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Darwin Initiative Innovation: Final Report

To be completed with reference to the "Project Reporting Information Note":
(<https://www.darwininitiative.org.uk/resources/information-notes/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

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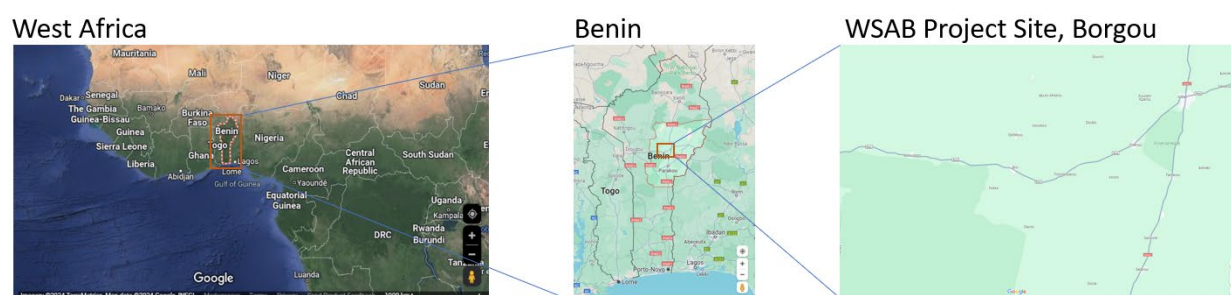
Darwin Initiative Project Information

Project reference	DARNV019
Project title	Women-led, School-based Agroforestry in Benin (WSAB)
Country(ies)	Benin
Lead Organisation	JSI Research & Training Institute, Inc., World Education Division (JSI/WorldEd)
Project partner(s)	Alafia NGO
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Project Leader's name	Nadege Djitrinou Fagla
Project website/blog/social media	worlded.org
Report author(s) and date	JSI/WorldEd, June 30, 2025

1 Project Summary

The Women-led, School-based Agroforestry in Benin (WSAB) Project strengthened the capacity of Mothers of Students Associations (AMEs) in northern Benin to address multidimensional poverty and biodiversity loss by using schools as hubs for reforestation and agroforestry activities. These activities expand native forested habitats in and around fragments of the Ouémé Supérieur-N'dali Forest to increase biodiversity, generate income for the school and community, improve food security by providing crops grown through climate-resilient agroforestry practices to school canteens, and provide a leadership platform for women to champion the environment and alternative income opportunities.

Agriculture is a key driver of biodiversity loss in Benin. Population growth, cash crop production, and demand for food are putting increasing pressure on biodiversity through habitat degradation, fragmentation and conversion. Current agricultural practices deplete soils, leading to the gradual abandonment of fallow terrain and search for new land. Traditional farming knowledge is often overlooked for quick, unsustainable gains achieved through monoculture and other harmful agricultural practices. Benin ranks 163rd of 189 countries in the 2019 Human Development Index report. Around 80% of the population is employed by agriculture, which accounts for one third of Benin's GDP. Benin's principal export is cotton (62%) and suffers from an overall weak crop diversity, threatening food security. Benin's high female labour force participation at 87% belies a reality of poor access to and control over resources. WSAB works in northern Benin where high poverty rates and low education levels contribute to women's exclusion and low education completion rates. Employment is mostly in cash crop agricultural production, though traditional economic activities, such as gathering nutritional leaves and tree products (including shea), are typically harvested and marketed by women. In Benin, 70% of the female population lives in rural areas where they carry out 70% of the agricultural work.



Despite women's labour contribution, men primarily own the land and manage income. Revenue women earn are often from small-scale economic activities. Nevertheless, Beninese women's income flows contribute disproportionately towards back-to-school costs, and delayed income from cash crops greatly often impact a family's food security and decisions on the number of children sent to school.

JSI/WorldEd and Alafia have worked in Benin for over 30 years, providing first-hand insight into the challenges presented above. Together, we have had profound success developing and scaling the AME model for participatory community development. JSI/WorldEd has also implemented farmer field school (FFS) models to sustainably engage communities in biodiversity-sustaining agriculture for over 40 years and have developed and refined multiple income generating activity (IGA) approaches. WSAB's innovation is the integration of these three successful stand-alone approaches to prove that the novel approach of shifting management of agroforestry IGAs through formal school-based, women-led structures will significantly bolster biodiversity and poverty reduction impact. WSAB was designed to improve impact across all domains (biodiversity, food security, livelihoods, and education).

2 Project Partnerships

The WSAB project exemplifies strong collaborative partnerships, with its core activities directly stemming from host community vision. This grass roots initiative puts community decision-making at the forefront by using JSI/WorldEd's Participatory Community Diagnostic (PCD) tool (Activity 1.1 [A1.1]) to truly understand local perceptions and priorities concerning the environment, agriculture, women's roles, and school governance. This demand-driven approach meant that project planning, including the co-development of Community Action Plans (CAPs) (A1.4), was a deeply collaborative process, with communities identifying their own activities and priorities.

All key partners were consistently involved in planning, monitoring, and decision-making. The establishment of AMEs (A2.1) through participatory community assemblies served as the foundation of local governance, with AMEs actively managing resources and supporting environmental stewardship. Their ongoing training in administration and financial oversight (A2.2, A2.3) further empowered them to make crucial decisions. Monitoring was integrated, with community feedback during a mid-term review directly leading to adaptive changes in project implementation (A3.10).

The project involved a diverse range of partners. WSAB facilitated processes and provided technical expertise, while Alafia, WSAB's Northern Beninese partner, bridged the project with broader agricultural development efforts, participating in meetings with the Territorial Agency for Agricultural Development (ATDA), another key partner (A1.2). Local communities were the primary implementers, from conducting participatory BioBlitzes (A4.1) that blended scientific data with local knowledge, to managing agroforestry microenterprises. Local government entities like the N'dali mayor's office and relevant ministries provided essential endorsement and alignment with national priorities (A1.2), crucial for long-term sustainability. Teachers played a vital role in integrating environmental education into schools (A5.2), and community chiefs lent invaluable traditional authority and promoted behavioral change (A4.9). While not explicitly stated, the comprehensive nature of this report strongly suggests that the information presented reflects the collective input and experiences of these diverse partners and stakeholders.

The partnerships achieved significant milestones, most notably the genuine community ownership (A1.4) that resulted in 100% completion of community-identified activities in the CAP. A major achievement was the establishment of space for women to exercise their agency through AME-led microenterprises, transforming a previous absence of women-led income-generating structures in the project communities (Output 3). The project's adaptive management approach was a key strength, allowing communities to autonomously address challenges like declining motivation or environmental setbacks, for example, by restructuring cooperatives or initiating self-led reforestation efforts (A3.10, A4.9).

While challenges like drought and inconsistent local leadership engagement in some areas arose (A4.9), the strength of the collaborative model enabled communities to devise and implement their own solutions. This demonstrated a powerful capacity for self-correction.

The project's deep investment in building robust local structures, fostering economic self-sufficiency, and embedding environmental education within schools strongly indicates that these partnerships are very likely to endure after project completion. The shift in mindset catalyzed by the project, expanding from dependence on distinct income sources to proactive enterprise and collaborative action, lays a solid foundation for sustained biodiversity conservation and community resilience for years to come.

3 Project Achievements

3.1 Outputs

Output 1: Community Engagement in Planning and Decision-Making for Biodiversity, Agriculture, and School Governance

The WSAB project had a clear vision: to meaningfully engage communities in planning reforestation activities and decision-making processes around biodiversity conservation, school management, food security, and women's leadership.

(A1.1) To advance this vision, the WSAB team began by adapting JSI/WorldEd's Participatory Community Diagnostic (PCD) tool to reflect the unique social and environmental landscapes of the three intervention communities—Wèrèkè, Sonnoumon, and Pouraparé. This updated version became a foundational entry point into the communities, designed to uncover perceptions and commitments relating to the environment, agriculture, women's roles, income-generating activities, and school governance. The tool gave structure to community dialogue and provided a space for inclusion, especially for voices often excluded decision-making. This adaptation fulfilled Output Indicator 1.1, with one customized PCD tool created and deployed across all three sites (see *Annex 5A: Participatory Community Diagnostics Tool, Report and Community Action Plan*).

(A1.2) However, WSAB also recognized that community engagement alone was insufficient without the support and alignment of local authorities. In July and August 2023, the team conducted outreach to local government entities, including the mayor's office, ATDA4 (Agence Territoriale de Développement Agricole), the Forestry Cantonment of the Ministry of Environment, the commune's Pedagogical Advisor, the Forestry Inspectorate at the departmental level, and regional directors of pre-primary and primary education. These engagements served to not only present WSAB's goals, but to actively solicit buy-in and lay the groundwork for ongoing collaboration.

The result was enthusiastic endorsement from government counterparts, who viewed WSAB's approach as both novel and aligned with their institutional mandates. This partnership evolved into tangible forms: Alafia, WSAB's local partner, began participating in ATDA's quarterly meetings, and in December 2024, the Ministry of Agriculture's Department for Agriculture, Livestock, and Fisheries (DDAEP) visited all three sites to observe implementation, offer insights, and strengthen the knowledge exchange. This visit further confirmed WSAB's alignment with national priorities and institutional frameworks.

(A1.3) With both community and government backing secured, the project advanced to full implementation of the PCD in all three communities. On 30 August 2023 in Wèrèkè, 31 August in Sonnoumon, and 4 September in Pouraparé, the adapted tool was deployed through one-on-one interviews, focus groups, and plenary sessions. These inclusive formats ensured the engagement of a diverse range of stakeholders: 72 participants in Wèrèkè (including 64 women), 45 in Sonnoumon (29 women), and 71 in Pouraparé (35 women). The PCD discussions tackled complex themes: biodiversity, agriculture, the role of women in society, income generation, and school management. Critically, the facilitation team created safe spaces to discuss women's roles and mother's association (AME) leadership in ways that minimized potential backlash, while still encouraging communities to reflect deeply on equity, agency and environmental stewardship.

(A1.4) Each community co-developed a Community Action Plan (CAP) that articulated the priorities and activities they themselves had identified. These CAPs were central to the design and sequencing of WSAB's agroforestry and conservation activities. In particular, they helped guide the selection of native tree and crop species, ensuring that the project reflected community knowledge and values (see also *Activity A4.3* for more on species selection). The CAPs are documented in *Annex 5A* and represent a shared roadmap for action.

Importantly, Output Indicator 1.2—the creation of three CAPs—was fully met. Each community completed 100% of the 12 activities they themselves had selected. This level of follow-through is a powerful indicator of genuine community ownership and sustained engagement.

