefore especially vulnerable to climatic shocks.<sup>7</sup> Competition over access to and use of the scarce natural resource base (land, pastures, water points, livestock corridors, etc.) is strong and increased by internal displacement. This is even more true in the north and eastern parts of the country, which have the highest physical and food insecurity levels registered in the country.

Natural resource management (land, water) and community-based governance systems at the local, regional, and national levels are not adequate to cope with the increase in demographic pressure, inadequate legal frameworks and enforcement, climate change, conflict, and forced displacement.

Water supply in rural and semi-urban areas in Burkina Faso is provided mainly through wells, boreholes, and standpipes. At national level, only 69.5% (2020) of the population has access to water. The government has tried to address this challenge with the promulgation of law N°002-2001/AN (Water Management Act) that stresses that the population's need of water must be met before other activities demanding water can take place.

There are two large aquifer formations in country: the crystalline basement and the sedimentary zones. The crystalline basement extends over 225,000 km<sup>2</sup> or 82% of the territory where groundwater is linked to fracturing or alteration of rocks. Flow rates (or discharge rates) are generally low (0.5 to 10 m<sup>3</sup>/h). The aquifer can provide higher flows of up to 100 m<sup>3</sup>/h. The intervention area is in this crystalline zone (*zone de socle*).

In the project intervention areas, the situation of access to drinking water is summarized in the table below.

Commune	Number of boreholes with human-powered pumps	Rate of functionality of human-powered pumps	Number of AEPS	Functionality of AEPS	Management of AEPS	Number of Water Users Associations (WUA)	Rate of access to drinking water
Boussouma	435	96,9	2	100%	Twinning Committee	67	76,50%
Korsimoro	241	96,8	2	100%	International Production Project (PPI)	64	76%

Source: INO 2020<sup>8</sup>

This study conducted in 2020 by the "Inventaire National des Ouvrages d'approvisionnement en eau potable en milieu rural" (INO), illustrates that the access to

<sup>5</sup> Burkina Faso | UNDP Climate Change Adaptation ([adaptation-undp.org](https://adaptation-undp.org))

<sup>6</sup> WFP Burkina Faso Country Brief, November 2021, available [here](#).

<sup>7</sup> Evaluation à mi-parcours de la Stratégie nationale de développement durable de l'agriculture irriguée (SNDDAI)

<sup>8</sup> Data provided by « Direction Regionale de l'eau Centre Nord »

water rates remains particularly low in the targeted areas of this project, compared to the objectives of the "Programme National d'Assainissement des Eaux Usées et Excreta" (PN-AEP 2016-2030) which aims to increase access to drinking water to 100% by 2030. In fact, the number of AEPs in these municipalities is very low, with 2 AEPs only in the commune of Boussouma (out of 62 villages) and the same in the commune of Korsimoro (out of 29 villages). Moreover, the massive displacement of populations to these municipalities add pressure on resources for both hosts populations and IDPs.

Improving access to clean and sustainable water resources is, therefore, an integral part of the HDP-nexus for the following reasons:

- Access to safe and reliable water is a fundamental human right<sup>9</sup>, and a critical element in assisting conflict-affected countries overcome the fragility trap and being able to respond to rising environmental threats.
- Improved access to water for irrigation schemes can increase agricultural productivity and lead to improved opportunities for economic growth and job creation.
- Contaminated water is linked to the transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid, and polio. Absent, inadequate, or inappropriately managed water services expose individuals to preventable health risks.
- Bringing higher quantities of reliable water to fragile communities will enhance the quality of life by reducing the time and effort to collect water – a burden that disproportionately affects women and children – through improvements in physical security, public health, child education and economic productivity.
- Improved access and provision of water for irrigation and for households, implemented through a conflict sensitive approach, will be a positive contribution towards minimizing the causes of conflict and operationalizing the triple nexus in Burkina Faso.

## 2.4 Climate change and sustainability

*An extensive climate and environmental analysis of the project is available in **Annex 3***

The World Food Programme embraces the vision of the 2030 Agenda for a world free from hunger in a context of socially equitable and environmentally responsible sustainable development. WFP's ability to contribute to the achievement of the 2030 Agenda depends on its unwavering commitment to act with the highest ethics and to apply the highest standards in its interactions with the people, communities and governments it serves, and the natural environment on which all depend.

In order to take sustainability into account in a cross-cutting way in all its interventions, WFP follows the recommendations of the "WFP Environmental and Social Sustainability Framework"<sup>10</sup> which consists of a set of principles, standards, and tools created to increase WFP's environmental and social sustainability and to limit the potentially negative impacts WFP may have on the environment, people, or communities.

The project aligns with a vision of sustainable development. Production processes and economic development are often associated with an increased environmental footprint. This project utilises clean technologies minimising adverse environmental impacts. While the infrastructure component foresees green technologies based on renewable energies, the economic development component will support green jobs, and the dissemination of green technologies.

**Green infrastructure.** This project uses solar-powered water pumps to generate power for drinking and irrigation of school and market gardens, thereby reducing the possible carbon footprint compared to diesel water pumps regularly used. The total greenhouse

---

<sup>9</sup> Résolution des Nations Unies du 27 Juillet 2010 concernant l'accès à l'eau : <https://documents-dds-ny.un.org/doc/UNDOC/LTD/N10/464/65/PDF/N1046465.pdf?OpenElement>

<sup>10</sup> WFP ESS : <https://docs.wfp.org/api/documents/WFP-0000102399/download/>



gas emissions avoided by using solar pumps are estimated to be **27.6 ton of CO<sup>2</sup> per year<sup>11</sup>**.

**Green growth and sustainable practices.** The project envisages a number of activities at community and household levels, introducing sustainable practices of production and behavioural change. These practices aim at the general environmental footprint of the project on vegetable production sites, as well as an improvement of the village ecosystem. These activities include:

- Large-scale composting for vegetable gardens (replacing mineral/chemical fertilizer)
- Production and planting of a minimum of 50,000 trees through the project serving as windshields and barriers (capturing carbon, improving micro-climate)

### **3. Operational response**

#### **3.1 Operational response and alignment**

This project will contribute to scaling-up WFP's resilience activities on clean water and irrigation. WFP's participatory planning processes are central to the efforts, fostering dialogue and trust at community level and to the extent possible, leveraging on the leadership of decentralised authorities. Valuable experience has been gained from inclusion of IDPs in participatory community-based planning and resilience building – an approach that can be scaled up in settings of protracted displacement to support self-reliance and build social cohesion with host communities.

WFP's approach aims at reducing vulnerabilities and tackling root causes of fragility through asset creation and livelihoods activities, while ensuring improved access to and better use of natural resources and social services. Further, capacity strengthening of institutions and local actors enhances governance to deliver quality programmes and equitable services.

The project aims to address many of the basic humanitarian needs in a sustainable manner, while at the same time boosting long-term development and stabilization for selected communities, in line with the HDP-nexus approach.

The project will consist of three main phases:

- 1) Transfer of know-how and feasibility studies: "Finding and extracting water".
- 2) Installation of hardware: "Making water available to end users (infrastructure sizing and construction, management and maintenance of infrastructures etc.)".
- 3) Bringing hardware to life: "Impact and governance of water being available to the communities – for both private consumption and production".

#### **3.2 Links with priorities in international, national development plans, and Danish strategic interests**

This project will directly contribute to 5 of the 17 United Nations Sustainable Development Goals (SDG):

- SDG 2 "Zero Hunger": End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- SDG 6 "Clean water and sanitation": Ensure availability and sustainable management of water and sanitation for all.

---

<sup>11</sup> This is based on following assumptions: In terms of environmental impacts, each litre of diesel fuel releases **2.3kg of CO<sup>2</sup>** equivalent. Based on the **total area of vegetable gardens 15.75ha** in seven locations irrigating three times in a year (=three production cycles), and assuming a diesel generator would have to power the water pump, an estimated 12,000 lit of fossil fuels would be necessary per year, equivalent to 27.6 tons CO<sup>2</sup>. By using the solar powered irrigation system, this project thus significantly reduces potential negative impacts considering fossil powering alternatives and replacing these harmful technologies.

- SDG 12 “Responsible production and consumption”: Ensure sustainable consumption and production patterns.
- SDG 13 “Climate action”: Take urgent action to combat climate change and its impacts.
- SDG 15 “Life of land”: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forest, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Further, WFP will leverage its partnerships for the goals (SDG 17) to pursue synergies and complementarity and ensure the full and successful implementation of the project at all levels.

The project also match the Danish Strategy for Development Cooperation “The World We Share”, directly contributing its objective 1 “Prevent poverty, fragility, conflicts and violence and create sustainable alternatives to irregular migration and displacement”, as well as align with the Danish Government’s long-term Strategy for Global Climate Action and the United Nations Sustainable Development Cooperation Framework (UNSDCF) 2023-2026 for Burkina Faso.

It is also consistent with the Danish Cooperation Strategy in Burkina Faso and its Strategic Focus Area 3.3 namely “Agriculture sector led employment and green growth”, with the results:

- Improved integrated water resource management in the five water basins of Burkina Faso and introduction of innovative water-saving technologies.
- Increased use of green approaches and technologies in the priority sectors for Danish support: Agriculture and water

The proposed project will contribute to the achievement of Burkina Faso’s national development plan (PNDES II). PNDES II is the second phase of Burkina Faso’s long-term development plan covering the period from 2021-2025. The primary objective of PNDES II is to foster sustainable and inclusive economic growth and promote social development in Burkina Faso.

The present project particularly aligns with the strategic key areas 1 “Consolidate resilience, security, social cohesion, and peace”, and 4 “Boost the growth of key sectors for the economy and jobs.”

In January 2023, the transitional government also published the Action Plan for Stabilization and Development (PA-SD) in which the project aligns with the pillar 3 “Re-founding the State and

improve governance”, and particularly with the following strategic outcomes (SO):

- SO 2.4: Strengthen decentralization and good local governance
- SO 3.6: Improve the living environment, access to drinking water, sanitation and quality energy services
- SO 4.1: Develop a productive and resilient agro-sylvo-pastoral, wildlife and fisheries sector in a sustainable manner, more oriented towards market-oriented
- SO 4.5: Reverse the trend of environmental and natural resource degradation to promote climate resilience and reduce greenhouse gas and reduce greenhouse gas emissions

Finally, the proposed project is also aligned with WFP Burkina Faso’s Country Strategic Plan (CSP) 2019-2023.

### **3.3 Area of intervention and beneficiaries**

The intervention will be carried out in the Centre-Nord region. The identified areas have received large inflows of IDPs due to their relative stable security situation, with limited risk of attacks.

The project intervention sites have been selected after preliminary hydraulic assessments from the national office of water and sanitation (ONEA). The assessments have pointed towards groundwater availability, yet further analyses will be carried out in the context of the project to proceed with the final confirmation of the project sites.

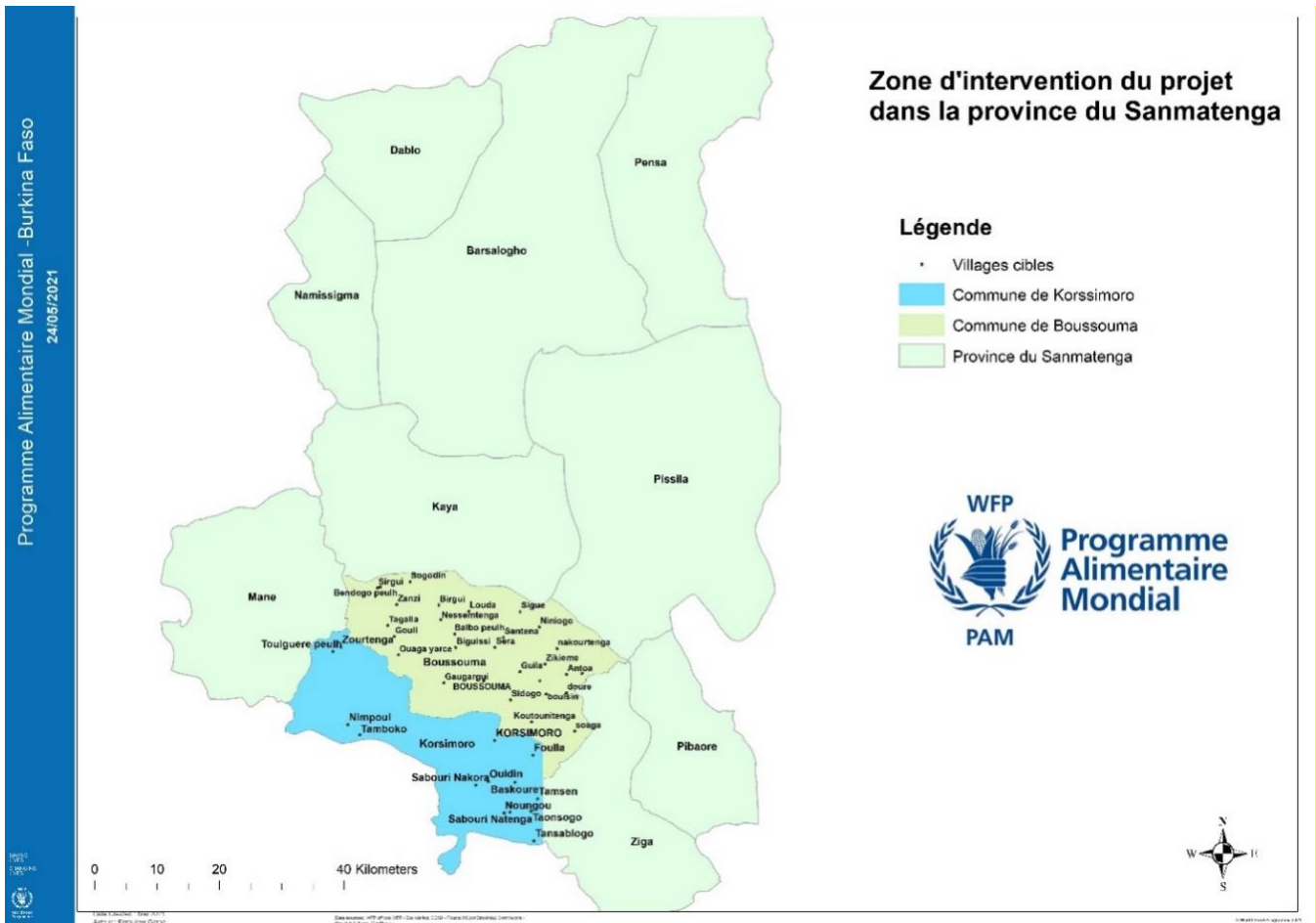
The project initially focuses on **7 village centres** in the municipalities of Boussouma (Kassiri, Sidogo, Goaragui, Louda) and Korsimoro (Tansabologo, Komtenga, Wara), and their extended vicinity, **comprised of 23 villages**, with a total population of **46,470 people**. These intervention sites are also municipalities where WFP has operational presence and experience implementing its integrated resilience package of activities.

**The project is estimated to reach a total of 46,470 beneficiaries**, including a total of 4,002 IDPs<sup>12</sup> (see Annex 4 for a detailed breakdown).

The seven village centres and the surrounding villages were consulted through Community-Based Participatory Planning (CBPPs). This participatory exercise at community level made it possible for WFP and communities to acquire a common understanding of beneficiaries' self-identified needs. It was accompanied by a multi-sector action plan laying down all the proposed development activities to be conducted. This exercise ensured the ownership of resilience activities, including those linked to irrigation, and the prioritization and participation of specific vulnerable groups such as youth and women. The results of these consultations in the targeted areas are available in **Annex 4**.

---

<sup>12</sup> The project will reach 21,455 direct beneficiaries, including approximately 2,578 IDPs, through the AEPS for the supply of water for homestead activities in the 7 selected village centres and the villages of Tagalla and Boala,. With regards to agricultural production activities, the project will reach 7,000 direct beneficiaries, of which 700 are IDPs, and 2,900 beneficiaries from surrounding villages. Overall, the project will reach a total of 21,455 direct beneficiaries (13,467 beneficiaries from village centres and 7,987 beneficiaries from surrounding villages). Additionally, approximately 25,015 people will benefit from the spill-over effects resulting from water infrastructure and agricultural production.



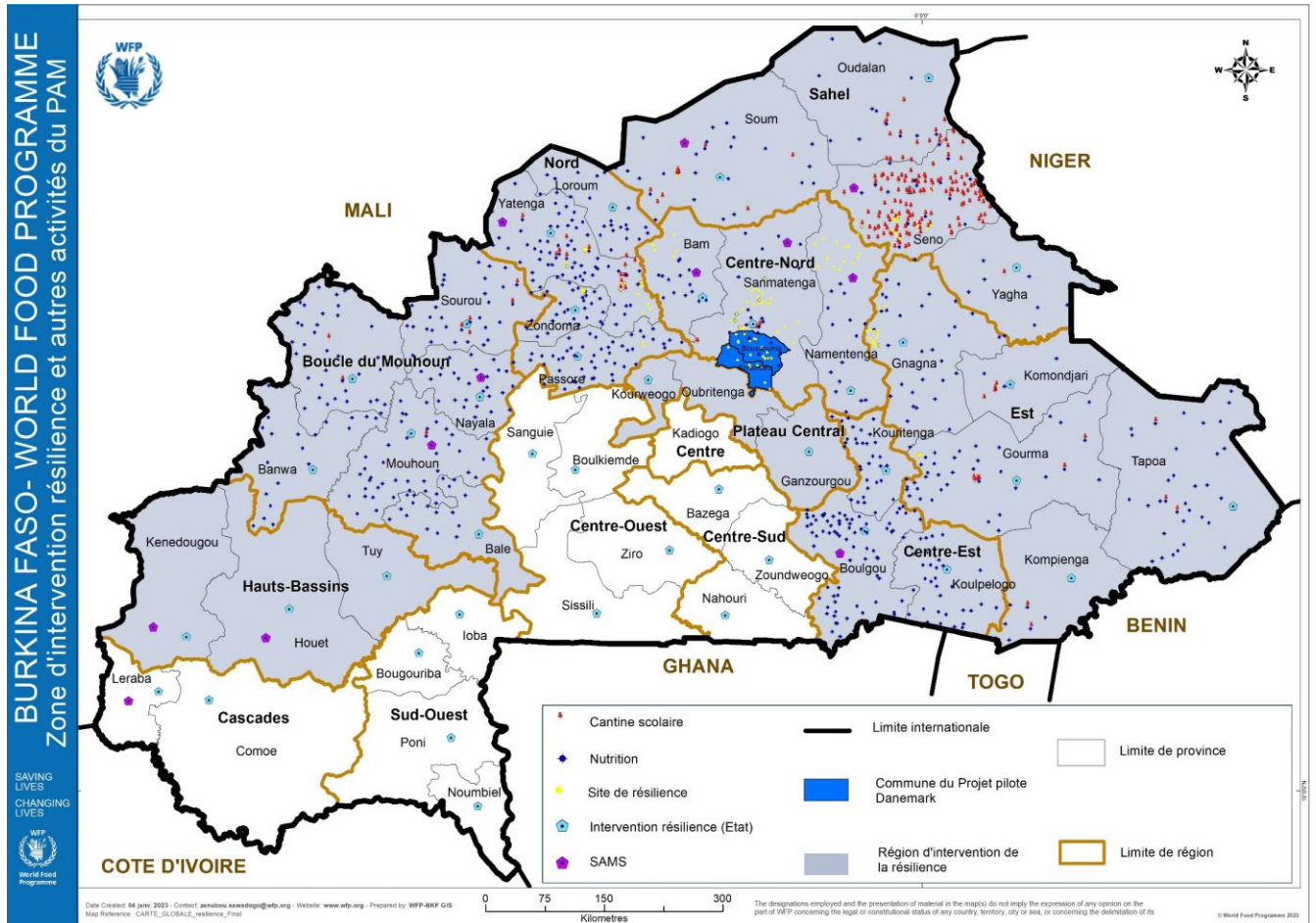
**Focus on IDPs.** IDP's represent 7% of the population of selected villages. Given the trends of violence and displacement in 2022, this number could rise significantly. The share of IDPs in the population could reach 10% or more IDPs<sup>13</sup> over the course of the project. It is important to emphasize that even a share of 7% of IDPs in the population represents a significant stress on resources at village-level.

In terms of inclusion in activities, the share of IDPs engaged in agricultural production activities (vegetable gardens and irrigation) will be proportionately higher than the overall share of IDPs (7000 beneficiaries with 700 IDPs), thus ensuring that IDPs reach a certain level of self-sustenance, as well as enabling them to contribute to the local economy and food security.

