**TC Document**

1. **Basic Information for TC**

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| * Country/Region: | BRAZIL |
| * TC Name: | Improving Amazon’s sustainable development through technical education (TVET) course for açaí |
| * TC Number: | BR-T1531 |
| * Team Leader/Members: | Cossi Fernandes, Joao Paulo (SCL/EDU) Team Leader; Blasco, Ivana (SCL/EDU); Emilio Laguillo Gutierrez (SCL/EDU); Eschoyez, Guillermo Antonio (LEG/SGO); Roberta Felix (CSC/CBR); Verissimo Da Silva, Carolina (LEG/SGO) |
| * Taxonomy: | Client Support |
| * Operation Supported by the TC: |  |
| * Date of TC Abstract authorization: | 17 Oct 2022. |
| * Beneficiary: | State of Pará, through Fundação Itaú para Educação e Cultura (FIEC) |
| * Executing Agency and contact name: | Fundacao Itau Para A Educacao E Cultura |
| * Donors providing funding: | Multi-Donor Fund for the Transformation of Technical and Vocational Education and Training(TVT); OC SDP Window 3 - Sustainable Development in the Amazon(W3A) |
| * IDB Funding Requested: | Multi-Donor Fund for the Transformation of Technical and Vocational Education and Training (TVT): US$500,000.00 OC SDP Window 3 - Sustainable Development in the Amazon (W3A): US$210,000.00 Total: US$710,000.00 |
| * Local counterpart funding, if any: | US$0 |
| * Disbursement period (which includes Execution period): | 24 months |
| * Required start date: | March, 15th, 2023. |
| * Types of consultants: | Consulting Firms and Individual Consultants |
| * Prepared by Unit: | SCL/EDU-Education |
| * Unit of Disbursement Responsibility: | CSC/CBR-Country Office Brazil |
| * TC included in Country Strategy (y/n): | No |
| * TC included in CPD (y/n): | No |
| * Alignment to the Update to the Institutional Strategy 2010-2020: | Social inclusion and equality; Environmental sustainability |