No major obstacles were encountered in delivering these outputs. Early engagement with government authorities and careful adaptation of participatory tools preempted many of the common challenges that can arise in community-based work. Although alignment with government actors was not initially listed as a logframe assumption, it emerged as a critical success factor, demonstrating that institutional collaboration is essential to sustaining locally driven change.

Output 2: AMEs Established and Strengthened to Sustain Agroforestry Systems and Support Community Resilience

From the outset, WSAB recognized that the long-term sustainability of its agroforestry systems—and their broader impact on school communities—depended on building robust and capable local structures. To this end, Output 2 focused on the creation and strengthening of Mother's Associations, or *Associations des Mères d'Élèves* (AME) as the principal community mechanism to deliver WSAB activities, manage resources, and support both environmental stewardship and school governance.

(A2.1) The process of establishing the AMEs was participatory and inclusive. Through community General Assemblies, WSAB formally introduced the project and laid the groundwork for AME formation. These assemblies were convened in each of the three intervention communities: in Pouraparé on 8 September 2023, where 68 participants (including 39 women) attended; in Sonnoumon on 31 August with 37 participants (32 women); and in Wèrèkè on 20 August with 96 participants (43 women). The assemblies served the dual purpose of ensuring broad community understanding and buy-in for the WSAB initiative, while also democratically establishing the AMEs within each school. These events were carefully documented, including the formal designation of AME members, as captured in *Annex 6A: AME Trainings and Attendance Lists - Attendance List, General Assembly to Establish AMEs*.

Output Indicator 2.1 was successfully met: three AMEs were established and trained—one in each project community—with all documentation supporting their formation and member designation.

(A2.2) Following their establishment, each AME underwent a structured training on their roles and responsibilities. The training took place in three key parts: an introduction to the AMEs' place within the WSAB framework; a participatory exploration of individual roles and group governance; and an evaluation phase to confirm understanding. The training was held in Sonnoumon on 11 September 2023 with 22 participants (20 women), in Wèrèkè on 16 September with 16 participants (15 women), and on 16 September in Pouraparé with 21 participants (15 women).

Building on this foundational training, WSAB then organized a specialized session focused on administrative skills—specifically, how to record and write official meeting minutes. These trainings were essential for building the functional literacy and administrative confidence of AME secretaries. They were held simultaneously on 20 November 2023 in all three communities, with 12 women participating in each location. These sessions equipped AME members—particularly women—with critical tools to ensure the transparency and continuity of their work. Details are recorded in *Annex 6A: AME Trainings and Attendance Lists*.

(A2.3) Recognizing that functional management capacity is just as critical as formal structure, WSAB conducted an additional layer of training focused on management and governance. These sessions served as both a refresher and an opportunity to deepen practical understanding of how the AMEs should operate in real-world contexts. Through group discussions and applied learning, participants examined how their roles and responsibilities intersect with administrative processes, financial management, and group dynamics. This training was held in Pouraparé on 17 November 2023 (9 participants, all women), in Wèrèkè on 16 November (8 women), and in Sonnoumon on 20 November (11 women), all of whom are active AME members. These trainings further reinforced AME readiness to take on leadership and coordination responsibilities essential to WSAB's success and sustainability.

Output Indicator 2.2 was fully achieved: all three AMEs received targeted capacity development support. Each received multi-stage training covering governance, administration, and financial oversight—all of which are substantiated through technical summaries and attendance documentation (see *Annex 6A: AME Trainings and Attendance Lists*).

WSAB did not encounter any significant obstacles in establishing or the initial strengthening of the AMEs. The participatory and inclusive nature of their formation—combined with the strong female representation and community endorsement—meant that the AMEs quickly evolved into trusted and functional bodies.

WSAB strengthened Output 2 by building capable, empowered AMEs with the systems, skills, and community trust needed to carry WSAB's vision forward.

Output 3: AMEs Trained and Supported to Manage Agroforestry-Based Microenterprises in Collaboration with Teachers and Community Farmers

Output 3 aimed to promote agroforestry as a viable income-generating activity by transforming community engagement into sustainable, enterprise-driven outcomes. The strategy centered on the development of microenterprises managed by AMEs, rooted in school-based agroforestry plots and bolstered through collaboration with teachers, farmers, and community stakeholders. At project inception, there were no women-led income generating structures within the communities. By project close, WSAB had established a dynamic, community-led ecosystem that identified innovative models for leveraging agroforestry for economic empowerment.

(A3.1) The first step in achieving this vision was the identification of motivated and committed participants for Farmer Field Schools (FFS). Drawing on the results of the Participatory Community Diagnostic (PCD) and community awareness sessions, WSAB identified 30 FFS participants per locality, including teachers, AME members, farmers, and local leaders. The community chiefs supervised and endorsed the process, lending institutional credibility to the initiative. These partnerships were formalized through community-level agreements signed in November 2023 (see *Annex 6B: Farmer Field School Establishment Agreements and Attendance Sheets*). Output Indicator 3.1 was successfully achieved, with 90 individuals trained (30 per community), all formally selected and supervised through community structures.

(A3.2) WSAB then developed a tailored FFS curriculum outline designed to span the growing season. The course content was informed by both the PCD and the findings of the community-led BioBlitz (see A4.1). The curriculum outline incorporated modules on composting and soil fertilization, irrigation design, integrated pest management, intercropping to prevent erosion, natural resource management, and the agroecological value of native trees and crops. Importantly, the curriculum outline was structured to evolve over time, allowing for dynamic learning based on field observations.

(A3.3) From February to September 2024, WSAB launched the FFS practical sessions, blending theoretical learning with hands-on experience. Using adult learning pedagogies, participants compared agroforestry plots with conventional kitchen gardens to observe the ecological and agricultural differences. One compelling moment came during visits comparing monoculture soybean plots with WSAB agroforestry plots. Participants noted a visible increase in butterflies—key pollinators—and Orthoptera pests in the agroforestry sites. These observations, though anecdotal, echoed patterns observed in the BioBlitz and suggested that biodiversity gains were already emerging.

In terms of yield, the results were also promising. While monoculture sites produced approximately 800 kg of soybean across 2 hectares, agroforestry plots—where soybeans were intercropped with native trees—yielded 550 kg from a smaller area, demonstrating higher productivity and efficiency.

Theoretical and practical training also included sessions on composting (with direct support from ATDA), pest management, and maintenance of socio-economically valuable trees. By the end of the growing season, FFS participation rates reached 55% in Wèrèkè, 74.16% in Pouraparé, and 66.67% in Sonnoumon, with many participants continuing their involvement in subsequent project activities.

(A3.4) To build on the agricultural progress and lay the groundwork for economic sustainability, WSAB delivered training on entrepreneurship and micro-enterprise management between 2–21 April 2024. In Wèrèkè, 43 people participated; in Sonnoumon, 54; and in Pouraparé, 47. These updated figures (revised from the Y1 report) reflect high engagement. The training focused on soft skills, business idea development, market research, marketing strategies, and business plan creation. Participants—particularly AME members—reported a strong understanding of

how to translate these concepts into viable businesses (*Annex 6C: AME Entrepreneurship Training and Attendance List*). Output Indicator 3.2 was met in full: three AMEs received entrepreneurship and microbusiness training, equipping them to lead agroforestry-based enterprises.

(A3.5) Following the training, WSAB helped the AMEs map the local agricultural value chain. Together, they analyzed the life cycle of agroforestry products—from production and processing to marketing. A local market study provided insights into pricing, market share, and demand. Using this information, WSAB facilitated connections between AMEs and local buyers to ensure timely sales and profitability.

(A3.6) An essential outcome of this work was the development of transparent funding allocation mechanisms for all AMEs. Each AME established clear plans for how income generated would be distributed: 50% to school canteens, 25% to AME collective funds, and 25% to individual women—based on a work schedule that tracked contributions. This income-sharing model was developed collaboratively with each community and documented in *Annex 6D: AME Funding Allocation Plans*.

Output Indicator 3.3 was successfully achieved, with three funding agreements in place that outlined disbursement timelines and specific contributions to poverty-reduction activities, especially around school retention for at-risk children and girls.

(A3.7) In the first month of Year 2, WSAB supported each AME in designing and finalizing their business plans. Each plan outlined projected costs, income, marketing strategies, and long-term objectives. Wèrèkè gained 460,000 FCFA in revenue; Sonnoumon gained 284,000 FCFA in revenue; and Pouraparé gained 436,000 FCFA in revenue (see *Annex 6E: AME Revenue and Allocation Summary*). These figures resulted in slightly less revenue than projected due to unequal engagement of the AME members, pest pressures, and destruction by livestock. This setback ultimately resulted in a success. The AMEs' new model—through which a broader group of women, including youth, manage small scale plots in exchange for a small monthly contribution and commitment to care for native and fruit trees—promises steady, long-term income for the AMEs while ensuring agricultural productivity and ecological health. See *Annex 5B: Success Stories and Essays - Women Led Agroforestry Thrives On in Wèrèkè*. While the first year focused on agricultural products, all three AMEs plan to shift to agroforestry-based income streams in the future (see *Annex 6F: AME Business Plans*). Output Indicator 3.4 was met: three detailed business plans were developed, offering a clear roadmap for AME-led enterprises.

(A3.8) WSAB then provided start-up funds to each AME, along with boreholes and fencing to secure plots. Funds were transferred to AME bank accounts in early Y2, enabling enterprise operations to begin. The infrastructure and capital support were critical in ensuring that the microenterprises could launch on a strong footing.

(A3.9) Ongoing support was a key feature of WSAB's strategy. The team provided weekly site visits and quarterly supervision. This close accompaniment included administrative and financial management training and peer-learning exchanges. Notably, AMEs from Sonnoumon and Pouraparé visited Wèrèkè, the highest-performing site, to learn from its successes.

(A3.10) A mid-term review in September 2024 helped identify bottlenecks—such as declining member motivation and inconsistent protection of tree species. In response, Wèrèkè held two general assemblies in February 2025 to reform their engagement model (see *Annex 6G: AME Plan Revision – General Assembly Attendance Sheet*). The community restructured the AME-led agricultural cooperatives by bringing in 10 youth members and dividing agroforestry plots into 40 rent-based sub-parcels. Youth were charged a symbolic monthly fee of 1,000 FCFA and committed to maintaining native and fruit trees in exchange for use of these sites. The rent not only incentivized care of the plots but contributed to AME income.

