

**ROOM VIII, Building E**  
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UNITED NATIONS  
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The Commonwealth



IOI International  
Ocean Institute

**Oceans economy and trade:**  
Sustainable fisheries, transport and tourism



**Intersectoral linkages- fisheries, transport and tourism -  
experiences from the Commonwealth Caribbean**



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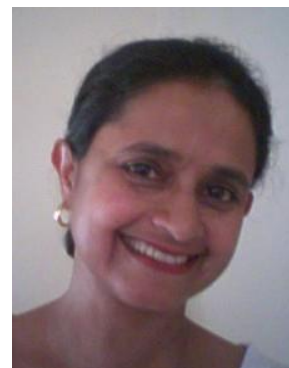


# **Greetings on behalf of the Caribbean Regional Fisheries Mechanism**

**Mr. Milton Haughton  
Executive Director**



**Dr. Susan Singh-Renton  
Deputy Executive Director**



**Thanks for inviting us!!**

Website: [www.crfm.int](http://www.crfm.int)

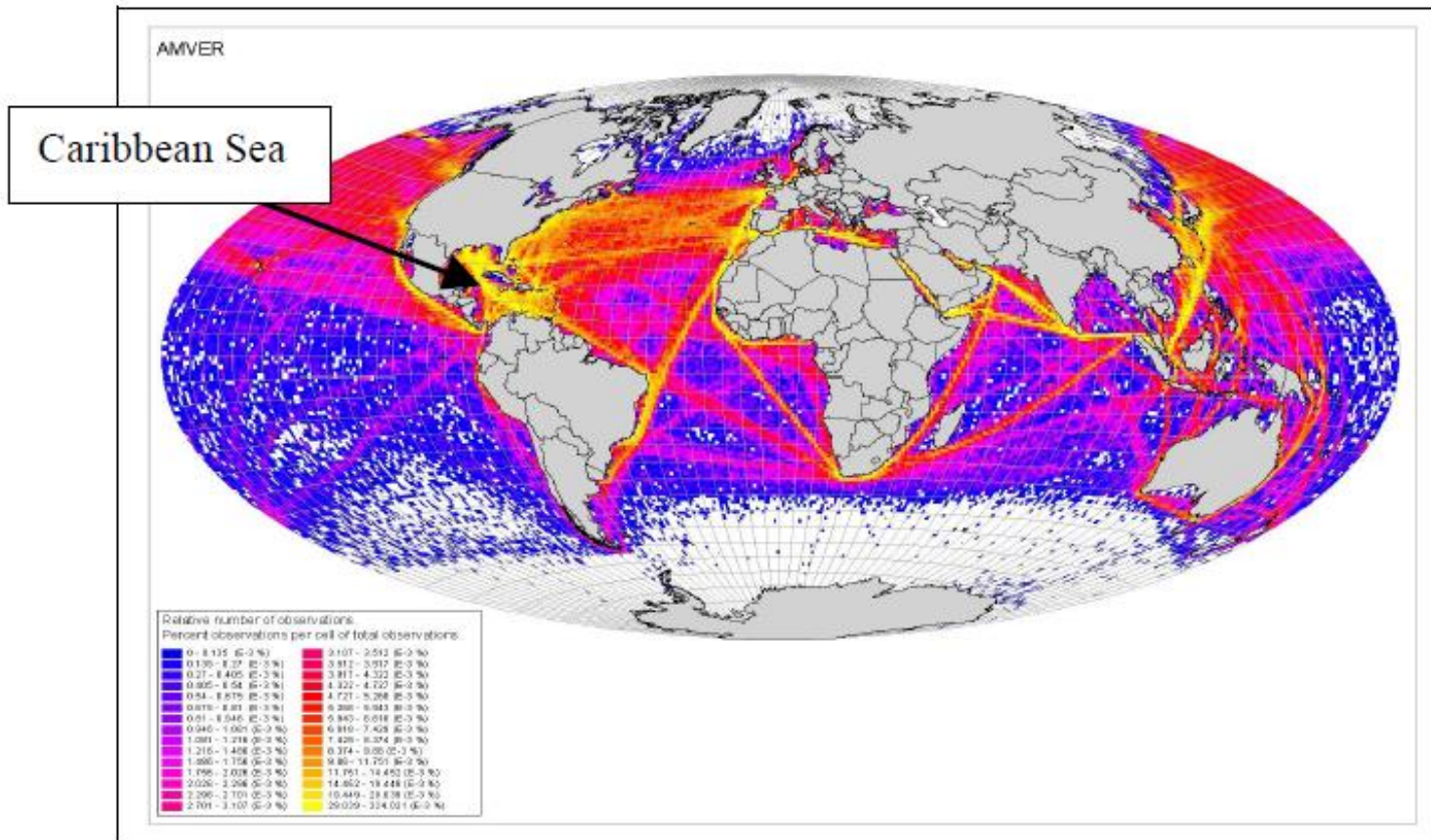
# **INTRODUCTION**

**The report, *Green Economy in a Blue World*, argues that the ecological health and economic productivity of marine and coastal ecosystems, which are currently in decline around the globe, can be boosted by shifting to a more sustainable economic approach that taps their natural potential - from generating renewable energy and promoting eco-tourism, to sustainable fisheries and transport.**

**The report suggests that fisheries, tourism and maritime transportation sectors can take steps to become more efficient and profitable and sustainable and thus contribute directly to the sustainability and productivity of other businesses and livelihoods that depend on healthy oceans and coasts.**

# LINKING FISHERIES AND TRANSPORTATION

## Concentration of Shipping on International Routes



Source: Automated Mutual Assistance Vessel Rescue System (AMVER)

(Robin, D.V., 2007. Audit of National Maritime Agencies in the Organisation of Eastern Caribbean States Member States. OECS Environment and Sustainable Development Unit. Castries. 139p.)