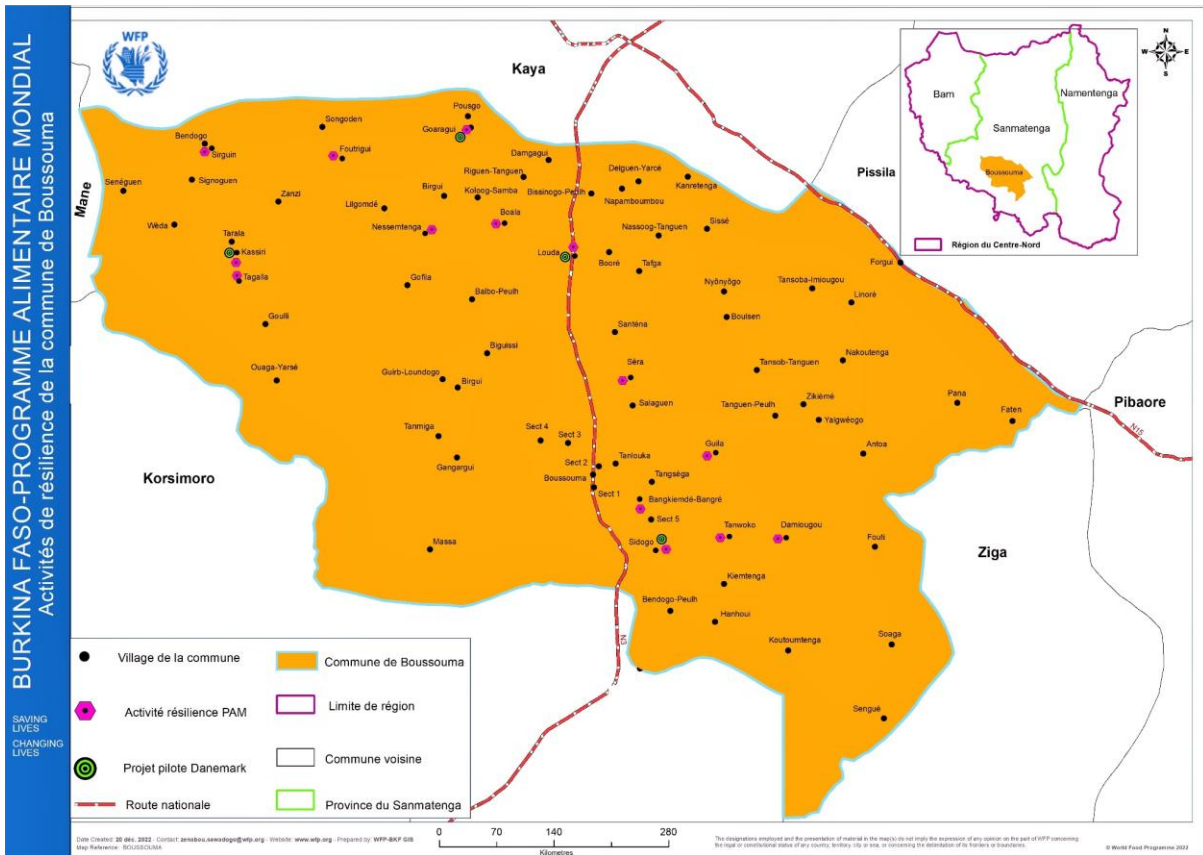
### 3.4 Synergy with WFP Resilience Programme

WFP's Integrated Resilience Zones (see map below) benefit from the synergistic support of WFP's various donor-funded programs and projects. Because they are supported at multiple levels of vulnerability (land management, agriculture, infrastructure, education, governance, etc.), these zones become "buffer zones", serving as a bulwark against the proliferation of violence.

<sup>13</sup> WFP Field Research, Assessment and Monitoring team projections, Kaya sub-office, 2022



This pilot project will add a new component to the synergy of the area. All the villages targeted by this project are either villages included in other WFP resilience activities or neighbouring villages (see maps below). Thus, the water resources produced/managed by this project will serve all the communities in these areas, by providing drinking water to all the beneficiaries in the area (e.g. cash for asset beneficiaries groups, school children canteens, beneficiaries of nutrition interventions, etc.), and will also serve as an irrigation resource for land restoration and agro-pastoral activities, or to support the creation of vegetable gardens in schools.



### 3.5 Implementation arrangements and partners



For the implementation of this project,

The collaboration with all these partners is based on specific memorandums of understanding (MoUs) according to the areas of interest. These protocols will allow to pool technical and financial resources while agreeing on the approaches and tools for monitoring, learning, and capitalizing on achievements.

The main partners of implementation and their role are:

- **ONEA:** Geophysical studies, drilling, AEPS studies and AEPS works, including the installation of solar drainage systems (solar pumps, solar panels, water towers, pipe laying, etc.) will be carried out by the Office Nationale de l'Eau et de l'Assainissement (ONEA) through an agreement with WFP. Based on the terms of this agreement, WFP will transfer the funds necessary to carry out these activities to ONEA.
- **DGFOMR:** The Directorate General of Land Tenure, Training and Organization of the Rural World (DGFOMR) will coordinate all the land tenure security measures in conjunction with all the actors involved in the process. This includes the identification of sites, the sensitization of land actors, the realization of a socio-land diagnosis, the formalization of land agreements and commitments.
- **DGADI:** Direction Générale des Aménagements agro-pastoraux et du Développement de l'Irrigation (DGADI) It will be involved in the validation of the development studies of the irrigated perimeters and in the supervision of the installation of the irrigation equipment.
- **Nazi Boni University:** WFP has an ongoing partnership with Nazi Boni University of Bobo Dioulasso (MoU in place), developing sponsorships for promising students in rural development and water conservation, and organizing bootcamps for lecturers and researchers. WFP also offers technical support to the development of the University's curricula. In 2021, around 20 trainees were mobilized on WFP resilience sites for the purpose of conducting field work and action-research projects. As part of this project, Nazi Boni University will be called upon to conduct a series of action-research projects on the themes of land tenure, fish farming development, and the optimization of water resource use. The University will assign students to the various sites and provide innovative recommendations that will allow for sharing and replicating good practices, as well as improving and adapting implementation processes. The University will also be the one to stock the fishponds and train the beneficiaries in the practice of fish farming.
- **DRARAH:** The Regional Directorate of Agriculture, Animal Resources and Fisheries (DRARAH), through its proximity teams (ZAT and UAT), will identify the sites to be developed and participate in the land negotiation process through the SFOMR. It will also be responsible for supervising producers in the development of sites and monitoring the maintenance of irrigation facilities, setting up and accompanying the formalization of SCOOPs, monitoring the operation of SCOOPs, particularly the establishment of a working capital fund for the group purchase of inputs and the payment of water charges.
- **DREA:** The Regional Directorate of Water and Sanitation will be involved in supervising the construction of boreholes and AEPS. It will also monitor the operation of the AEPS, the management of the AEPS by the private operator, the establishment and operation of the AUEs and the supervision of IEC activities (Inform - Educate - Communicate, information for behaviour change).
- **Communes:** The communes will be involved in all stages of the project and will actively participate in monitoring the work, setting up the WUAs and their operation alongside the DREA. They will also be responsible for recruiting the private operator

in charge of managing the AEPS and will monitor the management of the AEPS entrusted to the operator.

- **NGO WASH:** It will implement activities related to information/awareness raising (IEC) of beneficiaries on hygiene and sanitation issues: theatre forums, animations, radio broadcasts, image boxes, home visits, etc. It will also carry out a diagnosis of the management of AEPS in the project's beneficiary communes and, if necessary, propose capacity-building sessions for the various actors in the AEPS management scheme (communes, DREA, AUEs, private operator).
- **Private sectors:** geophysical surveys, technical studies (AEPS studies and development of market gardening areas) as well as the various works (drilling of boreholes, construction of AEPS structures and installation of drainage, storage and irrigation equipment, etc.) will be carried out by private service providers. They will be recruited by ONEA for the drilling and AEPS components and by WFP for the hydro-agricultural developments.

The WFP will recruit private service providers to carry out studies and development work on market gardens, school gardens and nurseries. WFP will supervise the activities in the field through its specialized staff at the country office and also through its field office in Kaya.

Finally, WFP will produce capitalization documents and conduct baseline studies and monitoring and evaluation of the project and will organize the various workshops (launch workshops, annual review, etc.).

WFP will coordinate all project activities and report to the Danish Embassy in line with the management arrangements described in chapter 9.

#### **4. Project Components and Outline**

##### **Component 1: Climate-smart Infrastructure and Improved Access to Water**

**Outcome 1:** The availability of water and irrigation services is improved in the intervention areas

- Output 1.1: Completion of 28 very high-speed positive boreholes
- Output 1.2: Construction of 7 water supply networks and piping systems for communities and resilience activities including monitoring of the groundwater levels

Availability of year-round water is a major challenge in the Sahel. This leads to major hardships (time to fetch water for women and kids) and health implications (water-borne diseases) for communities, even when water is available. Solar-powered water pumps are an ideal solution for this challenge:

- They can be installed anywhere, even in areas lacking electrification.
- They have low running costs and replace the need for fossil fuels.
- They ensure availability of good quality water year-round.

Together with the Danish Embassy, technical advisors from Burkina Faso's water authorities have confirmed that water resources are potentially available in areas where WFP has ongoing resilience activities. However, in view of the low flow rates obtained during the construction of previous boreholes in the project area, WFP plans to install four boreholes per village centre to guarantee a sufficient volume of water. WFP expects to install a total of 28 solar-powered water pump systems in the Centre-Nord region with adequate water flows to irrigate, for each cluster of villages, 2 hectares vegetable gardens (with tree nurseries), 0.25 hectares of school gardens integrated with a fishpond of 30m<sup>3</sup>, as well as a number of household-level activities requiring water (homestead vegetable gardening, composting, fruit tree planting, urban greening, etc.).



Before the drilling of boreholes, a company will be tasked to perform a geophysical analysis to identify the most suitable areas. This will be done on the basis of hydro-geological maps, prospections and previous experience of local technical extension services, and potentially enhanced by the expertise from ONEA. The solar pumps will then be sized based on the required depth and water flow of boreholes, and systems will be purchased and installed accordingly.

*Climate-sensitivity of the intervention.* Solar systems replace the need for diesel- or gasoline-powered systems. In villages connected to the grid, electricity is generally produced in diesel-powered plants, and in villages without electricity the only alternative is diesel-powered generators. The need for water thus leads to carbon emissions that can be avoided by introducing solar-powered pump technology. This project will require an important amount of water for irrigation and homestead activities, which could potentially lead to considerable carbon emissions if water pumping were to be powered by fossil fuel-powered generators (or those connected to the grid). With rising fuel costs, the use of such generators also becomes a less economically viable alternative – all of which makes the solar-powered pumps an exceedingly attractive endeavor.

A full climate and environment analysis of the project is available in **Annex 3**

*Complementarity between Component 1 and Components 2-4:* WFP will launch its activities as soon as the water installations have been established in target villages in sufficient quantity and quality (Work plan of the project available in **Annex 5**). Infrastructure and its maintenance should continue to be conducted by the local authorities during project implementation and beyond. This will ensure an automatic and organic handover of the project to authorities in terms of ensuring water supply and eventual handover to local communities for resilience activities.

## **Component 2: Governance and local water management**

**Outcome 2:** Improve local governance and capacities to manage water resources in target communities (IDP and host populations).

- Output 2.1: Improving education and capacity building around the management of water resource in the communities
- Output 2.2: Improving water service access for target villages (quartier, schools, health and job opportunities)

To support the decentralization process and to sustainably improve access to water, Decree No. 2000-514/PRES/PM/MEE was adopted in November 2000 by the government to reform the management system of hydraulic infrastructure for water supply in rural and semi-urban areas. This decree recommended the delegation of infrastructure management to the municipalities for direct management or for indirect management through a private operator. The decree was followed by the 2004 Decentralization Law, which delegated water governance to local governments. In this framework, Water Users Associations or *Associations des Usagers de l'Eau* (AUEs) are not responsible for the management of the infrastructures but for ensuring the control of the public water service (equity, quality, quantity, availability and accessibility).

The governance of the AEPS to be installed under this project by ONEA should thus be transferred to the municipalities, which will in turn ensure the recruitment of private service providers responsible for the management and operation of the AEPS.

Further, water management at each village will be ensured by an AUE, which will assume the responsibilities of controlling the public water service provided by the private operator (in terms of equity, quality, availability and accessibility) and report to the municipality. AUEs will also defend the common interests of users and participate in all decision-making concerning modifications in the village's water supply infrastructure. Before setting up the AUEs, communal workshops will be organised. These workshops will gather village advisers and users, and will prepare beneficiaries for the establishment of AUEs.

Once this system is set up and/or reactivated by the government, WFP through its cooperating partners, will ensure that the AUEs of the 7 villages benefiting from these works are able to improve their command of the legal framework, and their skills and knowledge in governing local water resources. Partners will also ensure the identification and management of conflicts related to water use, and the involvement of women and young people in the management of water resources. WFP will also promote the proportional inclusion of IDPs depending on each village's demographic structure within AUEs to prevent any potential exclusion, inequity or conflict derived from host communities' exclusive management and governance of water supply.

The launching of AUEs will be preceded by animation sessions, broken down as follows: (1) meeting of information, decision and organization in the villages; (2) commitment verification meeting for the appointment of village representatives; and (3) AUE constitutive general assembly. For villages that already have an AUE in place, it will be necessary to identify its development stage (absence of government receipt/acknowledgement, account not opened, need for renewal of office or trainings, etc.). The animation sessions will consider the state in which the AUE is found to make it operational again.

Furthermore, Social Behavior Change Communication (SBCC) activities will be conducted at the household level, in schools and health centers, markets and WFP asset creation sites. These will concern topics around hygiene and sanitation, such as safe household water treatment and storage, and knowledge on waterborne diseases and treatment, and will include the distribution of didactic material on good practices concerning water use. Hygienists will be appointed by neighborhood and trained to continue sensitization at household level to verify the adoption of practices and reinforce messages.

### **Component 3: Climate-smart Agriculture, Food Production & Income Generation**

**Outcome 3:** Enhanced use of water resources for diversified productive use, improved livelihoods and income generation for the most vulnerable households in targeted communities (IDPs and host populations)

- Output 3.1: Promoting water-efficient irrigation systems (drip irrigation) and fish production
- Output 3.2: Intensifying agricultural production and facilitating market access and financial inclusion
- Output 3.3a: Organizing producers in associations and agro-business cooperatives (Simplified Cooperative Societies – SCOOPs), longer-term income and job generation opportunities and green jobs.
- Output 3.3b: Enabling water access at village level for homestead productive activities and urban development: Homestead vegetable gardens, household-level composting, urban greening (tree planting), clothes washing, etc.
- Output 3.4: Capacity strengthening and information sharing on financial management, commodity market prices, climatic hazards/forecasts and environmental risks

This project will apply Climate Smart Agriculture/CSA (**see Annex 3**) approach targeting mainly IDPs and vulnerable host communities. It incorporates greening and land restoration activities which help to reduce greenhouse gas emission through sequestering carbon. The proposed climate-smart agriculture technologies are mainly improved vegetable farming with solar irrigation system combined with various soil fertility management practices, agro-forestry and homestead development intervention including energy saving stoves, homestead greening and compost making. Most of these interventions primarily increase productivity and enhance the resilience and adaptation capacity of vulnerable communities. To support communities in their efforts to become more resilient to shocks and improving their food and nutritional security, WFP has

developed a specific approach known as the Three-Pronged Approach (3PA),<sup>14</sup> including CBPP or PCPs. The project's intervention sites are found in a semi-arid climatic zone, where WFP is already implementing an integrated package of resilience activities, based on PCPs conducted in 2020 to identify community priority interventions. Asset creation activities (Food for Assets/FFA) derived from these community plans are carried out by WFP and communities thanks to the contribution of various donors.

WFP's CBPP combined with the integrated resilience programmes have been found to contribute to social cohesion among communities: A study of the Stockholm International Peace Research Institute (SIPRI)<sup>15</sup> has confirmed that a combination of participatory planning and asset creation activities (FFA) contributes to social cohesion and brings communities together, especially farmers and pastoralists, as well as host and IDP communities in the Sahel (example of Mali). The project enables them to collectively decide what are their common development priorities and to work towards the same goals. This in turn promotes addressing existing intra and inter-community conflicts and prevents new ones from emerging, while creating informal groups and local governance fora for their resolution, through asset creation and rehabilitation activities and their respective community-based management committees – thus enabling a concrete operational response to challenges identified in the ambit of the Humanitarian-Development Peace Nexus.

The leading factors that influence the performance and efficiency of solar water pumping systems are environmental conditions. According to some research<sup>16</sup>, Burkina Faso belongs to the sunniest areas of the earth, with a potential of average solar irradiation of approximately 5-6 kWh/m<sup>2</sup>/day. The average range of hours of sunshine in Burkina Faso particularly in project area of Kaya is 3,149 sunshine hours annually and approximately 8.63 sunlight hours per day. May has the most sunshine (average sunshine: 12h), whereas December has the least (average sunshine: 7.6h). Even in the worst months, sunshine is sufficient to produce the required amount of energy from the solar panels.

Irrigation in Burkina Faso is essentially gravity-powered and poorly developed, with 33% of the irrigated area out of an irrigable potential of 233,500 ha. Efforts are being made to build irrigation facilities. However, irrigation management is poor, and producers are disorganized leading to improper water management and lack of maintenance of hydraulic structures. The irrigation systems used on the irrigated areas include dewatering systems, transport and application of water by containers, gravity irrigation system, semi-Californian irrigation system, and pressure irrigation system. The latter includes micro-irrigation and sprinkler irrigation. It involves pressurizing water and delivering it to the foot of the plant (drip) through lines of drip emitters or through micro-sprinklers that spray the crop in a close proximity.

WFP plans to establish and equip 7 farms of 2 hectares each, as well as 7 school gardens with modern and efficient irrigation systems. A total of 14ha community village gardens to be established in the targeted villages which will benefit 746 households. Each market garden shall be protected with chain links supported by live fences. The pumped water from each borehole will be stored in a water tank and distributed to each block through PVC pipe system and water applied to each field with drip irrigation. The recommended irrigation method (drip irrigation) is around 90% more efficient compared to traditional methods currently in use, namely furrow irrigation (by earth canals) or hand watering (with watering cans). Unlike other modes of water mobilization such as "boulis" and

---

<sup>14</sup> The 3PA approach aims to strengthen the design, planning and implementation of resilience building programmes, social safety nets, risk reduction and preparedness. The 3PA is made of three interdependent tools at three different levels: Integrated Context Analysis (ICA) at the national level, Seasonal Livelihood Programming (SLP) at the regional level, and Community-Based Participatory Planning (CBPP) at the local level.

<sup>15</sup> [The World Food Programme's Contribution to Improving the Prospects for Peace | SIPRI](#)

<sup>16</sup> Adama Nombre, *Complementarities and synergies with intermittent renewable energy, related issues - Burkina Faso cases studies, 2022* : [https://www.e3s-conferences.org/articles/e3sconf/pdf/2022/13/e3sconf\\_ciqb2022\\_03028.pdf](https://www.e3s-conferences.org/articles/e3sconf/pdf/2022/13/e3sconf_ciqb2022_03028.pdf)

shallow wells, which can dry up during the year, the AEPS provided by the project should make water available throughout the year, thus allowing an intensification of crop production across seasons, and enabling a continuous economic activity. Up to three production cycles per year will be possible thanks to the irrigation equipment installed.

To manage the solar irrigation systems, local technicians from each community garden will receive the required tools with service and maintenance training. Beneficiaries will also be sensitized, trained, and exposed to all project technical and management aspects to ensure ownership and sustainability of the investments made. Water management committees will be formed and specialized trainings to be arranged on Water and Environmental management. Water management training focuses on the efficient use of available water. Whilst the environmental management training creates awareness amongst the beneficiaries about nursery operations, tree plantation, agro-forestry and hedge planting and provides insight on environmental rehabilitation.

Beneficiaries and village populations will have better access to fresh produce from vegetable gardens on local markets. These developments will also provide employment opportunities for people directly involved with resilience sites, and indirectly involved in associated value chains (producers, retailers, transporters, etc.), and will generate incomes for producers<sup>17</sup>.

