Sahel transformed—
Excerpts from the field

Good Practices of integrated resilience activities in the G5 Sahel

November 2019
Message from the Regional Bureau

The Sahel is a tough place. It is affected by recurrent climatic shocks, chronic poverty, food insecurity, high population growth and land degradation. Every three years, the region faces a drought, and every five to ten years, a major one.

The G5 Sahel countries (Burkina Faso, Chad, Mali, Mauritania and Niger) are home to 80 million people, a very young population that is expected to double within only two decades. This puts a strain on existing natural resources, basic services and safety nets. At the same time, this presents an enormous opportunity to harness the demographic dividend, making most out of the drive of a young population looking for a better future.

People living in the Sahel are not defeated. Every day, communities show us their enormous potential for social, economic and ecosystem change despite an increase of hardships. They capture water with old and new techniques, they survive on barren, degraded land, attend to their children and families, and often manage to show inspiring solidarity in an increasingly difficult security context. The resilience programme in the Sahel aims at harnessing this potential.

One year ago, we embarked on a transformative journey for the Sahel and started a massive scale-up of our integrated resilience interventions alongside governments and partners. The World Food Programme supports the governments of the Sahel countries and brings children back to schools, invest in people’s health and nutrition, make degraded land productive again and create jobs for the youth. Crucially, this occurs in the same communities, targeting the same vulnerable people over a period of five years. This brings the necessary investments at scale to boost the resilience of Sahelian communities.

With the resilience scale-up, our aim is to achieve transformative change by assisting 2 million people until 2023, creating between 250,000 and 500,000 jobs across the region, restoring 0.5 million hectares of degraded land, producing an extra 500,000 to 1 million tons of cereals, fresh vegetables, and fruits, and reducing unsafe migration in at least 70% of the communities.

The World Food Programme is not working alone. The resilience scale-up in the Sahel is spearheaded by national governments. They are in the driver’s seat – planning and implementing, and building upon existing good practices from communities and partners. To seek operational complementarities and leverage synergies, we are actively partnering within the UN, including the Rome Based Agencies (RBAs) and UNICEF, as well as with NGOs, and other institutions such as the World Bank, the G5 Sahel Permanent Secretariat, and universities in the Sahel. Above all, we work with the communities, that take ownership of their own transformative journey, with a particular focus on participation and empowerment of vulnerable groups, such as women and youth, as key protagonists of change.

With the recent dramatic increase in violent conflict and social tensions in the core Sahel countries (Mali, Burkina Faso and Niger) which is leading to massive displacement and pressure on already vulnerable host populations, resilience-building interventions are more important than ever. Humanitarian response alone, while saving and protecting lives, cannot address the root causes of Sahel’s worsening crises. With resilience programmes, we contribute to addressing the drivers impacting social stability aligned to our mandate—i.e. food and nutrition insecurity—while ensuring that vulnerable people meet their food needs.

In this booklet some concrete examples of good practices from the five countries are presented, completed with an overview and technical description of the interventions tailored to the specific context and needs of each community, alongside with results achieved to the benefit of the communities.

This is just the beginning of our journey and we will continue to advocate and pursue investments in integrated efforts through actionable partnerships for a resilient Sahel.

Chris Nikoi, Regional Director
WFP Regional Bureau for West and Central Africa
**CONTEXT**

The site of Wacha (region of Zinder) is located about 100 km southeast of the town of Zinder in the commune of Wacha—one of the strategic partnership communes with FAO, IFAD and UNICEF. Composed by a vast system of dunes and erosion-prone gently sloping land, the territory is mostly covered with scattered shrubs and trees, dominated by acacias, doum palms and date palms. The surroundings of the site of Wacha, comprising nine villages, is further characterized by a system of water ponds; however, their existence is threatened by aquatic invasive plants, in particular Typha Australis (commonly known as "Katchala"), which colonize water bodies causing ecological imbalances and impeding the productive exploitation of water resources through irrigation and fishing.

**INTERVENTION**

The World Food Programme, the Government and partners have been working since 2014 implementing a multi-sectorial, integrated, community-based approach, carrying out several resilience building activities. Interventions were informed by a community-based participatory plan.
CHANGE AND RESULTS

The integrated package of activities developed around the cleaning and rehabilitation of ponds directly benefitted 385 vulnerable households (2,680 beneficiaries in total) and indirectly strengthened the resilience of the whole community. The following key changes were highlighted by the community based on their perceptions:

- **Increased and sustainable access to water**: Through asset creation activities, the community worked to remove invasive weeds and free the water surface of 16 water ponds from *Typha Australis*. This allowed not only to restore 204 hectares of land, but also to reduce the time to fetch water for domestic use—a chore essentially reserved for women and children.