This model sparked renewed enthusiasm. Youth saw agroforestry as a pathway to a greener economy—an idea also echoed in external youth-led action research by JSI/WorldEd. Inspired by Wèrèkè's success, Sonnoumon and Pouraparé adopted the same structure, signaling a highly adaptive and community-driven solution to initial challenges.

Output Indicator 3.5 was fully achieved: three agroforestry enterprises were launched, each backed by business plans, funding, local partnerships, and a sustainability model rooted in community participation.

Output 3 achieved its goals—training 90 individuals in sustainable agroforestry, empowering AMEs to manage profitable microenterprises, and adapting to challenges through innovative, community-led models. Beyond the numbers, the output catalyzed a shift in mindset—from subsistence to sustainability, from dependence to enterprise, and from isolated effort to collaborative, intergenerational action. The foundations are laid not just for financial success, but for long-term, biodiversity-friendly development rooted in community leadership.

Output 4: Agroforestry Systems Are Planned and Established in Schools to Support Native Biodiversity

The activities under Output 4 were designed to ensure that the agroforestry systems established through WSAB would function as native biodiversity-sustaining ecosystems. From the outset, WSAB grounded its approach in both scientific evidence and local ecological knowledge rooted in community priorities and agroecological realities.

(A4.1) The project began by gathering foundational data to guide the design of agroforestry systems. WSAB conducted desk research to identify native plant species and paired this with a participatory BioBlitz in each community—an inclusive and community-led biodiversity survey designed to capture both scientific data and local observations.

The first BioBlitz took place in Wèrèkè on 6–7 October 2023, and it engaged a broad cross-section of the community, including AME members, teachers, youth, elders, and traditional leaders. The two-day event began with an in-depth dialogue around the ecological benefits of native forests. Community members were encouraged to share their experiences and perceptions of forest systems, including their observations that native forests do not require human maintenance, support higher soil fertility and moisture, stay cooler during heatwaves, and host a greater diversity of beneficial fauna like pollinators and insectivorous birds.

From there, the discussion transitioned to challenges in agriculture: declining soil quality, persistent pest pressure, the burden of irrigation, and the vulnerability of crops to erratic climate change-driven conditions. In this juxtaposition, participants made direct links between the ecosystem services provided by forests—moisture retention, pest control, nutrient cycling—and the deficits experienced in their farmland. Through this facilitated process, the community agreed that replicating these forest functions in their agricultural systems could improve resilience, productivity, and biodiversity. Following the dialogue, community members moved into the field for the hands-on portion of the BioBlitz. They examined four distinct land-use types: monoculture fields, polyculture plots, fallow land, and fragments of the native Ouémé Supérieur–N’dali Forest. Working in mixed teams that included elders, youth, and women, participants documented the presence of flora and fauna, recording plant species and types of insects and birds observed. Data collection tools were adapted for local use and supplemented with scientific support from the WSAB facilitation team.

The data collected during the BioBlitz revealed statistically significant differences in the presence of beneficial fauna between sites. Participants identified higher relative and absolute abundances of native flora and fauna in forest and polyculture plots. Specifically, native plants accounted for 100% of both abundance and richness on fallow and forest sites, 82% abundance and 87% richness in polyculture, and only 60% abundance and 13% richness in monoculture fields. These findings not only confirmed community perceptions—which also inferred correlations between the richness of native plant species and the presence of insectivorous birds and beneficial pollinators, as well as absence of pest species—but validated the ecological degradation caused by many monoculture farming methods.

The response to the BioBlitz was enthusiastic and affirming. Many participants, especially women and youth, expressed pride in rediscovering their environment and voiced new interest in conservation. The community’s reflections and observations set a powerful foundation for the agroforestry design work to follow. This excitement prompted the WSAB team to conduct subsequent BioBlitzes in Sonnoumon (17–18 October) and Pouraparé (19–20 October), using the same model of collaborative learning and shared data collection.

Findings from the BioBlitz continued to shape the project throughout Year 2. Participants in the Farmer Field Schools later referenced the experience when they observed native pollinators in agroforestry plots or noted improved soil conditions. In Wèrèkè, when plots were subdivided for youth cooperatives (see A3.10), several parcel managers independently chose to incorporate native tree species into their designs—pointing to pest suppression and erosion control as lessons taken from the BioBlitz. In Pouraparé, participants launched a small community-led reforestation campaign to replace damaged plants, citing the BioBlitz findings as their rationale.

The BioBlitz not only produced scientific data—it may have contributed to changed practices. Farmers began modifying their land preparation methods to preserve rather than remove trees. Reports emerged of reduced deforestation and, significantly, a halt to the annual practice of burning forest areas to drive out game animals for hunting. While these behavioral shifts were not quantified, they signal meaningful, community-led change. (See *Annex 5B: Success Stories and Essays - BioBlitz Photo Essay* for visuals of the process and participation.)

Output Indicator 4.1 was fully achieved with one consolidated, user-friendly report produced and shared in all three communities. It contained data on native species from the BioBlitz, the PCD, and literature reviews. Report-out sessions were held in February 2024 (see *Annex 5C: BioBlitz Summary Discussion Guide and Community Species Selection*), ensuring accessibility and comprehension.

(A4.2) To deepen the utility of the findings, WSAB compiled intercropping ratios and abundance patterns for various species, allowing communities to visualize the ecological design of a productive and biodiverse agroforestry system. The resulting data informed subsequent planning and was triangulated with local knowledge throughout the season.

(A4.3) With scientific and community inputs aligned, WSAB facilitated participatory species selection. Using BioBlitz results, relative abundance data, and PCD priorities, communities collaboratively selected trees and crops with high biodiversity and agricultural value (see *Annex 5C*). Species included *Parkia biglobosa*, *Vitex doniana*, *Tamarindus indica*, and fruit-bearing trees like mango and papaya.

(A4.4) Building on this, the project team presented five sample agroforestry system designs based on varying principles of spatial organization—ranging from concentric circles with native forest cores to intercropped rows with afforested borders. Each community selected and adapted a design that best suited their context. These community-generated designs contributed to alpha diversity within each system while complementing the gamma diversity of the surrounding Ouémé Supérieur–N’dali Forest. See *Annex 5D: Agroforestry Sample Designs and Community Agroforestry Design Sketches*. Output Indicator 4.2 was achieved: three agroforestry plots were fully designed and planted, each grounded in the biodiversity-supporting recommendations outlined in the report under Indicator 4.1.

(A4.5) To operationalize the systems, WSAB established tree nurseries in all three schools, providing each with tools and technical training. Theoretical sessions covered nursery construction, growing media, and propagation methods; practical sessions were held in July 2024: in Pouraparé (8 July), Wèrèkè (10 July), and Sonnoumon (12 July). See *Annex 6H: Photos*.

Output Indicator 4.3 was achieved: three school-based nurseries were established, and have since continued to replenish native seedlings.

(A4.6) Sourcing seedlings required a multifaceted approach. Fruit and crop seedlings were easily procured, but native tree seedlings proved more elusive. WSAB collaborated with local government and engaged in direct seed collection to fill any remain gaps. In Wèrèkè, demand for native seedlings even led to a budding microenterprise opportunity, with AMEs preparing to sell seedlings such as baobab to passing farmers who previously expressed interest in their native tree planting activities.

(A4.7) Planting activities began in June and July 2025, timed with the rainy season. Over the course of monthly community planting days, participants implemented the Miyawaki method—planting native species densely to accelerate growth, enhance soil fertility, and support microclimate regulation. These planting events, led by AMEs and FFS members, also served as community education and mobilization opportunities. Approximately 360 individuals

participated, far surpassing the 180 target (*Annex 6H: Project Photographs*). This informal tally is based on observation, as no formal participant list was circulated.

Output Indicator 4.4 was significantly surpassed, with (informally) double the target number of community members involved in planting and awareness activities.

(A4.8) Upkeep and maintenance of the agroforestry systems was embedded in community action plans (CAPs) developed during the PCD and updated by FFS members post-planting. Subcommittees were installed to oversee long-term maintenance, and WSAB trained FFS members in site management. These plans also included broader environmental stewardship goals: natural resource conservation, biodiversity restoration, and sustainable agriculture promotion. Despite not being codified as standalone documents, all three CAPs included clear and consistent maintenance provisions.

Output Indicator 4.5 was achieved: three agroforestry upkeep strategies were developed and incorporated into the broader community governance plans.

(A4.9) While project support continued through supervision and guidance, two key challenges emerged: drought and livestock trampling. An unexpected mid-season drought in August 2025 caused significant seedling loss in all sites. In Wèrèkè, up to 60% of plants were damaged, though many native trees began regrowing after rains resumed in September. Livestock trampling also destroyed young plants, highlighting gaps in protection and enforcement.

In response, Wèrèkè and Sonnoumon communities initiated self-led reforestation efforts in May 2025 and erected basic fencing around their sites. They also adopted a revised agroforestry model, dividing plots among cooperative members for better accountability (see A3.10). Meanwhile, Wèrèkè's village chief played an active role in community awareness, leading to the abandonment of harmful hunting practices involving intentional forest burning.

Although Pouraparé and Sonnoumon struggled with local leadership engagement, Wèrèkè's experience illustrates how empowered communities can identify and resolve setbacks autonomously—an encouraging sign for long-term sustainability.

Output 4 represents the culmination of the project's core goals: integrating scientific insight with community wisdom to design and implement school-based agroforestry systems that protect biodiversity and build resilience. From the BioBlitzes and participatory design sessions to the establishment of nurseries and the planting of native trees, the work has been deeply rooted in collective knowledge, experimentation, and adaptation.

Output 5: Schools Lead Community Engagement in Environmental Monitoring, Conservation, and Biodiversity-Sustaining Agriculture

The final output of WSAB aimed to extend the reach of the agroforestry systems beyond food production and biodiversity benefits, transforming them into living classrooms and engines of community learning and environmental action. Output 5 positioned schools as hubs for participatory environmental education, community biodiversity monitoring, biodiversity-sustaining/climate-smart agriculture, and improved school nutrition—creating a full-circle model of ecological, educational, and social transformation.

(A5.1) WSAB began by developing a bilingual environmental education curriculum and accompanying teacher manual, rooted in both scientific evidence and local knowledge. This was not a top-down imposition; rather, the curriculum was designed in a participatory manner, with extensive input from community members, local authorities, and education professionals. The content was built to align with the Farmer Field School (FFS) curriculum and designed for learners in CE1, CE2, and CM1 (ages 6–9). Themes covered included biodiversity, climate change, gender, conservation, sustainable agriculture, and community-based natural resource management (CBNRM). A national curriculum and early-grade literacy expert ensured coherence with INFRE, the government body in charge of Benin's official school curriculum and pedagogical framework, while WSAB's approach emphasized experiential, hands-on learning that would foster not just knowledge, but invoke action.

