# A Portrait of Risk and Resilience

The Caribbean island nation has done well to provide social security to its small-scale fishing community. It must make them resilient to face the effects of climate change

ver the past decades the fisheries sector of Antigua and Barbuda has been interwoven into the social, cultural and economic aspects of national development via major improvements in fisheries infrastructure coupled with the modernization of the fleet. Most of the wooden sloops and dories that dominated the sector in the 1970s have been replaced by modern fibreglass launches and pirogues with the latest fishing equipment (like global positioning system and depth sounder).

Fisheries, including aquaculture, is no longer seen as an informal sector outside the purview of national development but as a priceless asset contributing to nutrition, food security, poverty alleviation and livelihood. Additionally, the sector acts as a 'safety net' in times of economic crises or when there is a 'downturn' in the main engine of growth of the national economy: tourism. This lesson was emphasized during the 2008 financial crisis and the subsequent recession, and more recently during the COVID-19 pandemic, when the number of individuals registering and licensing for the first time or renewing their fisher licence increased by 262 per cent in the first half of 2020, compared to the average for pre-pandemic years.

Despite the great strides made with respect to modernization, fishers are struggling to maintain their traditional access and user rights as they compete with the luxury real estate industry and coastal tourism development. Couple this with the catastrophic threats associated with climate change (tropical storms, floods, ocean warming

and acidification, beach erosion and sea-level rise, among others) paints a bleak picture for the sector.

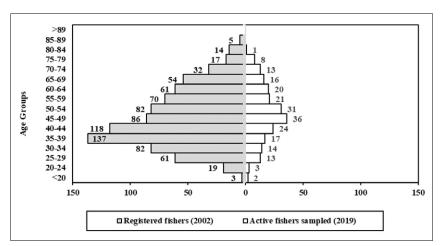
According to the Global Climate Risk Index compiled by Germanwatch, Antigua and Barbuda were ranked seventh globally in terms of economic losses from extreme weather based on average percentage losses per unit GDP from 2000 to 2019. This article provides a portrait of social development in the fisheries sector against this backdrop, as well as provide a synopsis of existing policies, legislation, and programmes.

... about half the fishers in Antigua and Barbuda have a robust degree of financial resilience and adaptive capacity

#### **Basic support, social protection**

To ensure fisheries policies were consistent with overall social protection policies as well as to support the process of 'formalizing' and 'professionalizing' the sector, the Fisheries Regulations 2013 were introduced. They state that to be entered into the record as a licensed fisher, an individual is required to be registered under the Social Security Act (1972), and any other labour requirements for Antigua and Barbuda, such as the Medical Benefits Scheme. The enactment of the Social Security Act created a fund to provide the insured population and their dependants with some degree of financial security in the event of sickness, injury, invalidity, maternity, retirement, or death.

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Age distribution of fishers residing in Antigua in 2002 and 2019. Registered fishers N=841 and active fishers sampled n=219 (Horsford in press)

Under the Act, all persons 16 years of age or over, and under the pensionable age of 64 years, and gainfully employed are required to be registered and shall be insured for life. Fishers typically register as self-employed contribute 10 per cent of the minimum monthly declared earnings of EC \$2,500 (US \$926) as a contribution to the Social Security Fund. Some ingenious features of the scheme include: one, the universal coverage offered by the system assures workers that their protection will follow them when they change jobs; two, the scheme's ability to finance the benefits rest on the entire economy and not on a single entity; and, three, benefits under social security also adjust readily to changing wage conditions through benefit and ceiling increases.

An additional condition for fisher registration is engagement with the Fisher Professionalization Programme. Modules are centred around building human capital by providing education and practical skills in areas such as first aid and cardio-pulmonary resuscitation, safety at sea and basic navigation, fisheries laws and protected areas stewardship, small business management and record-keeping, outboard engine maintenance, and seafood safety and quality assurance.

In terms of healthcare, Antigua and Barbuda has a robust system funded through public taxation and levies in support of the Medical Benefits Scheme. The scheme covers primary healthcare including healthcare for specific diseases, as well as refunds for services

such as laboratory tests, x-rays, surgery, ultrasounds, electro-cardiographs or similar services, hospitalization, and drugs. Registration with the Scheme is mandatory according to the Fisheries Regulations 2013 and as such, fishers and their families are entitled to all the services within.