- **Improved nutrition situation and behavior**: Awareness sessions on nutrition and essential family practices increased knowledge of health, hygiene, nutrition and infant and young child feeding practices, especially exclusive breastfeeding. Coupled with increased access to and diversity of food, this resulted in a reduction of malnutrition prevalence in children.

- **Diversified diet and access to proteins**: Garden produce (onion, potatoes, cabbage, lettuce, tomato, mango, moringa, etc.), and new crops, such as rice, have diversified food products and dietary habits of households. Fish stocking of seven ponds through FAO increased access to protein-rich food. Assessments highlight that households carrying out pond rehabilitation activities are consuming fish almost 8 days out of 10.

- **Improved productivity**: The development of irrigated gardening activities allowed to progress from a rain-fed production cycle to year-round cultivation. Coupled with trainings and the provision of improved seeds, production was significantly increased. For example, the cabbage yield has increased by 20 to 25 tons per hectare. In 2018 only, gardening was supported on 17.5 hectares, and production of rice, cowpea and okra on 15 hectares.

- **Better socio-economic status and income**: Beneficiaries were able to increase and diversify their income sources. Assessments on World Food Programme resilience activities show that two thirds of assisted households improved their socio-economic status. The support to 115 women in a producer organization as well as better livelihood opportunities contributed to women’s economic and social empowerment.

- **Community ownership and social cohesion**: Through the harvest from community fields, a cereal bank was established. In 2018, of the vegetable produce (178 tons), 50 percent was used for consumption and 50 percent was sold and used to finance activities of community interest. The community organized mutual support structures, such as groups to work their private land or a “tontine” (weekly small cash contributions put into a common fund), to purchase goats in groups of five.

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“Before, I had nothing, and today I am at an acceptable level. Before, during the dry season I went to Nigeria looking for work. Now, I have found opportunities in my village. Thanks to the interventions, I can exploit my field with gardening activities. I even planted fruit trees. Even if the World Food Programme leaves, I am confident that I can move forward. I am reassured.”

Mahaman Gali Malam Ma’azou, Wacha, WFP beneficiary, 37 years old, 6 children

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**Chad: “Gardens of Life” promote home-grown school feeding and green jobs, Chaouir (Guéra)**

**CONTEXT**

Chaouir is a village in the region of Guéra with 3,180 inhabitants, in the Sahelian belt of Chad — a region prone to droughts and food shortages. Moderate and severe food insecurity rates are estimated at 21.8 percent and 18.4 percent respectively, and micronutrient deficiencies such as anaemia affect a large range of the population. Every year, the lean season hits hard and residents turn to humanitarian assistance to meet their daily food needs.

In 2018, Chaouir has been included in the World Food Programme’s regional resilience scale-up for the Sahel, which aims to gradually build the resilience of vulnerable people against climate shocks.

**INTERVENTION**

Chaouir was selected to pilot the *Jardins de Vie* (‘Garden of Life’ for its French version) back in 2017. Participating families worked on their plots of land, while the World Food Programme provided all necessary materials to develop a vegetable garden with the plan to supply the local school. Since 2018, the World Food Programme is implementing an integrated package of activities, focusing on scaling-up gardening capacity, area under production and on integration between garden production, the school and resilience activities at household level. Interventions ensure that villagers have year-round access to sustainably grown nutritious food and income. In total, some 200 households are directly engaged in the scheme and 1,200 households (including neighbouring villages) have benefitted from interventions in the past year.

1. **Home-grown school feeding**, providing 400 children with nutritious, locally grown school meals.
2. **Compost production** to fertilize 12 hectares of cropland and homesteads.
3. **Community vegetable garden** (4 hectares) to produce vegetables, millet and sorghum.
4. **Orchard** with 200 fruit trees (Mangos, Citrus, Goyava), producing up to 10,000 kg of fruits.
5. **Solar-powered water pump** and two shallow wells for the irrigation of vegetable gardens and crops.
6. **Community forest** (15 hectares of trees for firewood and soil conservation).
7. **Tree nurseries** to produce 140,000 fruit and forest tree seedlings per year.
8. **Gully control** (400m), protecting the garden and orchard, while allowing for groundwater recharge.
9. **Prevention and treatment of moderate acute malnutrition** through the distribution of nutrition supplements to children and women.
10. **Promotion of key family practices** for nutrition, health and hygiene through large-scale Social and Behavioral Change Communication.
11. **Homestead activities**: development of household assets to catalyze nutrition-sensitive behavior and enable food availability.