1. **Objectives and Justification of the TC**
   1. The objective of this TC is to pilot a hybrid TVET course regarding açaí to the “Ribeirinhos” *[[1]](#footnote-2)* communities in the State of Pará, as well as developing knowledge regarding the impact of this type of intervention in this population.
   2. Innovation in bioeconomy chains is rare in the Brazilian Amazon; and we often see companies from other regions of the country, and even from outside Brazil, taking advantage of innovation opportunities for regional raw materials. Lack of capital for larger investments combined with low technological and market knowledge are the main causes for this low development in several production chains in this region (doi.org/10.1590/1809-4422asoc20200123vu2020L3ID).
   3. The açaí is another example of this reality. This berry is rich in polyphenols, with high antioxidant activity, and has been recently incorporated by many people across the world with healthy diets (doi.org/10.1590/1981-6723.09217). The product is obtained from its fruit and is commercialized as pulp, ice cream, energy drink, among others. In addition to the recently opened international market, it is one of the main dietary supplement for traditional *Ribeirinhos* populations and residents of large urban centers.
   4. Açaí is now considered the most important non-timber product in the region and the main source of income for *ribeirinhos*, making it essential to the regional economy (doi.org/10.1016/j.biocon.2021.109251). The fruit grows on palm trees which are irrigated and fertilized with the change of river tide. People from small communities, such as Chaves, in the Marajó Island, harvest the fruit and prepare the pulp at their own houses, with poor infrastructure and hygiene processes. Additionally, according to the Brazilian Institute of Geography and Statistics (IBGE), açaí berry production grew 32% compared to last year, with 95% of its production being concentrated in the state of Pará. This amount injects around US$1.5 billion into the Pará economy.
   5. However, the low efficiency in the harvest and production processes is a challenge. The State Agricultural Defense and Surveillance Agency estimates that most of the Açaí do Pará is lost at the foot of the tree. Consequently, there are two possible solutions to meet this increasing demand: improve productivity or deforest the Amazon, which should not be an option for many different reasons (doi.org/10.1016/j.biocon.2021.109251).
   6. To improve the efficiency of these processes, the Department of Sciency, Technology and Technical Education of the State of Pará (SecTet), in partnership with local industries, will design a hybrid technical education (TVET) course to improve efficiency in the harvest, production and commercialization processes. The course will be part online and part in person. To solve the challenge of offering specialized education to low-density regions, SecTet will equip a truck-cart (see similar example in Picture 1, used by the state to offer other technical courses or public services to remote communities), which will be moved across the distant areas of the state. The course will be taken by students who are enrolled in regular high schools or by adults, who will have access to this portable laboratory near their own houses. In addition to creating the course and the laboratory, the project aims to identify other bottle necks in the supply chain and pilot a management information system to identify the regions where the production is growing or need more support from the state. In the context of High School Reform, which will expand technical education, and with SecTet’s focus to expand this kind of course, this pilot will be used as reference in many other courses in the state, and around the Country. In fact, SecTet has approached the Bank to design an operation with EDU to build technical education centers and expand the offer of TVET courses across the state, showing the potential of this project.
   7. This project complies with all three criteria required by the TVET Fund, as follows:
      1. Private sector leadership: Frooty is one of the biggest acaí industry in the world and was the first one to be contacted by SecTet. Other industries will be involved when the project is signed. Frooty is willing to help to design the curriculum, provide training for teachers and students, and equip laboratories so that students may use similar machinery as used by industries. Cooperatives of açaí workers will also be involved in a way so the view of independent workers is represented in the proposal.
      2. Innovation: This is the first TVET course focused to serve isolated *ribeirinhos* communities, which are usually underserved by public policies. This is also the first TVET course focusing on strengthen an important bioeconomy chain in the Amazon Forest which is key to fight climate change. Finally, an impact evaluation of a hybrid course in the context of isolated communities will be conducted. Since these communities are usually not served by public policies, there is little evidence in the context.
