Darwin Initiative Innovation Annual 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)

Submission Deadline: 30th April 2024

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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 Partner	JSI Research & Training Institute, Inc., World Education Division (JSI/WE)
Project partner(s)	Alafia NGO
Darwin Initiative grant value	£199,418.00
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Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	April 2023 - March 2024, Annual Report 1
Project Leader name	Nadege ███████
Project website/blog/social media	worlded.org
Report author(s) and date	World Education, April 30, 2024

1.   Project summary

The Women-led, School-based Agroforestry in Benin (WSAB) Project strengthens the capacity of Mother's of Students Associations (AMEs) in northern Benin to address poverty and biodiversity loss by using schools as hubs for reforestation and agroforestry activities. These activities expand 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 land 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.

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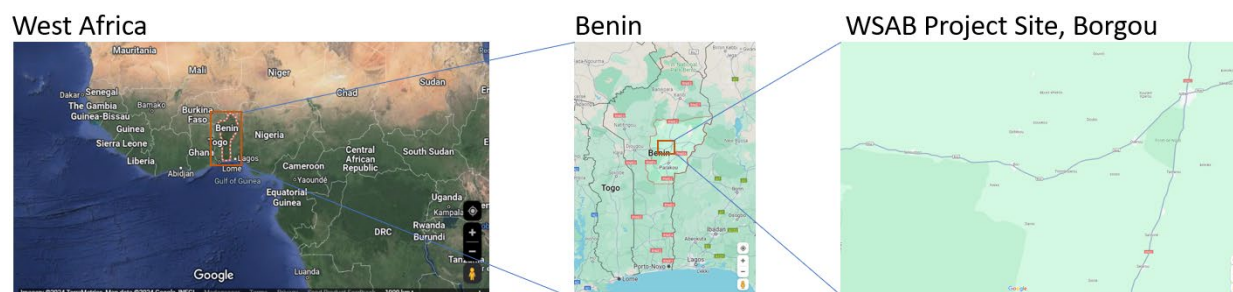
Despite women's labour contribution, men primarily own the land and manage income. Revenue women earn are often from small-scale economic activities. Nevertheless, Beninese women's income flows contribute disproportionately towards back-to-school costs, and delayed income from cash crops greatly often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

World Education 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. World Education 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 stakeholders/partners

The WSAB Project engages in-country stakeholders throughout all of its planning, implementation, monitoring and evaluation activities. This ensures that the project resonates with all stakeholders and is demand-based driven by their priorities. At the project outset, the project team met with multiple commune- and community-level stakeholders, including the mayors and communal departments of the ministries in charge of agriculture, forestry, and education; and with the department levels of these ministries as well to ensure the project aligns with local government priorities. For a detailed list, see Activity 1.2 on the following page.

WSAB works closely with school leadership and school communities, engaging community leaders, women's groups (once established, AMEs), teachers, school directors / principles, and more in the design, rollout and evaluation of the activity. The participatory community diagnostic (PCD) process (See Activity 1.2) is vital in ensuring community buy-in and that communities drive project priorities.

To ensure mutual learning between WSAB and the local government, the project team is working in close collaboration with the Forestry Cantonment under the Ministère du Cadre de Vie et des Transports, en charge du Développement Durable (MCVDD), the government ministry in charge of forestry, to source and select native plant species. During the project's event celebrating International Women's Day (see Activity 5.5), the project invited relevant government authorities to participate and further engage in project activities. As the project progresses into Y2, these relationships will be crucial in both meeting the project results in a meaningful way, and sustaining project activities beyond the life of the project.

3.   Project progress

3.1   Progress in carrying out project Activities

Output1: 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

The activities under Output 1 lay the community foundation of the Women-led School-based Agroforestry in Benin (WSAB) Project and were designed to ensure all activities are led by and resonate with the three Project communities.

Prior to initiating the official activities listed in the WSAB work plan, the WSAB team worked with local authorities (see Activity 1.2 below) to select schools - and thus, communities - based on the following criteria: the school had an active AME or wished to establish one; the school was situated in close proximity to an un- or lightly-touched native ecosystem; the school possessed 1-3 hectares to be restored through agroforestry on or adjacent to its premises; the school expressed interest and commitment to engaging in agroforestry during and beyond the project duration and committed to AMEs managing the site and its outputs; schools express interest in engaging in project-based learning through the agroforestry sites; and the school committed to AMEs leading income generating activities and managing their funds. Through this participatory process, WSAB, in conjunction with local authorities, selected the following communities in the Borgou Department of Northern Benin: Wèrèkè, Sonnoumon, and Pouraparé.

Under Activity 1.1. **(A1.1)**, the WSAB team adapted World Education's Participatory Community Diagnostic (PCD) tool based on the distinct contexts and realities of the three project intervention communities. The tool was designed as an entry point to the communities, to ensure the project resonates with them, and to address nuanced issues they see as most relevant to the project's goals. The tool adapted for WSAB collects community perceptions and commitments pertaining to the natural environment, agriculture, income-generating activities, the role of women in society and school management.

(A1.2) To ensure WSAB's activities and approaches align with local government authorities and to actively involve these authorities throughout WSAB to ensure sustainability, the team engaged the following administrations in July and August of 2023: the mayor; the communal branch of the Agence Territoriale de Développement Agricole 4 (ATDA4, the Agricultural Development Agency); the Forestry Cantonment of the Ministère du Cadre de Vie et du Développement Durable (MCVDD); the Pedagogical Advisor of the N'Dali commune; the Forestry Inspectorate at the Borgou Department; and the Departmental Brank of the pre-primary and primary education in Borgou as well as in Parakou. The Project team presented the overall project and solicited their engagement and buy-in for project activities and to ensure they would accompany the project throughout its life. Local authorities expressed enthusiasm for WSAB and confirmed their commitment to collaboration, noting that the approach, while novel and exciting, aligns with their priorities and offers ample opportunity for learning.

After having adapted the PCD tool to WSAB and ensuring buy-in from government authorities, WSAB administered the PCD **(A1.3)** in Wèrèkè on 30 August, 2023; Sonnoumon on 31 August, 2023; and Pouraparé on 4 September, 2023. The PCD ensures inclusion of all facets of the community, especially those often excluded from decision-making, by carrying out one-on-one sessions, focus groups with community subsets (women, youth, community leaders, religious leaders, etc.), and plenary sessions with the entire community. In Wèrèkè, the PCD engaged 72 participants, including 64 women; 45 participants in Sonnoumon, including 29 women; and 71 participants in Pouraparé, including 35 women. During the PCD, several themes were addressed including perceptions around the environment, agriculture and biodiversity; the place of women in society; school management; and community vision for income-generating activities. To ensure the PCD laid the groundwork for avoiding any possible backlash against AME members for elevating women's roles, the PCD posed important questions to the community that stimulated meaningful discussion on the value of AMEs and the commitment of the community to ensuring the space exists for AMEs to function and for women to exercise their agency. The PCD pinpointed the strengths, weaknesses and needs of the communities pertaining to the different points discussed.