The curriculum was developed with a bilingual education model: in French by trained teachers, and in local languages by community members, ensuring that children engaged with the material in both formal and informal learning contexts and in their mother tongue—an evidence-

based approach to maximize learning outcomes. The agroforestry plots and local landscapes (e.g., native forests, monoculture fields, fallow land) were integrated directly into the curriculum as sites for learning, exploration, and discovery. (See *Annex 5E: Introduction Pages to Environmental Education Curriculum and Teacher Guide*.)

(A5.2) WSAB then trained a select group of 10 teachers across the three sites to deliver the content using participatory, project-based learning pedagogies. The selection criteria for participating teachers were rigorous: demonstrated experience with child-centered instruction, commitment to environmental education, experience with the target age group, and capacity to mentor peers. These teachers were trained through a series of Training of Trainers (ToTs) held in Wèrèkè (21 December 2024 and 8 February 2025) and in Sonnoumon (15 March 2025). The trainings built not only pedagogical skills but introduced teachers to the curriculum's technical content and helped them design lesson plans aligned with school-based agroforestry and biodiversity monitoring. (See *Annex 6I: Attendance List, Environmental Education Teacher Training*.)

In parallel, community members were trained in local languages to deliver the same content informally. These trainings were held in all three communities—three times each—in early 2025. Pouraparé saw 25–26 participants per session, Wèrèkè engaged between 26–41, and Sonnoumon hosted 14–19 per session. This bilingual, intergenerational approach fostered wide accessibility and reinforced community buy-in.

Output Indicator 5.1 was achieved, with 102 community members trained in CBNRM and biodiversity-related content through the environmental education curriculum.

While the goal for Output Indicator 5.2 was to see 30 teachers formally express interest in integrating biodiversity monitoring into their lesson plans, this target was not fully met. Only 10 teachers were formally trained. However, anecdotal and informal feedback from over 30 other educators and community stakeholders—such as PTA members and school directors—revealed strong interest in replicating and embedding this content in their schools. These expressions were not formally documented, and thus not counted toward the indicator.

(A5.3) Following the trainings, the selected teachers began delivering the curriculum to their students (exact delivery figures to be finalized). Lessons were brought to life through interactive activities like transect walks, garden observations, and participatory planting. These practices are grounded in education research that shows how experiential learning boosts comprehension and instills long-term behavior change. By situating the learning within the agroforestry plots themselves, children were not only recipients of information—they became participants in a living system, actively managing, questioning, and observing the outcomes of their stewardship.

WSAB also trained teachers and AMEs to incorporate students into CBNRM and community-based biodiversity monitoring, reinforcing both scientific and community-led approaches to conservation.

(A5.4) In addition to learning outcomes, the agroforestry system directly contributed to improving school nutrition. WSAB supported AMEs in forming agreements with school management to supply the school canteens with fresh produce from the kitchen gardens and agroforestry plots. The distribution model allocated produce in three ways: to the school canteen, to support AME group initiatives, and to individual AME members based on participation. Crops such as tomatoes, lettuce, okra, peppers, cucumbers, and amaranth greens were supplied—expanding diets and improving micronutrient intake in schools where meals typically included only staple foods like rice, cowpeas, maize, or semolina. (See *Annex 6E: Revenue and Allocation Summary*.) Output Indicator 5.3 was achieved: 3 school canteens formalized agreements with their AMEs, and deliveries of diversified crops were documented.

(A5.5) Finally, Output 5 emphasized public awareness and environmental celebration. Throughout Y2, AMEs and farmer groups hosted community-based agroforestry and awareness days, spotlighting the value of native biodiversity. One major highlight was a large-scale celebration held on 9 March 2024, the day after International Women's Day, which brought together government officials and community members from all three sites. The event honored the role of women in environmental conservation and explored both traditional practices and contemporary advocacy for gender and climate equity. The day served as a

platform for women to share their visions for sustainable development, economic opportunity, and environmental justice. (See *Annex 5B: Success Stories and Essays - International Women's Day Article and Photos.*)

In addition to this event, each community hosted two planting and learning events in June and July 2025, using the agroforestry sites as gathering points for community education and engagement. Output Indicator 5.4 was met: six awareness-raising events were held (two per community), plus the regional event for International Women's Day—demonstrating strong momentum around community-led biodiversity education.

Output 5 successfully transformed schools into hubs of environmental learning and local leadership. The integration of agroforestry into the school ecosystem supported biodiversity, nutrition, experiential education, and cultural exploration. Through bilingual delivery, cross-generational engagement, and a strong foundation in participatory learning, this output helped ensure that the values of conservation, resilience, and stewardship will extend far beyond the life of the project—taking root in the minds and lives of the next generation.

3.2 Outcome

WSAB's overarching outcome was to boost community income, strengthen food security, and enhance native species biodiversity. Upon project completion, the evidence indicates substantial achievement across these core objectives, while also shedding light on measurement challenges and the adaptive capacity demonstrated by communities to find alternative pathways to achieving outcomes.

Economically, the project demonstrably advanced community income. While initial revenue from the first year's operations—Wèrèkè's 460,000 FCFA, Sonnoumon's 284,000 FCFA, and Pouraparé's 436,000 FCFA—was slightly below projections, the project successfully launched three AME-led agroforestry businesses (Output Indicator 3.5 Achieved). These ventures were supported by meticulously developed business plans (Output Indicator 3.4 Achieved) and transparent funding allocation mechanisms (Output Indicator 3.3 Achieved). Crucially, a new AME model emerged towards the project's end, engaging the most active AME members and seeking broader engagement by integrating youth and other women from the community into a cooperative to manage small plots in exchange for a modest monthly contribution and a commitment to nurturing native and fruit trees. This innovative, community-driven approach holds significant promise for generating steady, long-term income, while also ensuring agricultural productivity and ecological health. The community cited that this model was inspired by WSAB having piqued their interest in agroforestry and native plant integration as well as women-led income generation activities.

Food security also improved. Although baseline data on school canteen crop volume was not initially collected, the AMEs consistently supplied schools with a diverse array of fresh produce, including tomatoes, lettuce, cucumbers, amaranth greens, okra, and peppers. This diversification directly contributed to improved micronutrient intake for schoolchildren, surpassing the implied target of Outcome Indicator 0.7 (adoption of 5 new agricultural species). Furthermore, for Outcome Indicator 0.8 (percent increase in school-produced crop volume), the project shifted its measurement to monetary contributions. The AMEs' combined cash transfers and crop monetization amounted to a total of 257,000 FCFA (Sonnoumon, 71,000 FCFA; Wèrèkè, 80,000; Pouraparé, 106,000 FCFA), providing a clear financial measure of their impact on school canteens and student nutrition.

From an ecological perspective, the project made considerable strides in establishing biodiverse agroforestry sites. Outcome Indicator 0.3 (hectares under sustainable land management) was surpassed, with 9.5 hectares now managed under restorative, biodiversity-sustaining agroforestry plans. Similarly, Outcome Indicator 0.4 (hectares restored with native plant and crop species) was achieved, with the same 9.5 hectares reflecting the integration of native trees selected through participatory methods and scientific review.

However, specific biodiversity outcomes related to Outcome Indicator 0.5 (Percent increase in pollinators) and Outcome Indicator 0.6 (Percent increase in bird species) were not fully achieved or quantifiable within the project's two-year timeframe. This was largely due to the inherent biological latency; it simply takes longer for native trees to mature, establish robust

habitats, and consistently produce pollinator-attracting flowers or attract diverse bird populations. An initial oversight in project design meant this biological reality wasn't fully accounted for, and native herbaceous pollinator-attracting plants were not yet systematically introduced into the systems. Moreover, progress on these indicators was set back by external environmental stressors: each site experienced significant plant loss due to an unexpected mid-season drought and persistent livestock trampling (A4.9). While anecdotal observations from Farmer Field Schools indicated a visible increase in beneficial insects, these could not be rigorously quantified against a baseline established for long-term ecological shifts. Despite these setbacks, a highly promising development for long-term sustainability is the communities' initiation of self-led reforestation days post-project, utilizing native species they themselves propagated.

Beyond the quantifiable, the project also significantly impacted climate change adaptation and resilience. Outcome Indicator 0.1 (Number of people supported to better adapt to the effects of climate change) saw 10,729 people (5,225 women and 5,504 men) indirectly supported, far exceeding the 1,800 target. This broad reach, encompassing the entire populations of Sonoumon (7,270 residents), Wèrèkè (1,847 residents), and Pouraparé (1,672 residents), resulted from extensive community engagement in designing agroforestry plots and discussions around ecosystem-based solutions. This also directly contributed to Outcome Indicator 0.2 (Number of people whose resilience has been improved), with the same 10,729 people experiencing improved resilience through enhanced agricultural practices that increase land resilience to climactic events and boost food security in their communities.

Robust capacity development provided to the AMEs proved to be a key project success. All three AMEs were successfully established and comprehensively trained on their roles, responsibilities, governance, administration, and financial management (Output Indicator 2.1 and 2.2 Achieved). Ninety individuals—farmers, teachers, and AME members—received training in sustainable agroforestry (Output Indicator 3.1 Achieved), and all three AMEs underwent specialized training in entrepreneurship and micro-business management (Output Indicator 3.2 Achieved), equipping them with critical skills for sustainable enterprise.

WSAB has largely fulfilled its intended outcome, driving economic growth, bolstering food security, and initiating significant biodiversity restoration through empowered AME-managed agroforestry. While short-term quantification of certain biodiversity indicators proved challenging due to ecological timelines and external environmental factors, the strong progress in sustainable land management, climate change adaptation, community engagement, and the adaptive responses to environmental challenges underscore key lessons learned for a meaningful, impact-yielding scale-up. The project exemplifies successful community-driven development, adapting to challenges and building local capacity for lasting social and ecological change.