In addition, beneficiaries will produce 750 MT of compost (worth 125 000 USD at market prices) for the fertilization of fields and establish 7 nurseries to produce at least 50,000 plants by the end of the project, approximately half of which will be used for land rehabilitation. 7 overall site management committees, as well as 7 committees for seedlings, including both members of host communities and IDPs, will be set up and benefit from capacity building in the production, management and maintenance of irrigation equipment, and agricultural production and related economic activities. Host communities and IDPs will be given user rights and integrate decision-making bodies within the committees, at a rate proportional to the demographic structure of each village group, to ensure equity of access and benefits to the community assets, and equal opportunity.

WFP will seek to scale up and strengthen the value chains of dry season market gardening production through irrigation. Most farms in Burkina Faso do not exceed 5 months of sustained production after the end of the rainy season. WFP will also organize producers through Smallholder Agricultural Market Support (SAMS) activities, directly linked to FFA activities and essential to increasing productivity, linking producer organizations to additional market access opportunities, controlling production quality standards and ensuring quantitative scale-up, and overall making small producers more productive and competitive in local and national agricultural markets.

The organization of the targeted producers under this project will comply with the 2010 *Organisation pour l'harmonisation en Afrique du droit des affaires* (OHADA) standards, harmonizing the business rights and obligations of producer organizations in the 17 African countries having adhered to its treaty. As part of this project, a total of 7 SCOOPs, one per market garden/site, will be set up and accompanied through capacity building activities, including training on management, leadership, marketing and financial inclusion, reduction of post-harvest losses and the provision of agricultural inputs and tools, including processing equipment, and storage and conservation infrastructure for

---

<sup>17</sup> For vegetable production the following considerations are made: Assuming an average price of USD 516/MT of market gardening produce in Burkina Faso, as per current market prices, every market garden of 2 hectares and its school garden (a total of 2,25 hectares), producing a total of 3 times per year at a rate of 20MT/hectare, will be able to generate an average of USD 70,000 in value of produce per year. Annual production resulting in a total amount around 756 MT of produce at its optimum level (end-of-project) for 7 village centers, should equate to returns of USD 390,096 in annual value of produce. In addition to the production at community level, production at the household level on an estimated surface of 9m<sup>2</sup> per household and targeting approximately 300 beneficiary households in each village center, an annual produce worth USD 73,143 per year is envisaged.

market gardening products. WFP intends to reduce the rate of post-harvest losses by 3% (from around 5% at the start of the project to less than 2% at project closure).

Capacity building activities will strengthen the SCOOPs capacities on associative and financial management, ensure basic knowledge and capacities of agricultural marketing, facilitate access to financial services, warrantee and Village Savings and Loans Associations (VSLAs); keep harvests sheltered from rain, humidity, insects and other harmful animals, excessive heat and even theft; offer products with adequate quality and safety standards; and minimize the losses (quantitatively and qualitatively speaking), and consequently increase the profits of the SCOOPs. Ultimately, the project is expected to allow the organization of 140 small producers into 7 SCOOPs and the direct creation of around 63 green jobs in and around the market gardens, benefitting proportionally both host and IDP communities.

#### **Component 4: Learning and Progression**

**Outcome:** Learning and sustainability of the project is ensured

- Output 4.1: Capitalization and documenting of results based on knowledge management, monitoring and evaluation
- Output 4.2: Handing-over and decommissioning of water infrastructures and related resilience interventions

#### **Learning**

WFP's partner the Nazi Boni University (see section 3.5 "Implementation arrangements and partners") will be called upon to conduct a series of action research on the themes of land, appropriation of socio-economic units, development of fish farming, and optimizing of the water resources usage. Students will also learn about PCPs and how to conduct them and around 20 additional students will participate in field work with WFP in the selected sites, which will allow them to finish their theses and to provide useful feedback on the interventions and activities conducted in the framework of the project.

The project will require an annual assessment by stakeholders in the ambit of the Working Group (constituted of WFP and DANIDA representatives) to track the progress against the expected outcomes, and to identify the successes and gaps for timely adjustment. This will ensure an ongoing learning process and will facilitate the project being eventually leveraged for future initiatives using a similar joint innovative approach to community-based water and irrigation management, with the aim of helping boost the operationalization of the HDP-nexus.

Appropriate documentation and dissemination of the project's good practices and success stories will improve knowledge management and donor' visibility. These exercises will include capitalization workshops, elaboration of practice sheets and results stories, and studies and assessments.

The progression strategy will begin at the inception of the activities, through government technical services at municipality level taking over the construction, maintenance and management of water supply infrastructure throughout the project implementation and beyond. This process will then include transitioning and decommissioning of water infrastructures (including irrigation infrastructure) to local governments and targeted host and IDP communities, through establishment of appropriate governance and oversight mechanisms, such as capacity strengthening of government technical services and community leaders. WFP will promote the proportional participation of host and IDP populations in all governance bodies and committees linked to the project.

Moreover, WFP systematically hands over resilience sites to community management after 3-5 years of operation and capacity strengthening efforts, in the framework of its Country Strategic Plan. In line with this strategy, and bearing in mind the particularities of the context, WFP will leverage the created community-based management committees and SCOOPs to ensure the peaceful ownership, sustainability and scale-up of initial investments. To alleviate the risk of resource-based conflicts linked to the ownership of,

and profit from irrigation systems and land-based assets, WFP will ensure to convene the drafting and signature of land and production transfer forms among representatives of the host and IDP communities, and local governments, during and before exiting the 7 villages centers and their resilience sites. WFP's financial exit may or may not occur by the end of this project, depending on the speed of implementation and the level of self-reliance achieved by the pilot.

Despite the experience already gained in Burkina Faso, the nexus is in many ways still uncharted territory for the international community, in which WFP and partners continually develop programmatic approaches in an evolving context. Together with operational and funding partners, WFP is striving to further build the evidence base on how actors across the humanitarian, development and peace communities together can achieve joint outcomes in Burkina Faso that pave the way for more stable, prosperous, harmonious and food- and nutrition secure communities. This project will contribute to the ongoing efforts aimed at informing learning and programmatic development, but likewise at operational decision-making among WFP, partners and donors.

### **Inclusion of women and youths**

The inclusion of youth and women is a cross-cutting priority of this project. WFP designs, plans and implement operations using an inclusive approach toward women and youth (boys and girls). WFP provides guidelines to cooperating partners on how to improve inclusion and gender mainstreaming, for example through positive discrimination measures.

Within its component 3 (agriculture, food production and income generation), this project will work to reach around 60% of women and 70% of youth, including 35 young girls, members of SCOOPs in the 7 villages. Advocacy activities will also be carried out to secure access of women and youth (girls and boys) to good arable land in order to allow them to carry out income-generating activities in a serene manner.

Representation in governance bodies is one of the major challenges for youth and women. This is why awareness-raising and advocacy activities aimed at village communities will be carried out to encourage the integration of women and youth (girls and boys) into the AUEs management committees. In addition, to promote the effective and qualitative participation of women and youth (girls and boys) in AUEs discussions and decision-making, capacity-building activities in speaking, negotiation and advocacy techniques and leadership will be conducted for the same targets.

### **Monitoring and Evaluation**

Monitoring and evaluation (M&E) activities will be aligned with WFP's corporate M&E guidance. Process monitoring and outputs data, including cross-cutting indicators, will be collected through cooperating partner reports, monitoring of regular on-site food, and contact with beneficiaries, carried out by WFP field staff. Facing security challenges in most of WFP's areas of operation, more specific and better adapted tools will be developed to meet the monitoring and reporting needs of WFP resilience activities. The CFM will allow triangulation of data sources to ensure that no issue, including related to protection, slips under WFP's radar.

To collect data at field level, WFP will use mobile devices through monitoring questionnaires, joint assessment, and surveys with real-time data submission. Outcome indicators will be monitored through the post-distribution monitoring (PDM) exercise, and through food security assessments in collaboration with the government, UN agencies and NGO partners. PDMs will be carried out among beneficiary households and results be used to make eventual adjustments to implementation. Data collection, analysis and dissemination of results and reports will be in conformity with the business rules, methodologies and frequencies outlined in WFP's Corporate Results Framework 2017-

2021. Capacity of staff and partners will be strengthened through results-based monitoring and evaluation trainings. The online Country Office Monitoring and Evaluation Tool (COMET) will be used to track outputs as well as for response planning and management purposes.

## 5. Theory of change (TOC) – The HDP Nexus Approach

Through its Country Strategic Plan (CSP)<sup>18</sup>, WFP's approach to the HDP-nexus in Burkina Faso runs through multiple and complementary change pathways. This water irrigation project is in line with the complementary and integrated approach of the WFP CSP in Burkina Faso, and therefore with the WFP Burkina Faso theory of change. However, this pilot project can also be represented, on its own scale, as a theory of change in the area of water access and resilience building.

Following the HDP-Nexus framework, this goal will be achieved by a complementary and multi-layered intervention, articulated around three main topics: the **access to water resource**, the **management and governance of water**, and the **sustainable use** of it.

### 1) Access to water

**If** the geophysical studies to map most potential areas for ground water extraction point and estimation of a sustainable water consumption are carried out in the field and show possibilities, **then** it is possible to complete 28 very high-speed positive boreholes in the targeted areas.

**If** the test pumping of the boreholes to determine the amount of sustainable water available validates their operability, **then** it is possible to construct 7 water supply networks and piping systems for communities and resilience activities.

**If** all the AEPs are functioning and maintained, **then** they can be used and the volume of water available is increased.

**If** the availability of water is improved in the intervention areas, **then the population have better access to water resource**, allowing them to drink it and improve immediately their nutritional status, to irrigate their lands and cultivate food for their private consumption, and for market purpose which therefore improve their livelihood and economical status. Access to water also helps communities to cope much better with shocks than other villages entirely dependent on rain fed agriculture. Moreover, the water access plays an essential role in maintaining adequate food consumption and providing alternative sources of income especially in drought years.

*But if the available resource is not properly managed, then its use will be limited and minimal*

### 2) Water management and governance

**If** AEPs and community consultation frameworks are set up, **then** the management of the resource is ensured by dedicated entities and a management framework is established.

**If** proper training and capacity building on water management and use is provided to the AEPs and to the local officials, **then** they are capable to ensure a proper monitoring and use of the water resource in their localities independently.

**If** local entities are able to ensure the water management and governance properly, **then the water management and governance are improved, and** the resource use is controlled, framed and optimised. The water is more equally distributed within the

---

<sup>18</sup> WFP, CSP 2019 – 2023 ; Burkina Faso : <https://www.wfp.org/operations/bf02-burkina-faso-country-strategic-plan-2019-2023>

population, reducing conflicts and misuses. The water is available in a long-term way because water facilities and equipment are regularly maintained. The water is better quality, because quality norms, policies and controls are conducted. Finally, as the water diseases prevalence is reduced thanks to the improvement of people's knowledge on water use, hygiene and sanitation, the nutritional status of the population is increased.

*but if the resource is not managed in a diversified and sustainable manner, then its long-term availability will not be assured.*

### **3) Sustainable utilization of the water**

**If** water-efficient irrigation system (drip irrigation) and fish production technics are promoted at school gardens, market gardens and household level, **then** the resource is conserved and used at its maximum yield and thus benefits the greatest number of people.

**If** organization of producers into SCOOP are encouraged and facilitated, **then** the community has the means to transform the newly accessible resource into income generation, job creation and market value.

**If** capacity strengthening on climatic hazard/forecast and environmental risks are provided to the population, **then** the entire community becomes more resilient to future shocks, aware of climate change and will manage their resources accordingly.

If the targeted populations have the knowledge and means to ensure water management and utilization in a sustainable way, **then the sustainability of water utilization is improved**, and the resource is leveraged and optimized. The access to water is ensured in a long-term way because the source is protected by sustainable standards of utilization (applied by water governance units), waste and overuse is avoided. The use of water is optimized, and the same amount of water allows to cover much more needs because people's knowledge and technics on good practices and sustainable use of water are improved. Therefore, the extent of irrigated lands increase, as well as the local production, food consumption and local market volumes.

If all the above conditions are met, then the main goal and objective of the project will be met, and the approach will be scaled up to other regions.

The expected impact of the project is to strengthen the resilience to shocks of vulnerable populations in the Centre-Nord and to improve their food security situation.

The main goal contributing to the expected impact, is to enhance the target population's access to water resources for private consumption (at household level), and for irrigation, that constitute a key factor to support long-term sustainable livelihood opportunities





World Food Programme

**IMPACT : RESILIENCE AND SELF-RELIANCE RELATED TO FOOD SECURITY AND ACCESS TO WATER FOR TARGETED HOST COMMUNITIES AND IDPs IN THE INTERVENTION AREAS ARE IMPROVED**

*LEARNING PROCESS AND KNOWLEDGE MANAGEMENT ( 4.1 Capitalization and documenting of results based on knowledge management, M&E / 4.2: Hand-over and progression strategy for water infrastructures, vegetable gardens, and related assets and resilience interventions)*

**GOAL**

**To reinforce resilience to shocks of targeted population by improving their access to water for irrigation purposes and at household level, to support long-term sustainable livelihood opportunities, and to improve food security and nutritional status**

**OUTCOMES AREA**

**ACCESS TO WATER**

**WATER MANAGEMENT & GOVERNANCE**

**SUSTANAIBLE UTILIZATION**

**GENERAL OUTCOMES**

**The availability of water and irrigation services is improved in the intervention areas**

**Improve local governance and capacities to manage water in the 7 targeted communities (IDP and**

**Enhanced access to water resources for diversified productive use, to improve livelihoods and generate income**

**OUTPUTS**

**1.1 - Completion of 28 very high-speed positive boreholes**  
**1.2 - Construction of 7 water supply networks and piping systems for communities and resilience activities including monitoring of the groundwater levels**

*WFP expects to install a total of 28 solar-powered water pump systems with adequate water flows to irrigate, for each cluster of villages, 2 hectares vegetable gardens (with tree nurseries), 0.25 hectares of school gardens integrated with a fishpond of 30m3, as well as a number of household-level activities requiring water (homestead vegetable gardening, composting, fruit tree planting, urban greening, etc.).*

**2.1 - Improving education and capacity building around the management of water in the communities**  
**2.2 - Improving availability of water for target villages (quarter, schools, health and job opportunities)**

*Water management at each village will be ensured by an AUE.. WFP will ensure that the AUEs of the 7 villages are able to improve their command of the legal framework, and their skills and knowledge in governing local water resources. Social Behavior Change Communication (SBCC) activities at the household level, in schools and health centers, markets and WFP asset creation sites around hygiene and sanitation, such as safe household water treatment and storage, and knowledge on waterborne diseases and treatment.*

**3.1 - Promoting water-efficient irrigation systems (drip irrigation) and fish production**  
**3.2 - Intensifying agricultural production and facilitating market access and financial inclusion**  
**3.3 - Organization of producers into Simplified Cooperative Societies (SCOOP), and creation of related agroforestry job opportunities**  
**3.4 - Capacity strengthening and information sharing on financial management, commodity market prices, climatic hazards/forecasts and environmental risks**

*Greening and land restoration to reduce greenhouse gas emission through sequestering carbon, improved vegetable farming with solar irrigation system combined with various soil fertility management practices, agro-forestry and homestead development intervention (energy saving stoves, homestead greening and compost making, etc.).*

## 6. Project Objectives and Results Framework

For results-based management, learning and reporting purposes, Denmark will base its continued support on the annual progress attained in the implementation of the project, as described in the results framework.

Progress will be measured through WFP M&E teams and subcontracted WFP implementing partners (including government technical services and NGOs) different corporate monitoring frameworks, at the different phases of the project.

The project comprises 4 main outcomes. The completion of the project in the allocated timeframe depends on the timely completion of Outcome 1 (covering the project's first two phases), which will then allow WFP to launch and complete the remaining project outcomes (third and final phase of the project), requiring three years to show desired outcomes.

Project	Piloting the nexus approach in resilience and water interventions in Burkina Faso until 2025
Project Objective	Reinforced resilience to shocks of vulnerable populations in Burkina Faso's Centre-Nord region by improving their access to water for irrigation purposes and at household level, to support long-term sustainable livelihood opportunities, and to improve food security and nutritional status
Impact Indicator	Increased resilience and self-reliance related to food security and access to water for targeted host communities and IDPs in the intervention areas (SDGs 2, 6, 13 and 17).  Percentage of people, households and institutions (health centers and schools) reached by the project, who have improved food and nutrition security through access to water and irrigation services

Outcome 1	The availability of water and irrigation services is improved in the intervention areas		
Outcome indicator	a. Percentage of people accessing a sufficient quantity of water at household level for homestead-based activities in the intervention areas b. Additional volume of water available and accessible for human consumption per day (m3)		
Baseline	Year	2022	a. 74% b. 0
Target	Year	2023	a. 74% b. 0
Target	Year	2024	a. 100% b. 210 m3
Target	Year	2025	a. 100% b. 210 m3

Output 1.1	Completion of 28 very high-speed positive boreholes
------------	---

Output indicator		a. Number of geophysical methods carried out in the field to map most potential areas for ground water extraction point and estimation of a sustainable water consumption. b. Number of new positive boreholes drilled with trial pump to determine the sustainable water quantity available.	
Baseline	Year	2022	a. 0 b. 0
Target	Year	2023	a. 21 b. 28
Target	Year	2024	a. 21 b. 28
Target	Year	2025	a. 21 b. 28

Output 1.2		Construction of 7 water supply networks and piping systems for communities and resilience activities including monitoring of the groundwater levels	
Output indicator		a. Number of efficient water supply networks constructed and sustainably functioning b. Number of resilience sites covered by the water supply network	
Baseline	Year	2022	a. 0 b. 0
Target	Year	2023	a. 0 b. 0
Target	Year	2024	a. 4 b. 12
Target	Year	2025	a. 7 b. 21

#### Water for village-level use

Outcome 2		Improve local governance and capacities to manage water in the targeted communities (IDP and host populations)	
Outcome indicators		a. Percentage of AUEs capable of ensuring proper monitoring of the AEPS water service managed by private operators b. Percentage of local elected officials capable of ensuring good governance in the management of water resources	
Baseline	Year	2022	a. 0 b. 0
Target	Year	2023	a. 25% b. 25%
Target	Year	2024	a. 50% b. 50%
Target	Year	2025	a. 80% b. 80%

Output 2.1		Improving education and capacity building around the management of water in the communities	
Output indicators		<ul style="list-style-type: none"> <li>a. Number of AUEs set up and trained on water management</li> <li>b. Number of functional community consultation frameworks set up to ensure the management of AEPS</li> <li>c. Percentage of people directly sensitized through SBCC on good water and sanitation practices</li> <li>d. Percentage of women represented in community management bodies</li> </ul>	
Baseline	Year	2022	<ul style="list-style-type: none"> <li>a. 0</li> <li>b. 0</li> <li>c. 0</li> <li>d. 0</li> </ul>
Target	Year	2023	<ul style="list-style-type: none"> <li>a. 7</li> <li>b. 7</li> <li>c. 50%</li> <li>d. 40%</li> </ul>
Target	Year	2024	<ul style="list-style-type: none"> <li>a. 7</li> <li>b. 7</li> <li>c. 65%</li> <li>d. 50%</li> </ul>
Target	Year	2025	<ul style="list-style-type: none"> <li>a. 7</li> <li>b. 7</li> <li>c. 80%</li> <li>d. 60%</li> </ul>

Output 2.2		Improving access of water for target villages (quarter, schools, health and job opportunities)	
Output indicators		<ul style="list-style-type: none"> <li>a. Number of people (host communities and IDPs) getting improved access to water and sanitation</li> <li>b. Number of people (youth and women) able to access jobs linked to the construction and operation of water points</li> <li>c. Reduction in the prevalence of waterborne diseases</li> </ul>	
Baseline	Year	2022	<ul style="list-style-type: none"> <li>a. 0</li> <li>b. 0</li> <li>c. 0</li> </ul>
Target	Year	2023	<ul style="list-style-type: none"> <li>a. 46 470 (4002 IDPs)</li> <li>b. 25 (15 Youth; 10 women)</li> <li>c. 0.5%</li> </ul>
Target	Year	2024	<ul style="list-style-type: none"> <li>a. 46 470 (4002 IDPs)</li> <li>b. 50 (25 Youth; 25 women)</li> <li>c. 1%</li> </ul>
Target	Year	2025	<ul style="list-style-type: none"> <li>a. 46 470 (4002 IDPs)</li> <li>b. 75 (30 Youth; 45 women)</li> <li>c. 1.8%</li> </ul>