The key output of the PCD is a community action plan (CAP) **(A1.4)** that lays out clear activities that communities take to address the issues they identify in the PCD. Under WSAB, each communities' CAP, developed during the PCD process, informs the process and chronology of agroforestry activities, conservation activities, and school management, and is tailored to the communities' unique capacities. Through in-depth discussion on natural resources and native plant species, the PCD provided input on native species and crops the communities wished to see in their agroforestry plots. See A4.3 for an overview of the species selection process. This process was crucial to ensuring that the agroforestry plots fully reflect community priorities.

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

The activities under Output 2 establish the AME structure, ensuring that the WSAB AMEs have the systems in place to fully deliver WSAB activities and remain functional long into the future to sustain the agroforestry systems and support themselves and the school community financially.

WSAB underwent a participatory process to establish the AMEs in each community **(A2.1)**. WSAB convened a General Assembly in Pouraparé on September 8, 2023 with 68 participants, including 39 women; on August 31, 2023 in Sonnoumon, with 37 participants, including 32 women; and on August 20, 2023 in Wèrèkè, with 96 participants, including 43 women. The General Assemblies first informed the community about WSAB and explained its intervention strategy, ensuring community buy-in. Then, the General Assembly formally established the AMEs, with an AME office then established in each school.

Once established, WSAB trained the AMEs were trained on their roles and responsibilities **(A2.2)**. The training took place in three stages: (1) overview of the training and its connection with WSAB

as a whole; (2) a participatory overview of the roles and responsibilities of each AME member; and (3) an evaluation to ensure that each member understood their function. The training in Sonnoumon was held on September 11, 2023 with 22 participants including 20 women; in Wèrèkè on September 16, 2023 with 16 participants including 15 women; and in Pouraparé on September 16, 2023 with 21 participants including 15 women. Following the training on roles and responsibilities, the AMEs were trained on writing meeting minutes. The training, which built the AME secretaries' capacities took place on November 20, 2023 in Pouraparé with 12 participants, all women; on November 20, 2023 in Wèrèkè with 12 people present, all women; and on November 20, 2023 with 12 participants, all women.

Because AMEs require strong management capacity, WSAB organised a training for AMEs on their management capacity **(2.3)**. This course included a refresher course on AME roles and responsibilities and proceeded by engaging AMEs in a discussion of these roles and responsibilities as they pertain to the functioning of the AME. The training took place on November 17, 2023 in Pouraparé with 9 participants, all women; on November 16, 2023 in Wèrèkè with 8 people present and on November 20, 2023, with 11 participants, only women.

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

The activities under Output 3 set the groundwork for community engagement in agroforestry and biodiversity conservation to ensure the sustainability of these activities.

Through the PCD, the WSAB team, in collaboration with community members, identified farmer field school participants. The PCD, alongside other awareness raising sessions in each community, resulted in a list of community members, including teachers, farmers, AMEs and community leaders who expressed motivation for and commitment to engagement in farmer field schools (FFS) (A3.1). 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.

The WSAB team developed the framework of the FFS course to be delivered throughout the year over which the FFS will be rolled out. The content was informed by findings in the PCD and the community-based biodiversity survey carried out through a BioBlitz (see A4.1). Due to the dynamic nature of FFS activities, the course contains general content areas to be updated as the course progresses. Such content includes modules in soil fertilisation (composting), installation of an irrigation system, presentation of the BioBlitz results and selecting native plant species, best practices in agroforestry that integrates native species, integrated pest management, techniques in preventing soil erosion through intercropping, market gardening techniques, natural resource management, and maintenance of trees selected by communities due to their socio-economic value as perceived by the communities.

WSAB also initiated FFS sessions **(A3.3)**. Theoretical courses are integrated in practical, experiential learning using evidence-based adult learning pedagogies. The key FFS activities will start at the beginning of Y2, during which participants will observe their agroforestry plots in comparison with standard kitchen garden plots over the course of the growing season. This will enable them to draw conclusions around the benefits of agroforestry through their observations.

To reap the economic benefits of the eventual agroforestry outputs, WSAB delivered a training to AMEs and farmers participating in the FFS in entrepreneurship and micro-enterprise management **(A3.4)**. The training took place in Wèrèkè with 28 participants, in Sonnoumon with the presence of 39 participants and in Pouraparé with the presence of 21 participants. The training covered the soft skills and characteristics of a successful entrepreneur, brainstormed business ideas, covered the process of developing a marketing strategy, initiating market research, and developing a business plan. From the training, AME members expressed an increased ability to apply the concepts covered in the training to succeed in their business.

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To maximise success of the AME-run microenterprises which primarily sell products from the agroforestry yield, WSAB engaged AMES in in-depth work to establish connections throughout the agricultural value chain in Borgou **(A3.5)**. Together with AMEs, the WSAB team evaluated products from production to marketing and through to processing. WSAB then conducted a local market study to understand the market share of each agroforestry product and its derivatives and established connections between the AMEs and the various local markets in order to quickly sell the products.

A key to the success of the AME model is the fact that the income AMEs generate through their microbusinesses is allocated between the AME members and for the schools themselves to improve the school environment and support the attendance of children at risk of leaving school. Underlying this success is the establishment of a clear, transparent mechanism for allocating these funds. Following the AME's training in marketing, the WSAB team worked with AMEs to establish a clear allocation of income generated to by agroforestry outputs to school and community activities **(A3.6)**. This included the specific activities to which funds generated will contribute to reduce multidimensional poverty, such as school feeding activities and contributions to school costs that low-income families are not able to afford, and improving retention in school, especially for girls. AME members will also be able to benefit from additional funds to improve their lives, those of their families and those of the school communities. The allocation mechanism also included a timeline during which funds will be disbursed.

Following the training on entrepreneurship and micro-enterprise management, WSAB supported AMEs in designing their specific micro-enterprises and developing basic business plans **(A3.7)**. The business plans provide comprehensive coverage of production, processing and marketing activities. The primary business plan development took place in the first month of Project Year 2 (Y2) and is thus not covered in this report. Following the business plan development, WSAB provided seed funds to AMEs to launch their businesses. This activity also took place in the first month of Y2 and is thus not covered in this report. Activities **A3.9**, Provide initial guidance and monthly follow-up support to AMEs as they launch businesses, including quarterly supportive supervision visits; and **A3.10**, Provide a collaborative mid-term review on business plans developed by AMEs and provide on-demand support based on findings are both planned for Y2.

