



Food and Agriculture Organization
of the United Nations



TECHNICAL ASSISTANCE FOR INCLUSIVE, SUSTAINABLE AND RESILIENT FOOD SYSTEMS IN SELECTED RURAL AND PERI-URBAN TERRITORIES OF BAHAMAS, AS A RESPONSE TO THE COVID-19

October 2023

SDGs:



Country:

Bahamas

Project Code:

TCP/BHA/3801

FAO Contribution:

USD 200 000

Duration:

1 January 2021-31 May 2023

Contact Info:

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Implementing Partner

Ministry of Agriculture and Marine Resources (MAMR).

Beneficiaries

The poorest, mainly youth and women, specifically within the family farming sector in Grand Bahama and Abaco Island.

Country Programming Framework (CPF) Outputs

Priority 1: Food and Nutrition Security Safety.

Output 1.1: Market-oriented production and productivity capacity of the agricultural sector of the Bahamas strengthened and modernized with improved linkages to markets to absorb increased production.

Output 1.4: National school feeding programme is strengthened.

Priority 2: Climate Change and Sustainable Resource Management.

Output 2.1: Climate smart agricultural practices developed and implemented.

Priority 3: Poverty Elimination.

Output 3.1: Sustainable livelihoods programmes developed.



BACKGROUND

The project aimed to tackle the challenges of low income and unemployment among youth and women, specifically within the family farming sector in Grand Bahama and Abaco Island. The sector lacked consistent access to the technology and knowledge needed to develop economic enterprises able to serve national and regional food markets, while promoting local sustainable livelihoods. The MAMR lacked the tools required to deliver adequate training in agricultural practices and agribusiness, and organizational and financial support. The MAMR also had no National Strategy or National Land Administrative Proposal to achieve the rural development goals set out in the SGD 2030.

The project presented an opportunity for the land administration unit of the MAMR to develop a pilot model that could be scaled up nationwide, especially as part of the COVID-19 recovery plan. The project, which was inspired by the FAO Hand-in-Hand (HIH) initiative approach, was expected to contribute to the government's plan by increasing the availability of fresh and nutritious local products in the country's diet and by creating income-generating opportunities and employment for the most vulnerable population, particularly youth and women. It would also address the urgent need for comprehensive Geographic Information System (GIS) data and would support inter-sectoral coordination between institutions and sectors, as well as the establishment of policy and legal frameworks to drive investments and innovation within strategic areas of the food value chain, such as the national school feeding programme (NSFP). By addressing critical gaps in technology, knowledge, entrepreneurial and organizational skills, and financial services, the project would enable the conception, development and implementation of sustainable and climate-smart practices and models. Finally, the project would serve as a catalyst for resource mobilization to scale up lessons learned and good practices.

IMPACT

The project successfully developed a business incubation model, creating a guide and conducting negotiations to deploy a public-private partnership (PPP) with the Grand Bahama Port Authority (GBPA), and implementing a value chain financing strategy and a financing strategy for business plans. In addition, the project provided methodological tools and training materials to promote market linkages with domestic markets and e-commerce, thereby strengthening commercial relations within the Grand Bahama poultry value chain.

ACHIEVEMENT OF RESULTS

The project conducted a technical analysis of the conditions needed to create a multidimensional GIS data platform to visualize economic, statistical and geospatial data, and to enhance the capacity of the land administration unit. A comprehensive training manual was developed, covering such topics as site selection using GIS suitability analysis, an introduction to GIS, technical competence in GIS, data availability, and spatial resolution limitations. Training was provided to 17 participants. The project also designed feasibility manuals for five agricultural sectors (poultry layers, poultry fertilizer, hydroponics, beekeeping and mushroom farming), and conducted a baseline study and assessment of farmer field schools (FFS) in the Bahamas.

In order to ensure the training of beneficiaries, two train the trainer (TOT) programmes were implemented; these enhanced the capacity of extension units and cooperative departments in the business incubator methodology designed by the project. Other beneficiaries included the MAMR land administration unit, and key public and private stakeholders. The project also designed TOT and training manuals in five thematic areas to enhance the business planning skills of project beneficiaries.