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2019 | Good practices—Sahel transformed
In early 2019, water-management structures have been established in Chaouir, including a high-capacity solar-water pump, and the community garden has been expanded to a total of 4 hectares. This is enabling a yearly production of at least **24 tons of fresh vegetables** and more than **10 tons of staples** (mostly sorghum and millet), increasing food availability for the community. The garden is currently producing nearly **30 varieties of vegetables**, allowing to diversify households’ and school children’s diet and to tackle micro-nutrient deficiencies.

Beyond collective activities, the model aims at **promoting change at household-level**. The families of Chaouir are incentivized to add assets to their homesteads to catalyze nutrition-sensitive behavior and increase food availability. Each household is encouraged to add: compost pits, improved stoves, fruit and forest trees, chicken houses, water collection basins, pit latrines, vegetable gardens, dish drying surfaces, garbage pits and clotheslines. The **World Food Programme only contributes 20 percent** of the monetary value, while each **household contributes 80 percent**.

The children of Mr. Banate go to the primary school of Chaouir, while he works in the community garden: “We are satisfied. **The best vegetables are used to prepare children’s meals at school.** They are our children and we want them to eat well.” The community is taking ownership. Mr. Djbril Nidjet, the principal of the school, tells: “We know that we will not receive support for our canteen forever. So the community started to contribute and we stock what we produce in the school warehouse. We want to make sure that our students can eat.”
Mali: Boosting integration to build resilience in the rural community of Sio (Mopti)

**CONTEXT**

The site of Sio is located in the central region of Mopti, and comprises four villages. Livelihoods depend mainly on agriculture and livestock, but also on fishing, commerce and traditional craftwork. As a region of the Sahelian belt, Mopti is impacted by the effects of climate change combined with soil poverty. This results in high levels of food and nutrition insecurity, affecting in particular vulnerable households. In 2018, the region reported over one quarter of the population suffering from a poor food consumption score, and a high severe and moderate acute malnutrition rate (1.7 percent and 5 percent respectively).

Other challenges include underdeveloped food systems, insufficient water sources, rising prices of basic foodstuffs and a volatile security situation tied to conflict.

**INTERVENTION**

To identify entry points for reinforcing the resilience of the four villages, the World Food Programme carried out a community-based participatory planning (CBPP) exercise with the participation of the community, local governmental technical services and NGO partners in September 2018. A community action plan established prioritized activities:

1. **Rehabilitating and restoring land, water, and improving production through asset creation (FFA)**
   - Rehabilitation of 3 ha pond,
   - Restoration of community bridge,
   - Creation of 1000 lm of stony walls,
   - 42 ha cultivable land,
   - Irrigated community gardens,
   - Production of 72 m³ of organic manure fertilizer and technical capacity trainings.

2. **Preventing and treating malnutrition and creating nutritional awareness (NUT)**
   - Distribution of nutritious supplements, for 184 children 6-23 months, nutrition sensitization sessions at the health centre, and cash for awareness (transfers of USD 8.5/person/month) for 100 pregnant and lactating women.

3. **Developing and restoring smallholder businesses and facilitating access to markets (SAMS)**
   - Rehabilitation and equipment of a dairy factory, to improve the quality and quantity of dairy products along the production line.
   - Women and youth employment incentivized through the creation of an initial 10 to 12 jobs for young women and men.

These actions can be looked at through three interconnecting pathways to building resilience:

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**Rehabilitating and restoring land, water, and improving production through asset creation (FFA)**

**Preventing and treating malnutrition and creating nutritional awareness (NUT)**

**Developing and restoring smallholder businesses and facilitating access to markets (SAMS)**
CHANGE AND RESULTS

**PHYSICAL CAPITAL**
- Rehabilitation of the bridge of Soufouroulaye: communities regain access to rice fields, villages amongst themselves, health center, school and the weekly market;
- Access to freshwater year-round thanks to the restoration of the pond;
- Improved access to commodities: availability of nutritious vegetable and milk/dairy products on the local market.

**SOCIAL CAPITAL**
- Cash savings group constitutes an important factor in the socio-economic promotion of communities, including women’s empowerment;
- Social cohesion is reinforced since farmers and pastoralist can both equally benefit from a freshwater source.