Output 4. Agroforestry systems are planned and established in schools

The activities under Output 4 were designed to ensure that the agroforestry systems established through WSAB follow evidence-based best practices in establishing agroforestry plots that sustain native biodiversity. WSAB sees evidence as a thoughtful blend of scientific data complementing local ways of knowing about the natural world and designed the activities to gather data in this way. In addition to engaging communities in discussions about their understanding of and appreciation for the natural world through the PCD, the project also facilitated a BioBlitz (see A4.1 below); carried out desk research; and engaged local agronomists, government officials working in agriculture and natural resources, and more.

WSAB carried out two primary studies to gather scientific data to inform which species and in what abundance is needed to sustain and improve biodiversity levels through agroforestry activities **(A4.1)**. The WSAB team carried out desk research to pinpoint specific tree species native to the area, and a participatory BioBlitz with each community to pinpoint information enabling the team to draw inferences on relative abundance of native species and the presence of native fauna. WSAB carried out one BioBlitz with each community. The first BioBlitz, held in Wèrèkè on October 6-7, 2024, engaged a wide array of community members, including members of the AME.

The BioBlitz started by engaging the community in a discussion around the functionality of native forests, exploring observations around the lack of need for upkeep to maintain forests; fauna species the community identified in the forest; moisture retention and soil richness the forest offered; and the fact that the forest temperatures remained cooler than the surrounding areas.

The conversation then shifted to a discussion about challenges around agriculture, including the fact that the community's agricultural land required constant upkeep; the land was at severe risk of unpredictable and fluctuating climactic events; crops were under constant pest pressure; and watering remained a significant, sometimes insurmountable burden. The community then reflected on the concept of ecosystem services and discussed how ecosystem services benefit agriculture. The discussion concluded with observations around the ecosystem services that enabled the native forests abutting their village to require no upkeep, retain moisture, and limit pest pressures – all unlike their agriculture. The discussion resulted in the community concluding that it would be valuable to replicate the ecosystem services provided by the native forest in their agriculture systems. The community then proceeded to collect data through the BioBlitz.

The BioBlitz collected data on four parcels of land demonstrating different land uses and different compositions of native and crop species: fallow land, monoculture, polyculture, and native forest (fragments of the Ouémé Supérieur-N'dali Forest). The data collected by the community demonstrated that there is a significant difference in faunal populations across the four land use sites. A chi-square test performed on the difference of beneficial native plants by site presented a chi-square value of 18.78, accounting for a P-value of less than .005, showing a statistically significant difference in beneficial fauna across the four sites. The study identified different compositions of native plant species by site. Using abundance data, the study identified that coverage of native plants accounted for 100% of flora specimen on the fallow site, 60% on the monoculture site, 82% on the polyculture site, and 100% in the native forest site. Using richness data, the coverage of native plants accounted for 100% of species present on the fallow site, 13% on the monoculture site, 87% on the polyculture site, and 100% on the native forest site. Correlations between the presence of native fauna and difference in faunal populations can be indirectly inferred when compared with data collected on the composition of flora communities on each site. While this data points only to inferred correlations, it reaffirmed community perceptions.

The community of Wèrèkè expressed significant enthusiasm around the BioBlitz process and thus the WSAB team carried out a BioBlitz in Sonnoumon and Pouraparé on October 17-18 and October 19-20 respectively.

Annex 4A presents a photo essay on the BioBlitz carried out in Wèrèkè.

The project team then compiled research on intercropping ratios needed to build / maintain healthy ecosystems that also produce food and other cash crops **(A4.2)**. This data includes an analysis of relative abundance data from each BioBlitz. This analysis provided insight into the target relative abundance of different plant species (trees, food crops, and other crops) in the eventual agroforestry systems, as well as the (indirectly inferred) correlation that exists between abundance data and faunal communities. The WSAB team prepared a digestible report out of the data for communities to ensure the data resonated with them. These report outs took place in Wèrèkè and Sonnoumon on February 21, 2024, with 21 participants and 26 participants respectively and on February 20, 2024 in Pouraparé with 22 participants.

To select species for the agroforestry plots that reflect the communities' biodiversity and agricultural priorities **(A4.3)**, the Project team reviewed the BioBlitz data - including tree species identified - and relative abundance analyses with the communities. The communities reviewed this data alongside a summary of their initial PCD findings. Linking these two pieces of information made it possible for communities to drive the choice of different species of the agroforestry system, selected both for biodiversity conservation and sustainable agriculture purposes.

To design agroforestry systems supporting alpha diversity in each system and contributing to the gamma diversity in the area, including the Ouémé Supérieur-N'dali Forest **(A4.4)**, the project team prepared a triangulation of data from the DPC, a literature review of the area's native species, and the BioBlitz results. The data provided a list of species and target relative abundance goals for each system. The project team then prepared a presentation with five different agroforestry designs to propose to each community. These designs included a singular concentric circle where the community would afforest a native forest in the centre, and start integrating fruit and nut trees

in outer layers, ending with an annual kitchen garden on the outermost layer; a series of smaller, similar concentric circles; a design with rows of native and crop trees intercropped with native herbaceous species and kitchen crops; and a scheme with native afforested boarders containing intercropped native herbaceous species and crops. The communities selected and adapted their own design. Through this participatory approach, communities designed their agroforestry systems with hopes to support alpha diversity within each system and contribute to the rich gamma diversity in the area, including the Ouémé Supérieur-N'dali Forest.

To supply the agroforestry plots, the WSAB team will work with communities to build tree nurseries in each of the schools/communities **(A4.5)**. This activity is slightly delayed due to challenges in sourcing native seeds (see A4.6 below). To ensure this does not delay the planting planned for early Y2, the WSAB team is working with communities to procure seeds and seedlings and will stock the nurseries built in early Y2 with plants to replenish ones that may not survive. The WSAB team worked with communities to identify seeds and seedlings for crop, fruit tree, and native plant species **(A4.6)**. Seedlings for crop and fruit trees were easily procured with native tree species more difficult to locate. Through a mixture of seed collection, and collaboration with local government and other reforestation efforts, the WSAB team continues to source native species. Native tree nurseries pose an interesting potential income generation activity that the WSAB team is looking to explore with AMEs.

Community planting days **(A4.7)** led by AMEs and FFS members and involving the broader community; long-term support to farmers to upkeep their agroforestry systems **(A4.8)**; and supportive supervision for agroforestry management **(A4.9)** are all planned for Y2.

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

Output 5 activities, primarily planned for Y2, are primarily schools based and are designed to leverage the agroforestry system as an opportunity to expand awareness raising about biodiversity conservation, natural resource management, and sustainable climate-smart agriculture. Activities under Output 5 also leverage the agricultural products to improve school feeding.