**The most common use for fisheries resources is food and its contribution to food security is rising significantly.**

**Over 75% of the global fish production is used for direct human consumption.**

**•Of the fish destined for direct human consumption, the volume marketed as fresh fish nearly doubled during the 1990s**



## The State of World Fisheries and Aquaculture



FAO 2001-2016. Fisheries and Aquaculture topics. Utilization and trade. Topics Fact Sheets. In: *FAO Fisheries and Aquaculture Department* [online]. Rome. Updated 6 January 2016. [Cited 18 April 2016]. [http://www.fao.org/fishery/utilization\\_trade/en](http://www.fao.org/fishery/utilization_trade/en). [accessed 10 April 2016]

**Post-harvest handling, processing and transportation of fish require particular care in order to ensure proper quality and safety.**

**However, improved storage and preservation technologies and cheaper transportation have dramatically increased fish trade over the last 30 years, such that fish and fishery products now constitute the most highly traded food commodity internationally (nearly half of the market, followed by frozen, canned and cured fish).**

Staff Working Paper ERSD-2010-03

Date: January 2010

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**World Trade Organization**  
Economic Research and Statistics Division

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This paper appears in the WTO working paper series as commissioned background analysis for the World Trade Report 2010 on "Trade in Natural Resources: Challenges in Global Governance"

**Trade and Fisheries: Key Issues for the World Trade Organization**

Frank Asche: University of Stavanger, Norway  
and  
Martin D. Smith: Duke University, USA

Manuscript date: December, 2009

Asche, F. and M.D. Smith, 2009. Trade and Fisheries: Key Issues for the World Trade Organization. Staff Working Paper ERSD-2010-03 Date: January 2010. World Trade Organization, Economic Research and Statistics Division