Water for community gardens and production

Outcome 3		Enhanced use of water resources for diversified productive use, in order to improve livelihoods and generate income for the most vulnerable households in targeted communities (IDPs and host populations)	
Outcome indicators		<ul style="list-style-type: none"> <li>a. Proportion of the population in targeted communities reporting benefits from an enhanced livelihood asset base</li> <li>b. Percentage of households with acceptable Food Consumption Score (FCS)</li> <li>c. Proportion of children 6–23 months of age who receive a minimum acceptable diet</li> <li>d. Percentage of women of reproductive age (15-49) who reached a minimum diet diversity</li> <li>e. Livelihood-based coping strategy index (percentage of households using coping strategies)</li> </ul>	
Baseline	Year	2022	<ul style="list-style-type: none"> <li>a. 94%</li> <li>b. 52%</li> <li>c. 10.5%</li> <li>d. 13%</li> <li>e. 34%</li> </ul>
Target	Year	2023	<ul style="list-style-type: none"> <li>a. 94.2%</li> <li>b. 60%</li> <li>c. 30%</li> <li>d. 30%</li> <li>e. 30%</li> </ul>
Target	Year	2024	<ul style="list-style-type: none"> <li>a. 94.4%</li> <li>b. 70%</li> <li>c. 60%</li> <li>d. 60%</li> <li>e. 28%</li> </ul>
Target	Year	2025	<ul style="list-style-type: none"> <li>a. &gt; 94.6%</li> <li>b. &gt; 80%</li> <li>c. &gt; 90%</li> <li>d. &gt; 80%</li> <li>e. &lt; 30%</li> </ul>

Output 3.1		Promoting water-efficient irrigation systems (drip irrigation) and fish production	
Output indicators		<ul style="list-style-type: none"> <li>a. Number of market gardens equipped with drip irrigation systems</li> <li>b. Number of school gardens equipped with drip irrigation systems</li> <li>c. Number of fishponds created in school gardens</li> <li>d. Number of households (IDPs and host populations) having directly benefited from market gardens</li> </ul>	
Baseline	Year	2022	<ul style="list-style-type: none"> <li>a. 0</li> <li>b. 0</li> <li>c. 0</li> <li>d. 0</li> </ul>
Target	Year	2023	<ul style="list-style-type: none"> <li>a. 0</li> <li>b. 0</li> <li>c. 0</li> <li>d. 0</li> </ul>

Target	Year	2024	a. 7 market gardens b. 7 school gardens c. 7 fishponds d. 1,000 households, 100 IDPs (7,000 people, 700 IDPs)
Target	Year	2025	a. 7 market gardens b. 7 market gardens c. 7 fishponds d. 1,000 households, 100 IDPs (7,000 people, 700 IDPs)

Output 3.2		Intensifying agricultural production and facilitating market access and financial inclusion	
Output indicators		a. Quantity of market gardening products produced b. Value of the market gardening produce c. Quantity of compost produced d. Number of tree seedlings produced e. Rate of smallholder post-harvest losses f. Percentage of targeted smallholders selling through WFP-supported farmer aggregation systems	
Baseline	Year	2022	a. 0 b. 0 c. 0 d. 0 e. 5% f. 10%
Target	Year	2023	a. 0 b. 0 c. 0 d. 0 e. 5% f. 10%
Target	Year	2024	a. 680 MT b. USD 351 086 c. 750 MT d. 35,000 e. 3% f. 15%
Target	Year	2025	a. 898 MT b. USD 463 239 c. 750 MT d. 50,000 e. < 2% f. > 20%

Output 3.3		Organizing producers in associations and agro-business cooperatives (Simplified Cooperative Societies – SCOOPs), longer-term income and job generation opportunities and green jobs.	
Output indicator		a. Number of SCOOPs created b. Number of SCOOPs' members	

		c. Number of green jobs created for smallholders/youth	
Baseline	Year	2022	a. 0 b. 0 c. 0
Target	Year	2023	a. 0 b. 0 c. 0
Target	Year	2024	a. 5 SCOOPs b. 100 smallholders (5 SCOOPs, 65-70% youth and 60% women) per village c. 63 jobs
Target	Year	2025	a. 7 SCOOPs b. 140 smallholders per village (994 au total) c. 63 jobs

Output 3.4		Capacity strengthening and information sharing on financial management, commodity market prices, climatic hazards/forecasts and environmental risks	
Output indicator		a. Number of trainings conducted on financial management b. Number of sensibilizations organized on commodity market prices, climatic hazards/forecasts and environmental risks c. Number of public information emissions aimed at diffusing information on market prices, climatic hazards/forecasts and environmental risks d. Number of households/people with an increased knowledge of sustainable agricultural production	
Baseline	Year	2022	a. 0 b. 0 c. 0 d. 0
Target	Year	2023	a. 14 trainings (2 per site) b. 14 sensibilizations (2 per site) c. 4 emissions (1 per quarter) d. 1000 households (7000 people)
Target	Year	2024	a. 21trainings (3 per site) b. 21 sensibilizations (3 per site) c. 8 emissions d. 1000 households (7000 people)
Target	Year	2025	a. 28 trainings (4 for site) b. 28 sensibilizations (4 for site) c. 12 emissions d. 1000 households (7000 people)

#### Learning and sustainability of the project

Outcome 4	Learning and sustainability of the project ensured
Outcome indicator	a. Percentage of project villages with adequate government staffs and community leaders responsible to follow up and support water and irrigation activities during and after the project

		b. Percentage of AUEs able to ensure the management of water supply during and after the end of the project	
Baseline	Year	2022	a. 0% b. 0%
Target	Year	2023	a. 30% b. 25%
Target	Year	2024	a. 75% b. 50%
Target	Year	2025	a. 90% b. 80%

Output 4.1		Capitalization and documentation of results based on knowledge management, monitoring and evaluation	
Output indicator		a. Number of assessment and capitalization workshops conducted b. Number of joint evaluations on implementation conducted c. Number of good practice sheets and results stories drawn up to feed the capitalization process and the results document d. Number of studies/assessments conducted by the local University	
Baseline	Year	2022	a. 0 b. 0 c. 0 d. 0
Target	Year	2023	a. 1 b. 0 c. 1 d. 0
Target	Year	2024	a. 2 b. 1 c. 4 d. 4
Target	Year	2025	a. 3 b. 1 c. 6 d. 4

Output 4.2		Handing-over and decommissioning of water infrastructures and related resilience interventions	
Output indicator		a. Number of trainings on project's management provided to government staffs and community leaders b. Number of trainings on project's management provided to AUEs c. Number of stakeholder workshops organized to facilitate handing over and decommissioning processes d. Number of artisan repairers capable of ensuring the maintenance of AEPS and irrigation systems	
Baseline	Year	2022	a. 0



			b. 0 c. 0 d. 0
Target	Year	2023	a. 0 b. 0 c. 0 d. 7
Target	Year	2024	a. 1 b. 2 c. 0 d. 21
Target	Year	2025	a. 3 b. 3 c. 3 d. 21

## 7. Budget

The total Danish contribution in the framework of this project amounts to DKK 35 million (equivalent to roughly USD 5 million), covering a period of 3 years (2023-2025).

Total Outcome 1	19,123,016
Total Outcome 2	3 927,294
Total Outcome 3	7,137,302
Total Outcome 4	641,427
Suivi évaluation (M&E/VAM) capitalisation	924,871
Support Costs (DSC, ISC)	3,246,089
<b>Total</b>	<b>35,000,000</b>

Detailed Budget in **Annex 7**.

## 8. Partner assessment

The selection of WFP as the main implementing partner is based on WFP's experience working in the area, synergy with its existing resilience programme, and the pilot component leading to scale-up of WFP activities and inspiration for other organisations.

WFP has extensive experience working in fragile contexts in the region of implementation, as well as working with national authorities and local organisations in Burkina Faso. Experience that allows it to operate effectively in areas inaccessible to most donors and international organisations.

WFP's existing resilience programme is already operational in the region of intervention. This provides implementation of the pilot project with an established foundation for operations. It also reduces the complexity and start-up costs usually associated with projects in similar contexts.

WFP has been brought into this partnership to ensure that complementary resilience activities are carried out, and that the intervention serves a development purpose beyond sustainable and climate friendly water supply, ranging from the support of economic actors at local level to the implementation of interventions aimed at building awareness and capacities for the sustainability of water systems.

The government has the ultimate mandate for all development efforts on its territory, including those around access to water for irrigation and other productive use, which is a public good. WFP, as the sole multilateral agency engaged in this project, has been requested by the Danish embassy to provide overall support to the government of Burkina Faso, which shall enable contractual arrangements with NGOs and support packages to the government at all levels, especially to cover the governance of water, which falls outside WFP's direct mandate.

One of the core aspects of the project is for it to be a pilot for further scale-up within WFP and by other organisations. The purpose is to showcase the benefit and synergy of combining sustainable water management and resilience intervention. Learning and knowledge sharing is, therefore, an integral part of the project, which could lead to further activities by WFP.

## **9. Planning and reporting**

The Annual Country Report (ACR) of all activities implemented during the year by WFP Burkina Faso will be shared with the Donor outlining how the Danish contribution has contributed to WFP's activities. Throughout the year, WFP will keep the donor informed on the implementation of mentioned activities. A steering committee will be established between WFP and the Embassy to meet every six months or when required. The steering committee will discuss and resolve issues related to project progress and decide on any reallocation of resources between development engagements. The steering committee should also pursue a policy dialogue based on lessons learned throughout the project with the aim to see if this HDP-nexus pilot could be replicated in other countries and contexts or could be amplified and scaled-up within the country. WFP will also provide the Danish Embassy with a yearly and final project progress narrative reports covering the period of implementation and due six months after project completion. The financial ACR will be the standard financial report for this project.

## **10. Risk management**

Given the recent developments in the country during 2022, the main risk for this project is the risk of the deterioration of the security situation in the targeted regions.

The politico-military context in the North Central region since the second quarter of 2022 has been marked by the continuation of NSAGS activities, as in the rest of Burkina Faso. Acts of terrorism and armed conflict continue and are getting closer to the main cities of the Centre-North.

However, the communes targeted by this project (Boussouma and Korsimoro) are located in the most secure area of the north-central region, adjacent to the central plateau, which has been relatively spared from conflict to date, and do not present a major safety risk as shown on the map below.



So far, no significant acts related to the activities of the NSAGs in the Centre-Nord region have been recorded in these communes. The town of Boussouma has a Gendarmerie Brigade and the town of Korsimoro has a Police Station. Most administrative services are present and functional in these communes. The schools and health centers are functional, and the various administrative authorities (prefects, mayors, heads of departments) reside there on a permanent basis.

Jan 2023

WFP Security risk analysis -

Risk	Impact	Probability	Mitigation measures
Deterioration of the security situation in the targeted regions	High impact Non-participation of the populations in the project. Absence of technical supervision on the ground. Disruption of commercial circuits and supply of inputs. Displacement of populations. Project installations being used by terrorist organisations resulting in reputational damage for both WFP and the Ministry of Foreign Affairs of Denmark.	Medium	Locating project target areas that are/have been relatively safe. Possibility to change location areas before constructions if the security situation is deemed too dangerous. Monitoring security situation closely and adjusting travel and work plans based on security advice. Clarity of project objectives with local populations, neutrality and transparency of interventions in close collaboration with communities. In case activity must be relocated during the period of implementation, the project is pre-identifying

			villages in a neighbouring region where operations could eventually be shifted.
Slow start-up and progression of project coordination and implementation	Medium impact Poor project coordination between partners and implementation can result in substantial delays in the project implementation plan particularly between the different phases.	Medium	Strong monitoring and coordination role of project activities by Danish Embassy particularly in start-up phase. Technical working group meetings on a regular basis. Designation of responsible focal points from all partners.
Occurrence of a major agro-pastoral crisis affecting livelihoods due to climatic hazards	High impact Food insecurity, dysfunctional markets, price volatility, low incomes Deterioration in terms of trade livestock/cereals	Medium	Prepare an agropastoral crisis response plan that will be supported by all FTPs
Risk of not finding water	High Impact Will delay program implementation to find new target areas where water is likely to be found which in turn will increase costs.	Low	New technology to better project where and how much water can be found. Reallocation of funds and work efforts to other areas with the same needs and WFP resilience activities
Risk of finding insufficient water to satisfy both needs for consumption and production	High Impact Need to readjust implementation in the targeted area and find other areas where larger quantity of water can be found	Medium	New technology to better project where and how much water can be found. Reallocation of funds and work efforts to other areas with the same needs and WFP resilience activities. Monitoring of groundwater level will insure sustainable use
Delays related to construction of infrastructures	Medium Impact Will delay program implementation plan	High	Compliance with the project implementation plan.
Weak mobilization and community commitments	Sustainable management of agreed-upon community interventions, including the functionality of AUEs	Low	Involve communities at all stages

Failures in beneficiary targeting	Non-achievement of the real beneficiaries and the targeted objectives	Low	Strengthening of targeting capacities and involvement of community actors, elected officials, local administration and technical staff.
Delay in acquisition and distribution of equipment	Disruptions in the progress of the project (installation, training, use by beneficiaries)	Low	Begin the process of identifying needs and purchasing kits as early as possible. Compliance with the project implementation plan.
Weak presence of state technical services	Weak technical supervision and monitoring of interventions.	Low	Completion of political transition to restore state presence.
Weak performance of community contractors	Weak operations and maintenance of systems Bottlenecks in repairs and availability of spare parts	Medium	Ensure political transition to strengthen municipalities' management responsibility.

## 11. Closure and progression strategy

WFP has developed a progression strategy to support the government and its population in order to prevent assisted beneficiaries from falling back into extreme poverty. In sites that have sufficiently progressed, and which have reached a good level of Food and Nutrition Security (FNS), food assistance will be progressively reduced by adapting in accordance to their FNS level.

This strategy consists of moving towards a logic of technical assistance and supervision that will capitalize on achievements and strengthen partnerships able to bring these sites to a level of sustainable development. For this, based on the reality of the context, WFP identifies the sites on which to continue food assistance (including new sites identified as food insecure), those on which to stop it and / or substitute technical assistance with a gradual transition into assistance by other partners. The scale of interventions and partnerships involved play a major role in ensuring the sustainability of the effects produced by the intervention.

This strategy is called the strategy of "Progression" and not "exit" because it represents an "exit" for certain activities but also an "entry" point for new ones, offering an excellent opportunity to intensify partnerships and to improve benefits for communities. On the aside, WFP's exit from food aid in the old sites of intervention means that it can start activities on new safe sites

Moreover, to ensure sustainability of the effects of the project's impacts, WFP implement the following approach:

- Intervening with the same partner and beneficiaries over at least three years;
- Involving all actors in the entire project cycle: Participatory Community Planning (PCP), monitoring, evaluation, etc. At this level, in addition to the NGO's monitoring, WFP has signed agreements with four technical ministries (Agriculture, Livestock, Environment and Hydraulics) for their local supervision, and this collaboration also contributes to the organisation of a monthly meeting led by the mayor at the commune's town hall.

→ **Political and institutional progression strategy:**

This project will be based on the existing water supply framework, seeking to strengthen its actors and their coordination in the management of AEPS. The leasing contract will be promoted as part of this project in view of its advantages, in particular the consideration of the renewal of part of the equipment by the private operator.

For an appropriation of the project by the actors of this framework, the latter will be involved from the start of the project until the operating phase through information meetings on the project, their involvement during the study phase, their participation in the validation of the studies and the follow-up of the work, and the establishment of the management mechanism.

With regards to production activities, the same approach will be adopted by closely involving the Ministry of Agriculture through the (DGAHDI) and the Regional Directorates of Agriculture from the start of the project and into the operational phase. The Regional Directorates of Environment will also be involved in the project on the aspects that fall within their mandate.

At the end of the project, the supervision of project beneficiaries and production-related activities will fall within the framework of the supervision systems of these technical services. The agriculture and environment agents responsible for supervising the sites will benefit from training to build their capacities on topics related to production, on the innovative irrigation technologies in place and on the maintenance of this equipment.

→ **Community progression strategy**

The activities proposed under this project emerged as priorities for the communities during PCPs conducted by WFP in the beneficiary villages.

Land tenure security is, however, a major issue for the sustainability of investments in rural areas and land problems are among the major factors undermining social cohesion, especially in a context of protracted displacement. Indeed, WFP has often witnessed individuals claiming ownership of the land used to undertake community-based works, even going so far as to want to dispossess and/or evict the producers occupying plots previously surrendered for the life of a project. This situation is often the result of a land negotiation process that was not participatory or that did not consider the interests and real aspirations of the land actors concerned. This is why land tenure security is a particular point of attention in the context of this project.

In the framework of this project WFP will work closely with the Directorate General of Land, Training and Organization of the Rural World (DGFOMR), which has set up a mechanism to secure land in the context of land development. The approach favors the search for land legitimacy by involving all stakeholders and encouraging their mutual support and acceptance through frank and direct negotiations and agreements. It is the result of successful practical experiences in the field of hydro-agricultural developments. The process leads to the production of transfer forms to formalize land agreements between landowners, traditional authorities, community leaders and state actors. This activity will lead to the production of two documents, including individual protocols for the transfer of land rights, and site handover report.

The second major identified issue relating to the sustainability of this project is the payment of water supply. The same water supply networks will provide water for consumption and water for production/irrigation; however, at different prices. In order to ensure community acceptance of cost differences, the difference in quality between water and irrigation water will be integrated within the design of the network. While the price of water will be aligned with the price of municipal water, the price of irrigation water will be subject to consultation between the water management stakeholders (municipality, operator private management of the AEPS, AUE, DREA), as well as the Regional Directorates for Agriculture and Environment and the producers. This process will lead to

the setting of a consensual tariff for irrigation water in the form of a water charge or a payment per m<sup>3</sup> consumed.

→ ***Economic and financial progression strategy***

For the AEPS component, the water service will be charged. The structures will be operated by a private operator who sells the water and collects the revenue, according to the terms of a contract binding it to the municipality. The latter reports on the technical and financial management to the municipality every six months and pays a monthly fee to the municipality.

The organization of producers into SCOOPs is essential to the economic and financial sustainability of the project. SCOOP members will be accompanied by capacity building activities including training on management, leadership, marketing and financial inclusion. In addition, producers will be supported through start-up kits in the form of working capital, the management of which will guarantee them continuous access to quality inputs. In addition to this working capital, the beneficiaries will pay water fees to guarantee a continuous supply of irrigation water by the operator in charge of the management of the AEPS. Contributions will also be instituted for the maintenance of the irrigation network.

→ ***Technical progression strategy***

For the AEPS component, the repairs and maintenance of water equipment are the responsibility of private operators responsible for operating the various AEPS systems under contracts with the municipalities. The municipalities and the AUEs will ensure the maintenance of the equipment and, if necessary, their replacement in accordance with the clauses of the contracts binding the private operator to the municipality. The renewal of equipment that is not the responsibility of the private operator (equipment with a lifespan of more than 15 years) will be ensured and provided by the municipality.

Regarding the water supply infrastructure, to guarantee the durability and efficiency of the irrigation equipment that will be put in place, WFP will sign a contract with one or more private service providers who will be responsible for monitoring and maintaining the equipment throughout the duration of the project and will ensure the transfer of skills to beneficiaries. Service providers will establish a series of periodic maintenance operations of the irrigation network and will train beneficiaries and agricultural agents to undertake them. Agricultural agents from technical services will ensure that producers carry out these maintenance operations.

In addition to direct beneficiaries', the artisan repairers of the municipal AEPS systems will also benefit from trainings on the maintenance of the irrigation equipment in place. The same approach will be adapted for the various suppliers for services and goods. The members of the community with a certain level of education and skills on technical aspects will be trained and equipped thanks to the income drawn by the beneficiaries, on the one hand, and on the other hand, on the financial opportunities that the infrastructure will create.