In Y2, the WSAB will 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 **(A5.1)**. The BioBlitz (A4.1) laid the groundwork for this activity. WSAB will also train teachers and AMEs to involve school children in CBNRM and community-based biodiversity monitoring **(A5.2)**.

The agroforestry systems being based in schools offers profound opportunities to drive experiential learning for school children. This unique opportunity for transformative learning is rooted in evidence-based education practices that both improve learning outcomes and invoke environmental action. To this end, WSAB will 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 **(5.3)**. To establish the groundwork for this activity, during Y1 of WSAB, the project team supported AMEs to liaise with school management, teachers, the ministry and other education stakeholders to ensure that agroforestry activities provide practical learning opportunities for school children during awareness raising events. Additionally, the Project Lead attended a global education conference and engaged in a series of curriculum design workshops with colleagues at World Education to start designing an extracurricular environmental education curriculum to be rolled out in Y2.

In Y2, WSAB will support AMEs to liaise with school management to ensure school canteens benefit from and take advantage from increased and diversified crops **(A5.4)**. To set the groundwork for this activity, WSAB initiated discussions between AMEs, school management and school canteens to start preparing to use a proportion of the harvests from the agroforestry sites.

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AMEs and farmer groups will host community-based agroforestry days and awareness raising activities around the importance of conserving native biodiversity **(A5.5)** in Y2. However, during this project year, the team held a large-scale community event in honour of International Women's Day. This event, convened on March 9, 2024, the day after International Women's Day, convened government authorities and members from all three project communities and AMEs to celebrate the incredible contributions women in Northern Benin have made towards conserving the environment. The day explored Beninese traditions that celebrate women's role in biodiversity conservation, and advocated to improve gender equity, noting that women bear a disproportionate brunt of climate change and environmental degradation. The event offered a valuable platform for women in the communities to articulate their vision for environmental conservation and economic equity and explored advocacy channels to ensure their vision is realised.

3.2 Progress towards project Outputs

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 1 is complete. During this reporting period, the project adapted 1 PDC tool (Indicator 1.1). The tool was designed to address the unique contexts of the Wèrèkè, Sonnoumon, and Pouraparé communities and was tailored to stimulate discussion around challenges and opportunities pertaining to biodiversity conservation, agriculture, women's leadership, gender equity, school governance, and income generating activities. The PCD tool developed pinpoints assets, strengths, weaknesses and needs of the three communities.

Following the facilitation of the PDC, the project achieved its target of 3 CAPs developed by the project communities (Indicator 1.2). The CAPs include activities with measurable milestones relating to biodiversity - pinpointing key native tree species and trees with economic, cultural and/or medicinal properties that the communities value; management of funds - examining how to best ensure gender equity in funds management; food insecurity - by addressing school canteen activities; school management and women's leadership through AME establishment activities. The PCD and CAP were crucial in ensuring community buy-in. All three project communities continue to express enthusiasm for the project and note through their actions and engagements that the activities engage with them. These activities also helped inform the selection of tree species (see Output 4).

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

Output 2 is complete. The project met its target of training 3 AMEs on their roles and responsibilities (Indicator 2.1). There is now a permanently established AME office in each community. The list of AME members as well as their internal regulations are available and all members have been trained on their roles and responsibilities. The project possesses a technical overview of the training and attendance sheets to demonstrate the completion of this activity. The training sessions demonstrate a change in aptitude among AMEs members, with each member demonstrating motivation to play their part and assume their responsibility for the proper functioning of the AME as well as achieving the objectives of WSAB.

The project also achieved its target of delivering a capacity strengthening training to 3 AMEs (Indicator 2.2). The three AMEs received a training from the project in administrative and financial management as well as leadership. The AMEs are already demonstrating professionalism in the execution of the various activities. Each AME also has cash registers/journals, meeting minutes documented and a bank account, demonstrating that they have systems in place and strengthened capacity.

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

All Output 3 targets have been achieved, however some activities continue into Y2 as originally planned. The WSAB team established an agreement with the community to train 30 individuals per community on sustainable agroforestry and have since rolled out FFS and other community engagement activities in sustainable agriculture. At least 90 individuals have been trained and are currently in training (Indicator 3.1) through the FFS activities and other sustainable agroforestry activities. Attendance registers for the trainings document individuals trained. Trainings measured by Indicator 3.1 are ongoing and thus the final number of individuals trained will be included in the Y2 report.

In Y1, the three WSAB AMEs were trained on entrepreneurship and micro-enterprise management (Indicator 3.2). This enabled AMEs to conduct market research, provided tools to make their businesses profitable, and provided tools for successful entrepreneurship. To ensure that funding allocation mechanisms were in place to guide the allocation of funds earned by AMEs, the project established 3 written agreements together with AMEs detailing the financial allocation mechanism in place (Indicator 3.3). During this reporting period, each AME developed business plans, with three total being developed (Indicator 3.4). The three micro-enterprises designed by AMEs were launched in Y1 (Indicator 3.5), with seed funds having been disbursed at the beginning of Y2.

Output 4: Agroforestry systems are planned and established in schools

Activities under Output 4 are ongoing and all Y1 targets have been met with the exception of Indicator 4.3 (see below), which, despite a small delay, is underway and will be completed in early Y2. The results under Output 4 provide valuable insight into the complementarity between community observations, traditional cultural practices and beliefs around specific native tree species, and scientific studies.

Under this output, communities engaged in valuable discussion around their perceptions of the natural world and engaged in scientific processes to complement their perceptions. The WSAB team reported back the qualitative and quantitative findings to the communities in a user-friendly format summarising the BioBlitz (Indicator 4.1), 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. The report-out contains valuable information observed from communities. The table below summarises community observations, later corroborated by data from the BioBlitz (A4.1).

Table: Community Observations by Site

Site	Observations Made
Monoculture	● Noted an absence of birds and proliferation of pests ● Observed less pests at perimeter due to insectivorous birds in trees
Polyculture	● Noted herpetofauna, an indicator of replicating forest ecosystems ● Noted less pest pressure ● Noted more humidity and cooler temperatures
Native Forest	● Noted almost complete lack in pests ● Noted cooler temperatures and more humidity ● Noted presence of birds and invertebrate pollinators
Fallow	● Noted that many herbaceous plants harboured invertebrate pollinators ● Noted decrease in pests close to trees

When complemented by BioBlitz data, initial observations of the richness and abundance data collected demonstrated trends that were then tested using a chi-square test (see A4.1 in the section above for more details on the findings). The test using abundance data to determine whether or not there is a correlation between native plant species and beneficial fauna demonstrated significant correlation. The chi-square test using abundance data to determine a correlation between native plant species and pest fauna; and the chi-square tests using richness data to determine a correlation between native plant species and both beneficial and pest did not prove significant correlation. It is possible that a larger sample size would have proven significant. Despite the many caveats associated with citizen science-based data collection, overall, the trends picked up by the data collected proved significant and resonated with the community, to whom the data was ultimately reported back. The report back to communities enabled communities to design agroforestry plots.