      3. Sustainability/Scalability: Brazil is implementing the high school reform and it will be mandatory that states expand the technical education, so having pilots like this will make it easier to states to replicate the model for their specific context; and Brazil has many other products as açaí in its biomes. Additionally, the responsibility for offering TVET courses in the state of Pará has recently moved from the education department to the Department of Science, Technology, and Technical Education (SecTet), which aims to expand the enrollment for technical education, especially on these related to bioeconomy. Furthermore, this project will favor that *ribeirinhos* keep living at their places, protecting the Amazon Forest from external exploitation.
   8. Value Added by the project: The Region has many different diverse biomes and products as açaí, but communities are not equipped to sustainably explore them. This project will show that focalized education initiatives have the potential to not only improve education outcomes but also improve communities’ lives and protect these important biomes. Açaí will be the first product, but other raw goods will be used when the model proves to be successful.
   9. Strategic alignment. The program is consistent with the Second Update to the Institutional Strategy (UIS) 2020-2023 (AB-3190-2) and is aligned with the development challenge of Social Inclusion and Equality, by expanding students’ access to high-quality, pertinent education. It is also aligned with the cross-cutting themes of: (i) Gender Equality and Diversity by adapting and designing inclusive curriculums and expanding access to high-quality, pertinent education for Ribeirinhos. Additionally, it will contribute to the Corporate Results Framework (GN-2727-12) indicator “2.1 - Students benefited by education projects.” It is also aligned with the strategic objective defined in IDB Group Country Strategy with Brazil 2019-2022 (GN-2973) to improve infrastructure as well as management and quality of spending in the health and education sectors, by designing an intervention which provide education to a population which would not have access to it. The program is consistent with the Skills Development Sector Framework Document (GN-3012-3) in Lines of Action (1) Ensure access to high quality and relevant learning opportunities throughout life, by expanding access to regular and full-time education. The program is also aligned with the Gender and Diversity Sector Framework (GN-2800-8) financing "interventions to support development with identity and social inclusion of indigenous peoples, Afro-descendants, and other diverse populations” and “Improve educational outcomes for indigenous peoples and Afro-descendants” by providing culturally appropriate curricula and expanding educational access for *ribeirinhos*. The program is aligned with Amazonian Initiative (GN-3036), by improving the quality of labor and by improving the quality of sustainable agriculture. Finally, the program is also aligned with OC SDP Window 3 - Sustainable Development in the Amazon (W3A) (GN-2819-14) through “Emerging need 1: Amazon’s sustainable development” by piloting a model of education which will support Amazon’s sustainable and inclusive development.
2. **Description of activities/components and budget**
   1. **Component 1 (activity 1): Curriculum Development (IDB: USD140,000).** It will finance: (i) individual and firm consultancies to conduct a market analysis to understand the demand from the industry and from the market; and (ii) firm consultancies to develop a curriculum for the TVET course. Outputs are (i) “Diagnostics and assessments completed” regarding the market analysis; and “Policy Designed” for the detailed curriculum.
   2. **Component 2 (activities 2 and 3): Pilot course (IDB: USD360,000).** It will finance: (i) firm consultancies to develop teacher training material and conduct training sections; (ii) truck-cart and its equipment to be used as mobile pedagogical laboratory which will be available for communities in loco for specific period of time. Outputs are: “supervision reports” regarding (i) teachers training process and (ii) students benefitted by education programs, and “truck-cart equipped”.
   3. **Component 3 (activities 4 and 5): Management and knowledge generation (IDB: USD210,000).** It will finance: (i) individual or firm consultancies to develop a diagnosis about other bottle necks in the açaí supply chain, and (ii) firm consultancies to develop a robust impact evaluation of the project in *ribeirinhos* communities regarding income, quality of the products, and education. Randomization of families and communities is being discussed to evaluate the impact on education (e.g.: years of schooling for families or target people) and economic variables (income, employment, etc). Additionally, qualitative research will be conducted to identify the perception of the families to stay in the communities and protect the forest. The impact evaluation in this project is expensive since travelling to this location is expensive and may require travel with car, boat and airplane in the same trip. Output are “Diagnostics and assessments completed” for the açaí chain bottlenecks, and “Discussion papers developed” as a draft of the technical note which will be developed regarding the results of the program.
   4. **This TC will be financed the following funds:** Multi-Donor Fund for the Transformation of Technical and Vocational Education and Training (TVT), which will finance USD500,000; OC SDP Window 3 - Sustainable Development in the Amazon (W3A), which will finance USD210,000. The proposed execution period is 24 months.