3.3 Monitoring of assumptions

All key outcome and output-level assumptions were monitored throughout WSAB. Most held true; others required mitigation through adaptive strategies. Importantly, references to "endemic" plant species in original documents have been updated to "native*," which more accurately reflects the species used. Below is a summary of assumptions, updates, and outcomes:

Outcome-Level Assumptions

1. *Community interest in CBNRM activities* - Held true. Community engagement remained high across all sites, with 360+ participating in planting days and strong follow-through on CAPs and agroforestry upkeep.
2. *School commitment to land allocation* - Held true. Schools designated and maintained agroforestry sites, with signed agreements and continued collaboration through AMEs.
3. *Limited extreme weather events*- Partially held. An unexpected drought caused seedling loss (up to 60% in Wèrèkè), but mitigation via boreholes, replanting, and cooperative restructuring preserved outcomes.
4. *Limited anthropogenic stressors* - Partially held. Livestock damage was addressed through fencing, plot subdivision, and behavior change campaigns led by local leaders.
5. *Availability of native seedlings* - Challenged but addressed. Native seedling access was limited, but solutions included seed collection and AME-led nursery propagation—now seen as a new income stream.

Output-Level Assumptions

6. *Community engagement in PCD* - Fully met. High community participation; 100% of community-identified activities completed.
7. *Local knowledge of native species* - Confirmed. BioBlitzes validated strong ecological knowledge, informing participatory species selection.
8. *School and APE support for AMEs* - Sustained. AMEs were established through school assemblies and remain trusted leadership structures.
9. *Farmer availability for new techniques* - Met. 90 individuals (farmers, teachers, AME members) trained in sustainable agroforestry.
10. *Community engagement in funding decisions* - Met. All three AMEs developed and implemented transparent allocation mechanisms.
11. *Engagement of supply chain actors* - Confirmed. AMEs established local buyer links; demand for native seedlings is emerging.
12. *Demand for AME products* - Validated. Combined revenue of 1.18 million FCFA across three sites; market studies supported expansion.
- 13–16. *Repeated assumptions on land, weather, anthropogenic stressors, and seedling availability* - Addressed under Outcome Assumptions 2–5.
17. *Interest in planting and awareness days* - Surpassed. Over 360 participants took part in community planting events (target: 180).
18. *Community interest in CBNRM* - Reconfirmed. See Assumption 1.
19. *Teacher interest in experiential learning* - Met. 10 teachers trained; many others expressed informal interest in replication.
20. *School canteen staff willing to adapt menus* - Met. All three canteens integrated new crops into meals, supporting nutrition and AME-enterprise links.

3.4 Impact

Original Intended Impact: The WSAB project aimed to achieve sustainable community development through biodiversity restoration, food security, climate resilience, and increased income, led by women's associations (AMEs) managing school-based agroforestry systems. By integrating biodiversity and poverty reduction goals, the project sought to contribute to national, regional, and global sustainable development frameworks.

Contribution to Biodiversity Conservation: WSAB restored 9.5 hectares of degraded land using native tree species selected through participatory BioBlitzes and literature reviews. Sites now operate under community-managed, biodiversity-sustaining agroforestry systems. In line with Benin's NBSAPs (Strategic Objectives 6 and 12), WSAB contributes to conservation of biological diversity in agricultural landscapes and preservation of genetic diversity. Behavior

change included halting harmful practices like forest burning for hunting. The project supported CBD objectives, including Articles 8, 10, and 13, and aligned with SDG 15 targets on sustainable forest management and ecosystem restoration. Early ecological indicators, such as increased presence of pollinators and pest predators, were observed anecdotally, signaling the potential for long-term biodiversity gains.

Contribution to Poverty Reduction and Human Wellbeing: WSAB generated alternative income through AME-run enterprises, with total reported revenues of 1,180,000 FCFA across three communities. These funds supported school canteens and provided income to women, improving financial resilience. Food security improved via delivery of nutrient-rich crops to canteens. Over 10,700 individuals benefitted indirectly from climate-smart agricultural practices and environmental education, enhancing resilience to climate shocks. The leadership of women and youth in AME-run cooperatives represented a shift in local power dynamics and contributed to improved wellbeing and agency. The combined impact on food security, income, education, and governance reflects a multidimensional contribution to human development.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Project support to the Conventions, Treaties or Agreements

WSAB contributed directly to Benin's NDC and NBSAPs, advancing climate mitigation through agroforestry, and biodiversity preservation through reforestation. The project aligns with the CBD Post-2020 Framework, particularly Goals A (biodiversity integrity), B (sustainable use), and D (inclusive participation). Through collaboration with the Ministry of Agriculture (DDAEP), ATDA, and the Ministry of Environment's Forestry Cantonment, WSAB ensured institutional alignment. Reports and project data, including BioBlitz results and species selection frameworks, are available for review by the Forestry Directorate under the Ministry of Environment and Sustainable Development (MCVDD), who expressed keen interest in engaging with JSI/WorldEd's Darwin-funded work to better understand community appreciation for native species-integrated agroforestry. Selected key contributions include engagement with ATDA's quarterly forums; DDAEP field visits and advisory input and the development of tools and data (BioBlitz, CAPs, curriculum) for national and local use for learning.

4.2 Project support for multidimensional poverty reduction

WSAB made significant contributions to multidimensional poverty reduction by targeting several key dimensions: income, food security, education, women's empowerment, environmental sustainability, and community governance.

- Economically, AME-run agroforestry enterprises introduced new, locally viable income streams for women who previously had minimal access to formal economic opportunities. Revenue was transparently allocated, with a portion reinvested in school canteens, a portion saved for AME group initiatives, and another distributed among members. This distribution mechanism provided immediate financial support to vulnerable women and helped retain girls in school.
- In terms of food security, AMEs supplied school canteens with fresh vegetables and herbs, increasing access to diverse and nutritious foods. Previously, canteens relied heavily on basic staples; WSAB added tomatoes, okra, amaranth greens, and other nutrient-rich crops, addressing hidden hunger and enhancing child nutrition.
- Educationally, the improved nutrition supported school attendance and learning outcomes, while environmental education integrated into curricula promoted ecological literacy. The governance capacity of AMEs, built through training and continuous support, empowered them to advocate for community needs and hold decision-making roles in school management and land stewardship.
- Environmentally, WSAB introduced sustainable farming practices that restored soil health, conserved biodiversity, and increased resilience to climatic shocks such as drought and erratic rainfall. These gains were reinforced through youth engagement and community-led reforestation efforts, ensuring long-term sustainability.

By combining economic, ecological, and educational interventions, WSAB contributed to reducing chronic poverty and building inclusive resilience across gender and age groups. The

project demonstrated that biodiversity conservation can be a pathway to equitable, community-centered development in low-income, rural contexts.

4.3 Gender Equality and Social Inclusion (GESI)

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	X

GESI was core to WSAB design. Women led project implementation through AMEs, received tailored capacity-building in leadership, administration, and entrepreneurship, and managed both natural and financial resources. AME structures were created via community elections, enhancing legitimacy and inclusion. Youth were later integrated into cooperative models, creating intergenerational pathways to income. All community diagnostic and action planning processes were participatory, gender-aware, and designed to mitigate backlash. Community ownership of agroforestry and food production systems gave women sustained visibility and control over resources.

4.4 Transfer of knowledge

WSAB's approach built on existing knowledge, leveraging community assets to co-create environmental and social solutions. This ensured that knowledge always existed with the individuals served by the project. Furthermore, our action-based adult and child-centered pedagogies invoke environmental action by connecting learners of all ages with the natural work. Concretely, WSAB produced bilingual (French and local language) environmental education curricula, trained 10 teachers and 102 community educators, and embedded biodiversity topics in school activities. Agroforestry sites served as demonstration plots for peer learning, and BioBlitz findings were disseminated in community report-outs and shared with local authorities. Public awareness was raised through community planting days, media engagement during Women's Day events, and outreach via ATDA and DDAEP networks. Knowledge transfer extended from policy to practice, reaching farmers, teachers, youth, and government actors.

4.5 Capacity building

WSAB's capacity strengthening approach also builds on existing assets and knowledge, ensuring sustained capacity. Ninety individuals (majority women) were trained through Farmer Field Schools in sustainable agroforestry, supported by AME business and governance training. Alafia gained national visibility, participating in sectoral working groups. AME leaders reported improved status and influence in school and community governance. Teachers gained tools to deliver climate-smart environmental education. Several trained individuals are now supporting neighboring communities, suggesting a multiplier effect. Through layered and sustained training, WSAB embedded conservation leadership and agroecological expertise at the community level.

5 Monitoring and evaluation

WSAB's M&E framework combined quantitative logframe indicators with participatory feedback loops. Regular supervision visits, community reflection sessions, and a formal mid-term review

ensured timely adjustments. Partners shared responsibilities: JSI/WorldEd oversaw data collection tools and analysis, while Alafia and AMEs conducted field monitoring. Monitoring findings were shared in joint planning meetings and informed adaptive management, such as adjusting cooperative models to improve motivation (See Activity 3.10). Though biodiversity data collection faced limitations due to time lags in ecological change, the M&E approach supported continuous learning and accountability.

6 Lessons learnt

The WSAB project yielded a number of valuable insights with strong relevance for future Darwin Initiative investments. One of the clearest successes was the use of participatory, ground-up planning. By engaging communities directly through diagnostic exercises, the project fostered genuine local ownership and buy-in from the start. The creation and strengthening of women-led associations (AMEs) also proved powerful: when women had access to collective structures alongside financial and technical support, visible shifts emerged in local leadership dynamics and control over resources. In addition, integrating biodiversity goals with education and food security fostered effective cross-sector collaboration and helped build a more sustainable model.

However, the project also faced important limitations. The time frame was too short to fully observe the outcomes of ecosystem restoration. In some communities, agroforestry plots were damaged by roaming livestock, pointing to the need for stronger early-stage enforcement mechanisms and investments in fencing. Furthermore, the income potential of agroforestry systems was slower to materialize than anticipated, given the maturation time of fruit trees.

Looking forward, several changes would strengthen future programming. Greater investment early on in durable fencing and clear livestock management agreements would prevent damage and encourage long-term stewardship. A flexible grant window could also help communities pilot and adapt cooperative models tailored to their own contexts.

For other implementers, the project offers clear guidance: take time to understand social norms around land use and women's leadership before launching interventions. Embed environmental education in schools early to instill conservation values in the next generation. And above all, tie biodiversity goals directly to poverty reduction by designing women-led economic incentives for conservation.

Key takeaways include the importance of working through cross-sector teams—education, agriculture, and environment actors proved far more effective when collaborating than in silos. Biodiversity efforts gained traction only when paired with short-term livelihood benefits. And the foundation of community trust and AME-led governance structures was critical to the project's success and replicability.

7 Actions taken in response to Annual Report reviews

JSI/WorldEd took actions to address the majority of the actions recommended in the review of our Y1 report, submitted on April 30, 2024. The only remaining issues are related to biodiversity-related outcome indicators, namely 0.5 and 0.6 as those were not possible to measure given the time it takes for native species to grow, and the destruction of plants through drought and livestock trampling - although they were replaced.