With the 'greying' of the fishing population, these interventions are becoming increasingly important with respect to retirement, old-age pension and healthcare. In 2002, fishers under 35 years comprised 20 per cent of the population; in 2019, only 15 per cent of sampled fishers were under 35 years. Interventions have also been made into affordable public utilities potable water, electricity, internet, and telecom—via the Senior Citizens Utility Subsidy Programme. Pensioners, the physically challenged, and those living below the poverty line receive a monthly subsidy of EC \$100 (US \$37) toward payment of utility bills.

Prioritizing social development has led to the provision of universal free education for children aged five to 16 years, a sharp decline in infant mortality, and an increase in overall life expectancy, with females leading the way according to data from the World Bank (78.0 years versus 75.7 years). Additionally, government has made investments in improving housing stock through programmes such as the EUfunded Housing Support to Barbuda Project, the Low-Income Housing Project, and the Home Advancement (Refurbishment) for the Indigent, as well as new building codes given the islands vulnerability to extreme weather conditions.

#### **Income support measures**

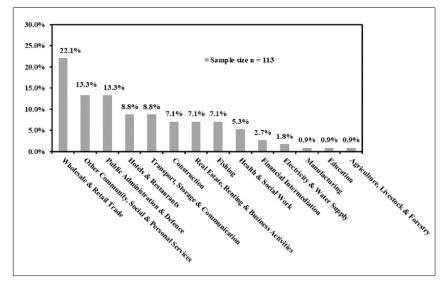
The Peoples Benefit Programme is a social scheme that supports people with and disabilities economic vulnerabilities, with a monthly transfer of EC \$215 (US \$80). This amount is transferred to a debit card to purchase food and personal items in supermarkets and stores selected by the programme. Economic hardship is the typical criterion for qualifying under this programme; for example, households earning less than EC \$800 (US \$296) per month before payment of bills as well as those with physical disabilities or having children with developmental issues are eligible.

The Board of Guardians, division of the Ministry of Social also provides Transformation, fortnightly allowance to the poor **Notwithstanding** and destitute. these programmes, 'occupational pluralism'—having more than one job or multiple sources of income from various occupations or enterpriseswas a common livelihood strategy or a means of economic security for fishers. In 2019, 51.6 per cent of fishers had another occupation or source of income within fisheries or outside of the fisheries sector. In general, service and sales occupations were the most complement, common including clerical work, taxi or bus driver, bartender, tour guide, and water sport operator.

There was also vertical integration of businesses, for example, fishing and water sports or a seafood restaurant. This approach to mitigating business risk in fishing by pursuing economic opportunities in other industries suggest that about half the fishers in Antigua and Barbuda have a robust degree of financial resilience and adaptive capacity. This is supported by the exponential gains in human capital in terms of educational attainment since the late 1990s, with 77.2 per cent of the fishers having a secondary education or higher, thereby enhancing labour mobility and resilience.

# **Decent work**

The Antigua and Barbuda Medium-Term Development Strategy emphasizes 'decent wages and work conditions' as vital to sustainable development. The Labour Code establishes the minimum standards employers must meet regarding labour practices and decent work in the country. It includes provisions governing the terms of employment, health and safety issues, the right to join a trade union, collective bargaining, and prohibitions against retaliation towards persons who take industrial action. Article E8 (1) of the Labour Code ensures equal pay for women in both the public and private sectors;



Complementary employment or source of income by industry for multi-occupational fishers in Antiqua in 2019 (Horsford in press)

"no woman shall merely by reason of her sex be employed under terms of employment less favourable than that employed by male workers in the same occupation and by the same employer". Article c<sub>4</sub> (1) prevents discrimination: "no employer shall discriminate to any person's hire, tenure, wages, hours, or any other condition of work, by reason of race, colour, creed, sex, age, or political beliefs".

The code is complemented by specific technical requirements for

In terms of migrant fishers, freedom of movement is a right of all nationals of the Organisation of Eastern Caribbean States (OECS) in the economic union area

fisheries such as: minimum age to engage in fishing (16 years); mandatory medical benefits and social security; training in occupational health and safety, and mandatory safety at sea; minimum requirement for food and potable water on board; and a list of mandatory safety equipment for licencing of fishing vessels, including life jackets for each person onboard, flares, VHF radio, tool kit and basic spares for minimum repairs, sound-making device to signal passing vessels, first aid kit and flashlights.