The communities each designed their agroforestry plots, achieving the project goal of 3 agroforestry plots designed and planted (Indicator 4.2). The planting is ongoing and continues into Y2. As the planting continues, WSAB is currently working with each community to construct tree nurseries built so that by early Y2, three nurseries will be built (A4.3). The nurseries under construction will enable each community to propagate their own native species themselves and promote agroforestry supporting native biodiversity, ensuring resilient and sustainable agroforestry days.

Indicators 4.4, "Number of community members participating in community planting day. End of project target: 180" and 4.5, "Number of agroforestry systems upkeep plans developed by farmers and AMEs to maintain agroforestry systems. End of project target: 3" will be achieved in Y2.

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

All Output 5 activities are planned for Y2 although the groundwork for a few of the activities was set during Y1. Through the BioBlitz activity, and multiple other touch-points with communities on natural resource management, individuals to be engaged in CBNRM (Indicator 5.1) are aware and motivated to engage in such activities. Additionally, WSAB supported AMEs to establish agreements with schools to initiate extracurricular environmental education activities and protocols to link school canteens with agroforestry outputs.

3.3   Progress towards the project Outcome

WSAB's outcome states that training of AMEs in Borgou to manage agroforestry activities will result in increased income for 3 communities, food security, and gamma diversity of native species and alpha diversity in agroforestry sites.

WSAB is making promising progress towards realising this outcome. Y1 activities primarily set the groundwork for establishing agroforestry plots that are sustainably managed by AMEs and their communities. Indicators 0.1 and 0.2 track the number of people supported to adapt to the effects of climate change (0.1) and number of people whose resilience has improved (0.2). The project has thoughtfully and thoroughly engaged each community in a participatory manner that ensures they lead the process of identifying the value in ecosystem services for their current lives; draw from their knowledge of local, native plant species; and engage in scientific processes to infer correlations between native plant species and beneficial fauna - and other beneficial ecosystem services. This participatory engagement has already resulted in anecdotal evidence that community members have adapted new practices - or, more importantly, restored old practices - that improve their adaptability to climate change, and increase their resilience and thus WSAB is well on its way to achieving these two indicators.

Indicators 0.3 and 0.4 track land restoration, tracking the number of hectares receiving sustainable land management practices (0.3) and 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 (0.4). The project communities have worked to thoughtfully design

their agroforestry systems such that they sustain native biodiversity and the in-depth study to infer correlations between native plant species and beneficial faunal communities will guide the planting of the eventual plots. WSAB is thus well on its way to achieving these two indicators.

Indicators 0.5 and 0.6 track the percent increase of pollinators on agroforestry plots vs. degraded farmland (0.5) and the percent increase in bird species on agroforestry plots vs. degraded farmland. It may be difficult to understand the full impact against the two indicators within the timeframe of WSAB. During the BioBlitz, the community tracked data comparing the four land use sights (monoculture, polyculture, native forest and fallow land). Comparing the data between polyculture and fallow simulated eventual results against these two indicators, however because the relative abundance of native species on the eventual WSAB agroforestry plots will differ from those on the existing polyculture plots, this comparison is inaccurate. Furthermore, the BioBlitz methodology is effective in its ability to capture large quantities of data and, more importantly, to engage the community in doing so. However, data captured often lacks accuracy. The study to capture data against this indicator will likely have to be a more thorough sampling on much smaller sections of the agroforestry plots and fallow control plots. Nevertheless, data collected at the end of Y2 will only reflect the current stage of the agroforestry plots. Trees planted will likely not be mature enough to capture the eventual richness of bird species. Furthermore, while the community noted the value of invertebrate pollinators, their focus was primarily on the benefit of insectivorous birds controlling grasshoppers and other pests. The focus was thus on planting native trees and less on planting native herbaceous plants that attract pollinators. As such, this indicator may not be the most useful in determining a successful outcome. It is among these reasons that the baseline was set as "to be determined."

Indicators 7 and 8 capture the increased diversification of agricultural production, as measured by new agricultural species (0.7) and the percent increase in crop volume received by school canteens (0.8). While achieving both indicators is possible, WSAB will engage communities to determine whether or not the current diversity of crops is sufficient. While the agroforestry parcels will certainly provide an increase in the diversity of crops, and thus achieve indicator 0.7's target of 5 new crop species included in school canteens, it is likely that WSAB will focus primarily on increased agricultural output, assuming that there is an existing diversity of crops (i.e., not an increased output of maize only, for example).

The current indicators are appropriate, however, WSAB will likely work with communities to determine the level of focus placed on Indicator 0.7 and notes that the full impact against Indicators 0.5 and 0.6 will not be realised within the project timeframe.

3.4 Monitoring of assumptions

All initial assumptions have been met, with measures taken to ensure they continue to be met. The assumptions, and some original project language refers to "endemic" plant species. WSAB's focus is on native species, not strictly endemic. As such, this wording of this assumption is no longer accurate and is replaced with "native" with an asterisk.

Outcome-level assumptions:
Assumption 1: Community interest and availability to engage in CBNRM activities
Communities have expressed interest and availability to date.

Assumption 2: Schools committed to designating land to reforestation initiatives
Through the school / community selection process (foundational activity under Output 1), schools had to express interest in designating land. This ensured buy-in and commitment, which schools have continued to demonstrate.

Assumption 3: Limited extreme weather events and other natural environment stressors as agroforestry plots take root and establish
Thus far, this has not been a problem. However, due to the extended dry season in Northern Benin, and erratic weather patterns, it was crucial to install wells and pumps to ensure that in its early stages of becoming established, the community could effectively irrigate the

agroforestry plots. Ultimately, the agroforestry systems should offer profound moisture retention capacity and thus not need regular irrigation.

Assumption 4: Limited anthropogenic stressors on the environment as agroforestry plots take root and establish

So far, this has not posed an issue as communities are committed to agroforestry.

Assumption 5: Availability of endemic and crop seedlings

Sourcing native* seeds and seedlings has been a challenge. The team is successfully working to address the challenge and now sees native seedling propagation as a potential income generation activity. This is an exciting, unexpected potential outcome to be explored further.

Output-level assumptions:

Assumption 6: Communities interested and available to engage in PCD

Communities demonstrated significant interest and engagement in the PCD.