**HUMAN CAPITAL**
- Improved food security and diversity: cash transfers of USD 3/person/day as social safety nets and livelihood protection for 407 FFA participants: 75.5 percent of households confirmed having sufficient quantities of food, 93.5 percent attest an increase in food diversity, 67 percent can cover schooling needs of children; 83.5 percent confirm that children are eating well now;
- Improvement of the nutritional status: decrease by 41 percent and 37.5 percent respectively of moderately and severely malnourished children 6-23 months between last quarter of 2018 and the first trimester of 2019;
- Increase in the health center attendance rate by more than 38 percent in less than a year: of the 653 women registered in April 2019, all have carried out pre-natal consultations;
- “Cash for awareness” helps cover health expenses during pregnancy and/or breastfeeding and has positive impacts on the whole family.

**NATURAL CAPITAL**
- Increased quantity and quality of water collection and retention allowing different uses: irrigated gardening, livestock/animal watering, fishing and brick-making;
- Reduced effects of land degradation and increased agricultural yields. Irrigation systems and the use of high-quality seeds extended the cropping season by 3 months;
- Irrigated gardens benefit from stable source of water, enriched soil and quality seeds, producing larger quantities and varieties of vegetables;
- Improved livestock conditions: improved milk production.

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**FINANCIAL CAPITAL**
- Increased opportunities, prospects of work and income for women and youth through conditional cash transfers and the dairy factory, which will support approximately 150 households;
- Reinforcement of women’s economic independence thanks to the “cash for awareness” transfers;
- Increased family income through the improved production on irrigated vegetable gardens;
- Improved revenue management through the women’s savings group that incentivizes loans for investments in small commerce or businesses.

**INSTITUTIONAL CAPITAL**
- Improvement of the living environment of the rural communities of Sio: better inter/intra community communication thanks to trainings and the creation of a new public meeting space;
- Improvement of the Sio health center administrative functioning and transparency;
- Community committees contribute to the sustainability and management of assets created.

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Before, I didn’t really understand why it was important to have a healthy diet. While I was pregnant, I received supplementary nutritious food for the prevention of malnutrition and now my 2-month old baby daughter, Pana, is healthy. The cash I received at the health clinic was also extremely important for me to be able to buy the things I needed for myself and my children and I learned a lot on how to make sure that me and my daughter stay healthy.

During the rehabilitation of the Soufouroulaye bridge, I was the treasurer for the women committee that was created. As a member of the committee, I manage the money saved and I participate with the other women in giving loans to women of the community for small commerce and investments. Soon I will start working in the dairy kiosk in Sio. I hope to be able to gain enough money for me and my family but also to help other people in the community that may need my support.”

Madou Kamia, Soufouroulaye, WFP beneficiary, 20 years old, mother of two children.
Burkina Faso: Strengthening social cohesion through asset creation in Bissighin (Centre Nord)

CONTEXT
The site of Bissighin comprises three villages and is situated in the commune of Kaya (Centre Nord region). Water erosion has left significant marks on the terrain, and most of the land is degraded, with crusted soil surface and gullies that exacerbate water run-off and soil erosion. Risk of malnutrition is high, particularly during the lean season, and the community is reporting difficulties to access sufficient and diverse food. Due to the deteriorating security situation, Centre Nord is hosting more than 270,000 internally displaced people. In Kaya, it is estimated (as of October 2019) that one in five is displaced —this not only poses a challenge for the food security of people on the move, but also of host communities that share their already scarce resources.

INTERVENTION
At regional level, a Technical Task Force, bringing together stakeholders involved in resilience activities, including partners and technical services from Ministry of Agriculture, Livestock, Environment, Health, Education, Solidarity and Women, etc., has been formed with World Food Programme support to coordinate and implement activities. Interventions started in October 2018 and were informed by a community-based participatory planning exercise.

Land rehabilitation
Degraded lands are being rehabilitated with the half-moon and stone bund techniques to increase agricultural production. These measures facilitate water retention, control soil erosion and maximize the use of the scarce rain to the benefit of crops, such as sorghum, millet, niebe beans (cowpea) and sesame.

Gully treatment
To capture rainwater run-off, and reduce soil loss by erosion, gullies are treated to facilitate sedimentation and protect infrastructure, such as roads.

Construction of a pond
A 3,000 m$^3$ pond was dug to facilitate rainwater collection to provide water for cattle. The water is expected to last until February, and constructions took place from December 2018 to March 2019.

Gardening
120 women organized in women’s organizations grow okra during the rainy season and tomatoes, carrots, cabbage and zucchini during the upcoming dry season in two gardens (0.5 hectares). The school garden provides fresh food to diversify the canteen menu.

Micro-Insurance against crop deficits
To complement assets created, 70 beneficiaries purchased an insurance against yield deficits caused by insufficient and/or irregular rains. This pilot project aims at protecting their livelihoods in the event of a shock.
More than 100 internally displaced people are currently being hosted by the community, fleeing insecurity in other parts of the country.