In terms of migrant fishers, freedom of movement is a right of all nationals of the Organisation of Eastern Caribbean States (OECS) in the economic union area. These include nationals from Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines. The Revised Treaty of Basseterre lays out the provisions for individuals to enter and stay indefinitely in any OECS Protocol Member State except in those circumstances where the OECS national poses a security risk for the receiving country.

In terms of healthcare, Antiqua and Barbuda has a robust system funded through public taxation and levies in support of the Medical Benefits Scheme

> The free movement of persons is linked to broader goals of regional integration and harmonization in Article 13 of the Protocol of Eastern Caribbean Economic Union in the Revised Treaty of Basseterre. The treaty specifies the movement must be without harassment or impediments. Non-OECS nationals intended to engage in local commercial fishing are required to apply for a work permit specifically

> Not with standing these gains, work in fisheries is still precarious given that there is inadequate insurance to mitigate the various risks associated with climate change, like hurricanes and floods, and more recently sargassum blooms. In 2017, only 5.9 per cent of vessel owners reported that they had vessel insurance. High premiums, inadequate coverage (like the policy not covering the extent of fishing operations in the maritime limits), and high deductibles were cited as the main reasons for opting for an emergency saving account to cover unplanned expenses. The precarious nature of fisheries has been acknowledged within the regionally endorsed 2018 Protocol on Climate Change Adaptation and Disaster Risk Management in Fisheries

and Aquaculture. However the biggest hurdle to its complete implementation is funding.

One of the most important decisions coming out of the 27th Conference of the Parties (2022), hosted by the United Nations Framework Convention on Climate Change, is an agreement to provide 'loss and damage' funding for vulnerable countries hit hard climate disasters. Caribbean governments are looking to this ground-breaking decision to establish new funding arrangements, as well as a dedicated fund, to assist Small Island Developing States in responding to loss and damage. This along with disaster risk reduction and climate change adaptation, taking a whole-ofsociety approach, ensures that the most vulnerable in society are included.

According to the United Nations Office of Disaster Risk Reduction. "poverty is both a driver and consequence of disasters, and the processes that further disaster riskrelated poverty are permeated with inequality." To overcome these challenges, the most vulnerable must have a seat at the negotiation table; they include female-headed households, youth, and fishing communities in low-lying areas. Initiatives such a Mainstreaming Gender in Caribbean Fisheries can empower and up-scale the participation of women and youths in the governance and stewardship of fisheries, thereby unlocking society's full potential—the old adage 'a rising tide lifts all boats.'

for the fisheries sector.

# For more

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#### Social Development and Sustainable Fisheries: Antigua and Barbuda

https://www.icsf.net/wp-content/ uploads/2022/11/930.ICSF227\_Social\_ Development\_Antigua\_Barbuda.pdf

# Antiqua and Barbuda: Springing **Back into Shape**

https://www.icsf.net/samudra/antiquaand-barbuda-social-developmentspringing-back-into-shape/

# **Springing Back into Shape**

While tourism is the mainstay of the economy of the Caribbean islands of Antigua and Barbuda, fisheries reforms will give them resilience from developments like COVID-19

uman-rights principles in smallscale fisheries were officially established with the publication in 2015 by the Food and Agriculture Organization of the United Nations (FAO) of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). These are designed to encourage stakeholders to prioritize the physical and environmental security of smallscale fisheries for the benefit of those active within the fisher community and beyond. 'Fisher' is an all-encompassing term for those involved in any element of the fisheries value chain, from extraction to processing.

Antigua and Barbuda is a twinisland state in the Eastern Caribbean, renowned globally for its white sand beaches and tropical climate. The surrounding waters provide unique opportunities for fishing, hosting an array of species, including types of gastropoda and crustacea. However, these resources are not fully utilized due to a shift away from traditional industry. The tourism sector expanded exponentially in the 1980s and now accounts for over 90 per cent of total jobs. This transition has seen Antigua and Barbuda's gross domestic product (GDP) increase, with growth averaging 6.8 per cent and contributing to high levels of human and social development.

Nonetheless, this over-reliance on the travel and tourism industry leaves the island state highly vulnerable to exogenous economic shocks such as the COVID-19 pandemic, and environmental risks like hurricanes and earthquakes.

This article provides an overview of social development in the fisheries sector of Antigua and Barbuda, and a synopsis of existing policy, legislation and programmes that contribute towards achieving the goals outlined in the SSF Guidelines. It draws from secondary data analysis, a literature review, and interviews with key informants.