Assumption 7: Existing knowledge on endemic plant and crop species

Communities demonstrated knowledge on existing native* species.

Assumption 8: Schools and parent associations (APE) available and (still) willing to provide the structure for AMEs to lead land management work

New AMEs were established and commitment remains for them to lead land management.

Assumption 9: Farmer availability and interest in alternative agriculture techniques

Farmers are available and active in the project.

Assumption 10: Presence and availability of community and schools to help determining funding allocation

Schools and communities were available and engaged in determining this allocation.

Assumption 11: Engagement of actors along the agricultural supply chain

This will be determined in Y2, however initial studies suggest engagement is likely.

Assumption 12: Demand for products marketed by AMEs

This will also be determined in Y2, however initial studies also suggest existing demand.

Assumption 13: Schools committed to designating land to reforestation initiatives

Schools demonstrated commitment during their selection and continue to do so.

Assumption 14: Limited extreme weather events and other natural environment stressors as agroforestry plots take root and establish

This has not yet been a problem. See Assumption 3 above.

Assumption 15: Limited anthropogenic stressors on the environment as agroforestry plots take root and establish

See Assumption 4 above.

Assumption 16: Availability of endemic and crop seedlings

See assumption 5 above.

Assumption 17: Community interest and availability to engage in community planting and awareness raising days

This will occur in Y2, however community engagement to date suggests interest and availability will remain high.

Assumption 18: Community interest and availability to engage in CBNRM activities

See Assumption 17.

Assumption 19: Teachers available and interested in integrating hands-on experiential learning into the existing national curriculum
    This will occur in Y2. Initial engagement suggests interest.

Assumption 20: School canteen staff willing to adapt new recipes accommodating increased and diversified agricultural yield
    This will occur in Y2. Initial engagement suggests interest and JSI/ World Education's global work around behaviour change on nutrition activities can guide any challenges faced.

3.5   Impact: achievement of positive impact on biodiversity and poverty reduction

WSAB's impact statement posits that Mothers Association (AME)-managed agroforestry will result in sustainable community development with increased biodiversity levels, increased food security and income levels, and strengthened structures for women's leadership. In Y1, the project team partnered with communities to establish the roots and enabling environment for WSAB to advance achievements towards this impact. This year, such activities mostly promote prioritising biodiversity sustaining behaviours and that the challenges communities face - namely economic and food insecurity - can be addressed through ecosystem-based solutions to agroforestry and not through environmentally harmful practices. This was achieved through meaningful, intentional 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.

4.   Project support to the Conventions, Treaties or Agreements

WSAB continues to be aligned with Benin's NBSAPs, which prioritise an ecosystem approach to implementation. The NBSAPs recognise the role of agricultural expansion and ineffective practices in threatening biodiversity and the ability of sustainable agriculture to sustain biodiversity and maintain levels of genetic diversity. Specifically, Strategic Objective 6 seeks to guarantee the conservation of biological diversity in agricultural areas and Objective 12 aims to preserve genetic diversity in cultivated and wild plant species. WSAB's role in advancing sustainable agriculture as a means to sustain biodiversity advances these objectives. Most notably, the project's work to source and integrate native tree species in agroforestry sites works to sustain genetic diversity in native plant species through land sharing conservation practices. These activities also align with Benin's NDC, which cites school-based forestry activities as key to poverty reduction and biodiversity conservation. The NDC cites the successful reforestation initiatives of over 55 hectares of school-based reforestation activities through its PAGEFCOM2 project.

5.   Project support for multidimensional poverty reduction

As noted in Section 1 of this report, Benin ranks 163rd of 189 countries in the 2019 Human Development Index report with around 80% of the population is employed by agriculture. In Benin, 70% of the female population lives in rural areas where they carry out 70% of the agricultural work. Benin's high female labour force participation at 87% belies a reality of poor access to and control over resources. Despite women's labour contribution, men primarily own the land and manage income. Revenues 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. WSAB works in northern Benin where high poverty rates and low education levels contribute to women's exclusion and low education completion rates.

WSAB works to reduce multidimensional poverty by addressing the multiple facets contributing to this environment. In World Education's experience, AMEs are a vital avenue in addressing poverty. AMEs are key project partners in directly addressing poverty in their communities by increasing income streams through their microbusinesses and, perhaps more importantly, managing these income streams themselves. World Education's experience with AME's in the past demonstrates global evidence that women often make financial decisions that improve their families' and communities' wellbeing long into the future. This year, through WSAB's AME-led micro entrepreneurship activities, the AME's initial business plans project earnings that will directly increase income levels and the agroforestry sites' agricultural yields are projected to improve food security. Of vital importance to the long-term economic stability is the value AMEs are demonstrating in maintaining biodiversity for the cultural and ecosystem services it provides. Furthermore, AMEs have demonstrated success in improving girls' retention in schools, which can also correlate to improved economic stability in the long term.

6. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board[1].	50%
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women[2].	50%

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

WSAB addresses multi-leveled exclusion of women from entrepreneurial agriculture, formal markets, land, and decision-making fora. Through the AMEs, WSAB provides a structure for women's leadership in the management of funds earned from agroforestry businesses. This not only addresses the basic needs and vulnerabilities of women and increases equal access to assets, but ensures that systems for decision making around livelihoods shift to enabling space

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[1] A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

[2] Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

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for women to exercise agency. WSAB follows World Education and Alafia's experience in establishing AMEs, and supporting community structures supporting them, takes important steps to mitigate any backlash that may have adverse effects on women. A key lesson learned also applied to WSAB is ensuring that men partake in the design and conception process, establishing AMEs through their involvement in overall parents' associations. The process also ensures women take an active role in education management decisions and are valued as the centre of the biodiversity conservation movement within their communities. This involvement is enshrined in the PCD process, which also centres the voices of other marginalised groups later supported through inclusion by AMEs. With World Education support since 2003, AMEs are a proven structure for social change, which can also be utilised to advance community-based biodiversity conservation and poverty reduction activities.

7.   Monitoring and evaluation

Y1 monitoring and evaluation (M&E) data is primarily output indicators measuring activity completion and capturing the number of participants present. Y2 M&E will be more qualitative and will capture more meaningful data on WSAB's outcomes. At this stage, the Alafia team collects data against output indicators (# of individuals present at an event, etc.) during activities and submits the data to the World Education/Benin administrative staff who files the information electronically and inputs it into a spreadsheet. This data is verified by the Project Lead and the project's Senior Program Officer.

While not part of WSAB's M&E plan, the BioBlitz captured important biodiversity data that the project communities and project team were able to use to draw inferred correlations around land use that later informed the design of the project's agroforestry systems. These data were triangulated with qualitative data collected through the DPC and other data points collected through a literature review.