## ANNEX 1 - Context Analysis / Burkina Faso's Water Sector Profile



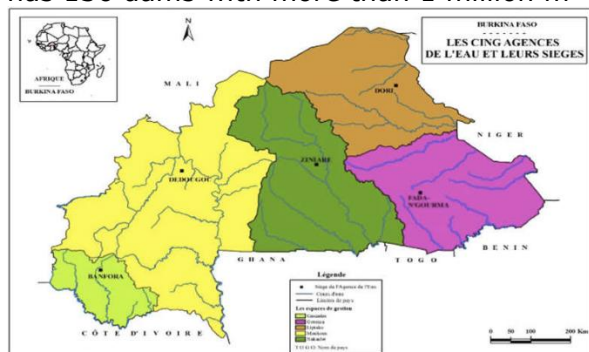
### Geography

Burkina Faso is a land-locked country located in West Africa. It is bordered to the north and west by Mali; to the south by Côte d'Ivoire, Ghana and Togo; to the southeast by Benin and to the east by Niger. The country has a land area of 274,200 km<sup>2</sup> about 400 km<sup>2</sup> of which is covered by water. The terrain of the country is characterized by mostly flat plains, with scattering of dissected, undulating plains and hilly terrain especially in the west and southeast of the country. The country occupies an extensive plateau covered by savanna vegetation that

is grassy in the north and gradually gives way to sparse forests in the south. Mean elevation is 297 masl (meters above sea level).

### Water Resources Situation

Burkina Faso is a water stressed country. Water availability varies greatly between regions and seasons, as well as from year to year. The country has five major river basins (Comoé, Mouhoun, Nakambé, Nazinon and Niger) belonging to three transboundary river basins (Volta, Niger and Comoé). The only rivers in the country that flow all year round are the Mouhoun River (Black Volta) and the Nakambé River (White Volta), the rest of the rivers are seasonal. Most of the rivers are dammed to store water for the dry season. The country has 136 dams with more than 1 million m<sup>3</sup> of storage capacity.



**Figure 1:** The five river basins of Burkina Faso (source: AfDB, 2020).

With regard to groundwater sources, approximately 82 percent of the country is underlain by crystalline basement rock, which typically does not contain thick, continuous and productive aquifers. Groundwater is unevenly distributed and occurs only in rock fissures, fractures and weathered zones, with low drilling success rates and insufficient yields to supply large settlements or for medium to large scale irrigation. The quality of groundwater is relatively good, making it suitable for human consumption. Naturally occurring arsenic has been identified as a problem in some areas, particularly associated with zones of gold mineralisation in Birimian volcano-sedimentary rocks. Pollution from nitrate is also common in shallow groundwater sources, especially in areas with high housing density. Agricultural production consumes more water and the human population as it accounts for 51% of consumptive water use closely followed by municipalities (water supply and sanitation), which account for 46% of consumptive water use. Industry only accounts for 3% of consumptive water use.

### Climates risk overview

The Notre Dame Global Adaptation Global Adaptation Index (ND-GAIN) is based on two key dimensions: (1) vulnerability - a country's exposure, sensitivity and capacity to adapt



to the negative effects of climate change; and (2) readiness - a country's ability to leverage investments and successfully convert them to adaptation actions.

The ND-GAIN Index ranks Burkina Faso in 19<sup>th</sup> position out of 181 countries evaluated with respect to both vulnerability and readiness.

Burkina Faso is at risk to several natural hazards, including droughts, floods, epidemics, heat waves, windstorms and insect infestations. With sporadic rains and poor water retention in soils, Burkina Faso has been experiencing 'quasi-drought' conditions since the early 1970s. These conditions are most pronounced between November and December, and in the north where rain only comes for two months out of the year.

Burkina Faso's wet season is characterized by heavy and often relentless rain that can wreak havoc on the country's poorly constructed informal settlements and degraded landscape, disturb the entire water sector, and destroy or reduce infrastructure services. Over the past 30 years, severe flooding has occurred repeatedly especially in the north and centre of the country. In recent decades, an increase in frequency of floods has also been observed.

Over the period 1990-2012, temperatures increased by 0.6°C, amplifying the effect of droughts. Temperatures across Burkina Faso are projected to increase by 1.25°C to 3.03°C in 2040-2059, and 3-4°C by 2080-2099. This represents substantially higher temperature increases than the global average. Temperature increase in the north of the country is projected to occur at a much higher rate than in the south, and more in the wet season than in the dry season. Annual precipitation is projected to change by -243.34 mm to 359.95mm in 2040-2059. An increase in extreme climate events is also predicted. These changes are expected to negatively affect agriculture, livelihoods, poverty and the national economy.

## **Water Governance**

*Water policy and legal framework:* The key policy and legal instruments that guide the management of the WASH sector in Burkina Faso are the following:

- *National Water Policy (updated in 2015):* The policy aims to promote the sustainable management and development of the country's water resources following IWRM principles. The policy outlines a number of priorities for the sector, which include: (a) providing universal access to water and sanitation with emphasis on poor and vulnerable communities and (b) promoting the long-term sustainability of the sector through, inter alia, increased engagement of the private sector in management of water supply systems, giving priority to maintenance of existing investments, and mobilizing internal resources for the sustainable financing of the sector. The policy is being implemented through a number of subsector programs covering the period 2016-2030, including a program on Water Supply (PN-AEP) and Wastewater and Sewerage (PN-AEUE).
- *National Public Hygiene Policy (2004):* This policy works to create the conditions necessary for life, preventing illnesses, maintaining an environment conducive to human activities and guaranteeing comfort of all. Its scope includes the management of wastewater.
- *The National Sanitation Policy (2007):* This policy aims to improve the living conditions and environment of the population, improve their health, and protect the country's national resources thereby contributing to sustainable development. Among other things, it emphasizes the improvement of WASH practices, and ensuring sustainable financing for the sanitation sector.
- *The Environment, Water and Sanitation Sectoral Policy 2018-2027 (2018):* This policy aims to work towards improved economic and social conditions of populations and sustainable development by 2027 by improving access to water, creating a healthy living environment and strengthening environmental governance. The policy is based on guiding principles and strategies that are in line with the National Water Policy.

The key legal and regulatory instruments that guide the management of the WASH sector in Burkina Faso include the following:

- *2001 Water Management Act.* This law presents principles for the integrated management of water resources and for the development of water to meet various

water needs. This Act is the basis of all water related legislation in Burkina Faso. It covers issues regarding administration, management, conservation and use, rights, waterworks and supply. Article 2 explicitly states the right of all to water.

- *2004 Decentralization Law (Charge Générale des Collectivités Territoriales, CGCT)*. This law decentralizes public service provision, and defines responsibilities for the delivery of basic services, including water supply and sanitation, amongst public agencies at different administrative levels. The law transfers the responsibility of provision of water supply and sanitation services to local rural governments.
- *2009: 107/2009*: Law transferring state assets and resources to the municipalities for matters relating to water supply and sanitation, (part of reorganization and decentralization).
- *2009: 58 (rules) and 290 (implementation)*: relate to the parafiscal tax (water user fees) for the abstraction, works and/or pollution of water. Currently, there is no implementation of the polluter-pays principle.
- *2019: 228/2019 and 320/2019*: This defines water quality, water access and sanitation criteria so as to create a standardized way of classifying and evaluating water services.

*WASH Institutional Framework*: The institutional framework for water has undergone a number of changes over the past two decades both at national and local levels a part of general government decentralization of services and reforms introduced by adoption of IWRM policies. The water sector over the past decade has alternated between falling under two ministries and falling under a single ministry. In the transitional government of 2014-2015, water management functions were combined under a single ministry but in the years that followed they were assigned to two separate ministries.

The key water sector institutions in Burkina Faso are the following:

- *Ministry of Water and Sanitation (Ministère de l'Eau et l'Assainissement, MEA)*: This ministry, which was created 2016, is responsible for setting priorities, policies and standards for water development; regulating water and sanitation services and; managing and regulating water resources. Among its directorates, there is the General Directorate for Water (DGEP), the General Directorate for Sanitation (DGA), General Directorate for Wastewater and Disposal (DG), and the General Directorate for Water Resources (DGRE). It is also the ministry in charge of the decentralization for Water and Sanitation (establishing and operating Regional Water and Sanitation Directorates - DREA) and operating a Permanent Secretariat for IWRM (SP/PAGIRE). The Directorate for Drinking Water (DGEP is responsible for providing technical assistance to rural and semi-urban areas on water supply and sanitation management and development. DGEP also oversees the National Office for Water and Sanitation (ONEA), which provides water and sanitation services to urban areas.
- *National Office for Water and Sanitation (Office National de l'Eau et de l'Assainissement, ONEA)*: This is an autonomous publicly owned utility that is responsible for the provision of water supply, on-site sanitation, and sewerage services in 57 urban centres in Burkina Faso. The population served in the ONEA towns is over 100,000. ONEA is one of the better performing public water utilities in Africa. The utility employs 2.8 staff per 1,000 connections and has non-revenue water rate of 18%. Between 1990 and 2019, the utility managed to raise the improved water coverage in the urban areas under its management from 37% to over 90%. However, the urban water sector faces a major sustainability challenge related to inadequate cost recovery and rapidly increasing water demand, driven by strong urban population growth.
- *Agency for the execution of water and rural infrastructure works (AGETEER)*: Established in 2009, this parastatal serves as Project Manager for development of rural infrastructure; including water and sanitation facilities, and agricultural irrigation schemes, on behalf of central and local government authorities. Although responsibilities for management of water supply and sanitation were transfer to municipalities, the local agencies did not have the capacity for these responsibilities, and uptake of the new roles has been slow.

- *Water User Associations (Associations d'usagers de l'eau AUE)*. In March 2009, the government passed a decree transferring the ownership of piped water systems in small towns outside the ONEA service area to municipalities, which in turn contract out operation and maintenance services to local private operators or NGOs. The planning and development of major infrastructure is still undertaken by DREA. Under the reforms, boreholes equipped with hand pumps were to be managed by Water User Associations (Associations d'usagers de l'eau AUE) through a delegation agreement signed between the municipality and the AUE. An operator based on a contract signed with the municipality ensures pump maintenance and repair. In some regions, community service providers have formed regional umbrella organisations. An example is the *Fédération des usagers de l'eau de la région de Bobo-Dioulasso* (FAUREB). The federation sets a standard tariff for all rural areas in the region, and administers funds for maintenance, renewal and new investments. This mechanism allows for cross-subsidies between the different small towns and villages in the Federation.
- *River Basin Organisations*. Under the Action Plan for IWRM (Plan d'Action pour la Gestion Intégrée des Ressources en Eau, PAGIRE, 2003–2015), River Basin Organisations have been created to oversee water resources management in the country's five river basins.

### Water supply and sanitation

*Service coverage levels:* The water supply and sanitation situation in the country is poor, although it has been improving over the past two decades. Less than half the population (47.9%) has access to basic water supply services; close to one-fifth (19.4%) has access to basic sanitation services; close to half the population (46.7%) practices open defecation; and slightly more than one tenth (11.9%) has access to handwashing facilities with soap and water. No proportion of the population has access to safely managed water services and sanitation facilities.

There is great disparity in service access levels between water and sanitation, and between rural and urban areas, with lower access to sanitation facilities, and lower access levels in rural areas, where most of the population resides, relative to urban areas as shown by the table below.

**Table 1:** Burkina Faso: Water, sanitation and hygiene service levels in 2017 (source: JMP)

Indicator	Coverage		
	National	Rural	Urban
<b>Drinking water</b>			
Basic	47.9%	35.0%	79.9%
Safely managed	0.0%	0.0%	0.0%
<b>Sanitation</b>			
Open defecation	46.7%	62.5%	7.3%
Basic	19.4%	11.3	39.4
Safely managed	0.0%	0.0%	0.0%
<b>Hygiene</b>			
Hand washing facility with soap and water at home	11.9%	7.5%	22.7%

Most households in rural and urban areas that are not practicing open defecation use onsite sanitation for wastewater and fecal matter disposal. Only 5% of the urban population uses septic tanks with a large proportion of the rest of the population using pit latrines.

Despite the close-to-universal reliance on on-site sanitation facilities, sludge emptying is informal and only four sludge treatment plants exist in the country (in Ouagadougou and Bobo-Dioulasso) There is no strategy in place for sludge management. Sewerage networks only exist in the Ouagadougou business district and serve less than 1 percent of

Ouagadougou's population. Thus, much of the municipal wastewater is not treated before discharge into the environment. Sanitation fees are insufficient and do not cover the cost of sewerage services.

Matters with respect to hygiene are not much better as shown in the table above.

*Key WASH sector challenges:* The following are among the major challenges related to WASH in Burkina Faso:

- Inadequate water infrastructure base
- Widespread water pollution from poor disposal of feces, waste water and domestic solid waste
- Weak institutional capacity of water sector agencies especially those at local government levels
- Inadequate gender mainstreaming
- Inadequate financing of WASH activities
- Water scarcity and uneven water distribution in space and time
- Low resilience of water supply systems to impacts of climate change
- Fragility from rising violence especially in the northern parts of the country.

#### Key Sources of Information

1. CIA World Factbook
2. World Bank and OECD National Accounts Data
3. JMP Water and Sanitation Statistics, 2017.
4. UNDP 2020. Human Development Report 2020: The next frontier - Human development and the Anthropocene
5. AfDB 2020. Country Water Sector Profile – Burkina Faso: Snapshot On Water Security. November 2020. 50 pp.
6. FAO Aquastat Country Profile – Burkina Faso (2016).
7. USGS/USAID, 2012. A Climate Trend Analysis of Burkina Faso. Fact Sheet 2012-3084. 4

## ANNEX 2: Project beneficiaries' table

Municipality	PCP	Village	Number of IDPs	Observation (presence of a AEPS)	Population (RGPH 2019)	Projection in 2022 with a growth rate of 2.93%.	Village centre
Boussouma	Tagalla	Tagalla	45		3 497	3 813	Kassiri
		Sirguin	450		2 915	3 179	
		Kassiri	50		2 710	2 955	
	Tanwoko	Tanwoko	76		1 913	2 086	Sidogo
		Guilla	132		1 165	1 270	
		Sidogo	95		962	1 049	
		Damiougou	4		948	1 034	
		Balkiemde Bangre	36		1 574	1 716	
	Nessemtega	Nessemtega	2	AEPS réalisée en 2019 par la DREA-CN	6 060	6 608	Goaragui
		Foutrigui	69		1 037	1 131	
		Goaragui	65		1 312	1 431	

	Louda	Louda	2 271	Projet d'AEPS en cours par la DREA-CN	3 621	3 949	Louda
		Sera	73		3 010	3 282	
		Boala	34		1 134	1 237	
Korsimoro	Tansablogo	Tansablogo	15		681	743	Tansablogo
		Tampèlga	29		370	403	
	Komtenga	Komtenga	3		580	632	Komtenga
		Sabouri- Tansobdogo	37		829	904	
		secteur 2 de Korsimoro	224			2 477	
	Pissiga	Pissiga	60		585	638	Wara
		Wara	0		192	209	
		Silmitenga	200		132	144	
		Boalin	32			1 576	
	<b>Number of beneficiaries – host population</b>						<b>42 468</b>
<b>Number of beneficiaries - IDPs</b>						<b>4 002</b>	
<b>Overall number of beneficiaries (host population + IDPs)</b>						<b>46 470</b>	

### ANNEXE 3 - Climate and environmental analysis of the project

E&S Standard 1: Sustainable Natural Resources Management		B	Level	Annotations	Description	Mitigation measures (if YES in the column B)
<b>1</b>	<b>Could the project alter the land cover of forests, wetlands, farming land, grazing land, or other landscapes of ecological or economic importance?</b>	<b>YES</b>		<i>Examples: the change of land cover could be intentional (e.g. conversion of rangeland or forest in agricultural land) or unintentional (e.g. refugees deforesting the area around refugee camp)</i>	the project provides for the construction of a pumping system and a water network, the purpose of which is (among other things) to increase the agricultural capacity of the area. In this sense, the project will have an impact on the land coverage of the intervention areas.	The project is structured around 3 pillars: access to water, management and governance, and sustainable use of resources. This last pillar ensures that the impacts of this project are measured and that any potentially negative impacts are limited.
if 1 is yes	1.1 Could the project degrade, fragment, or convert the vegetation cover in an area (contiguous or cumulative) of 1 to 10 ha?	<b>YES</b>	Medium	<i>Examples of degradation: burning, thinning, felling, unsustainable pruning and harvesting from trees and other forest resources</i>  <i>Examples of fragmentation: additional fencing, construction of new pathways or roads through a forest, further fragmentation of plots.</i>  <i>Examples of conversion: clearance of forest for agricultural or constructions. Note that a road of 10m wide x 10km long covers 10ha.</i>	The development of irrigated production areas could modify the vegetation cover of the sites to be developed. This involves the development of market garden sites. Depending on the site that will be identified, tree cutting and/or brush clearing could be necessary for the development, hence the possible impact on the vegetation cover of the site	The production of seedlings and reforestation sites in the targeted villages are planned in the project
	1.2 Could the project degrade, fragment or convert the vegetation cover in an area (contiguous or cumulative) of more than 10 ha?	<b>NO</b>		<i>Examples of degradation: burning, thinning, felling, unsustainable pruning and harvesting from trees and other forest resources</i>  <i>Examples of fragmentation: additional fencing, construction of new pathways or roads through a forest, further fragmentation of plots.</i>  <i>Examples of conversion: clearance of forest for agricultural or constructions. Note that a road of 10m wide x 10km long covers 10ha.</i>	The areas to be developed per village are relatively small, in the order of 0.25 ha and 2 ha, for a cumulative area of 2.50 ha per village, well below the 10 ha threshold.	
<b>2</b>	<b>Could the project alter the quantity or quality of</b>	<b>YES</b>		<i>Example: the construction of dams of any type, creation or rehabilitation of water wells or</i>	This project involves the construction and operation of 28 very high flow positive boreholes for large-scale irrigation at the	The project villages benefit from WFP resilience activities and in particular from CES/DRS (Conservation des Eaux et des