A significant achievement was the piloted agribusiness incubator, which received 115 applications from youth and female farmers on Grand Bahama and Abaco Islands. The remote format allowed participants to learn and improve digital literacy, making the project accessible to all islands during COVID-19 and more efficient for replication. Support to incubator beneficiaries was provided by various institutions through grants and in-kind funding. The project also provided USD 10 000 to scale up beneficiary enterprises.

Policy suggestions were made to integrate outputs from the agribusiness incubator into the NSFP with the aim of promoting sustainability, direct market access for small-scale farmers and nutritious meals for schoolchildren. These included the creation of guidelines and procedures, a designated coordinating body and mechanisms for regular monitoring and evaluation.

The National Technical Committee (NTC), comprising representatives from government agencies, development partners, the private sector and project stakeholders, played a crucial role in providing guidance, technical input and oversight throughout implementation. The NTC's potential for continuity beyond the project could facilitate future achievements, contributing to the sustainability and growth of the agricultural sector in the Bahamas. A strategy was recommended to include development partners to enhance the financial sustainability of the incubator.

A National Plan was developed and presented to the MAMR to expand the project nationwide. The Bahamas Agricultural Industrial Corporation (BAIC) was initially selected as the main partner, but, as a result of human resource challenges, the strategy was revised to include the Cooperative Department of the MAMR and the Bahamas Agriculture and Marine Science Institute (BAMSI).

IMPLEMENTATION OF WORK PLAN AND BUDGET

All revised planned activities were carried out within the initial project budget. However, delays in procurement and the recruitment of experts as a result of the COVID-19 pandemic hindered results. In response to these delays, the project design was reconfigured to establish collaboration with project GCP/SLC/018/MEX, "Mexico, CARICOM, FAO Initiative Cooperation for Adaptation and Resilience to Climate Change in the Caribbean" (AMEXCID NSFP). Despite this, several components of the project remained incomplete. Activities were also impeded by challenging procurement procedures, the non-availability of local materials and suppliers, a lack of available personnel and unpunctual communication processes with the MAMR.

With regard to risk management, the risks encountered were generally well mitigated. During implementation, project team meetings were organized weekly to monitor implementation and conduct joint work planning. Among the challenges encountered were the following: limited GIS expertise within the land administration unit and insufficient technology infrastructure; a shortage of technical officers with the necessary skills and expertise; delays and procurement issues caused by the 2021 General Elections; and limited human capacity and participation within the MAMR.

FOLLOW-UP FOR GOVERNMENT ATTENTION

In view of the limited capacity of the land administration units to manage the GIS platform, it is recommended that: i) a GIS steering committee be established and an annual GIS strategic plan be developed; ii) an operational budget for GIS be allocated, funding for GIS development projects be secured and centralized GIS management be formalized; iii) GIS servers and workstations be set up, GIS mobile hardware and support devices be acquired and the necessary software obtained; iv) a centralized data management system be established and data partnerships formed; v) GIS consulting services be utilized and metadata management be implemented; and vi) training be provided for staff and end-users. The inclusion of GIS and Rural Invest feasibility training into incubator TOT methodology is also recommended to ensure that extension units are aware of the elements involved in the selection process for business incubation and to provide valuable data for feasibility reports.

SUSTAINABILITY

1. Capacity development

The national prioritization of the sector for the reduction of food importation plans and school feeding policies in force supported the sustainability of the project. The involvement of public and private stakeholders during implementation, as well as the project's partnership with the NTC, created the conditions for achieving the project results and provide a basis for follow-up activities. The project was also supported by the private sector, represented by GBPA, and academia. The roll-out and handover strategy prepared by the project clearly outlines the next steps to take.

2. Gender equality

Project activities were implemented according to the FAO gender balance approach. Women and youth were encouraged to participate in training and the incubation process, and were recipients of grants.

3. Environmental sustainability

Project activities were carried out with a focus on a positive environmental impact and were compliant with national regulations. However, mainstreaming environmental sustainability was not a specific objective.

4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

The project contributed to improving income-earning opportunities for the poorest, deploying an innovative framework for capacity-building and improving the ecosystem of micro, small and medium enterprises in the Bahamas. The project focused on providing social and environmental positive impacts compliant with international regulations and a human-rights-based approach.