8 Risk Management

The occurrence of risks related to erratic weather patterns materialized and affected the growth of many native plant species. While this was a setback, it was an important learning moment about the resilience of native species. Many of the fruit tree species did not survive and had to be replanted. However, when the rains resumed, many of the native species came back. The project did not initially account for livestock trampling and restructured the project in a few ways to account for this, including “living fence” solutions and community guardian ship / awareness raising for herders.

9 Scalability and Durability

WSAB's core outcomes show strong signs of durability beyond the project's end. Community ownership is evident in the emergence of a new cooperative model initiated by the AMEs.

Toward the close of the project, AMEs expanded their reach by engaging youth and other women from the community in managing smaller agroforestry plots. Participants agreed to modest monthly contributions in exchange for access to land and a commitment to nurturing fruit and native trees—demonstrating both grassroots interest and a long-term investment in sustainable agriculture.

Youth engagement has also deepened. After the formal project closed, young people played key roles in caring for native species propagated during WSAB. This action directly followed a period when some original agroforestry plots were damaged by drought and roaming livestock. Instead of abandoning these efforts, communities responded by initiating new plantings—an important signal of sustained motivation, adaptive learning, and ecological stewardship. Communities also reported stopping environmentally harmful behaviors, including burning brush during bush hunts and use of herbicides on native plants.

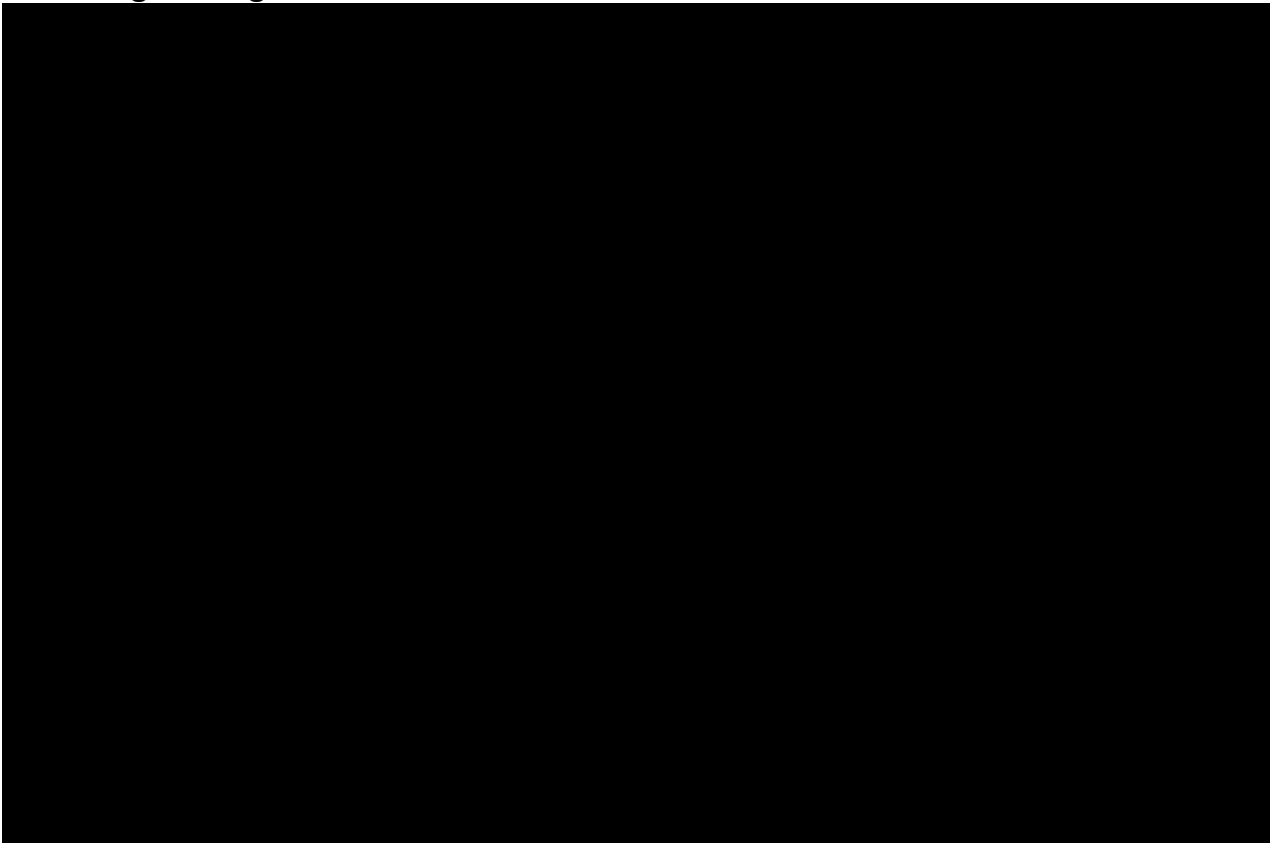
Additionally, school-based agroforestry continues to function with local investment, and AMEs remain active in managing plots, delivering crops to schools, and experimenting with diversified production. These ongoing activities suggest that the systems, knowledge, and leadership structures developed under WSAB are being maintained and built upon by the communities themselves—critical evidence that the project’s impacts are durable.

A key to scaling community-led efforts is to engage government and private sector counterparts, two platforms WSAB invested in during the project implementation—including through engagement with ATDA and the forestry cantonment as well as local market actors.

10 Darwin Initiative identity

The Darwin Initiative was acknowledged in all project materials, including signage, curricula, and reports. The UK Government’s role was recognized at public events, including Women’s Day celebrations. WSAB was communicated as a standalone initiative, enhancing visibility. The Darwin brand was also promoted through Alafia’s social media and during ATDA meetings. Stakeholders, including local authorities and educators, gained familiarity with the Initiative and expressed interest in future collaboration.

11 Safeguarding



12 Finance and administration

12.1 Project expenditure

All figures below are indicative and will be finalized in JSI/WorldEd's final claim submission.

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25 Total actual Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	90,682	90,682		

Staff employed (Name and position)	Cost (£)
Nadege Djitrinou Fagla, Project Director	
Safouratou Akpaki, Accountant	
Marietou Traore, Secretary	
Martin Omer Ahouandogbo, Alafia Executive Director	
Djamal Alfa Gambari, Climate-resilient Agriculture Specialist	
Oseni Yari, Community Engagement Specialist	
Hadi Adamou, Alafia Accountant	
Ben Vorspan, Technical Advisor	
Michaela Tobin, Program Officer	
Annette Champney, Finance and Operations Manager	
Edouard Dione, Finance and Operations Manager	
Marie Narey, Finance and Operations Officer	
TOTAL	

Capital items – description	Capital items – cost (£)
N/A	
TOTAL	

Other items – description	Other items – cost (£)
N/A	
TOTAL	

12.2 Additional funds or in-kind contributions secured

N/A

12.3 Value for Money

The WSAB project demonstrates strong value for money through its integration of proven, cost-effective models—community diagnostics, farmer field schools, and women's economic empowerment—into a single, school-based platform that delivers outcomes across biodiversity, livelihoods, food security, and education. With a relatively modest investment, the project indirectly improved the resilience of 10,729 people, restored 9.5 hectares of land with native species, launched three income-generating agroforestry businesses, and increased the availability of nutritious foods for schoolchildren. These achievements were delivered efficiently by leveraging local leadership, particularly through AMEs, and through community-led processes that minimized external costs and promoted sustainability. By establishing durable structures and building capacity for continued management, the project ensures long-term effectiveness and impact beyond the project timeline—maximizing return on investment in a context of high poverty, biodiversity loss, and gender inequality.

13 Other comments on progress not covered elsewhere

The WSAB project design was refined over its lifetime to strengthen its sustainability and scalability. Community cooperatives and school-based hubs proved to be effective, multi-functional structures that can support AMEs and attract support from government and private sector actors. Lessons learned—such as engaging youth in cooperative management, using living fences to protect and enrich agroforestry plots, and anchoring activities in trusted school spaces—offer meaningful, adaptable models for scale-up in Benin and similar contexts.

14 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here):

The essays and success stories in Annex 5B may be used for publicity purposes.

Annex 1 Report of progress and achievements against final project logframe for the life of the project

Project summary	Progress and achievements
Impact Mothers Association (AME)-managed agroforestry results in sustainable community development with increased biodiversity levels, increased food security and income	Community engagement in all biodiversity monitoring and agroforestry design processes - from initial community diagnostic activities to species selection has proven meaningful in ensuring the project resonates with and is led by communities, setting the groundwork for long-term impact. The thorough establishment of AMEs and comprehensive training and mentoring also ensures they remain in leadership positions long into the future.
Outcome Training of AMEs in Borgou to manage agroforestry activities resulting in increased income for 3 communities, food security, and gamma diversity of native species and alpha diversity in agroforestry sites.	Through the establishment and training of Mothers Associations (AMEs) and the participatory design of school-based agroforestry systems, the project led to measurable improvements in biodiversity, food security, income, and climate resilience across three communities. A total of 10,729 people were indirectly supported to better adapt to climate change, and 9.5 hectares of land were restored with native species selected through scientific and community-based methods. All three AMEs successfully launched agroforestry-based microenterprises, contributed produce and funds to school canteens, and engaged communities in conservation, biodiversity monitoring, and sustainable land management practices—laying the foundation for long-term environmental and social impact.
Outcome indicator 0.1 Number of people supported to better adapt to the effects of climate change as a result of ICF (ICF KPI 1) ¹ . End of project target: 1800 people (~600 per community).	Communities were engaged in the design of agroforestry plots and detailed discussion around ecosystem-based solutions to agricultural resilience against climate change. 5,225 women and 5,504 men, totalling 10,729 people were indirectly supported to better adapt to the effects of climate change through broader community engagement in activities as well as benefits from new practices adopted by the communities. The breakdown by community is below: <ul style="list-style-type: none"> • Sonoumon is home to 7,270 residents, with 3,789 men and 3,481 women. • Wèrèkè is home to 1,847 inhabitants, with 954 men and 893 women. • Pouraparé is home to 1,672 inhabitants, with 821 men and 851 women.
Outcome indicator 0.2 Number of people whose resilience has been improved as a result of ICF (ICF KPI 4) ² . End of project target: 1800 people (~600 per community)	Communities were engaged in the design of agroforestry plots and detailed discussion around ecosystem-based solutions to agricultural resilience against climate change. 10,729 people's resilience was improved through improved agricultural practices that increase land resilience to climatic events as well as agricultural resilience, improving food security.
Outcome indicator 0.3 Number of hectares of land that have received sustainable land management practices as a result of ICF (ICF KPI 17) ³ . End of project target: 9.	Achieved: The 9.5 hectares that were allocated across three communities are now under restorative, biodiversity-sustaining, agroforestry plans.
Outcome indicator 0.4 Number of hectares restored with a composition of native plant and crop species determined to sustain higher levels of biodiversity than plots containing crop species only. End of project target: 9 ha (3 ha per community).	Achieved: The 9.5 hectares that were allocated across three communities are now under restorative, biodiversity-sustaining, agroforestry practices using native trees selected through PCD data, literature review, and a BioBlitz activity.