	<b>groundwater, surface water, or sea water?</b>			<i>boreholes, the creation of irrigation schemes</i>	community level and the construction of 7 community water supply systems and resilience activities at the family level, in a semi-arid area of the country. These facilities have the potential to modify the amount of groundwater available.	Sols/Défense et Restauration des Sols) activities that promote rainwater infiltration and therefore groundwater recharge.
if 2 is yes	2.1	Could the project include the rehabilitation or construction of dams, weirs, reservoirs, or ponds that are more than 3m high/deep OR have a storage capacity of more than 400m <sup>3</sup> ?	<b>NO</b>	<i>Note: as per the <u>Engineering Risk Matrix</u>, a dam of &gt;3m cannot be constructed as part of an FFA programme and requires the involvement of WFP Engineering</i>	Such work is not included in this project	
	2.2	Could the project include the rehabilitation or construction of irrigation schemes that cover more than 20ha OR withdraw more than 1000m <sup>3</sup> per day OR withdraw more than 10% of the average flow of a stream or river?	<b>NO</b>	<i>Reference: the 20ha threshold and 1000m<sup>3</sup> threshold are also used by FAO; the 10% threshold is important for the Green Climate Fund  Note: if the answer to 2.2 is affirmative, also consider the risk of soil degradation or erosion (question 3)</i>	Such work is not included in this project	
	2.3	Could the project include the rehabilitation or construction of dams, weirs, reservoirs, or ponds that are more than 5m high/deep OR have a storage capacity of more than 10,000m <sup>3</sup> ?	<b>NO</b>	<i>Reference: the 5m threshold is also used by FAO  Note: as per the <u>Engineering Risk Matrix</u>, a reservoir of &gt;10,000m<sup>3</sup> cannot be constructed as part of an FFA programme and requires the involvement of the WFP Engineering Unit</i>	Such work is not included in this project	
	2.4	Could the project include the rehabilitation or construction of irrigation schemes that cover more than 100ha OR withdraw more than 5000m <sup>3</sup> per day OR withdraw more than 50% of the	<b>NO</b>	<i>Reference: the 100ha threshold and 5000m<sup>3</sup> threshold are also used by FAO  Note: if the answer to 2.4 is affirmative, then also consider the risk of soil degradation or erosion (question 3), the risk to ecosystems (question 4), and the</i>	Such work is not included in this project	



	average flow of a stream or river?			<i>risk of creating conflict (question 19)</i>		
2.5	Could the project involve groundwater extraction in arid or semi-arid areas?	<b>YES</b>	Medium	<p><i>Definition of arid and semi-arid: as per national classification; if this is not available, then as defined by the Köppen climate classification</i></p> <p><i>Note: extraction of groundwater in arid or semi-arid areas can easily lead to groundwater depletion; consider measures to control the amount of water withdrawn and measures to favour replenishment of groundwater</i></p>	The beneficiary sites of the project are located in the semi-arid zone of Burkina Faso (less than 900mm of rainfall per year) and the groundwater will be mobilized via boreholes for the various activities (AEPS, market gardening perimeters, nurseries...)	The project villages benefit from WFP resilience activities and in particular from CES/DRS activities that promote rainwater infiltration and therefore groundwater recharge.
2.6	Could the project contaminate water sources that are used for human consumption above national or WHO limits?	<b>NO</b>		<p><i>Examples of sources of contamination: wastewater discharge; overuse of agrochemicals.</i></p> <p><i>Reference for water quality: national legislation; if this is not available, then as defined by WHO.</i></p> <p><i>Note: if the risk exists that drinking water sources would be contaminated, also consider the risk of causing conflict (question 19)</i></p>	Beneficiaries will be sensitized to the proper use of mineral fertilizer (micro-dosing techniques, burying, application of reasonable quantities per ha...). They will also be sensitized to the use of registered chemical pesticides including good application practices.	
<b>3</b>	<b>Could the project degrade soils, increase soil erosion, or increase sediment load in surface water flows?</b>	<b>YES</b>		<i>Examples of negative impacts on soil: increase in soil salinity due to excessive irrigation; reduction of fertile topsoil due to erosion; reduction in organic content of the soil due to degradation of vegetation</i>	The project provides for the development of 2.5 ha in 7 villages, i.e. a total of 17.50 ha for market gardening that could have an impact on the soils	Water and soil conservation activities are carried out in the same villages as well as reforestation activities. The irrigation method promoted within the framework of this project (drip irrigation) limits the contribution of water to the quantity of water necessary to the cultures and thus no excess of water being able to involve the waterlogging of the grounds

if 3 is yes	3.1	Could the project convert between 1 and 10 ha of land into agricultural land or infrastructure, without introducing soil conservation measures appropriate to the topography of the landscape?	<b>NO</b>		<i>Note: a road of 10m wide x 10km long covers 10ha</i>	The project provides for the development of 2.5 ha in 7 villages, i.e. a total of 17.50 ha for market gardening, but includes soil conservation measures	
	3.2	Could the project convert more than 10 ha of land into agricultural land or infrastructure, without introducing soil conservation measures appropriate to the topography of the landscape?	<b>NO</b>			The developed areas per village are limited to 2.50 ha.	
	3.3	Could the project rehabilitate or develop irrigation schemes, without introducing measures to mitigate possible water logging and salinization?	<b>NO</b>		<i>Examples of mitigation measures: scheduled irrigation, planting of salt-absorbing grasses, creation of drainage canals, creation of raised beds</i>	The irrigation method promoted within the framework of this project (drip irrigation) limits the contribution of water to the quantity of water necessary to the cultures and thus no excess of water being able to involve the waterlogging of the grounds	
	3.4	Could the project introduce agricultural practices or agrochemical inputs that are likely to decrease soil quantity and quality?	<b>NO</b>		<i>Example of mitigation measure: capacity building to ensure correct practices and correct use of agrochemicals</i>	Emphasis will be placed on the use of compost for soil improvement and biopesticides for the control of crop pests in market gardens and school gardens.	
<b>E&amp;S Standard 2: Ecosystems and Biodiversity</b>				<b>Level</b>	<b>Annotations</b>		
<b>4</b>	<b>Could the project negatively affect natural habitats, ecosystems, or biodiversity?</b>		<b>NO</b>		<i>Examples: the reduction of an area that is known to be the habitat of an endangered species; the reduction of the population of a local species</i>	The scale of this project is too small to have an impact on an ecosystem, natural habitat or biodiversity	
if Q4	4.1	Could the project fragment, reduce or degrade the natural	<b>NO</b>		<i>Example: the project risks pushing the collection of firewood into new</i>	Same as above	

	habitat of autochthonous animal, plant or insect species?			<i>areas that are the natural habitat of local animals and plants</i>		
4.2	Could the project lead to an increase in unregulated or unlicensed collecting, hunting, or fishing?	<b>NO</b>		<i>Example: the project will develop the value chain of a wild animal species that is collected or hunted for by traditional means</i>	This project promotes subsistence feeding through the development of sustainable agriculture as an alternative to hunting, fishing and gathering.	
4.3	Could the project negatively affect endangered or protected animal, insect, or plant species, or their habitats?	<b>NO</b>		<i>References: for endangered species, see the <a href="#">IUCN Red List of Threatened Species</a>; for protected species, see national legislation</i>	The project area is not known to be the natural habitat of any protected plant or animal species or special ecosystems.	
4.4	Could the project alter the migration corridors of endangered or protected animals?	<b>NO</b>		<i>References: for endangered species, see the <a href="#">IUCN Red List of Threatened Species</a>; for protected species, see national legislation</i>	The location of the project and the planned infrastructures do not present any risk of hindering animal migration routes	
4.5	Could the project introduce species that are alien or genetically modified?	<b>NO</b>		<i>Reference: <a href="#">WFP follows national law regarding the use of GMOs</a>.  Note: The introduction of GMOs is always considered of medium or high risk, not only from an environmental point of view but also social point of view, as GMOs may create dependency from suppliers. This also applies to some hybrid crop species.</i>	N/A	
4.6	Could the project introduce alien or genetically modified species that may be invasive?	<b>NO</b>		<i>Definition of invasive alien species: non-native species that thrive in the host ecosystem and threaten the native biological diversity  References: <a href="#">IUCN Global Invasive Species Database</a>; <a href="#">CABI Invasive Species Compendium</a></i>	N/A	
<b>5</b>	<b>Could the project lead to negative impacts in protected areas?</b>	<b>NO</b>		<i>Examples: national parks, biosphere reserves, heritage sites, indigenous people's territories  References: sites could be protected by national law or by international agreements such as <a href="#">UNESCO Man and Biosphere Reserves</a>; <a href="#">Protected Areas</a>; <a href="#">Ramsar</a></i>	This project is not located in any protected area	

				<i>Sites; UNESCO World Heritage Sites</i>		
if Q5 is yes	5.1	Could activities of the project be located in the buffer zone of an area that is protected by national or international law or conventions?	<b>NO</b>	<i>Reference: buffer zone as per national or international legislation</i>	N/A	
	5.2	Could the project be located within, or have impacts on, an area that is protected by national or international law or conventions?	<b>NO</b>	<i>References: sites could be protected by national law or by international agreements such as UNESCO Man and Biosphere Reserves; Protected Areas; Ramsar Sites; UNESCO World Heritage Sites</i>	N/A	
<b>E&amp;S Standard 3: Resource Efficiency and Waste and Pollution Management</b>			<b>Level</b>	<b>Annotations</b>		
<b>6</b>	<b>Could the project increase the consumption of fuel (wood, charcoal, fossil fuel) or water?</b>		<b>YES</b>	<i>Note: consider all phases of the project, including operation of assets after they have been handed over</i>	The exploitation of the irrigated perimeters and the implementation of the AEPS network will lead to an increase in water consumption in the beneficiary localities.	Boreholes will be designed to mobilize only the quantities of water needed for these activities.
if Q6 is yes	6.1	Could the project lead to a permanent increase in the consumption of fuel (wood, charcoal, or fossil fuels) compared to the situation before the project?	<b>NO</b>	<i>Examples: project introduces an irrigation scheme with an engine-powered pumping system; project introduces income-generating activity that requires a permanent input of fuel or wood; project distributes food that requires extremely long cooking times</i>  <i>Note: devise mitigation measure that would ensure efficient resource use</i>	The project does not include activities that require the consumption of fuel (wood, charcoal or fossil fuels).  The pumping of water for the different activities will be done with solar energy.	
	6.2	Could the project lead to a sustained withdrawal of more than 1000m <sup>3</sup> of freshwater per day OR the withdrawal of more than 10% of the average flow of a stream or river?	<b>NO</b>	<i>Reference: the 1000m<sup>3</sup> threshold is also used by FAO; the 10% threshold is important for the Green Climate Fund</i>  <i>Example: a temporary hospital, built by WFP, could consume large quantities of water during operation, after handover</i>	For each village, 4 boreholes are planned with an average flow rate of 5m <sup>3</sup> /h, i.e. about 140m <sup>3</sup> of fresh water per day, well below the 1000m <sup>3</sup> /day threshold.  For all 7 sites this volume is about 980 m <sup>3</sup> /day and remains	

					<p><i>Note: if the answer to 6.2 is affirmative, then also consider the risk to ecosystems (question 4) and the risk of creating conflict (question 19)</i></p> <p><i>Note: devise mitigation measure that would ensure efficient resource use</i></p>	below the 1000m <sup>3</sup> /day threshold.	
	6.3	Could the project lead to a sustained withdrawal of more than 5000m <sup>3</sup> of freshwater per day OR the withdrawal of more than 50% of the average flow of a stream or river?	<b>NO</b>		<p><i>Reference: the 5000m<sup>3</sup> threshold is also used by FAO</i></p> <p><i>Note: if the answer to 6.2 is affirmative, then also consider the risk to ecosystems (question 4) and the risk of creating conflict (question 19)</i></p> <p><i>Note: devise mitigation measure that would ensure efficient resource use</i></p>	Same as above	
<b>7</b>	<b>Does the project involve substances or activities that could pollute the air, soil, or water?</b>		<b>YES</b>		<p><i>Examples of air pollution: open burning of waste; production of charcoal</i></p> <p><i>Examples of soil pollution: overuse of agrochemicals; leakage from cattle dip tanks; leakage of disinfectants from warehouse;</i></p> <p><i>Examples of water pollution: discharge of untreated wastewater; incorrect disposal of unused agrochemicals</i></p> <p><i>Note: consider the risk of pollution at all stages, from procurement and transport to use and disposal</i></p>	The machinery used during the work (drilling workshops, transport and installation equipment for the various AEPS and irrigation network structures) and the dust generated during the work could cause air pollution. The oil from the machines could also pollute the soil.	These developments are on a small scale (village scale) and their overall impact on the environment is very limited. Moreover, this pollution is temporary and stops after the work is completed.  Regular maintenance of the work machines will limit the release of smoke and engine oils.
if Q7 is yes	7.1	Could the project lead to the pollution of the air, soil or water that is <i>temporary, limited in scale, and remediable</i> ?	<b>YES</b>	Low	<p><i>Example: occasional burning of waste; occasional overuse of agrochemicals at household level</i></p> <p><i>References: WHO air quality guidelines; FAO Soil Pollution; WHO Guidelines for Drinking Water Quality; or national regulations if existent and stricter</i></p>	Same as above	Same as above
	7.2	Could the project lead to the pollution of the air, soil or water	<b>NO</b>		<p><i>Example: continuous discharge of wastewater from a hospital; large-scale overuse of agrochemicals</i></p>	N/A	

	that is <i>continuous</i> OR <i>large-scale</i> OR <i>irremediable</i> ?			<i>References: WHO air quality guidelines; FAO Soil Pollution; WHO Guidelines for Drinking Water Quality; or national regulations if existent and stricter</i>		
7.3	Could the project contaminate water sources that are used for human consumption?	<b>NO</b>		<p><i>Examples of sources of contamination: wastewater discharge; overuse of agrochemicals.</i></p> <p><i>Reference for water quality: national legislation; if this is not available, then as defined by WHO Guidelines for Drinking Water Quality.</i></p> <p><i>Note: if the answer to question 7.3 is affirmative, then also consider the risk of causing conflict (question 19)</i></p>	The project does not involve any intervention in the nature of the drinking water sources. It is only a question of drawing and conveying water. The treatment and use of water will be endorsed by ONEA and is not financed under this project	
7.4	Could the project involve chemicals or materials that are subject to international bans?	<b>NO</b>		<p><i>Definition of chemicals and materials subject to international bans: pesticides meeting the criteria of classes 1a or 1b of the WHO Recommended Classification of Pesticides by Hazard; chemicals in Annex III of the Rotterdam Convention on Hazardous Chemicals; pollutants governed by the Stockholm Convention on Persistent Organic Pollutants; asbestos as in the Asbestos Convention; mercury as in the Minamata Convention on Mercury; ozone depleting substances as in the Montreal Protocol</i></p> <p><i>Note: strong risk management measures would have to ensure that these types of chemicals and materials are not used and correctly disposed of</i></p>	The project does not involve the use of chemicals. In addition, the WFP respects the regulations in force in the country and formally prohibits the purchase of materials prohibited by the authorities.	
<b>8</b>	<b>Could the project generate waste (hazardous or non-hazardous) that cannot be reused, recycled, or adequately disposed of by the beneficiaries, WFP, or partners?</b>	<b>YES</b>			Eventually, dripper tubes can become unwanted plastic waste. However, due to the relatively long life span of this equipment (at least 10 years), replacements are limited in time. 1 supported village represents	Proper maintenance of irrigation equipment increases the life of the equipment, reducing the frequency of equipment replacement and thus the impact of equipment waste on the environment.

					approximately 33k meters of drippers		
if Q8 is yes	8.1	Could the project produce non-hazardous waste that cannot be reused, recycled, or adequately disposed of by the beneficiaries, WFP, or partners?	<b>YES</b>	Low	<i>Examples of non-hazardous waste: plastic bags, tin cans.</i>	Same as above	Same as above
	8.2	Could the project generate any quantity of hazardous waste that cannot be adequately disposed of by WFP, partners or beneficiaries?	<b>NO</b>		<p><i>Definition of hazardous waste: all waste listed in annex I of the <a href="#">Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal</a>;</i></p> <p><i>Examples of hazardous waste: unused pesticides, engine oil, brake fluid, tyres, medical waste, used Personal Protective Equipment (PPE)</i></p> <p><i>Note: hazardous waste for which WFP has clear procedures (fluorescent lights, batteries, printer/toner cartridges) is not considered a risk</i></p>	N/A	
9	<b>Could the project lead to increased use of agrochemicals?</b>		<b>YES</b>		<i>Examples of agrochemicals: synthetic fertilisers, pesticides, herbicides, fungicides</i>	This project aims to increase the market gardening capacity of the target villages, and therefore risks increasing the use of agrochemicals	<p>Beneficiaries will be sensitized to the proper use of mineral fertilizer (micro-dosing techniques, burying, application of reasonable quantities per ha...). They will also be sensitized to the use of registered chemical pesticides including good application practices.</p> <p>Focus will be made on the use of compost for soil improvement and biopesticides for the control of crop pests in market gardens and school gardens.</p>
if Q9 is	9.1	Could the project lead to an increase in the use of synthetic agrochemicals that could easily	<b>YES</b>	Low	<i>Examples of natural products or techniques: integrated pest management, conservation agriculture</i>	Although the emphasis is on the use of compost for soil improvement and biopesticides for crop pest control in market	Same as above



		be substituted by natural products or techniques?			<i>Note: mitigation measures would have to ensure correct use</i>	gardens and school gardens, these provisions do not preclude the use of agrochemicals by beneficiaries.	
	9.2	Could the project involve the use of pesticides that are subject to international bans?	<b>NO</b>		<i>References: pesticides meeting the criteria of classes 1a or 1b of the WHO Recommended Classification of Pesticides by Hazard; pollutants governed by the Stockholm Convention on Persistent Organic Pollutants</i>  <i>Note: strong risk management measures would have to ensure that these types of pesticides are not used and correctly disposed of</i>	The use of pesticides subject to international bans will be strictly prohibited on the sites. Beneficiaries will be sensitized to this effect and to the use of registered chemical pesticides including good application practices.	
<b>E&amp;S Standard 4: Climate Change</b>				<b>Level</b>	<b>Annotations</b>		
	<b>10</b>	<b>Could the project increase greenhouse gas emissions from fuel combustion, changes in land cover, or other sources?</b>	<b>NO</b>			The pumping of water within the framework of the project will be done thanks to solar energy which does not generate greenhouse gas emissions.	
if Q10 is yes	10.1	Could the project lead to a permanent increase in the consumption of fuel (wood, charcoal, or fossil fuels) compared to the situation before the project?	<b>NO</b>		<i>Examples: project introduces an irrigation scheme with engine-powered pumping system; project introduces income-generating activity that requires a permanent input of fuel or wood</i>	Same as above	
	10.2	Could the project degrade or convert the vegetation cover in an area (contiguous or cumulative) of 1 to 10 ha?	<b>NO</b>		<i>Examples of degradation: burning, thinning, felling, unsustainable pruning and harvesting from trees and other forest resources</i>  <i>Examples of conversion: clearance of forest or wetland for agriculture</i>	The areas to be developed per village are relatively small, in the order of 0.25 ha and 2 ha, for a cumulative area of 2.50 ha per village, well below the 10 ha threshold.	
	10.3	Could the project degrade or convert the vegetation cover in an area (contiguous or cumulative) of more than 10 ha?	<b>NO</b>		<i>Examples of degradation: burning, thinning, felling, unsustainable pruning and harvesting from trees and other forest resources</i>  <i>Examples of conversion: clearance of forest or wetland for agriculture</i>	Same as above	



<b>1</b>	<b>Could the project expose more people to natural hazards or make some people more vulnerable to natural hazards?</b>	<b>NO</b>		<i>Note: this question intends to probe changes in exposure, resilience and vulnerability of people to natural hazards</i>  <i>Examples of natural hazards: droughts, floods, cyclones, locust swarms</i>	The objective of the project is to make communities more resilient to future shocks and especially to natural hazards such as drought (frequent in the region) through sustainable water use	
if Q11 is yes	11.1 Will the project create infrastructure or assets that could increase the exposure of any person to natural hazards?	<b>NO</b>		<i>Example: a new dam that could easily break down under heavy rainfall increases the exposure of the people living immediately downstream of the dam</i>  <i>Note: this question particularly applies to vulnerable groups</i>	N/A  The project will contribute to diversify livelihoods resilient to climate and natural hazards	
	11.2 Could the project change people's behaviour or livelihood strategies, increasing their exposure to natural hazards?	<b>NO</b>		<i>Example: the project introduces water management techniques that are replicated incorrectly by the community, involuntarily increasing their exposure to floods</i>  <i>Note: this question particularly applies to vulnerable groups</i>	On the contrary, the project aims at diversifying the livelihood strategies	
	11.3 Could the project make any person more dependent on assets that would likely be damaged by natural hazards in the next 5 years?	<b>NO</b>		<i>Example: farmers completely shifting to irrigated agriculture while the irrigation scheme is prone to floods or droughts; farmers planting water-intensive crops (like sugarcane) in rain-fed plots that are prone to future decrease in rainfall</i>	On the contrary, the project aims at diversifying the livelihood strategies	
	11.4 Could the project make any farmer more dependent on a smaller number of crops?	<b>NO</b>		<i>Examples: farmers investing in one cash crop instead of multiple crops</i>	The project aims to increase the number of crops	
	11.5 Could the project reduce the livelihood options of any person?	<b>NO</b>		<i>Example: project fencing off communal land used by some of the community members</i>  <i>Note: this question particularly applies to vulnerable groups</i>	The project aims to increase the livelihood options of the persons.	