5. Technological sustainability

The project introduced new and easy-to-use technologies in the form of a framework to foster decision-making and entrepreneurship. Training was focused on adapting technologies suited to the target communities.

The project contributed to the development of knowledge, skills, resources and good practices for several levels of stakeholders, beneficiaries, non-governmental organizations, the private sector and the government. Beneficiaries now have the ability to conduct their businesses. Limited technical assistance may be required in the specific phase of donor engagement for the implementation of the roll-out and handover strategy.

6. Economic sustainability

The roll-out and handover strategy prepared can be used by the government to develop PPPs to increase outcomes. The materials provided by the project are all accessible to beneficiaries.



DOCUMENTS AND OUTREACH PRODUCTS

- TOT flyers.
- Training of beneficiaries flyers.



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	The prevalence of poverty and hunger, particularly among the youth and women, of the two most vulnerable islands of the Bahamas is reduced by half, moving towards meeting SDG targets for 2030 (SDG 1.1, 1.5, 2.1, 2.2 and 2.4)	
Outcome	The Government of Bahamas implements an integrated mechanism for food and nutrition security, using business incubator services and technological tools and approaches to match business opportunities presented in agrifood system with special attention for income-generating and employment opportunities of the most vulnerable groups, including youth and women living in the rural and peri-urban areas of the two most vulnerable islands	
	Indicator	<ul style="list-style-type: none"> – The MAMR is actively using the GIS developed by the project, two years after project end (Output 1). – The number of farmers (disaggregated by age and gender) trained by extension workers, using methodologies developed by the project, two years after project end (Output 2). – The number of rural businesses that have benefited from the business incubator since its inception until two years after project end (Output 3). – Funding proposal of USD 2 million for upscaling approved and upscaling project under implementation in 2024 (Output 4).
	Baseline	0
	End Target	<ul style="list-style-type: none"> – One GIS use documented by the Government of the Bahamas, number of active users and user report (Output 1). – 150 farmers (disaggregated by age and gender) trained by extension workers, using methodologies developed by the project, two years after project end (Output 2). – 60 in 2022 and 150+ in 2024 rural businesses that have benefited from the business incubator since its inception until two years after project end (Output 3). – Funding proposal of USD 2 million for upscaling approved and upscaling project under implementation in 2024 (Output 4).
Comments and follow-up action to be taken	Stakeholders have ownership and are willing to embrace and scale up new practices, models and lessons learned. The government is ready to accept financial and technical support to develop GIS usage. In addition, at least three entities are willing to use the best practices and scale up the agribusiness incubation process by looking for funding. To achieve these outcomes, it is crucial that donor support be sought.	