- **Substantial reductions in transportation costs by surface and air has promoted the international trade of new product forms like such as fresh seafood.**
- **Lower transportation costs have also given new producers access to the global market.**
- **Improved logistics has allowed economies of scale and scope on all levels of the supply chain, and particularly in the retail sector where supermarkets have replaced fishmongers and markets in a number of places.**



**Important in this linkage is consideration to the safe transportation of seafood, utilising standards set by the CODEX Alimentarius Commission's Committee on Fish and Fishery Products**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX ALIMENTARIUS COMMISSION  
Thirty-ninth Session  
Rome, Italy, 27 June – 7 July 2016

REPORT OF THE THIRTY-FOURTH SESSION OF THE  
CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS  
Ålesund, Norway  
19 – 24 October 2015

Note: This document incorporates Circular Letter CL 2015/05-FFP



# Transportation in fish capture

**There is another linkage between fisheries and transportation that can be easily ignored: the role of transportation in the process of fish capture.**

**The fishing vessel as a platform for catching fish is a combined function that also includes transportation of the fisher to the site of resource exploitation.**

**This brings to the fore, issues related to the safety of the fisher: fishing vessel safety is an inherent linkage between capture fisheries and transportation.**



**Most of the inshore and coastal fishing in the region is carried out in open or half-decked vessels, powered by conventional outboard motors. There is a transformation under way where the more traditional wooden vessels are being replaced by more seaworthy 7-10m glass fibre vessels powered by outboard engines.**



**The main safety issues relate, but are not limited to:**

- **diving accidents – conch, lobster, reef fish, black coral fisheries;**
- **accidents due to mechanical or physical problems;**
- **emergencies due to severe weather conditions at sea;**
- **medical emergencies and lack of first aid support;**
- **damage/destruction to property and life due to natural disasters; and**
- **the potential impact of climate change and the rise of sea levels.**



**The implementation of a generic programme for improving the safety-at-sea of small scale fishing vessels in the CARICOM region involves the establishment of standard specifications for the design and construction of fishing vessels and the establishment of efficient fishing vessel inspection services as an approach to addressing the safety issues.**

SAFETY AT SEA AS AN INTEGRAL PART  
OF FISHERIES MANAGEMENT



Petursdottir, G.; Hannibalsson, O.; Turner, J.M.M. Safety at sea as an integral part of fisheries management. FAO Fisheries Circular. No. 966. Rome, FAO. 2001. 39p.

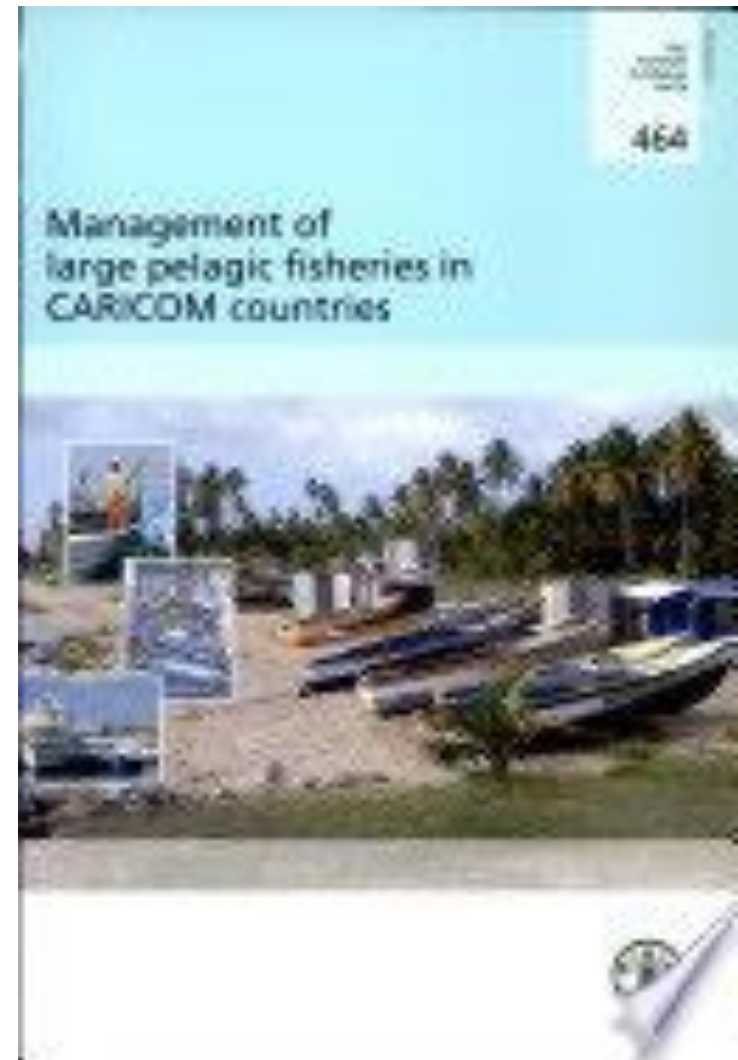
**In attempting to achieve the required standards and efficient vessel inspection services States have, *inter alia*, taken into consideration:**