**12. Annex 4 – 7**

*Attached separately.*

ACTIVITY
Validation of the project proposal and release of funds
Collection of baseline data on target communities (Baseline PDM)
Signature of an agreement with ONEA for geophysical studies, drilling and AEPS
Organization of the launching workshop + sensitization at the level of the intervention zones (local community authorities)
Mise à jour des Planifications Communautaires Participatives (PCP)
Recruitment of service providers by ONEA for the conduct of geophysical studies and the realization of 28 boreholes of at least 5 m <sup>3</sup> /h and of design offices for the studies and control of 7 AEPS
Conduct of geophysical studies by ONEA
Drilling of boreholes including development and pumping tests
AEPS studies
Recruitment of companies for the realization of the AEPS
Realization of the AEPS including reception of the works
Conduct of land negotiations with individual protocols for the transfer of land rights and site handover reports
Recruitment of offices for the study and monitoring of the installation of efficient irrigation systems (market gardens, school gardens)
Studies on the installation of efficient irrigation systems (market gardening areas, school gardens)
Recruitment of companies for the installation of efficient irrigation systems
Installation of efficient irrigation systems
IEC activities (SBCC) including establishment and/or capacity building of WUAs/theatre forum/.....
Organization of beneficiaries for the production and maintenance of infrastructure
Production on developed sites (model farm, nursery, school garden...)
Annual Joint Performance Evaluation (WFP, Government, ONEA, NGOs, communes, DREA, AUE)
Communal Exit Strategy Workshop
Student internships on the sites
Develop good practices in the management of community irrigation systems (development of 02 good practices per year)
Collection of follow-up data (VAM/ME) on targeted communities (Endline PDM)
Organization of the end assessment workshop
Final Project report





<b>WHO</b>
DANIDA
WFP
WFP/ONEA
WFP
WFP
WFP/ONEA
WFP/ONEA
WFP/ONEA
WFP/ONEA
WFP/ONEA
WFP/ONEA
WFP/DGFOMER
WFP
WFP/Bureaux d'études
WFP
WFP/Private companies
WFP/WASH NGOs
WFP/ST agriculture and L
WFP/ST agriculture and l
WFP
WFP
WFP/UNB
WFP
WFP
WFP
WFP



**PLANIFICATION COMMUNAUTAIRE PARTICIPATIVE (PCP) POUR  
LA CREATION D'ACTIFS ET DES INTERVENTIONS  
COMPLEMENTAIRES DE LA GRAPPE DE KOMTENGA (VILLAGES :  
KOMTENGA, SAOURI-TANSOBDOGO ET SECTEUR 2)  
-COMMUNE DE KORSIMORO-**

Région du Centre Nord	Province du Sanmatenga	Commune de Korsimoro	Grappe de Komtenga
Coordonnées GPS : Latitude : 12° 47' 25.074 N / Longitude : 001° 04' 27.216" W			



Novembre 2020

## Table des matières

1.1.	Présentation de l'approche et du processus d'identification .....	3
1.2.	L'équipe de planification communautaire.....	4
1.3.	Information de base et localisation de la communauté.....	6
II.	Populations, moyens d'existence et territoires .....	6
2.1.	Profilage de la vulnérabilité.....	6
2.2.	Identification des problèmes et exposition aux chocs .....	8
2.3.	Autres considérations propres aux femmes.....	17
2.4.	Organisations communautaires et partenaires externes.....	17
2.5.	Cartographie communautaire .....	18
2.6.	Topo séquence ou transect.....	19
III.	Plan communautaire .....	33
3.1.	La vision partagée de la communauté et leurs objectifs .....	33
3.2.	Les axes d'interventions prioritaires .....	33
3.3.	Plan de travail des activités 3A et des interventions complémentaires .....	34
3.4.	Les engagements pris par la communauté et les partenaires techniques et financiers .....	36
VI.	Clôture.....	36



## **I. Introduction**

### **1.1. Présentation de l'approche et du processus d'identification**

L'approche de la Planification Communautaire Participative est axée sur le terroir avec pour objectif d'améliorer la compréhension des moyens d'existence, les sources de vulnérabilité des ménages et le terroir villageois. Elle cherche à identifier les problèmes et les solutions intégrées se traduisant par l'élaboration d'un plan d'action communautaire pluriannuel et multisectoriel. Les interventions en lien avec la sécurité alimentaire se font à travers des activités d'assistance alimentaire pour la création d'actifs productifs et les autres interventions complémentaires. Elle contribue également à une meilleure autonomisation des communautés bénéficiaires, une appropriation des actifs créés ainsi que leur pérennité. La PCP correspond au maillon local de l'approche de programmation des activités de résilience à trois niveaux utilisés par le PAM : Analyse Intégrée du Contexte (AIC) au niveau national ; Programmation Saisonnière basée sur les Moyens d'Existence (PSME) au niveau régional ou provincial ; et PCP réalisée au niveau villageois.

Pour ce, l'exercice de la PCP exige une implication forte des services techniques et des partenaires stratégiques de mise en œuvre pour assurer convergence et synergie des activités mises en œuvre, avec un engagement de la communauté et du PAM.

Les principales étapes de la PCP sont les suivantes :

#### **a) Assemblée villageoise**

L'équipe du PAM du bureau terrain de Kaya en collaboration avec la DRAAH a effectué une visite de terrain et a échangé avec la communauté en assemblée générale. L'objectif principal était d'informer la communauté du choix du grappe et de fournir une brève description de l'approche PCP, du chronogramme de déroulement de l'exercice et de recueillir les attentes de la communauté.

#### **b) Déroulement de la PCP proprement dite**

Avant la phase pratique, il y a eu une séance de formation des facilitateurs issus des services techniques déconcentrés et des partenaires non étatiques sur l'utilisation des outils PCP et la réalisation des PCP. Cette formation s'est tenue le 16 novembre 2020 dans la salle de conférence de la chambre régionale d'agriculture (CRA) à Kaya.

Quant à l'élaboration du PCP, elle s'est déroulée du 17 au 20 novembre 2020 dans les villages de Komtenga, Sabouri-tansobdого et Secteur 2. Elle a débuté par une assemblée villageoise

élargie à l'équipe de la planification. Lors de l'assemblée générale, l'équipe de planification a apporté des clarifications sur l'approche PCP et sur le programme, et a expliqué la nécessité de former une équipe de planification communautaire inclusive et représentative. Aussi, il a été rappelé à la communauté bénéficiaire qu'elle doit être au cœur de l'exercice car tous les problèmes identifiés et les solutions proposées devraient être bâties autour de leurs préoccupations sous la facilitation technique de l'équipe de planification. Enfin, il a été dit que la mise en œuvre des activités du plan d'actions de la grappe de Komtenga ne pourrait se faire sans le concours de la communauté bénéficiaire.

Les préoccupations de la communauté endogène en fonction des groupes sociaux (les femmes, les homes et les jeunes) ont été également recensées.

Cet exercice de PCP a utilisé différents outils participatifs avec l'équipe des planificateurs qui sont :

- Les échanges et discussions en plénière,
- Les travaux de groupe (moyens d'existence, chocs et saisonnalité, etc...);
- Les cartographies
- Le transect qui a permis de faire des observations directes sur le terroir et de caractériser les unités.

Les échanges ont porté essentiellement sur : i) l'analyse et la compréhension des moyens d'existence de la communauté ; ii) la caractérisation de la vulnérabilité et l'insécurité alimentaire locales et aussi de comprendre le terroir villageois ; iii) l'identification des problèmes/priorités avec des solutions.

## **1.2. L'équipe de planification communautaire**

À l'issue des travaux en assemblée générale villageoise, une équipe de planification communautaire de 24 membres soit 8 membres par village a été mise en place en tenant compte de l'aspect genre. La liste nominative des vingt-quatre (24) membres de la planification communautaire de la grappe de Komtenga est mentionnée dans le tableau ci-dessous :

#	Nom	Femme/ homme/ jeune?	Groupe (de moyens d'existence, socio- économique)	Village ou sous-colline
1	OUEDRAOGO KARIM	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
2	OUEDRAOGO HAROUNA	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
3	OUEDRAOGO MAHAMOUDOU	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
4	SAWADOGO RASMANE	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
5	BALMA KARIM	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
6	OUEDRAOGO INOUSSA	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
7	ZOUNGRANA RIHANATA	FEMME	AGRICULTURE /ELEVAGE	KOMTENGA
8	OUEDRAOGO BOUKARE	HOMME	AGRICULTURE /ELEVAGE	KOMTENGA
9	ZABRE NOUSSA	HOMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
10	ZABRE PAMOUSA	HOMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
11	SAWADOGO ADAMA	JEUNE	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
12	ZABRE BOUKARE	HOMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
13	SAWADOGO TALATO	FEMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
14	MANDO ROUKIATOU	FEMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
15	OUEDRAOGO MARTINE	FEMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
16	ZABRE BARKE	HOMME	AGRICULTURE /ELEVAGE	SABOURI-TANSOBDOGO
17	OUEDRAOGO DIEUDONNE	HOMME	AGRICULTURE /ELEVAGE	SECTEUR 2
18	OUEDRAOGO K GILBERT	HOMME	AGRICULTURE /ELEVAGE	SECTEUR 2
19	SAWADOGO O PIERRE	HOMME	AGRICULTURE /ELEVAGE	SECTEUR 2
20	OUEDRAOGO K LAURENT	HOMME	AGRICULTURE /ELEVAGE	SECTEUR 2
21	SAWADOGO ALIMATA	FEMME	AGRICULTURE /ELEVAGE	SECTEUR 2
22	SAWADOGO P AWA	FEMME	AGRICULTURE /ELEVAGE	SECTEUR 2
23	OUEDRAOGO ADAMA	JEUNE	AGRICULTURE /ELEVAGE	SECTEUR 2
24	OUEDRAOGO L MAROU	HOMME	AGRICULTURE /ELEVAGE	SECTEUR 2

### **1.3. Information de base et localisation de la communauté**

#### **a. Données démographiques**

Selon les services de santé de la zone, la population des 03 villages est estimée à 6500 habitants.

#### **Situation alimentaire et nutritionnelle**

A l'instar des autres villages vulnérables, choisis pour les PCP, la population des trois (03) villages de la grappe de Komtenga fait face à des difficultés alimentaires et nutritionnelles régulières et de plus en plus fréquentes. Les caprices pluviométriques dues au changement climatique, avec pour conséquence le décalage progressif de l'installation de la saison des pluies a toujours porté préjudice à la campagne agro-pastorale. Cette situation a pour conséquence, une baisse des récoltes de céréales, principales denrées de base des habitants. Ainsi, de plus en plus, des enfants et des femmes enceintes et allaitantes sont dépistés malnutris.

#### **b. Les principaux moyens d'existence**

A l'issue des échanges avec la communauté en présence des représentants des différents groupes socio-professionnels, il ressort que la grande majorité des habitants sont des agro-pasteurs avec des activités complémentaires de sources de revenus telles le commerce, l'artisanat et l'orpaillage.

## **II. Populations, moyens d'existence et territoires**

### **2.1. Profilage de la vulnérabilité**

S'agissant du profilage de la vulnérabilité, il a été fait par la méthode des 10 cailloux en plénière de l'ensemble des participants. En somme 4 catégories de ménages distinctes ont été identifiées avec des caractéristiques propres à chacun : il s'agit des nantis, des moyens, des pauvres, des très pauvres. Le résumé de la classification de la vulnérabilité se présente comme suit :

- Nantis : 01/10 cailloux soit 10%
- Moyens : 02/10 cailloux soit 20%
- Pauvres : 03/10 soit 30%
- Très pauvre : 04/10 soit 40%

Le tableau ci-dessous indique les types de ménages ainsi que les caractéristiques de chaque type de ménage.

N°	Catégories de ménages vulnérables	Caractéristiques du groupe	Proportion indicative
1	<b>Nantis</b>	<ul style="list-style-type: none"> <li>- Dispose d'au moins 60 têtes d'animaux (Bovins, Ovins, caprins)</li> <li>- Dispose des moyens de production ;</li> <li>- Possède une grande concession clôturée avec des maison bien bâtis ;</li> <li>- Peut subvenir aux besoins de sa famille 12/12 mois de l'année soi-même et soutient les vulnérables en cas de famine.</li> <li>- Se soigne sans difficultés au CSPS et ailleurs et honore ses ordonnances médicales</li> <li>- Scolarise ses enfants sans difficultés à tous les niveaux et dans de grandes écoles</li> <li>- Emploi de la main d'œuvre dans les travaux champêtre</li> </ul>	10%
2	<b>Moyen</b>	<ul style="list-style-type: none"> <li>- Dispose de plus de 15 têtes d'animaux (Bovins, ovins et caprins)</li> <li>- Peut exploiter 2,5 ha de superficie ;</li> <li>- Possède quelques moyens de production ;</li> <li>- Assure les 03 repas/jour de sa famille et sur les 12 mois</li> <li>- Se soigne sans difficultés au niveau local ;</li> <li>- Scolarise ses enfants sans difficulté jusqu'au poste primaire ;</li> <li>- Possède une maison en banco avec toiture en tôle.</li> </ul>	20%
3	<b>Pauvre</b>	<ul style="list-style-type: none"> <li>- Ne dispose pas de bovins mais possède de la volaille (1 à 3 têtes)</li> <li>- Possède une maison avec toiture en terre ou en paille;</li> <li>- Ne peut honorer ses ordonnances médicales au-delà 2000 FCFA ;</li> <li>- Se nourrit difficilement et complète le reste par des emprunts et des aides.</li> <li>- Se soigne difficilement au CSPS</li> <li>- Scolarise ses enfants très difficilement</li> </ul>	30%
4	<b>Très pauvre</b>	<ul style="list-style-type: none"> <li>- Ne dispose ni de bétail, ni de la volaille.</li> <li>- Vie de la solidarité des bonnes volontés ;</li> <li>- Possède une maison en banco délabrée avec une toiture souvent en terre ou en paille ;</li> <li>- Est incapable de se soigner au CSPS et endure son mal en silence ;</li> <li>- N'a pas de terre à cultiver et constitue lui-même la main d'œuvre pour les moyens et nantis ;</li> <li>- Est incapable d'assurer la scolarisation de ses enfants même au primaire.</li> </ul>	40%

## 2.2. Identification des problèmes et exposition aux chocs

### a. Identification des problèmes et classification

L'identification des problèmes est faite par des échanges en groupes de travail. Pour cet exercice, trois groupes de travail furent constitués. Il s'agit du groupe des femmes, du groupe des hommes et celui des jeunes filles et garçons. L'équipe technique de planification aussi s'est répartie en trois pour appuyer les représentants des populations dans cet exercice.

#### Quelques problèmes par groupes social

Problèmes rapportés par les femmes	Problèmes rapportés par les hommes	Problèmes rapportés par les jeunes
1. Pauvreté des sols, Difficulté d'accès aux intrants agricoles (semences, engrais)	1. Dégradation des sols, Insuffisance de terres cultivables Mauvais rendement agricole	1. Dégradation des sols, Insuffisance de matériels agricoles Insuffisance de formation agricoles
2. Mortalité des animaux, vol et perte d'animaux dûs à l'absence d'enclos	2. Difficultés d'accès aux intrants et équipements agricoles, Absence de périmètre maraichers Insuffisance de retenues d'eau	2. Mortalité animale, Insuffisance de point d'eau et de pâturage
3. Absence de fond de roulement et manque de financement et de micro-crédit pour les AGR	3. Insuffisance de zone de pâturage, manque de retenue d'eau à usage pastorale	3. Centre de santé très éloignés et inaccessible en saison pluvieuse Coût de produits médicaux élevés
4. Exode des jeunes vers les sites d'orpillage résultant en des maladies psychiques, physiques et voire même des décès	4. Difficultés d'accès aux centres de santé	4. Insuffisance de moyens financiers pour la réalisation d'AGR
5.	5. Insuffisance des salles de classe	5. Absence de lycées et de collèges

### Synthèse des problèmes par domaine d'activité de la grappe de Komtenga

N°	Domaine	Problèmes	Causes	Solutions
1	Agriculture	Pauvreté des sols et insuffisance de terres cultivables	<ul style="list-style-type: none"> <li>- Dégradation des sols, érosion, ....</li> <li>- Dégradation du couvert végétal</li> </ul>	<ul style="list-style-type: none"> <li>- Réaliser des aménagements CES/DRS</li> <li>- Réaliser des fosses fumières</li> <li>- Traiter les ravines</li> <li>- Réaliser des pépinières et des plantations d'arbres</li> <li>- Limiter la coupe abusive du bois.</li> </ul>
		Mauvaises récoltes	<ul style="list-style-type: none"> <li>- Insuffisance des pluies,</li> </ul>	<ul style="list-style-type: none"> <li>- Réaliser des ouvrages CES/DRS</li> </ul>
		Insuffisance d'intrants et équipements agricoles	<ul style="list-style-type: none"> <li>- Manque de moyens pour l'achat de semences et d'équipements agricoles</li> </ul>	<ul style="list-style-type: none"> <li>- Apporter un appui dans l'acquisition des intrants et équipement agricoles</li> </ul>
		Manque de magasin de stockage		<ul style="list-style-type: none"> <li>- Construire un magasin de stockage</li> </ul>
		Absence de périmètre maraicher	<ul style="list-style-type: none"> <li>- Absence de sites aménagés</li> </ul>	<ul style="list-style-type: none"> <li>- Aménager des périmètres maraichers</li> </ul>

		Manque de retenus d'eau pour le maraichage		- Réaliser des retenus d'eau/boulis pour le maraichage
		Faible capacité technique des producteurs		- Initier des formations spécifiques aux profits des producteurs
2	Elevage	Insuffisance de zone de pâturage,	- Insuffisance des terres cultivables ; - Dégradation du couvert végétal	- Récupérer les sols dégradés et lessivés pour une vocation pastorale
		Manque de retenue d'eau pour l'abreuvement des animaux		- Réaliser des boulis et forages
		Absence de parc de vaccination		- Réaliser un parc à vaccination
		Difficulté d'écoulement des produits de l'élevage	- Absence de marché - Difficile accès aux marchés	- Organiser des foires de vente des animaux ; - Réhabiliter la voie principale de l'axe Komtenga-Secteur2 (Korsimoro)
		Connaissance technique insuffisante sur la production animale		- Initier des renforcements de capacités sur les techniques d'embouche
		Maladies parasitaire et mortalité des animaux	- Manque d'information sur le calendrier de vaccination des animaux	- Réaliser des sensibilisations sur le plan vaccinal des animaux
3	Santé / Nutrition- Hygiène eau et assainissement	Difficultés d'accès au CSPPS	Mauvais état de la route	- Réhabiliter/réaliser un ouvrage de franchissement entre Komtenga et le CSPPS - Aménagement des pistes rurales
		Coût élevé des médicaments	Pauvreté des ménages	- Disponibiliser les médicaments à prix subventionné



		Malnutrition des enfants	<ul style="list-style-type: none"> <li>- Pauvreté des ménages</li> <li>- Manque d'hygiène ;</li> <li>- Ignorance</li> </ul>	<ul style="list-style-type: none"> <li>- Aider avec des aliments enrichis pour les enfants</li> <li>- Réaliser des sensibilisations sur l'hygiène et la malnutrition</li> </ul>
		Insuffisance de latrines	Insuffisance de moyens	<ul style="list-style-type: none"> <li>- Plaidoyer pour la réalisation de latrines</li> </ul>
		Manque d'eau potable	Insuffisance des forages	<ul style="list-style-type: none"> <li>- Réaliser des forages</li> </ul>
4	Commerce /AGR	<ul style="list-style-type: none"> <li>- Manque d'AGR</li> <li>- Manque de fonds de roulement</li> </ul>	<ul style="list-style-type: none"> <li>- Manque de moyens financiers pour réaliser le petit commerce et les AGR</li> <li>- Manque de formations</li> <li>- Insuffisance organisationnelle des groupes</li> </ul>	<ul style="list-style-type: none"> <li>- Appuyer les ménages avec des fonds pour la réalisation des AGR</li> <li>- Renforcer la capacité des couches cibles en entrepreneuriat</li> <li>- Organiser les groupes sociaux en coopératives</li> <li>- Faire des plaidoiries au près des IMF</li> <li>- Sensibiliser les groupes sur l'épargne communautaire (Ex des AVEC)</li> </ul>
5	Education	- Insuffisance de classes à l'école de Komtenga	-	- Augmenter la capacité d'accueil de l'école du village
		- Manque de moyens pour la scolarisation et manque de suivi des élèves	<ul style="list-style-type: none"> <li>- Pauvreté des ménages</li> <li>- Ignorance</li> </ul>	<ul style="list-style-type: none"> <li>- Appuyer les ménages dans la scolarisation des enfants</li> <li>- Sensibiliser sur la nécessité du suivi des enfants</li> </ul>
		- Grossesse en milieu scolaire	- Absence de centre d'écoute pour jeunes	- Réaliser un centre d'écoute pour jeune
		- Manque de forage positif à l'école de Komtenga		- Réaliser un forage à proximité de l'école

❖ **Tableau de classification des problèmes par domaine de la grappe de Komtenga**

La priorisation des problèmes de la grappe a été faite en plénière par l’outil « *matrice de classification* » qui permet de faire une comparaison croisée des problèmes. Chaque problème est noté par son numéro d’ordre dans le tableau des problèmes. Cette classification des problèmes se présente comme suit :

	<b>1</b> Agriculture	<b>2</b> Elevage	<b>3</b> Santé/Nutrition-Hygiène eau et assainissement	<b>4</b> Commerce	<b>5</b> Education
<b>1</b> Agriculture		1	3	1	1
<b>2</b> Elevage	1		3	2	2
<b>3</b> Santé/Nutrition-Hygiène eau et assainissement	3	3		3	5
<b>4</b> Commerce	1	2	3		5
<b>5</b> Education	1	2	3	5	

❖ **Résultats de la classification par domaine**

<b>Numéro</b>	<b>Domaine</b>	<b>Score</b> (nombre de fois répétés cf tableau ci- dessus)	<b>Rang</b>
1	Agriculture	6	2 <sup>e</sup>
2	Elevage	4	3 <sup>e</sup>
3	Santé/Nutrition, hygiène eau et assainissement	8	1 <sup>er</sup>
4	Commerce et artisanat	0	5 <sup>e</sup>
5	Education	2	4 <sup>e</sup>

## **b. Historique des chocs vécus, les effets/impacts et les stratégies d'adaptations développées**

Divers types de chocs sont survenus dans la PCP de Komtenga. Des échanges en plénière avec les représentants de la communauté ont permis de dresser la liste de ces chocs et leurs effets/impacts éprouvés par la population. Les populations ont toutefois développé diverses mesures d'adaptation pour faire face aux chocs.

