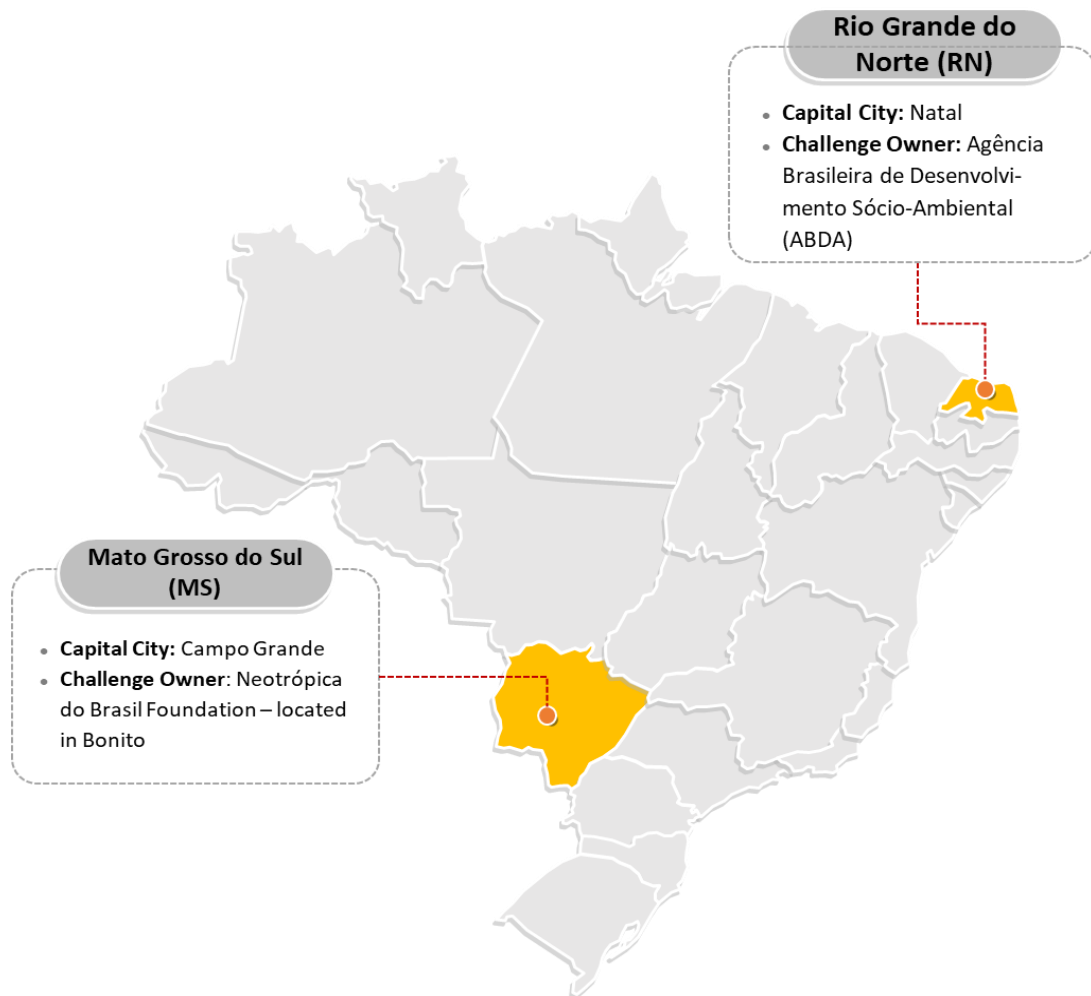**CHALLENGE 3: Sustainable development & DIGITALISATION**

Development and provision of an online tool and business model behind in order to help family farmers through the implementation of a digital platform, to commercialize and deliver family farming products. The tool needs to be applied in two states in Brazil with similar conditions: Mato Grosso do Sul (MS) and Rio Grande do Norte (RN). Minor adjustments to their specific markets will be requested from the solution provider.

While in Rio Grande do Norte the internet connection of 3G and 4G is sufficient to implement a tool to support local farmers, the rural areas of Mato Grasso do Sul suffer from inaccessibility in their regions. The proposed solution should therefore be optimized for low internet data consumption, considering that internet connection still is expensive in Brazil, as well as include solutions to access the tool while facing connection challenges.

In a second scenario, Neotrópica do Brasil Foundation (MS) and Agência Brasileira de Desenvolvimento Sócio-Ambiental (ABDA) (RN) are also seeking for support in the development of a sustainable business model behind the tool itself.

- Desired Type of Solutions: business model, technology, service, product

- Prize for Solution & Implementation: 10.000 €

- Application for solutions: **https://forms.gle/4sPrgQ86K6yEmion6**

- Deadline for Application: ~~15 September 2020~~ **9 October 2020 (extended)**

Rio Grande do Norte (RN)
- **Capital City:** Natal
- **Challenge Owner:** Agência Brasileira de Desenvolvimento Sócio-Ambiental (ABDA)

Mato Grosso do Sul (MS)
- **Capital City:** Campo Grande
- **Challenge Owner**: Neotrópica do Brasil Foundation – located in Bonito

1- Mato Grosso do Sul (MS) Region

Serra da Bodoquena area located in Mato Grosso do Sul state has been facing the consequent negative impacts of the COVID-19 pandemic since its beginning. The most affected sector was the tourism sector, meaning a huge decrease of visitors in the area.