- the size and ranges of fishing vessels to which the standards are to be applied;**
- the prevailing weather conditions;**
- the distances that the vessels may operate from safe havens; as well as**
- the type of fishing operations to be carried out.**



**In a process that came out of the United Nations Convention on the Law of the Sea (UNCLOS) and was characterized by the participation of fisheries and legal officers, in 1983, the FAO Legal Office began providing assistance to Member States of the Organisation of Eastern Caribbean States (OECS) in the development of harmonised fisheries legislation.**

**However, ownership became the central focus of vessel registration issues with safety requirements being seen as possible conditions of registration; rather than being enshrined in clearly defined regulation**



Mahon, R.. And P. McConney (eds), 2004. Management of Large Pelagic Fisheries in CARICOM Countries. FAO Fisheries Technical Paper 464, FAO, Rome, 149p.

## **FAO in 2001 made a number of proposals for fishers' safety-at-sea**

### **These reflect:**

- experience gained through the national workshops as well as a series of meetings with Maritime Administrations, Fisheries Administrations, boat builders and fishermen in the sub-region.**
- provisions of international instruments, as and where they apply to fishing vessels, codes of practice and voluntary guidelines in relation to boat building technology**

Final Report of Project

TCP/RLA/0069

Development of Standards  
for the  
Construction and Inspection  
of  
Small Fishing Vessels

Food and Agriculture Organization  
of the  
United Nations

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**These proposals therefore, can give legal substance to standards for the safety construction, equipment, safety equipment as well as the arrangement of a vessel that would allow its safe operation in accordance with the terms of its certificates of inspection giving consideration to:**

- provisions for a seaworthy hull;
- protection against fire;
- means of escape in case of a sudden unexpected casualty;
- guards and rails in hazardous places;
- ventilation of enclosed spaces; and
- necessary facilities for crew.

## **SMALL BOAT SAFETY CHECKLIST**

 <p>SPARE FUEL</p>	 <p>ENGINE TOOLS AND SPARES</p>
 <p>ANCHOR AND ROPE</p>	 <p>SEA ANCHOR</p>
 <p>ALTERNATIVE PROPULSION</p>	 <p>COMPASS</p>
 <p>FLARES SIGNALLING DEVICE</p>	 <p>MIRROR</p>
 <p>FLOTATION DEVICE</p>	
 <p>WATER CONTAINER</p>	 <p>FOOD</p>
 <p>FIRST AID KIT</p>	 <p>KNIFE</p>
 <p>BAILING DEVICE</p>	 <p>SHADE</p>



# Elements of a Safety-at-sea programme for small-scale fishing vessels

In general, safety-at-sea issues can be divided into (1) safe “boating” and (2) safe “manning”

<b>Programme outputs</b>	<b>Y1</b>	<b>Y2</b>	<b>Y3</b>	<b>Y4</b>	<b>Y5</b>
<b>Awareness building by all stakeholders of the significance of safety-at-sea</b>	_____	.....			
<b>Legislative enhancement for improving Safety-at-sea</b>	.....	_____			
<b>Training and education to enhance safety-at-sea</b>		_____	_____	_____	.....
<b>Enforcement and operations for improved safety-at-sea</b>		_____	_____	_____	.....