Ces chocs et effets/impacts ainsi que les mesures d'adaptation sont les suivants :

<b>Année</b>	<b>Chocs</b>	<b>Effets/impacts</b>	<b>Mesures d'adaptation</b>
1983	Rougeole	Mortalité infantile	<ul style="list-style-type: none"> <li>- Recours aux services de santé</li> <li>- Vaccination des enfants ;</li> </ul>
1985	Sècheresse	<ul style="list-style-type: none"> <li>- Mauvaises récoltes</li> <li>- Famine</li> </ul>	<ul style="list-style-type: none"> <li>- Vente d'animaux</li> <li>- Consommation d'aliment tels que les PFNL;</li> </ul>
2004	Sècheresse	<ul style="list-style-type: none"> <li>- Mauvaises récoltes</li> <li>- Famine</li> <li>- Malnutrition</li> </ul>	<ul style="list-style-type: none"> <li>- Vente d'animaux</li> <li>- Achat à prix social des denrées la SONAGESS</li> <li>- Réduction de la quantité et de la qualité des repas et de leur nombre par jour</li> </ul>
2009	Inondation	<ul style="list-style-type: none"> <li>- Dévastation des champs ;</li> <li>- Mauvaise récolte</li> <li>- Perte d'animaux (emportés par les eaux)</li> </ul>	<ul style="list-style-type: none"> <li>- Tentative de sauvetage des animaux</li> <li>- Vente d'animaux</li> <li>- Recours aux ventes à prix social de la SONAGESS</li> <li>- Vente de biens</li> </ul>
2018	Epidémie de Gouroum	<ul style="list-style-type: none"> <li>- Mort d'ânes</li> </ul>	<ul style="list-style-type: none"> <li>- Recours au service de vétérinaires</li> <li>- Acquisition d'ânes</li> </ul>

### **c. Systèmes d'alertes précoces mis en place**

Il n'existe pas de système d'alerte précoce formalisé dans la zone. Les habitants ont essentiellement recours à l'observation des éléments de la nature qui les entourent, notamment les arbres et les oiseaux. Ainsi d'après les habitants, l'apparition de certains oiseaux (ex : « siguiwali » en moree) ou une bonne fructification du karité sont annonciatrices d'une bonne campagne agricole. Une bonne fructification du sclérotaria (Nobga en moree) est annonciatrice d'une sécheresse.

D'autres éléments tels que les informations agrométéorologiques diffusées dans les radios communautaires ou via les sms sont souvent utilisés.

### **❖ Principaux moyens d'existence**

Les principaux moyens d'existence par groupe socio-économique et par ordre de d'importance sont mentionnés dans le tableau ci-dessous :

<b>Selon les femmes</b>	<b>Selon les hommes</b>	<b>Selon les jeunes</b>
1. Agriculture	1. Agriculture	1. Agriculture
2. Elevage	2. Elevage	2. Commerce
3. Commerce/AGR	3. Commerce	3. Elevage
4. Artisanat	4. Orpaillage	4. Orpaillage
5. PFNL		

#### d. Calendrier saisonnier

Le calendrier saisonnier prend en compte tous les domaines socio-économiques ainsi que les couches socio-professionnelles de la grappe de Komtenga. Il se présente comme suit :

**Tableau : calendrier saisonnier de la grappe de Komtenga**

Saison/Occupation	Jan	Fév	Mars	Avr	Mai	Jui	Juil	Août	Sept	Oct	Nov	Déc
<b>Saison</b>												
Saison sèche												
Saison humide								TH	TH			
<b>Chocs climatiques</b>												
Forte chaleur												
Vents forts												
<b>Production agricole</b>												
Compostage												
Préparation du sol												
Activités CES/DRS (Zai, DL, CP)												
Semis												
Opérations culturales (sarclage, buttage, récolte...)												
Pic d'activités agricoles												
Période de soudure												
Maraîchage												
<b>Production animale</b>												
Fauche de fourrage et ramassage de résidus												
Embouche												
Elevage de la volaille												
Maladies infectieuses												
Tension agriculteurs/éleveurs												
<b>AGR</b>												
Commerce												
Orpaillage												
Solidarité villageoise												
Construction des maisons												
Activités aux PNFL												

TH : très haute

### e. Répartition du travail

Le tableau ci-dessous présente la répartition des tâches domestiques usuelles et des activités de subsistance entre les membres du ménage.

**Tableau : Répartition des tâches domestiques usuelles et des activités de subsistance**

N°	Tâche	Responsabilité			
		Filles	Femmes	Garçons	Hommes
1.	Prise de décision sur les dépenses du ménage	NA	+	NA	++
2.	Prise de décision sur les sources de revenus du ménage	NA	+	NA	++
3.	Collecte d'eau potable pour les usages domestiques	+	++	NA	NA
4.	Collecte de bois de chauffe	+	++	NA	NA
5.	Préparation des champs pour les cultures pluviales et maraichères jusqu'à la récolte	+	+	+	++
6.	Accompagnement pour le pâturage et surveillance des animaux	+	NA	++	NA
7.	Construction de maison	+	+	+	+
8.	Travaux ménagers	NA	++	NA	NA
9.	Orpaillage	+	NA	NA	+
10.	Abreuvement des animaux	+	++	+	+
11.	Gestion des stocks alimentaires	NA	NA	NA	++
12.	Les rites	NA	NA	NA	++
13.	Exode économique	NA	NA	NA	++

**Légende** : NA (Non Applicable).

+ = Niveau de responsabilité

### 2.3. Autres considérations propres aux femmes

Au cours d'un focus group réalisé avec les femmes, les principaux problèmes relevés par celles-ci sont :

- Déscolarisation des filles, surtout celles issues de familles pauvres, à la suite des grossesses précoces
- Vécu déplorable des femmes en situation de veuvage

#### Solutions envisagées :

- Construction d'un centre d'écoute pour jeunes pour la sensibilisation
- Création d'AGR à travers l'accès au crédit pour des activités d'élevage, de saponification, de tissage
- Mise de terres cultivables à la disposition des femmes

### 2.4. Organisations communautaires et partenaires externes

Deux types d'organisation interviennent dans les villages de la grappe de Komtenga ; il s'agit (i) des organisations à base communautaire existantes et (ii) des services techniques étatiques, ONG et associations externes.

#### ❖ Institution à base communautaire et parties prenantes

On peut citer dans le village : les coopératives paysannes féminines et masculines intervenant dans la production agricole et la transformation des productions agricoles, le Conseil Villageois de Développement (CVD). Le tableau ci-dessous présente les organisations communautaires existantes dans les villages de la grappe de Komtenga.

Noms	Type d'activités
Comité Villageois de Développement (CVD)	- Coordination des actions de développement du village
CFV/CCFV	- Foncier
Agents de Santé à Base Communautaire (ASCB)	- Chargés de la question de santé au niveau village de la population, les sensibilisations
Coopérative Nabonswendé	- Production de niébé et commercialisation
Coopérative Relwendé	- Production et commercialisation de sorgho
Coopérative Wende telegueda	- Production de niébé et commercialisation
Coopérative Tewendé	
Coopérative Wendpanga	

### ❖ Services, projets et institutions externes

Les services techniques déconcentrés qui interviennent sont principalement : l'agriculture, l'élevage, l'environnement, l'éducation, la santé. Ces interventions sont en lien avec la politique du gouvernement en matière de développement et sont appuyées par des actions de partenaires au développement que sont les associations et ONG. Les interventions sont essentiellement orientées vers le développement et le renforcement des moyens d'existences des communautés. Les actions réalisées au profit de la communauté sont présentées dans le tableau ci-dessous :

<b>Intervenants</b>	<b>Type d'activités</b>
UAT (unité d'animation technique) /agriculture	<ul style="list-style-type: none"><li>- Mise en œuvre de la politique du MAAH</li><li>- Appui/conseil aux producteurs ;</li><li>- Distribution d'intrants et équipements agricoles</li><li>- Appui à la mise en œuvre des activités des partenaires</li></ul>
Elevage	<ul style="list-style-type: none"><li>- Appui/conseil aux producteurs ;</li><li>- Mise en œuvre de la politique du MRAH</li></ul>
Environnement	Mise en œuvre de la politique du MEEVCC
Santé	<ul style="list-style-type: none"><li>- Vaccination</li><li>- Distribution des MILDA</li><li>- ASBC</li><li>- Sensibilisation sur la santé de la reproduction</li><li>- Prévention de la malnutrition et récupération des malnutris</li><li>- IEC/CCC sur la santé, hygiène et assainissement</li></ul>
Education	<ul style="list-style-type: none"><li>- Scolarisation des enfants et suivi</li></ul>
CRS	<ul style="list-style-type: none"><li>- WASH</li></ul>
Water AID	<ul style="list-style-type: none"><li>- WASH</li></ul>
UNICEF/PLAN	<ul style="list-style-type: none"><li>- GASPA (Groupe d'animation de suivi des pratiques et parrainage des enfants)</li></ul>
ADP/PDE	<ul style="list-style-type: none"><li>- Lutte contre l'excision, le mariage forcé et précoce</li></ul>
PAM	<ul style="list-style-type: none"><li>- Récupération des terres dégradées (CES/DRS)</li></ul>

### 2.5. Cartographie communautaire

La grappe de Komtenga relève de la commune de Korsimoro dans la province du Sanmatenga dans le Centre Nord du Burkina. La grappe est composée de 3 villages que sont Komtenga qui veut dire : « Venez et Installez-vous ici » et Sabouri-tansobdogo qui signifie « Victoire » et le Secteur 2. On note l'existence d'une école primaire de 3 classes sans forage. Il est ressorti que le problème d'eau est récurrent dans la zone. Quant aux infrastructures sociales et économiques, à l'exception du secteur 2, il n'existe pas de point de vente d'articles. Le centre de Korsimoro constitue le point de convergence pour le commerce.





**Carte de la grappe de Komtenga**

## 2.6. Topo séquence ou transect

**Objectif :** En rappel, l'objectif de la topo-séquence est de parvenir à une meilleure compréhension des unités territoriales existantes dans le terroir et d'établir les relations entre les moyens d'existence et ces dernières. Ainsi, cet exercice permet d'apprécier les unités territoriales traversées à travers le relief, les sols, leurs utilisations, les principaux problèmes de dégradations rencontrés et les opportunités d'amélioration qui pourraient en découler en termes de mesures techniques de protection et de préservation. Elle constitue aussi une phase importante de documentation de la situation avant-projet à travers la caractérisation de chaque unité visitée par une prise de photo de référence.

**Méthodologie :** Avant la réalisation de la topo séquence, l'équipe de planification sur la base de la cartographie du village, identifie le circuit du transect permettant au mieux de découvrir aussi bien les contraintes naturelles que les opportunités d'interventions futures. L'itinéraire du transect est défini de concert avec les représentants de la communauté et l'assistance technique des services techniques et acteurs de développement participant à la PCP. Il s'agit de réaliser un parcours linéaire retenu. En général, des prises de photos illustratives accompagnent la visite des différentes unités afin de caractériser au mieux les unités, le niveau de dégradation des terres, les mesures correctives en cours pour y remédier avec un focus sur leur appréciation technique.

**Topo-séquence/ Transect du village de Komtenga**

Unités de territoire	Unité 1	Unité 2	Unité 3	Unité 4	Unité 5	Unité 6	Unité 7
<b>Nom ou référence</b>	Clairière N12 .794696 W 01.075565	Ouvrage de franchissement N 12.796540 W 01.072308	Clairière N 12 .796124 W 01.071537	Clairière N 12.786298 W 01.069669	Forêt villageoise N 12.780782 W 01.062960	Périmètre maraicher N 12.772324 W 01.063733	Conserverie d'oignon N 12.773846 W 01.065324
<b>Système agroécologique</b>	Plantes épineuses Balanite (kegelsés) :	Plantes épineuses (kegelsés)	Balanite, Karité, Neem	Balanite, Accacia	Combretum, Accacia	Karité, Raisinier, Kapokier, Baobab	Présence d'arbres : karité, neem, épineux (pègnega)...
<b>Relief</b>	Terrain plat	Accidenté Fort écoulement d'eau	Légèrement accidenté	Terrain accidenté	Terrain accidenté et caillouteux	Terrain à double inclinaison avec une faible pente	Terrain plat
<b>Sols</b>	Sablo-argileux	Sablo-argileux	Sablo-argileux	Gravionnaire et argileux	Gravionnaire	Sablo-argileux	Sablonneux
<b>Utilisation des terres / aspects fonciers</b>	Terrain abandonné	Voie difficilement praticable	Terrain abandonné	Terre abandonnée	Zone protégée	Zone exploitée	Lieu de stockage
<b>Principaux problèmes</b>	Terre dégradée	Difficulté d'accès, voie impraticable en saison pluvieuse Ravinement	Terre dégradée	Dégradation et ravinement prononcés	Erosion	Insuffisance d'eau pour le maraichage	Insuffisance de conserverie / magasin de stockage
<b>Principales opportunités/Solutions</b>	Récupération (demi-lunes+	Ouvrage de franchissement	Récupération CES/DRS à 4	Aménagement (demi-lunes	Reboisement et délimitation	Aménagement de périmètres maraichers	Construction de

# WFP Budget Cost Classification

# Country Portfolio Budget high-level Cost Categories

## Transfer

Costs which add directly to the transfer value of food and cash-based transfer modalities and transfer cost of food assistance, cash-based transfers, capacity strengthening, and service delivery activities and are directly related to the specific transfer and modality.

## Implementation

Costs directly attributable to implementing activities associated with a transfer. They do not add direct value to the transfer and are considered modality-neutral.

## Direct support costs (DSC)

Costs that are managed at the country level and directly support multiple activities related to transfer of assistance and implementation of programmes.

These costs are relevant to WFP's presence in a country and influenced by the scale of activities in the country.

## Indirect support costs (ISC)

Costs which support the execution of activities which cannot be directly linked with their implementation.

The ISC rate is approved by the Executive Board and is currently established at 6.5%.

# Country Portfolio Budget high-level Cost Categories

*Examples*

## Transfer

**Examples: purchase price of a commodity** and related costs; the **costs of cash or vouchers** and related costs (e.g. setting up the delivery mechanism); **distribution costs**; **partners' costs** associated with transfer of resources; **costs directly attributable to capacity strengthening**; and **service delivery activities**.

## Implementation

**Examples: WFP staff** working on an activity, **assessments, monitoring and evaluation** related directly to the activity; and **WFP field office expenses** linked to the activity.

May also include costs of assessments, monitoring and evaluations, and beneficiary management costs directly linked to an activity but not a specific transfer modality.

## Direct support costs (DSC)

**Examples: country office management costs**, such as for heads of units; **rental costs** for the country office; **assessments and country portfolio evaluations** not directly linked to a specific activity; and **certain security costs**.

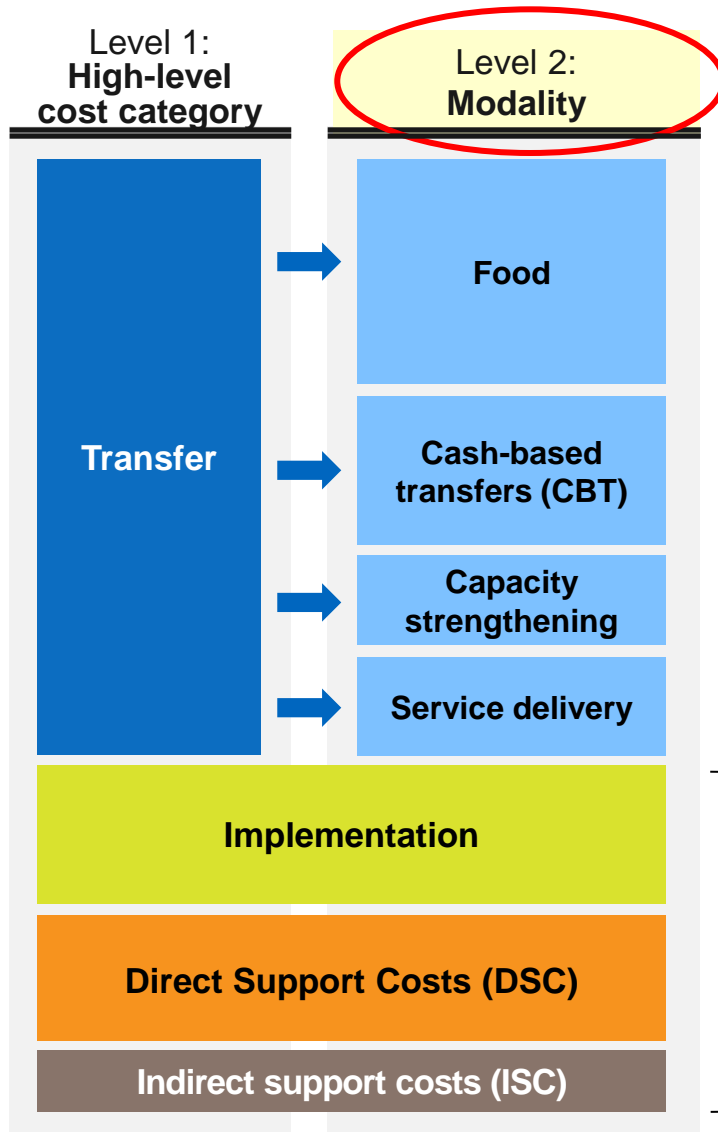
## Indirect support costs (ISC)

Costs which support the execution of activities which cannot be directly linked with their implementation.

\*ISC rate updated to 6.5 percent, as set out in WFP's Management Plan (2018–2020) (WFP/EB.2/2017/5-A/1/Rev.1), decision vi.

# Country Portfolio Budget cost classification hierarchy

## Level 2: Modality



All costs under the high level cost category Transfer are broken down by modality.

The modality is the method we use to deliver food assistance, goods or services.

Currently the 4 modalities are defined as:

- Food
- CBT and Commodity Vouchers
- Capacity Strengthening
- Service Delivery

Costs under Implementation, DSC and ISC are not broken down by modality, as they are considered “modality neutral”.

<b>Activity Costs Summary</b>
<b>Total Transfer (Costs linked to the cost to the purchase of the commodity)</b>
<b>Implementation Costs</b>
<b>Direct Operating Costs (DOC)</b>
<b>Direct Support Costs (DSC)</b>
<b>Total Direct Costs</b>
<b>Indirect Support Cost (ISC)</b>
<b>Grant Total Activity Costs</b>

<b>Activity Costs Summary</b>
<b>Total Transfer</b>
<b>Implementation Costs</b>
<b>Direct Operating Costs (DOC)</b>
<b>Direct Support Costs (DSC)</b>
<b>Total Direct Costs</b>
<b>Indirect Support Cost (ISC)</b>
<b>Grant Total Activity Costs</b>

<b>Activity Costs Summary</b>
<b>Total Transfer</b>
<b>Implementation Costs</b>
<b>Direct Operating Costs (DOC)</b>
<b>Direct Support Costs (DSC)</b>
<b>Total Direct Costs</b>
<b>Indirect Support Cost (ISC)</b>
<b>Grant Total Activity Costs</b>

2023

	USD	DKK
ilities)	834.935	5.833.689
	65.960	460.861
	900.895	6.294.551
	39.820	278.219
	940.714	6.572.770
	61.146	427.230
	1.001.861	7.000.000

2024

	USD	DKK
	2.259.485	15.787.024
	465.906	3.255.284
	2.725.391	19.042.308
	96.751	676.002
	2.822.143	19.718.310
	183.439	1.281.690
	3.005.582	21.000.000

2025

	USD	DKK
	753.162	5.262.341
	155.302	1.085.095
	908.464	6.347.436
	32.250	225.334
	940.714	6.572.770
	61.146	427.230
	1.001.861	7.000.000