With the explosion of the tourism industry, fishers and society, in general, have witnessed an increased focus on social development, human rights and decent work standards. A consequence of this was the introduction of the Fisheries Regulations in 2013, drawing together social policy with the prerequisite for fisher registration. There is extensive crossover between the SSF Guidelines and the Fisheries Regulations, most notably the focus on sustainable fisheries management and the utilization of the precautionary principle.

The 2013 regulations state that in order to be entered into the record as a licensed fisher, an individual is required to be registered under the Social

Antigua and Barbuda's fishers are struggling to maintain their traditional access and user rights as they compete with coastal development.

Security Act of 1972 that affords insured parties and their dependent(s) access to a degree of financial security through the provision of assistance, including sickness benefit and old-age benefit.

#### **Formalization**

Another condition for registration is engagement with the Fisher Professionalization Programme. Modules are centred around the formalization of the fisheries sector. It includes elements of record-keeping, fisheries laws and engine preventative maintenance.

There are gaps in this coverage, however. Take, for example, vessel

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Prioritizing social development has led to the provision of universal free education for children aged five to 16 years, and a sharp decline in infant mortality. Investment has also been made in affordable public utilities and better access to adequate housing, which is critical in the islands exposed to extreme weather conditions.

There still exist gaps that need to be addressed to ensure fishers and small-scale fisheries can mitigate the insecurities of external shocks. Fishers are believed to have a great level of occupational mobility due to high rates of education—78 per cent of fishers have a secondary school education—but it is the small-scale fisheries themselves who need protection, especially as they are considered a 'safety net' for other economic activities.

Antigua and Barbuda's fishers are struggling to maintain their traditional access and user rights as they compete with coastal development. Much of this development is driven by the demands for tourism-related infrastructure. In addition, access to landing sites is becoming increasingly problematic in certain rural areas, with the development of resorts and gated communities.

It appears that instead of acting as a complement to the tourism sector, the two industries are beginning to clash with the interests of fishers. As demand grows for additional infrastructure, there may be increasingly reduced access to spaces fundamental to fishing. To mitigate this, fisher organizations need strengthening in the areas of leadership, management, policy advocacy and engagement.

## **Proactive resilience**

Despite the impressive gains in development in Antigua and Barbuda, instances like Hurricane Irma highlight the fragility of these advancements and the need for proactive resilience planning. This has been acknowledged within the regionally endorsed 2018 Protocol on Climate Change Adaptation



Modern fishing units in Antigua and Barbuda. Despite the impressive gains in development, instances like Hurricane Irma highlight the fragility of these advancements and the need for proactive resilience planning



Northeast Marine Management Area, Antigua and Barbuda. Fishers are believed to have a great level of occupational mobility due to high rates of education, especially as they are considered a 'safety net' for other economic activities

and Disaster Risk Management in Fisheries and Aquaculture. But more needs to be done in terms of preparedness and diversification of the economy, especially as it is now overwhelmingly reliant on tourism.

## **Key recommendations**

Keeping a focus on the social development of the wider community, the following recurring themes are pertinent to small-scale fisheries and the wider fishing community:

- Diversification of the national economy, potentially towards capture fisheries and aquaculture. This will also aid food security.
- Further investment in processing and European Union-certified landing sites, offering export potential.
- Priority and funding for resilience planning.
- Initiatives to reduce inequality of income and gender. Now, only 7 per cent of the fishers are women.
- Shift towards information and communication technology (ICT) to allow for online training modules, enhancing education and infrastructure for the development of transferable skills.

These recommendations are aligned with the goals of the SSF Guidelines. They help encourage sustainability within small-scale fisheries. They would assist Antigua and Barbuda in preparing the fishing industry for the future, all the while addressing tensions between fishing and tourism, its two major industries. This will ensure a strong foundation for future economic growth and development. \$\frac{1}{2}\$

# For more

Case Study: A Comparative Analysis of Different Approaches to Fisheries Co-management in Antigua and Barbuda

http://aquaticcommons.org/21433/1/ GCFI\_65-6.pdf

Linking Fisheries to Tourism-Related Markets: Antiqua and Barbuda

https://unctad.org/system/files/ non-official-document/ditc-ted-Belize-28112018-Agenda-CRFM-Document-2016-3.pdf