Output 1	The MAMR has access to information and data for adequate selection of areas of intervention and beneficiaries of its programmes		
	Indicators	Target	Achieved
	– A multidimensional GIS data platform is operational that visualizes economic, statistical and geospatial analyses, and facilitates key relationships among diverse economic, social and environmental variables (including markets, poverty, altitude, water, roads and land use), collaborating with and improving capacity of the MAMR land administration unit and others.	– 1	– Partially
	– A manual for conducting feasibility and economic viability studies and assessments related to food, agriculture and fisheries projects elaborated and validated.	– 1	– Yes
	– At least five feasibility and economic viability studies and assessments conducted, taking into consideration different segments of the food system.	– 5	– No
– Number of technical staff trained to use upgraded system and new GIS manual in TOT.	– 20	– Yes	
Baseline	0		
Comments	<p>Situational analysis completed and introductory training to HIH platform conducted with five persons from the land administration units among stakeholders such as BAIC, Department of Forestry, agriculture officers and GBPA.</p> <ul style="list-style-type: none"> – GIS documents and analysis used by the government. – A manual for conducting feasibility and economic viability studies and assessments related to food, agriculture and fisheries projects elaborated and validated. – 17 technical staff trained to use the upgraded system and new TOT manual. – Feasibility analysis software Rural Invest available on FAO e-learning platform along with e-learning course recommendations. – Five feasibility manuals created in poultry layer farming, hydroponic farming, beekeeping and mushroom farming. <p>Output 1 faced several challenges. Delayed recruitment of the GIS expert impeded deliverables and the feasibility studies to be deployed before the incubation process. These were not completed owing to a lack of input from GIS data for inclusion in the HIH geospatial platform, and the unavailability of trained personnel. Other impediments included unbudgeted costs associated with obtaining primary data to feed the platform and a lack of land administration unit personnel.</p> <p>The achievement of the desired outcome is highly probable. The interest expressed by the land administration units and the MAMR, combined with a five-year timeline, greatly increases the likelihood of success. There is also a growing demand for access to land, and the land administration units are increasingly inclined to digitize their processes. Recognizing this, the MAMR made a commitment to enhance its land management and administration systems. Given the rising demand for GIS management, the digitization of land management appears feasible. The introduction of the HIH geospatial platform has created awareness and serves as a solid basis for strengthening the capacity of the land administration units.</p> <p>Five feasibility manuals, based on value chains selected by the Permanent Secretary, were completed. With the release of the Rural Invest course this gives the opportunity to include digital capacity-building in creating informed investment decisions based on field research.</p> <p>The feasibility reports were not completed but were supplemented with a methodology for steps forward.</p>		
Activity 1.1	Assessment of current situation and definition of needs		
	Achieved	Yes	
	Comments	An assessment of the current situation and a definition of needs document were completed.	
Activity 1.2	Implementation of the plan proposed		
	Achieved	Partially	
	Comments	A strategy was developed to inform of GIS functions along with the usage of the HIH platform, and to ensure that no cost would be associated with the use of the software. However, the MAMR needs to identify main users to ensure the usability of software and the ability to use it. The current situation of Grand Bahama and Abaco Island has also been severely impacted by Dorian Hurricane and primary datasets are not available.	
Activity 1.3	Conducting at least five feasibility and economic viability studies and assessments		
	Achieved	No	
	Comments	This activity was not completed, primarily because of the lack of available information and the absence of MAMR technicians and specialists to conduct the studies.	

Activity 1.4	Elaboration and validation of a manual for conducting feasibility and economic viability studies and assessments related to food, agriculture and fisheries projects		
	Achieved	Partially	
	Comments	<p>This activity was not completed. However, five manuals on how to conduct feasibility studies, considering the top three value chains identified by the NTC, were made available:</p> <ul style="list-style-type: none"> – Manual of Feasibility Analysis for Poultry Layer Farming. – Manual of Feasibility Analysis for Poultry Layer Fertilizer Production. – Manual of Feasibility Analysis for Small Hydroponic Container Farming. – Manual of Feasibility Analysis for Mushroom Farming. – Manual of Feasibility Analysis for Beekeepers with Ten Small Hives. <p>In addition, it was suggested that updated Rural Invest software available on the FAO e-learning platform be incorporated as a best practice.</p>	
Activity 1.5	Training of the MAMR and Bahamas National Geographic Information Systems personnel and technical assistance for the use of the upgraded system and the manual		
	Achieved	Yes	
	Comments	The training was completed for 17 persons, including five land administration unit personnel.	
Output 2	Capacity building of the Extension Service Unit of MAMR in different training methodologies to improve the productivity and sustainability of smallholder farms		
	Indicators	Target	Achieved
	– Number of methodological tools (training manuals) developed for FFS, Junior Field Schools and others.	– 3	– Partially
	– Number of extension officers of the MAMR trained.	– 25	– No
Baseline	0		
Comments	<p>One significant setback was the cancellation of FFS training, a crucial component of the project. In response, the project design was reconfigured to include collaboration with the AMEXCID NSFP project with the aim of optimizing resources and expertise. Under the new arrangement, an FFS training budget was secured from the AMEXCID NSFP project, ensuring financial resources for FFS activities and streamlining the training process. One adaptation to the project timeline was the decision to pilot the business incubation model before implementing a Letter of Agreement (LOA) under which a supplier was contracted to provide three key deliverables: 1) a baseline study; 2) a guidance document for FFS implementation, and 3) three manuals. A significant delay in payment for the baseline study hindered the remaining deliverables, leaving the project incomplete in terms of these critical components.</p>		
Activity 2.1	Selection and hiring of FFS subject matter expert and practitioner		
	Achieved	Yes	
	Comments	A supplier was contracted through an LOA to provide three deliverables. The assessment was completed.	
Activity 2.2	Training of Trainer and development methodology/model		
	Achieved	No	
	Comments	As a result of the significant delay in payment for the first deliverable and the uncertainty of future payments, the supplier did not produce the remaining deliverables.	
Activity 2.3	Development of business incubation model		
	Achieved	Yes	
	Comments	Output 3 included the creation of a concept note, the execution of a pilot model and the TOT. However, the structure for the business incubation had already been established prior to the arrival of the FFS specialist.	
Activity 2.4	TOT (technical staff and managers from MAMR and participating stakeholders) trained to deliver the targeted training to farmers		
	Achieved	No	
	Comments	This training was cancelled.	