# LINKING FISHERIES TO TOURISM-RELATED MARKETS



**The demand for fish and fish products is growing in some Commonwealth Caribbean Countries (e.g. those of the OECS sub-region) as a result of economic growth, population growth and changes in diet and consumption habits.**

**In light of the growing stress on inshore resources, States are increasingly challenged by the difficulty of meeting their domestic demands for fish, even without the additional demands of the tourist industry.**

**The development of tourism in the region has resulted in a level of demand which national fisheries have been unable to respond to completely and, consequently, fish imports have grown.**

**Tourism is the main pillar of the economy in most Caribbean States. The region is often described as "the most tourism-dependent region in the world". There were approximately 25 million visitors contributing \$49 billion or 14% of the region's gross domestic product in 2013.**



Turner 2014, cited in CRFM, 2016. Promoting Regional Trade and Agribusiness Development in the Caribbean: Case Studies on Linking Fisheries to Tourism-Related Markets. CRFM Technical & Advisory Document, No 2016 / 3. Belize City. pp102.

**Strengthening the linkages between fisheries and tourism can catalyse and add value to the socio-economic benefits each sector contributes to sustainable development in the countries.**



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Number 2018 / 3

PROMOTING REGIONAL TRADE AND AGRIBUSINESS  
DEVELOPMENT IN THE CARIBBEAN

CASE STUDIES ON LINKING FISHERIES TO  
TOURISM-RELATED MARKETS



CRFM Secretariat  
Belize  
2016

CRFM, 2016. Promoting Regional Trade and Agribusiness Development in the Caribbean: Case Studies on Linking Fisheries to Tourism-Related Markets. CRFM Technical & Advisory Document, No 2016 / 3. Belize City. pp102.

**This is consistent with the development objectives enunciated in regional policy instruments such as the:**

- CARICOM Strategic Plan (2014 – 2019)**
- Caribbean Community Common Fisheries Policy**
- Second CRFM Strategic Plan (2013 – 2021) (CRFM, 2013)**
- CARICOM Regional Food and Nutrition Security Policy (CARICOM, 2010)**
- Caribbean Sustainable Tourism Policy Framework (CTO, 2009).**



**The strengthening of these linkages is also consistent with SDG 14: Life below water - Conserve and sustainably use the oceans, seas and marine resources**

**Promoting sustainability in the fisheries sector also mitigates any threats of exploitation of the sector by illegal, unreported and unregulated (IUU) fishing, especially in relation to inshore coastal fisheries, which play a vital role in rural coastal economies.**

**In this regard, reformation and revitalisation of the fishing sector can reinforce the linkages with the tourism sector, while also prioritising conservation and sustainable use of biodiversity in the coastal and marine environment.**

**Increased utilization of locally produced fish and fishery products by the tourism sector would, therefore, also contribute to the saving of foreign currency, improvement in balance of payment deficit, and reduced the region's vulnerability to rising food prices and other forms of external economic shocks.**





**Conflict between fisheries and tourism arise because of competition over the usage of the limited coastal resources on which both depend, and also as a consequence of the rapid social, economic and environmental changes that have taken place and are still taking place in the countries.**

**Stakeholders in the fisheries and tourism sectors are often pursuing goals, which are incompatible with each other, and there are inadequate frameworks or mechanisms in place to facilitate cooperation, regulate and balance the interests of the two sectors, thus ensuring equitable benefits and win-win outcomes to operators in both sectors.**