20 hectares of rehabilitated land have been given to IDPs to allow production during the rainy season.

With the harvest from their land, families are expected to have food stocks for 6 months and an income of around USD 5,000 to cover their needs.

“Tasséré Sawadogo, one of the internally displaced people in Bissighin, tells: We had to flee our village. We walked three straight days before arriving in Bissighin. When we arrived, people had finished sowing. But they gave us land. Thanks to the activities, we have managed to transform this once arid land into arable land. We have even sowed and we will content ourselves with what God will give us.

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**Mauritania: Concerted action for nutrition, education and livelihoods in Gvava (Assaba)**

**CONTEXT**

Gvava Fulani is located in the wilaya of Assaba, 60km from Kiffa, the capital of the region. The site is inhabited by about 70 households, mostly Fulani. The dominant economic activities are lowland and flood recession agriculture (sorghum, cowpea) as well as ruminant farming. The community reported that in recent years, due to recurrent droughts and negative effects of erratic and poorly distributed rains, the land is no longer as exploitable as before. It affected the cereal production and the livestock sector, causing the a loss of part of the livestock and forcing herders to increasingly set out on further transhumance to Mali.

**INTERVENTION**

Together with the community, the World Food Programme conducted a community-based participatory planning (CBPP) exercise in late 2018; and water and soil management activities started in November 2018, benefitting in total 360 people. For nutrition, community awareness and learning groups have been formed and the World Food Programme has worked closely with UNICEF in training facilitators and in the development of awareness tools and materials.

1. **WATER AND SOIL MANAGEMENT**
   - **104 m long stone dike** with a volume of 670 m³ constructed to collect and retain rainwater for agriculture and livestock use.

2. **WOMEN’S NUTRITION LEARNING GROUPS**
   - UNICEF and WFP support the community nutrition group, where women gather to learn about child feeding, health, sanitation and hygiene.

3. **MALNUTRITION PREVENTION**
   - Provision of nutrition supplements to more than 120 children and women.

4. **SCHOOL FEEDING**
   - Provision of school meals for **80 school kids**. The meals are complemented with fish, meat, vegetables and condiments, provided by parents.

5. **SEASONAL FOOD ASSISTANCE**
   - **60 households** received cash transfers for 3 months to avoid a deterioration of their food security situation.
CHANGE AND RESULTS

BETTER WATER & SOIL MANAGEMENT

Last year, the community faced a big challenge, as the dam in the basin was damaged due to heavy rains. Water could not infiltrate the soil and ran off. Moussa tells: “We started working in March, and by June the dam was already in place. There was strong community support for the work because it gave us hope that our land would become fertile again. That actually happened.”

In total, some 130 women and men participated in the completion of the dam. During the 2019 rainy season, the dike was filled 95 percent—a water level never reached in recent decades. This significantly increased water availability for crops and livestock, improving production on some 30 hectares with an estimated yield of 15 tons sorghum (0.5 tons per hectare). As groundwater levels are rising due to improved water retention and infiltration, off-season activities such as gardening will be facilitated, further strengthening livelihoods, particularly of women, and access to fresh and diversified food.

IMPROVED NUTRITION BEHAVIOR & AWARENESS

In the community nutrition centre, some 50 pregnant women and mothers benefitted from the monthly sessions and learned about good feeding practices, hygiene, health and nutrition. As of today, 15 women have adopted exclusive breastfeeding and the number of children with moderate acute malnutrition has nearly halved as compared to 2017, indicating a significant improvement of the nutrition situation.

Fatima, mother of two children and pregnant, tells: “It is a very common practice in our village to give water and dates to a newborn child. I now learned that it is not good for the child’s health. I have also learned that breastfeeding is fundamental for the child’s growth and my diet has an impact on this. I need a diversified diet, including at least five food groups: eggs, meat, fish, vegetables and milk.”

WOMEN’S LEADERSHIP, COMMUNITY ORGANISATION & SOCIAL COHESION

The community nutrition centre is also used as a forum for the promotion of women’s leadership through capacity strengthening sessions, and promotes a safe space to discuss and plan income generating activities and the creation of assets that meet women’s particular needs. Fatimata Houceinou Ba, one of the facilitators at the centre, notes: “With the construction of the dike in Gvava now completed, we are making plans to create our own garden for vegetable production to improve the diets of our children and families.”

Further, a management committee is set up around the chief of the village to ensure that productive assets are maintained in the best interest of the community.
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