Output 3	Capacity building of the Cooperative Department of MAMR in rural business development, including processing, distribution and commercialization		
	Indicators	Target	Achieved
	– A technology and entrepreneurial incubator model is piloted, validated and promoted in coordination with the Department of Cooperative Development and the MAMR, benefiting at least 100 rural youth and women and their associations.	– 1	Yes
	– A document describing the business planning methodology (including a business plan template).	– 1	Yes
	– Number of standard agrifood business plans (including a financing strategy) prepared, together with extension workers of the Cooperative Department.	– 5	Yes
– Number of technicians of the Cooperative Department of the MAMR and other rural business development service providers that are trained.	– 20	Partially	
Baseline	0		
Comments	<p>The project achieved 100% overall implementation progress, with key programmatic achievements, including the selection and hiring of an incubator coordinator, the training of trainers and the development of a methodology/model, and the development of a business incubation model.</p> <p>Owing to a lack of participation from the MAMR and extension officers, university lecturers from BAMSJ, private-sector business strategists and industry leaders were invited to participate in the TOT: 17 persons completed the training.</p> <p>The value chain financing strategy adopted by the project was used to source funding from donors, and the elaboration of methodological tools and training materials was implemented.</p> <p>Key management and financial issues included a lack of collaboration from the MAMR owing to a shortage of extension officers during training or methodology creation, and delays in procurement and operational advances; these hindered the promotion of market linkages with domestic and regional markets.</p> <p>Recommendations include the reinforcing of TOT with handover institutions to ensure task force capacity to train beneficiaries. The technical incubator model and tools were validated.</p>		
Activity 3.1	Selection and hiring of Incubator coordinator		
	Achieved	Yes	
	Comments	An international consultant to adapt and develop a business incubation model in collaboration with the project task force (mainly the project coordinator and consultants with expertise in technologies and marketing) was hired from January 2021 to the end of the project. Her activities included adapting methodology to the Bahamas context, deploying activities (training, learning materials, negotiations, networking, sourcing grants, etc.) and ensuring stakeholder engagement.	
Activity 3.2	Training of Trainer and development methodology/model		
	Achieved	Yes	
	Comments	In collaboration with the project task force, the consultant carried out training needs and capability assessments of the MAMR, and selected universities and colleges. A TOT designed around best practices in business incubation and impact business models (Model C Canvas) was successfully delivered.	
Activity 3.3	Development of business incubation model		
	Achieved	Yes	
	Comments	<p>The consultant created templates for the manuals and deployed the adapted methodological tools, implemented by the incubation team, as follows:</p> <p>the Ideation process: online training, using YouTube and social media, comprising 12 lessons and final pitch: i) the incubation process with a three-pillar approach: training, funding and mentorship; ii) a training programme of 78 hours in 20 weeks of training, focused on five thematic areas; and iii) a grants and funding programme; and mentoring, consultancy and advisory methods.</p> <p>Additions from remaining consultants and experts to complete the manuals are pending. The incubation methodology was developed and implemented through a pilot cohort in Grand Bahama and Abaco Island.</p>	
Activity 3.4	Business incubation		
	Achieved	Yes	
	Comments	The projected incubation programme was successfully deployed as a pilot. For this purpose, strategies were developed to engage stakeholders and hire consultants with expertise in specific areas. The strategy of having the thematic knowledge and background of stakeholders was made partly possible through the NTC.	