**Some fishers have benefited from the growth of tourism in their communities mainly through their involvement in sports fishing, tour guiding and improved prices for their catch**

**However, the general impact appears to be one of marginalization due to their lack of capacity, resources and organizational skills to negotiate and compete with the powerful tourism brokers.**

- **While economically they may not be any worse off than they used to be before the arrival of tourism, their relative standing has been substantially eroded as a consequence of the new class of educated and refined business owners**

**In most cases the fishers have not been able to take advantage of the potential opportunities created by the growth of tourism either due to their limited access to investment capital, lack of skills training and limited access to and capacity to harness and apply scientific and marketing knowledge and technology, and lack of organization to represent their interests and articulate their concerns.**

**As tourism developed over the past 40 years, fishers have witnessed substantial reduction in the areas (landing sites) from which they can operate, access to beach front property, and fishing grounds on which they are permitted to operate.**

- **Beach front properties are being taken over and used for hotels and other infrastructure development including the construction of mariners, restaurants, and water sports facilities to accommodate tourism development.**

**Some of their traditional fishing techniques are considered offensive to tourist, and in some cases significant parts of their most productive fishing grounds have been set aside as marine parks or protected areas which are accessible for non-extractive tourist activities but not for fishing, or very restrictive types of fishing only.**



**Fishers also constantly complain about the growing pollution problem, degradation of the coastal and marine habitat such as coral reefs, reduction in fish populations and fish catches, arising partly or wholly from tourism developments and related activities and developments in the coastal zone.**

**Tourism interests on the other hand tend to blame the fishers and over-fishing for the growing environmental degradation and decline of the coastal ecosystems and fish stocks in the coastal waters.**



**The core problem is that much of the change has occurred with little discussion or real effort by planners, stakeholders or policy-makers at regional, national or local levels to create win-win outcomes by strengthening cooperation and linkages between fisheries and tourism.**

- **Within the Caribbean, fishers, until recently, have generally been unable to participate meaningfully in the process of reallocation of access rights to beaches and other natural resources in the coastal environment or to take advantages of new economic opportunities associated with the growth of tourism..**



**Although fishers have occupied and operated from some specific beaches for many decades, they usually do not have titles to these areas, which are crown lands, to be disposed of, or reallocated by the government at its will.**

- **If an area occupied by fishers is identified for tourism development the normal course of action is to advise the fishers that they need to relocate to another area.**

**They usually have no input in deciding where they go, and they are not normally compensated in any other way.**



**All this suggests that the links between fisheries and tourism are not very strong and need to be further supported and reinforced to create economic opportunities for stakeholders, reduce food import bill and foreign exchange outflows, which will benefit coastal and rural communities and enhance sustainable development of the countries**

# **Opportunities for Cooperation and Value Addition**

**Development of fisheries and tourism has been pursued separately in the region. National and regional sectoral policies and institutions have not been geared toward fostering positive linkages and cooperation between the sectors, and those linkages that exist have not been well documented or promoted to optimize economic benefits to local stakeholders and communities.**



**Tourism establishments such as hotels, lodges, and restaurants require reliable supply of high quality food for their clients. Often the food purchasing bills of a tourism service provider is large in the context of the local economy, but much of this food is imported with relatively little sourced from local farmers or fishers.**

**The numerous challenges of increasing inter-sectoral linkages include the mismatch between supply and demand; and, the lack of intermediary support structures that enable suppliers (fishers and sales agents) and buyers from the tourism sector to come together to better understand each other needs, and work together to satisfy the requirements of the market.**

**If these challenges can be addressed in ways that meet commercial needs and customer satisfaction, then these industries can significantly increase their contribution to local economic development**

**The common (well known) problems of sourcing fish and fishery products locally include, *inter alia*, inadequate quality and assurance of food safety, reliability of supply or volume of produce, inadequate product form.**