In Y2, the output data confirming the completion of activities collected during Y1 will be an important source for comparison against outcome indicators. For example, the project will be able to track whether presence at a training session resulted in the acquisition and application of skills presented during the training. Furthermore, outcome data will also provide evidence to strengthen hypotheses around biodiversity results achieved through following the plans developed for the agroforestry sites.

There have been no significant changes to WSAB's M&E Plan over the reporting period and the current data collection, cleaning, and management methods work well for this size of a project and can easily be scaled.

8.   Lessons learnt

This year provided valuable learning opportunities. A few key learnings were below:

Importance of showing immediate engagement, flexible engagement with communities: Following the PCD, while activities are being designed with communities, it is important that the project demonstrate commitment to the community and provide tangible contributions to the community's goals. This means responding to any technical support requested by community members during the PCD/CAP process, or providing on-demand guidance during FFS activities so that communities understand that the partnership initiated by the project is mutual. One example of responding to this concern was an ad hoc soil quality mentoring session offered by Alafia's agronomist. The community identified challenges with a specific growing area and requested support. The agronomist noted that increased sand-levels in the soil resulted in soil temperatures that were too hot for many seedlings. As a solution, the agronomist pointed to increasing the organic matter content in the soil. He noted as well that planting trees in the plot will contribute not only shade, but also organic matter. This not only resulted in the community feeling supported by the project and motivated by its approaches, but also provided insight into

future solutions the community can leverage in their agroforestry plots. An additional on-demand engagement provided by the project was to install wells for irrigation as the agroforestry plots take root and become established. Because the parcels designated for agroforestry were larger (3 hectares each) than typical kitchen gardens, the communities identified a need for wells. Through the FFS, the project team strengthened community capacity to select the kind of well / pump best suited for them in the short-term (with project support) and long-term (without project support).

Challenge finding seeds: The project team faced challenges sourcing native seeds to propagate and/or seedlings to include in the tree nurseries. This challenge is being actively resolved through engagement with the forestry cantonment of the MCVDD, other reforestation initiatives, and through community seed collection. The project will likely engage in a market study to identify opportunities to sell native seedlings as an income generating activity. This presents an unexpected, highly positive outcome for future activities, and potentially the current project that will benefit biodiversity and poverty reduction as well as scale the impact of the project.

Successful community science approach: Initially, the project team planned to engage a local ecologist to carry out biodiversity sampling. Ultimately, the team felt that the process needed to be more community-driven and participatory. The team thus opted to carry out a BioBlitz, which was ultimately highly successful in collecting large quantities of data and engaging the communities in biodiversity sampling. This instigated valuable discussion and reflection around biodiversity and local native species.

9.   Actions taken in response to previous reviews (if applicable)

N/A

10.   Risk Management

No new risks have arisen during this reporting period and there were no significant adaptations to the design needed to address any risks. The Project's updated risk register was submitted alongside this report.

11.   Sustainability and legacy

WSAB has embedded capacity strengthening in all of its activities and applies an approach that focuses on the transition from individual skills acquisition to institutional skills application through targeted, on-the-job training and mentoring. WSAB established three AMEs and is building their management capacity and leadership capacity alongside agroforestry and entrepreneurship skills. With AME members bringing the individual skills they acquired to their AME structures, they will support education management, biodiversity conservation, income generation and women's leadership beyond the life of the project. AME members have demonstrated their capacity to follow the institutional practices on which they were trained, including taking meeting minutes and acting in accordance with their designated roles and responsibilities. The farmer field school model is set up such that, through guided observations, farmers strengthen their ability to make agroforestry decisions long beyond the project.

The project team has been diligent in ensuring regular engagement of local government actors, who have taken note of the project's approaches and continue to express interest in learning more about simulating ecosystem services in agricultural practices through integrating native plant species. The WSAB team will leverage this interest in Y2 to ensure institutionalisation of evidence-based practices promoted by WSAB.

12.   Darwin Initiative identity

WSAB is known locally as "the Darwin Project" and all presentations to local stakeholders. The name "Darwin" was included on promotional material for the International Women's Day event

and the UK Government was thanked for the support making the project possible. Local government officials are also made aware of the Darwin Initiative's goals and the UK Government support making them possible. In Y2, the project will convene more public-facing events and will be sure to promote the Darwin Initiative and include its official logo on any public-facing documents and during events.

13. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes/**No**
Have any concerns been reported in the past 12 months	Yes/**No**
Does your project have a Safeguarding focal point?	**Yes**/No Nadege ██████████, ████████████████ Ben ████████████████
Has the focal point attended any formal training in the last 12 months?	**Yes**/No [*If yes, please provide date and details of training*]
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 62.5% [5] Planned: 100% [8]
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. *No*	
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify. *Because Y2 involves working directly with children, all members of the team will follow World Education's Safeguarding training which is required for all World Education staff.*	
Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants. *N/A*	
Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved. *N/A*	

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2023 – 31 March 2024)

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Initiative Costs (£)*	Variance %	Comments (please explain significant variances)
Staff costs (see below)				N/A - Below 10%
Consultancy costs				N/A - Below 10%
Overhead Costs				N/A - Below 10%
Travel and subsistence				N/A - Below 10%
Operating Costs				Please see note below table**
Capital items (see below)				N/A - Below 10%
Others (see below)				N/A - Below 10%
TOTAL	**£108,737**	**£108,025.59**		

*All figures in this Budget are provisional as some receipts from Y1 are not yet finalised and entered into JSI/World Education's financial system.

**This variation in expenditure of more than 10% of the budget is due to the fact that all partner costs are currently reported under operating costs. For the final Actual Claim Form, JSI/World Education will reallocate partner costs to their respective line items. This will not only decrease the variance on the Operating Costs budget line to less than 10% of the budget, but will decrease variances on other budget lines with a current positive variance (albeit below 10%).

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	N/A	N/A	N/A
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)	N/A	N/A	N/A

15. Other comments on progress not covered elsewhere

N/A

16.   OPTIONAL: Outstanding achievements or progress of your project so far (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).

Annexes 5 and 6 of this report present a photo essay of the BioBlitz activity and coverage of an event held for International Women's Day respectively.

Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
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	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.		
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.	Leverage engagement in Y1 to establish sustainable agroforestry plots in Y2.
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.	Leverage engagement in Y1 to establish sustainable agroforestry plots in Y2.
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.	9.5 hectares were allocated across three communities to restorative, biodiversity-sustaining, agroforestry plots and planting as begun.	Continue planting and maintaining the plots.
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).	9.5 hectares were allocated across three communities to restorative, biodiversity-sustaining, agroforestry plots using native trees selected through PCD data, literature review, and a BioBlitz activity and planting as begun.	Continue planting and maintaining the plots.
Outcome indicator 0.5 Percent increase in pollinators on agroforestry plots vs. degraded farmland. End of project target TBD.	Data supporting this indicator will only be available towards the end of Y2, with the most significant data only available beyond the life of the project.	Continue planting and maintenance, and implement biodiversity survey at the end of Y2.