Activity 3.5	Training of trainer (MAMR technical staff and managers, participating universities and colleges) trained to use the business planning methodology and training materials		
	Achieved	Yes	
	Comments	Two TOT cohorts were trained, each over seven sessions, with 19 participants, comprising lecturers, cooperative departments and two extension services officers.	
Activity 3.6	Validation of technical incubator model and tools		
	Achieved	Yes	
	Comments	The FAO agribusiness incubator model was validated by the training of 115 youth and women in the e-learning ideation processes for business plans. Despite challenges in gaining stakeholder participation, the FAO team conducted incubation processes and developed manuals for handover. Five beneficiaries were selected for scale-up funding. The pilot incubation programme was successfully deployed. The strategy of having the thematic knowledge of stakeholders was made possible in part through the active participation of the NTC.	
Activity 3.7	Development of financing strategy for business plans		
	Achieved	Yes	
	Comments	Five beneficiaries were selected for scale-up funding, including three poultry businesses funded through the programme budget for a pilot project. Three entities were approached to establish relationships for incubator business plans. The GBPA made donations of USD 10 000 cash and USD 5 000 in-kind to Grand Bahama beneficiaries. Challenges included delayed procurement, preventing the delivery of beneficiary livestock and equipment in a timely manner to ensure project closure and maximize impact.	
Activity 3.8	Elaboration of methodological tools and training materials to promote market linkages with domestic markets (with a particular focus on school feeding and other institutional markets), and regional and international markets		
	Achieved	Partially	
	Comments	The project provided TOT, developed a business incubation model, created a guide and negotiations to deploy a PPP with the Grand Bahama Port Authority, and implemented a value chain financing strategy. It also outlined a financing strategy for business plans. In addition, the project provided methodological tools and training materials to promote market linkages with domestic markets and e-commerce, thereby strengthening commercial relations within the Grand Bahama poultry value chain.	
Output 4	Technical assistance is provided for a policy and governance framework that sustainably integrates the outputs from the incubator programme and other local food production into the national school feeding programme		
	Indicators	Target	Achieved
	– An assessment of the operation of the current Sustainable School Feeding Model piloted, which uses the public purchasing of local food from small farmers for nationwide up-scaling, completed.	– 1	– Yes
	– A policy/plan/programme on the integration of the outputs from the incubation programme and locally grown food with the NSFP.	– 1	– Partially
	– An inter-sectoral and inter-institutional coordination platform established, integrated by the MAMR, the Ministry of Education, the Ministry of Health, participating universities and colleges, other government agencies, donors and the private sector, NTC formed.	– 1	– Partially
	– A Final Report documenting lessons learned, success stories and good practices.	– 1	– Yes
	– A National Plan to consolidate and expand the model across the country.	– 1	– Yes
	– A funding proposal with a particular focus on South-South Cooperation, to support scaling up and expansion elsewhere, developed and presented to resource partners (International Fund for Agricultural Development, Inter-American Development Bank and others).	– 1	– No
	– A Communication Plan with lessons learned and successful cases.	– 1	– Partially

Activity 4.1	Support for inter-sectoral coordination and the development of a strategy	
	Achieved	Yes
	Comments	<ul style="list-style-type: none"> – An assessment of the operation of the current Sustainable School Feeding Model, which uses the public purchasing of local food from small farmers for nationwide up-scaling, was piloted and completed by the marketing consultant along with NSFP and the coordinator of the market linkage strategy, to be drafted and implemented in the pilot project. – The project partnered with AMEXCID NSFP to combine similar FFS training for farmers. – Policy suggestions were provided to integrate outputs from the agribusiness incubator into the NSFP. Recommendations included incubated enterprises as suppliers of inputs to vendors, school gardens and encouraging the use of the gardens' produce to supplement school feeding menus.
Activity 4.2	Support for communication and replication of the experience elsewhere	
	Achieved	Partially
	Comments	<p>The Communications Plan was completed, approved by the NTC and used during the project. The NTC was formed with the aim of establishing an inter-sectoral and inter-institutional coordination platform for the project. The NTC played a crucial role in providing guidance, technical input and oversight throughout implementation and has the potential to facilitate future achievements, such as active participation from the public and private sectors.</p>

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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