**These are all exacerbated by poor transport and lack of communication and timely information sharing between supplier and purchaser.**

**To service the tourist markets, local fishers and processors will therefore need to find profitable and competitive ways to meet the tourism industry's requirements and standards for volume, quality, form of the product, regularity, traceability and safety requirements.**

**It is necessary, therefore, for fishers and seafood suppliers to better understand the markets, and adapt their product offerings to the specific needs and expectations of the markets, and therefore to derive optimum value from their production.**

**The ability of local fish and seafood systems to meet these requirements will be dependent both on supply factors (natural resource base, fish systems in place, processing and marketing capacity) and the kind of tourism development (mass tourism, high end niche, eco-tourism, branded product, certification etc).**

**Additionally, the exposure of tourists to specific local products could also help to create a unique local experience as well as improve export market penetration when such visitors help build domestic demand upon their return home.**

**A further consideration for demand for local fish and aquaculture products is the seasonality of visitor arrivals which implies that demand will vary over the year.**



**The opportunities for strengthening linkages are not confined to improving the consumption of locally produced fish and seafood in the catering sector.**

**There are a variety of non-consumptive ways in which the fish and other living marine resources and biodiversity in the marine environment may be utilized to enhance linkages between the sectors to create new economic opportunities.**



**In addition, there are an increasing number of opportunities that can be created for social and economic benefit through diverse partnerships and thinking beyond present boundaries. Not all focus on tourism, but several can do so:**

- Seasonally diversified use of underutilized infrastructure such as fish landing site market and processing buildings in the off season.**
- Summer school camps associated with a fish landing site to show case the diversity of skills and technology of which the public and visitors may be unaware.**



- **Increase in fish art in places frequented by visitors in order to reinforce the importance of marine resources and seafood in their awareness.**
- **Fisheries-related fun touristic activities such as mastering the skill of throwing a cast net or even fish boning.**
- **Conversion of fish processing waste into by-products such as fish leather and silage, or specialty food products.**



- **Twinning a major fishing port in the Caribbean with a fisheries counterpart in a country that is already a source of visitors in order to reinforce the region as an attraction.**
- **Include fishing families in home-stay community-based tourism (as done, for example, at Tarcoles on the Pacific coast of Costa Rica and operated by the fishing cooperative)**
- **Include more local seafood cooking classes in the activities package of upscale resorts and in addition to chefs include local fisherfolk, often women, who prepare such meals.**



- **Promote culture and heritage by establishing ‘fisheries through the years’ – a look at collections of fishing and boating equipment and other materials which show how fishing has changed over the past few decades.**
- **Encourage tourists to be engaged with the tourism product by featuring their activities (e.g. catching / cooking / boning fish in a destination) in videos or still photography. These videos and photos can then be used on social media to promote the destination.**



*Fisheries and Tourism*  
*Creating benefits for the community*



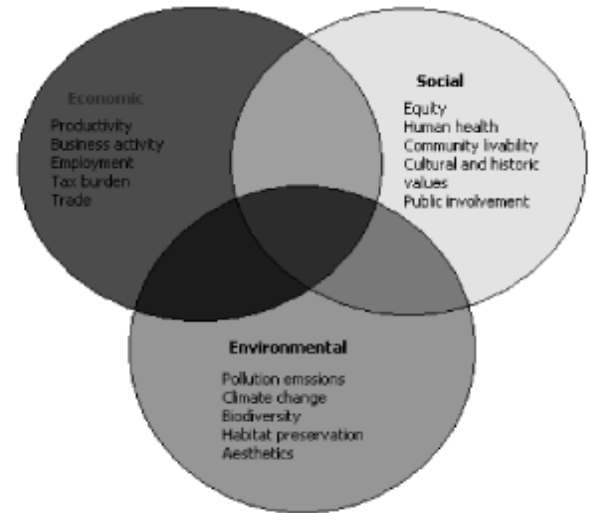
Useful ideas can be acquired from: European Commission, 2014. Fisheries and Tourism – Creating Benefits for the Community. FARNET Guide 9. European Commission, Directorate-General for Maritime Affairs and Fisheries, Brussels, Belgium. 52p.