**Indicative Budget**

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| **Component** | **Description** | **W3A (USD)** | **TVT (USD)** | **Total (USD)** |
| **1** | Market research |  | 70,000 | 70,000 |
| Curriculum development |  | 70,000 | 70,000 |
| **2** | Teacher training and implementation |  | 150,000 | 150,000 |
| Truck-cart equipped |  | 210,000 | 210,000 |
| **3** | Impact evaluation | 150,000 |  | 150,000 |
| Bottleneck analysis | 60,000 |  | 60,000 |
|  | **Total** | **210,000** | **500,000** | **710,000** |

1. **Executing agency and execution structure**
   1. As requested by SecTet (see annexes), the executing agency of this TC will be the Fundação Itaú para Educação e Cultura (FIEC). The IDB will sign a TC Agreement with FIEC to formalize the terms and conditions of the transfer and use of the non-reimbursable technical cooperation resources. FIEC is a private, non-profit foundation, and was created by Itaú Unibanco, which for more than 30 years have developed several programs committed to improving Brazilian public education. Besides having experience working with most of states in Brazil in the TVET topic, FIEC has already experience to execute IDB’s TC (BR-T1460). FIEC will use its systems for procurement, financial management and reporting, project management, and monitoring and evaluation of the project effectiveness. A training regarding IDBs financial procedures will be scheduled after the approval of the TC and before starting the execution.
   2. IDB will closely monitor the TC execution. The active role of the Bank in this TC may have positive externalities for other countries in the region. Finally, the IDB, with its relationship with Consed (the national council of head of state departments of education) will be able to scale the learnings from this initiative to other states. The TC disbursement and execution period will be 24 months.
   3. Activities to be executed under this TC have been included in the Procurement Plan 2 (see Annex IV) and, considering that FIEC is a private sector entity, procurement will be made using FIEC’s procedures according to appendix IV of the Policies for the Procurement of Goods and Works financed by the IDB (GN-2349-15) and appendix IV of the Policies for the Selection and Contracting of Consultants financed by the IDB (GN-2350-15), both of May 2019. FIEC has extensive experience in the execution of similar projects to the one targeted by this TC so the risks are considered low from the point of view of procurement and financial management. As a result, it is expected that the procurement supervision modality will be ex post. Finally, there is one good of approximately USD200,000 which will be purchased for this project. It is the truck cart which will contain the pedagogic laboratory with equipment required for teaching-learning practices. The process for that is simplified competitive process. As per IDB’s policy, in the case of a TC executed outside the Bank, the procurement of goods should not be greater than 30% of the total amount of the TC. This truck-cart will be procured by FIEC and the agreement between FIEC and SecTet (see 5.5) should specify that this cart will be donated to SecTet, which will be responsible for maintaining and operating it.
   4. Intellectual property. The intellectual property rights of the products derived from this TC shall be owned by the Bank. In any case, the Bank may enter into contractual arrangements to license these products so that FIEC and SecTet may take advantage of the products financed by this TC for non-commercial purposes, in accordance with its AM-331 of the Bank's Administrative Manual (Procedures for the Publication of Knowledge Products).
   5. Financial Management and Monitoring. The project team has determined that an external audit of the TC will not be required, due to the funding amount, the low level of risk, and the nature and complexity of the TC. To supervise the financial management, FIEC will present to the Bank semi-annual implementation and unaudited financial reports, which shall be presented three months after the end of each semester. These reports shall include, among other aspects, a description of the progress of execution, an update on implementation and financial status, and updated disbursement projections. Additionally, FIEC shall collaborate with the Bank and SecTet in the preparation of the TC’s final report, according to the IDB’s standards to report for the donors, which shall include the project’s overall results and learnings for future projects.
   6. Condition Precedent to First Disbursement. The first disbursement of the resources of the contribution shall be subject to the fulfilment, to the satisfaction of the Bank, of the following condition: evidence of an agreement that has been signed and entered into effect between FIEC and SecTet that contains, among other aspects, the terms and conditions of the cooperation between the parties regarding the project, including the roles and responsibilities of each institution and the respective working plan. The Bank will not be part of this agreement.
2. **Major issues**
   1. The risks associated with this operation are low, mainly associated with delays and changes intrinsic for work with government. Fundação Itaú and the Bank has experience executing similar projects, which decrease these risks. Monthly follow-up meetings will be performed to avoid major delays.
3. **Exceptions to Bank policy**
   1. None.
4. **Environmental and Social Strategy** 
   1. This Technical Cooperation is not intended to finance pre-feasibility or feasibility studies of specific investment projects or environmental and social studies associated with them; therefore, this TC does not have applicable requirements of the Banks Environmental and Social Policy Framework (ESPF).

**Required Annexes:**

[Request from the Client - BR-T1531](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-1723806763-4)

[Results Matrix - BR-T1531](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-1723806763-3)

[Terms of Reference - BR-T1531](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-1723806763-9)

[Procurement Plan - BR-T1531](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-1723806763-5)

1. *Ribeirinhos* live near rivers and have subsistence livelihoods based on natural resources. A significant part of them are Indigenous and/or Afro descendants. [↑](#footnote-ref-2)