In this scenario, the sales of family farming products were consequently highly impacted and hampered as the hotel chains and restaurants are not interested in buying products anymore.

Serra da Bodoquena National Park area is part of the Atlantic Forest Biosphere Reserve, a conservation unit that preserves the largest Atlantic Forest remnant in Mato Grosso do Sul state. It has 76.480 hectares distributed in two geographical areas (North and South), encompassing the cities of Bodoquena, Bonito, Jardim and Porto Murtinho. The area acts as rainwater catchment and storage surface, guaranteeing the continuity of scenic rivers that flow into the Pantanal lowlands.

The area holds karst reliefs, a special geological characteristic, as well as some paleontological and sedimentological sites and endemic species. Located under an important ecotone, Serra da Bodoquena National Park is a transitional area between two important Brazilian biomes.

An implementation of the solution for this challenge will have a relevant outcome of the family farmers, as it will increase the sales of their products. This solution could also contribute to the prevention of illegal hunting and fishing, as well as the removal of native fauna and flora to consumption and illegal sale

<u>Specific features</u>

The internet accessibility in the rural areas is a challenge, as the availability of internet connection are very low.

Specific basic internet and online tool training will be required from the solution provider. The most usual scenario is to have the settlement residents responsible for the internet access related issues, with the support of a private connection when available.

The settlements are composed by some areas with functional internet and some areas with lack of internet access.

<u>Resources</u>

[Neotrópica do Brasil Foundation](#) provides technical and administrative assistance to prepare the business plan in a cooperative flow with the involved communities, assistance in the development of the online tool and training for its use.

The team is composed by a multidisciplinary staff: environmental managers, biologists, forestry engineers, administrators and computer technicians.

Neotrópica do Brasil Foundation has over 250 square meters in its geographical location, with its headquarter based in Bonito municipality.

Cars, computers, internet, drone, data show, cameras and GPS equipment will be made available for the design and implementation of the solution for this challenge.

Moreover, the Neotrópica do Brasil Foundation will be able to mobilize, raise awareness and train the farmers involved, in order to facilitate the process of draining production, both from fruit and vegetable products, as well as handicrafts and processed home products, aiming at generating/increasing family income, suggesting alternatives combined with conservationist practices, encouraging the permanence of men in the countryside.

Neotrópica do Brasil Foundation will be actively involved in the implementation of the solution. Core activities involve mobilisation and dissemination of the planned tasks to enable the flow of the products (fruits, vegetables, handcrafted and processed); direct contact with the involved farmers to raise awareness and assist trainings.

The pursue goal of this challenge is to offer a solution that will generate and also increase the income of these family farmers, by suggesting business alternatives linked to conservationist practices, encouraging the permanence of men in the countryside.

2- Rio Grande do Norte (RN)

The target audience composed by Small Rural Producers (SRPs) from Northeast Brazil was highly impacted by the COVID-19 pandemic, with a specific emphasis on the production surplus disposal. The lack of knowledge and unpreparedness are common factors among SRPs, a fact that can be a strong barrier to address production situations such as overstocking, wastes, stoppages, selling struggles and revenue losses.

Social development organisations are already aware of the relevance and urgency of empowering SRPs to overcome challenges linked to the new digital economy. The pandemic of COVID-19 brings more

awareness to this issue. Undoubtedly, nowadays, the survival and growth of any economic activity closely relies on their capacity of exploring business opportunities beyond their backyards. ICTs tools are an option that can provide specific knowledge to SRPs to overcome these pandemic impacts.

Specific features

Agência Brasileira de Desenvolvimento Sócio-Ambiental (ABDA) will prepare a business model canvas which will encompass all features such as logistics, distribution, marketing and others. However, the solution providers need to deliver an option that considers a validation of this business model canvas with ABDA, in order to identify improvement potential and suggest changes to build a sustainable solution for all parties involved.

Besides the tool to be used to commercialize and delivery products, the solution needs to be able to support the SRPs establish partnerships with stakeholders and manage their production. This means that the platform needs, internally, provide a communication tool and production management system (dashbords, KPIs).

3G and 4G services are available in the location, even in remote areas. This is possible due to the daily use of smartphones for communication purposes. In any case, the solution should be optimised for low internet data consumption, considering that internet connection is still expensive in Brazil when compared with developed countries.

Resources

ABDA works with a continuous collaboration with the stakeholders from Municipal, State and Federal Public Regulation Institutions, Agricultural Secretaries, Public Institutions of Technical Education, Universities and Research Centres, Research & Development Agencies, Agriculture and Aquaculture Laboratories, SRPs Associations and Cooperatives, Professionals Associations, Local Community Clubs and Associations and Local Professors and Schools.

In terms of framework conditions and resources, SRPs and mayors are deeply interested in joining forces to promote the solution. ABDA itself possess a small office fully equipped (computers, laptops, GPS, HD cameras, vehicles) available to support the project. Moreover, the SRPs and the whole local community are eager with the possibility to use such a solution as soon as available. It is planned to integrate the locals not only in the development process (collecting data, user experience, etc.) but mainly also in the disclosure activities.