# ONE MORE “LINKAGE”?

**Given the potential linkage factors between fisheries (and other living marine resource utilisation activities) and tourism, transportation and safety issues are worthy of consideration in looking at the potential partnerships to be derived between the tourism and fisheries sectors.**

**Sustainable transportation as the basis for linking (and/or creating partnerships between) tourism to (and) fisheries becomes one more linkage to be considered.**



*Sustainability issues*

Litman, T. and D. Burwell, 2006. Issues in sustainable transportation. *Int. J. Global Environmental Issues*, Vol. 6, No. 4, 2006

**Admittedly, this goes outside the realm of “marine transport”; except that many tourists are carried to the Caribbean via marine routes (“Cruise Tourism”), but the nature of tourism has been evolving lately, moving from simply recreation to “self-fulfillment”. This has an impact on the type of destinations sought and the activities engaged in, often involving more travel.**

**Transport systems and services themselves can be at the heart of tourist activities.**

- **This includes sustainable tourism based around walking and cycling. This rediscovered form of tourism is growing significantly and shifting tourism from traditional urban locations to natural sites.**

**Transporting (whether by sea or land) and safety of tourists to the site of fisheries-related activities becomes an important aspect of this paradigm**

- **The promotion of this form of (transportation-oriented ? fisheries) tourism requires close collaboration between local and regional authorities to provide infrastructure, services and information.**
- **Ensuring good linkage (information and physical connections) with traditional transport services travel (say, to fisheries-related sites) is fundamental to encouraging a sustainable and also a pleasant experience.**



# **Caribbean Community Common Fisheries Policy – a tool for cementing linkages?**

- **Approved by CRFM Ministerial Council**
- **Confirmed by COTED as the definitive fisheries policy of CARICOM that “should be applied by Member States as far as possible”**
- **Among the stated objectives of the CCCFP are to:**
  - develop harmonised measures and operating procedures for sustainable fisheries management, ..., fisheries trade and the administration of the fishing industry
  - improve the welfare and livelihoods of fishers and fishing communities
  - transform the fisheries sector towards being market-oriented, internationally-competitive and environmentally-sustainable ....
- **Hence, the CCCFP may be a useful policy directional “tool” to encourage further development of the linkages between and among transportation, tourism and fisheries.**

# **Some broad policy recommendations**

- **Safe transportation of seafood should continue to be guided by standards set by the appropriate CODEX Alimentarius Commission committee**
- **Fishing vessel safety should be considered as an important aspect linking fishing and transportation.**
- **Opportunities for strengthening linkages should not be seen as being confined to improving the consumption of locally produced fish and seafood in the catering sector: non-consumptive ways in which the fish and other living marine resources may be utilised to create new economic opportunities.**
- **Opportunities for social and economic benefit can be also created through new and diverse partnerships and thinking beyond present boundaries.**
- **Sustainable transportation approaches should also to be considered as the basis for linking and/or creating partnerships between tourism and fisheries**
- **Shared/common regional policy documents/statements may be useful as policy-directional “tools” to encourage further development of the linkages between and among transportation, tourism and fisheries**

A photograph of a harbor filled with numerous small, white and blue motorboats. Many of the boats have outboard motors, some of which are Yamaha. People are visible on the boats and on the shore in the background. The water is calm, reflecting the boats and the sky. A concrete pier is visible on the right side of the frame.

Thank you  
for your attention

*Questions anyone??*

Website: [www.crfm.int](http://www.crfm.int)

Facebook: <https://www.facebook.com/CarFisheries>

Twitter: <https://twitter.com/CaribFisheries>

YouTube: <http://www.youtube.com/user/TheCRFM>

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