Outcome indicator 0.6 Percent increase in bird species on agroforestry plots vs. degraded farmland. End of project target, TBD.	Data supporting this indicator will only be available towards the end of Y2, with the most significant data only available beyond the life of the project.	Continue planting and maintenance, and implement biodiversity survey at the end of Y2.
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.	Data supporting this indicator will only be available in Y2, with the most data on outputs from fruit trees only available beyond the life of the project.	Continue planting and maintenance of kitchen garden crops and plan for use of fruit tree crops.
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.	Data supporting this indicator will only be available in Y2, with the most data on outputs from fruit trees only available beyond the life of the project.	Continue planting and maintenance of kitchen garden crops and plan for use of fruit tree crops.
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	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.	Complete.
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.	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.	Complete.
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.	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.	Complete.
Output indicator 2.2 Number of AMEs receiving capacity development training. End of project target: 3.	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.	Complete.

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).	90 individuals have been 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.	Training activities are ongoing, the bulk of which will continue through Y2 through the FFS.
Output indicator 3.2 Number of AMEs trained on entrepreneurship and microbusiness management. End of project target: 3.	The 3 AMEs from the 3 communities were trained in entrepreneurship and micro-enterprise management. Training modules and attendance sheets are available.	Complete.
Output indicator 3.3 Number of agreements developed by AMEs presenting funding allocation mechanisms developed. End of project target: 3.	3 agreements were developed by AMEs presenting the financial allocation mechanisms established. Agreements are available.	Complete.
Output indicator 3.4 Number of business plans developed by AMEs. End of project target: 3.	3 business plans were developed by the 3 AMEs. The business plans are available.	Complete.
Output indicator 3.5 Number of agroforestry businesses launched by AMEs. End of project target: 3.	0	The three AME-led agroforestry businesses were launched in early Y2 and work is ongoing to provide mentoring and support as AMEs follow their business plans (Indicator 3.4)
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.	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.	Complete.
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.	3 sites were designed by each community based on the data presented under Indicator 4.1 and sample plots presented to each community.	Design is complete. Planting to be completed in Y2.

Output indicator 4.3 Number of school-based tree nurseries built. End of project target: 3.	0	The nurseries are currently under construction in early Y2.
Output indicator 4.4 Number of community members participating in community planting day. End of project target: 180.	0	Planned for Y2.
Output indicator 4.5 Number of agroforestry systems upkeep plans developed by farmers and AMEs to maintain agroforestry systems. End of project target: 3.	0	Planned for Y2.
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)	0	Communities have already been engaged in CBNRM, however the main CBNRM activities are planned for Y2.
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)	0	Planned for Y2.
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	The AMEs are currently undergoing a plan to distribute earnings and agricultural yield.	Planned for Y2.
Output indicator 5.4 Number of community-based agroforestry days and awareness raising activities held by AMEs: 6 (~2 per community).	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 4B.	Planned for Y2.

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
	0.5 Percent increase in pollinators on agroforestry plots vs. degraded farmland. End of project target TBD.	0.5 Pollinator log from CBNRM led transect walks	
	0.6 Percent increase in bird species on agroforestry plots vs. degraded farmland. End of project target, TBD.	0.6 Bird log from CBNRM led transect walks	
	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.	0.7 Baseline and endline data; survey of school canteen workers	
	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.	0.8 Baseline and endline data; survey of school canteen workers	
Outputs: **1**. Communities engaged in planning school-based reforestation activities and involved in decision-making	1.1 Number of participatory community diagnostic (PCD) tools adapted. End of project target: 1.	1.1 PCD Tool	Communities interested and available to engage in PCD Existing knowledge on endemic plant and crop species

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	2.1 Number of AMEs established and trained on roles and responsibilities. End of project target: 3. 2.2 Number of AMEs receiving capacity development training. End of project target: 3.	2.1 Attendance register 2.2 Attendance register	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	3.1 Number of farmers, teachers and AME members trained on sustainable agroforestry. End of project target: 90 (~30 per community). 3.2 Number of AMEs trained on entrepreneurship and microbusiness management. End of project target: 3.	3.1 Attendance register 3.2 Attendance register	Farmer availability and interest in alternative agriculture techniques Presence and availability of community and schools to help determining funding allocation Engagement of actors along the agricultural supply chain Demand for products marketed by AMEs

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
	3.3 Number of agreements developed by AMEs presenting funding allocation mechanisms developed. End of project target: 3. 3.4 Number of business plans developed by AMEs. End of project target: 3. 3.5 Number of agroforestry businesses launched by AMEs. End of project target: 3.	3.3 Written agreements with funding allocation mechanisms included 3.4 Business plans 3.5 Project activity reports	
4. Agroforestry systems are planned and established in schools	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. 4.2 Number of agroforestry plots designed and planted according to a report developed to guide	4.1 Report presenting learnings from scientific and community-based anecdotal sources presenting endemic and crop species suitable in Borgou 4.2 Plot establishment report including photos and coordinates	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 Community interest and availability to engage in

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

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

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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

Annex 3: Standard Indicators

Please see the table on the following page.

Table 1   Project Standard Indicators

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-DO1	Hectares of habitat under sustainable management practices[3]	9	Community controlled or non-community controlled	0[4]	9.5	N/A	0	9.5
DI-DO2	Number of people whose disaster/climate resilience has been improved.[5]	1,800	Gender	0	10,224	N/A	0	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	0	10,224

Table 2   Publications

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, 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						

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[3] 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)

[4] To date, 9.5 acres have been allocated for agroforestry sites, the plot plans have been developed, and initial planting has begun according to schedule. In Y2, planting will be completed and this indicator will be achieved.

[5] Reported in the Logframe as "Number of people whose resilience has been improved as a result of ICF (ICF KPI 4)"

Annex 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Please see **Annex 4A** - Photo Essay: Citizen Science to Build Climate Resilience through Biodiversity Conservation in Northern Benin

Please see **Annex 4B** - Coverage Report: International Women's Day: Celebrating Women's Contributions to Biodiversity Conservation and Advocating for Equity

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	✓
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	✓
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	✓
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	✓
Have you involved your partners in preparation of the report and named the main contributors	✓
Have you completed the Project Expenditure table fully?	✓
Do not include claim forms or other communications with this report.	

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