Outcome indicator 0.5 Percent increase in pollinators on agroforestry plots vs. degraded farmland. End of project target TBD.	While the WSAB team and the project communities inferred a correlation between agroforestry plots and increased pollinator species (see Section 3: Activity Description 3,3; additionally, children engaged in transect walks), we do not have specific data on this indicator for two reasons: (1) the time it takes for native trees and herbaceous species to produce pollinator-attracting flowers extends beyond the two-year project time frame - this was an oversight in the project design; (2) the decision to use the BioBlitz as our data collection source was made to better engage communities—however, the data is not accurate enough to establish a baseline from which to measure change.
Outcome indicator 0.6 Percent increase in bird species on agroforestry plots vs. degraded farmland. End of project target, TBD.	While the WSAB team and the project communities inferred a correlation between agroforestry plots and increased bird species on agroforestry plots vs. degraded farmland through transect walks carried out by school children during their environmental education activities, we do not have specific data on this indicator for two reasons: (1) the time it takes for native trees to establish habitat for birds and attract food sources extends beyond the two year project time frame; (2) the decision to use the BioBlitz as our data collection source was made to better engage communities—however, the data is not accurate enough to establish a baseline from which to measure this indicator.
Outcome indicator 0.7 Increased diversification of agricultural production in schools, with adoption of new agricultural species per community/school by end of project. End of project target: 5 new agricultural species.	While WSAB did not collect baseline data on the crops served in schools, normally, school feeding in the areas of implementation includes rice, beans and lentils, maize, semolina with fruit and vegetables being served rarely. Through WSAB, the AMEs contributed tomatoes, lettuce, cucumbers, amaranth greens, okra and peppers regularly, improving micronutrient intake.
Outcome indicator 0.8 Percent increase in school- produced crop volume received by school canteens to feed school children. Target TBD based on baseline to be collected.	Ultimately, the school canteens and AMEs decided to measure the AMEs' contributions in money versus crop volume. These funds came from two sources: (1) cash transferred to the canteens generated from the AME's businesses and (2) monetization of the crops contributed to the school canteens. In total, the cash transferred, plus the monetization, amounted to 257,000 FCFA (Sonoumon, 71,000 FCFA; Wèrèkè, 80,000; Pouraparé, 106,000 FCFA).
Output 1 Communities engaged in planning school-based reforestation activities and involved in decision-making around issues relating to conservation of biodiversity, management of funds, food insecurity, school management, and women's leadership	
Output indicator 1.1 Number of participatory community diagnostic (PCD) tools adapted. End of project target: 1	Achieved: 1 Tool. The WASB team adapted World Education's PDC tool to adapt to the reality of the three WSAB communities and to capture WSAB-relevant data. The tool is available.
Output indicator 1.2 Number of community action plans (CAPs) developed including activities, actions, and considerations relating to biodiversity, management of funds, food insecurity, school management and women's leadership. End of project target: 3.	Achieved: 3 CAPs. Each community developed a CAP outlining activities they designed to address WSAB-related challenges and the activities inform the WSAB workplan and approaches. The CAPs for each community are available.
Output 2. AMEs established and/or strengthened and provided capacity development support to better understand their roles and responsibilities	

Output indicator 2.1 Number of AMEs established and trained on roles and responsibilities. End of project target: 3.	Achieved: 3 AMEs were established with one in each community. This is demonstrated by a technical summary and training attendance sheets documenting the roles and responsibilities training.
Output indicator 2.2 Number of AMEs receiving capacity development training. End of project target: 3.	Achieved: 3 AMEs received capacity strengthening trainings summarising their roles and responsibilities as they pertain to management activities; administration; and financial management. Training documentation is available.
Output 3. AMEs are trained and supported to manage microenterprises based on school-based agroforestry initiatives together with teachers and community farmers.	
Output indicator 3.1 Number of farmers, teachers and AME members trained on sustainable agroforestry. End of project target: 90 (~30 per community).	Achieved: 90 individuals were trained. WSAB established agreements with each community, including supervision through the communities' chiefs for participation in the FFS activities, resulting in 30 FFS members per locality.
Output indicator 3.2 Number of AMEs trained on entrepreneurship and microbusiness management. End of project target: 3.	Achieved: The 3 AMEs from the 3 communities were trained in entrepreneurship and micro-enterprise management. Training modules and attendance sheets are available.
Output indicator 3.3 Number of agreements developed by AMEs presenting funding allocation mechanisms developed. End of project target: 3.	Achieved: 3 agreements were developed by AMEs presenting the financial allocation mechanisms established. Agreements are available.
Output indicator 3.4 Number of business plans developed by AMEs. End of project target: 3.	Achieved: 3 business plans were developed by the 3 AMEs. The business plans are available.
Output indicator 3.5 Number of agroforestry businesses launched by AMEs. End of project target: 3.	Achieved: 3 businesses were launched by AMEs using agroforestry products
Output 4. Agroforestry systems are planned and established in schools	
Output indicator 4.1 Number of user-friendly reports produced - rooted in local and scientific knowledge - presenting data on key endemic plant species in Borgou, the ratio between and composition of endemic species, fruit and nut trees, other cash crops, and market/kitchen garden plants required to sustain and increase biodiversity levels for use by AMEs and farmers to design agroforestry systems. End of project target: 1.	Achieved: 1 report was produced and presented out to each community containing data on native plant species in Borgou as identified by communities during the PCD and BioBlitz and containing data from a literature review. The report also includes relative abundance of native vs. crop species to help guide the design of the agroforestry sites.
Output indicator 4.2 Number of agroforestry plots designed and planted according to a report developed to guide biodiversity-supporting agroforestry systems. End of project target: 3.	Achieved: 3 sites were designed by each community based on the data presented under Indicator 4.1 and sample plots presented to each community.

Output indicator 4.3 Number of school-based tree nurseries built. End of project target: 3.	Achieved: 3 nurseries were developed, one in each school.
Output indicator 4.4 Number of community members participating in community planting day. End of project target: 180.	Surpassed*: Approximately 360 participants. The WSAB team did not circulate a participant list for this activity. As such, this figure is a conservative estimate. The photos presented in Annex 6H demonstrate a large portion of the individuals participating.
Output indicator 4.5 Number of agroforestry systems upkeep plans developed by farmers and AMEs to maintain agroforestry systems. End of project target: 3.	Achieved*: 3 CAPs include maintenance activities, however a specific plan was not put in writing.
Outcome 5. Schools are supported to lead activities engaging communities in environmental monitoring, conservation, and biodiversity- sustaining agriculture	
Output indicator 5.1 Number of community members trained in CBNRM. End of project target: 90 (~30 per community)	Achieved: 102 community participants attending the environmental education curriculum learned and practiced CBNRM techniques community participants engaged in the environmental education curriculum training held at the community level.
Output indicator 5.2 Number of teachers expressing interest in integrating CBNRM and community-based biodiversity monitoring into their lesson plans. End of project target: 30 (~10 per school)	Not achieved: We trained 10 teachers across the three project localities, using carefully developed selection criteria to ensure they could effectively internalize the content and train additional educators and communicators. These criteria included: proven ability to use participatory pedagogies, a strong commitment to environmental education, experience with the target age group, and a track record of mentoring peers in new subject areas. Adhering to these standards was essential to ensure the accurate understanding and future dissemination of the content. These 10 teachers were selected in collaboration with school authorities. While more than 30 additional educators and community members (including AMEs, parent-teacher associations, and school directors) expressed interest in integrating CBNRM into their teaching and children's education, we did not formally document this engagement.
Output indicator 5.3 Number of school canteens with agreements with AMEs to receive crops cultivated in school-based agroforestry systems: End of project target: 3	Achieved: 3 agreements are in place between AMEs and school canteens to provide crops to schools and documentation presented in Annex 6E demonstrates the crops already presented.
Output indicator 5.4 Number of community-based agroforestry days and awareness raising activities held by AMEs: 6 (~2 per community).	Achieved: 6 - 2 community planting 1 large activity was held for all three communities in honour of International Women's Day. An attendance sheet and plan of events is available and a written piece with photos highlighting the event is included in Annex 5B.

Annex 2 Project's full current logframe as presented in the application form (unless changes have been agreed)

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: Mothers Association (AME)-managed agroforestry results in sustainable community development with increased biodiversity levels, increased food security and income levels, and strengthened structures for women's leadership			
Outcome: Training of AMEs in Borgou to manage agroforestry activities resulting in increased income for 3 communities, food security, and gamma diversity of native species and alpha diversity in agroforestry sites.	0.1 Number of people supported to better adapt to the effects of climate change as a result of ICF (ICF KPI 1). End of project target: 1800 people (~600 per community). 0.2 Number of people whose resilience has been improved as a result of ICF (ICF KPI 4). End of project target: 1800 people (~600 per community). 0.3 Number of hectares of land that have received sustainable land management practices as a result of ICF (ICF KPI 17). End of project target: 9. 0.4 Number of hectares restored with a composition of native plant and crop species determined to sustain higher levels of biodiversity than plots containing crop species only. End of project target: 9 ha (3 ha per community).	0.1 Census data, baseline and endline data on tree coverage and crop production, endline with support from CBNRM activities 0.2 Census data; baseline and endline data on tree coverage and crop production, endline with support from CBNRM activities; data presenting AME earnings 0.3 Plot establishment report including photos and coordinates, baseline monitoring data 0.4 Plot establishment report including photos and coordinates, baseline and endline monitoring data including CBNRM reports on sample plots	Community interest and availability to engage in CBNRM activities Schools committed to designating land to reforestation initiatives Limited extreme weather events and other natural environment stressors as agroforestry plots take root and establish Limited anthropogenic stressors on the environment as agroforestry plots take root and establish Availability of endemic and crop seedlings

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
	<p>0.5 Percent increase in pollinators on agroforestry plots vs. degraded farmland. End of project target TBD.</p> <p>0.6 Percent increase in bird species on agroforestry plots vs. degraded farmland. End of project target, TBD.</p> <p>0.7 Increased diversification of agricultural production in schools, with adoption of new agricultural species per community/school by end of project. End of project target: 5 new agricultural species.</p> <p>0.8 Percent increase in school-produced crop volume received by school canteens to feed school children. Target TBD based on baseline to be collected.</p>	<p>0.5 Pollinator log from CBNRM led transect walks</p> <p>0.6 Bird log from CBNRM led transect walks</p> <p>0.7 Baseline and endline data; survey of school canteen workers</p> <p>0.8 Baseline and endline data; survey of school canteen workers</p>	
<p>Outputs:</p> <p>1. Communities engaged in planning school-based reforestation activities and involved in decision-making</p>	<p>1.1 Number of participatory community diagnostic (PCD) tools adapted. End of project target: 1.</p>	<p>1.1 PCD Tool</p>	<p>Communities interested and available to engage in PCD</p> <p>Existing knowledge on endemic plant and crop species</p>

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
around issues relating to conservation of biodiversity, management of funds, food insecurity, school management, and women's leadership	1.2 Number of community action plans (CAPs) developed including activities, actions, and considerations relating to biodiversity, management of funds, food insecurity, school management and women's leadership. End of project target: 3.	1.2 PCD Report including action plans	
2. AMEs established and/or strengthened and provided capacity development support to better understand their roles and responsibilities	<p>2.1 Number of AMEs established and trained on roles and responsibilities. End of project target: 3.</p> <p>2.2 Number of AMEs receiving capacity development training. End of project target: 3.</p>	<p>2.1 Attendance register</p> <p>2.2 Attendance register</p>	Schools and parent associations (APE) available and (still) willing to provide the structure for AMEs to lead land management work
3. AMEs are trained and supported to manage microenterprises based on school-based agroforestry initiatives together with teachers and community farmers	<p>3.1 Number of farmers, teachers and AME members trained on sustainable agroforestry. End of project target: 90 (~30 per community).</p> <p>3.2 Number of AMEs trained on entrepreneurship and microbusiness management. End of project target: 3.</p>	<p>3.1 Attendance register</p> <p>3.2 Attendance register</p>	<p>Farmer availability and interest in alternative agriculture techniques</p> <p>Presence and availability of community and schools to help determining funding allocation</p> <p>Engagement of actors along the agricultural supply chain</p> <p>Demand for products marketed by AMEs</p>

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
	<p>3.3 Number of agreements developed by AMEs presenting funding allocation mechanisms developed. End of project target: 3.</p> <p>3.4 Number of business plans developed by AMEs. End of project target: 3.</p> <p>3.5 Number of agroforestry businesses launched by AMEs. End of project target: 3.</p>	<p>3.3 Written agreements with funding allocation mechanisms included</p> <p>3.4 Business plans</p> <p>3.5 Project activity reports</p>	
<p>4. Agroforestry systems are planned and established in schools</p>	<p>4.1 Number of user-friendly reports produced - rooted in local and scientific knowledge - presenting data on key endemic plant species in Borgou, the ratio between and composition of endemic species, fruit and nut trees, other cash crops, and market/kitchen garden plants required to sustain and increase biodiversity levels for use by AMEs and farmers to design agroforestry systems. End of project target: 1.</p> <p>4.2 Number of agroforestry plots designed and planted according to a report developed to guide</p>	<p>4.1 Report presenting learnings from scientific and community-based anecdotal sources presenting endemic and crop species suitable in Borgou</p> <p>4.2 Plot establishment report including photos and coordinates</p>	<p>Schools committed to designating land to reforestation initiatives</p> <p>Limited extreme weather events and other natural environment stressors as agroforestry plots take root and establish</p> <p>Limited anthropogenic stressors on the environment as agroforestry plots take root and establish</p> <p>Availability of endemic and crop seedlings</p> <p>Community interest and availability to engage in</p>

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
	<p>biodiversity-supporting agroforestry systems. End of project target: 3.</p> <p>4.3 Number of school-based tree nurseries built. End of project target: 3.</p> <p>4.4 Number of community members participating in community planting day. End of project target: 180.</p> <p>4.5 Number of agroforestry systems upkeep plans developed by farmers and AMEs to maintain agroforestry systems. End of project target: 3.</p>	<p>4.3 Plot establishment report</p> <p>4.4 Reports from event</p> <p>4.5 Agroforestry upkeep plans</p>	<p>community planting and awareness raising days</p>
<p>5. Schools are supported to lead activities engaging communities in environmental monitoring, conservation, and biodiversity-sustaining agriculture</p>	<p>5.1 Number of community members trained in CBNRM. End of project target: 90 (~30 per community)</p> <p>5.2 Number of teachers expressing interest in integrating CBNRM and community-based biodiversity monitoring into their lesson plans. End of project target: 30 (~10 per school)</p> <p>5.3 Number of school canteens with agreements with AMEs to</p>	<p>5.1 Attendance register</p> <p>5.2 Survey, PCD Data</p> <p>5.3 Agreements between AMEs and school canteens</p>	<p>Community interest and availability to engage in CBNRM activities</p> <p>Teachers available and interested in integrating hands-on experiential learning into the existing national curriculum</p> <p>School canteen staff willing to adapt new recipes accommodating increased and diversified agricultural yield</p>

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
	<p>receive crops cultivated in school-based agroforestry systems: End of project target: 3</p> <p>5.4 Number of community-based agroforestry days and awareness raising activities held by AMEs: 6 (~2 per community).</p>	5.4 Activity reports	

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1. Each activity should start on a new line and be no more than approximately 25 words.)

1. Communities engaged in planning school-based reforestation activities and involved in decision-making around issues relating to conservation of biodiversity, management of funds, food insecurity, school management, and women's leadership

- 1.1 Adapt participatory community diagnostic (PCD) tool to assess communities' perceptions of and engagement with environment, agriculture, income generation, women's role in society, and school management
- 1.2 Engage Ministry of Agriculture, Livestock and Fisheries (MAEP), Ministère du Cadre de Vie et du Développement Durable (MCVDD) and the National Agency for Domains and Land (ANDF) to ensure involvement, buy-in and guidance
- 1.3 Administer PCD in each community to engage communities around conservation, income generation, and AME leadership, and assess their strengths and needs in these areas
- 1.4 Co-develop community action plan (CAP) presenting steps on how communities can engage with the AME-run agroforestry initiatives and how they can best serve the community

2. AMEs established and/or strengthened and provided capacity development support to better understand their roles and responsibilities

- 2.1 Connect with schools to set the stage for establishing AMEs, focusing on schools where WEI has already build parent association (APE) and/or AME capacity
- 2.2 Train (or provide refresher trainings to) AMEs on their roles and responsibilities
- 2.3 Strengthen management capacity of existing AMEs through refresher training and/or engage APEs in AME creation and strengthen management capacity thereafter

3. AMEs are trained and supported to manage microenterprises based on school-based agroforestry initiatives together with teachers and community farmers

- 3.1 Engage local farmers and teachers identified during the PCD (Activity 1.2) to engage in a farmer field course together with the AMEs
- 3.2 Develop course content that is rooted in local ways of knowing and supported by scientific knowledge based off of findings in Activities 4.1-4.3
- 3.3 Roll-out farmer field course on sustainable agroforestry using WEI's farmer field school model which provides hands-on, experiential learning using adult learning pedagogies

- 3.4 Train AMEs and interested farmers on entrepreneurship and microbusiness management
- 3.5 Work with AMEs to establish connections along the agricultural value chain in Borgou
- 3.6 Design mechanism with AMEs to allocate income generated to school and community activities
- 3.7 Support AMEs in the design of their specific microbusinesses and develop basic business plans
- 3.8 Provide seed funds to AMEs to launch businesses
- 3.9 Provide initial guidance and monthly follow-up support to AMEs as they launch businesses, including quarterly supportive supervision visits
- 3.10 Provide a collaborative mid-term review on business plans developed by AMEs and provide support where needed based on findings

4. Agroforestry systems are planned and established in schools

- 4.1 Compile research on key endemic plant species to Borgou to ensure the right species are planted to contribute to a native biodiversity- rich ecosystem
- 4.2 Compile research on intercropping ratios to build / maintain healthy ecosystems that also produce food and other cash crops
- 4.3 Gather biodiversity and agriculture information based on local ways of knowing, including information gathered from the PCD
- 4.4 Design agroforestry systems supporting alpha diversity in each system and contribute to rich gamma diversity in the area, including the Forêt de l'Ouémé Superior
- 4.5 Build tree nurseries in schools
- 4.6 Procure and propagate seedlings to plant in agroforestry systems
- 4.7 Coordinate and implement community planting days, hosted by the AMEs and led by local farmers with active involvement from the school and broader community
- 4.8 Support farmers, AMEs and school to develop a plan for long-term upkeep of the agroforestry systems during the life of and beyond the project
- 4.9 Provide supportive supervision to ensure proper forest / agroforestry management

5. Schools are supported to lead activities engaging communities in environmental monitoring, conservation, and biodiversity- sustaining agriculture

- 5.1 Train teachers, select farmers, and select AME members on basic community-based natural resource management (CBNRM) including community-based biodiversity monitoring and engage forestry inspectorate
- 5.2 Train teachers and AMEs to involve school children in CBNRM and community-based biodiversity monitoring
- 5.3 Support AMEs to liaise with school management, teachers, ministry and other education stakeholders to ensure agroforestry activities provide hands on learning opportunities to school children
- 5.4 Support AMEs to liaise with school management to ensure school canteens benefit from and take advantage from increased and diversified crops
- 5.5 Support AMEs and farmer groups to host community-based agroforestry days and awareness raising activities around the importance of conserving native biodiversity

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total achieved	Total planned
DI-DO1	Hectares of habitat under sustainable management practices ¹	9	Community controlled or non-community controlled	0	9.5	N/A	9.5	9.5
DI-DO2	Number of people whose disaster/climate resilience has been improved. ²	1,800	Gender	0	10,224	N/A	10,729	10,224
DI-D05	Number of people supported to better adapt to climate change as a result of the project [ICF KPI 123].	1,800	Gender	0	10,224	N/A	10,729	10,224

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
N/A						

¹ Reported in the Logframe as “Number of hectares of land that have received sustainable land management practices as a result of ICF (ICF KPI 17)”

² Reported in the Logframe as “Number of people whose resilience has been improved as a result of ICF (ICF KPI 4)”