# NOT ENOUGH FISH IN THE SEA: COMMUNITY-BASED ENTERTAINMENT-EDUCATION TO PROMOTE SUSTAINABLE FISHING IN BELIZE

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#### **Abstract**

To reach local fishing communities in Belize with important messages about the environment, overfishing, stocks control and their own rights and responsibilities, PCI Media and the Wildlife Conservation Society (WCS) developed a multi-stranded Social Behaviour Change Communication (SBCC) strategy. This integrated Entertainment-Education (E-E) approach comes in the form of a radio drama serial, with accompanying phone-in shows, theatre productions and community mobilisation activities rounding out the holistic approach. This paper analyses the project's success and shortcomings, and discusses ways in which the underlying principles can be modified for use in different scenarios in the future.

## Introduction

Fishing communities in Belize, in common with those in many developing nations, face a tough dilemma: the ocean has long been regarded as an ample – indeed, infinite – resource, but unsustainable fishing practices are putting this resource at risk. Stocks of fish are being threatened by overfishing and pollution in a country where there are sometimes few alternative sources of local income.

Often, only small changes to customs and lifestyles are needed to make a meaningful and lasting impact. This is a situation where Social and Behaviour Change Communication (SBCC) can prove to be a highly effective form of intervention. PCI Media partnered with the Wildlife Conservation Society (WCS), the Belize Fisheries Department, the Oak Foundation and a coalition of local NGOs to develop a programme which informed fishing communities of the need to protect their marine environment and enlisted their support for behaviour changes.

PCI Media identified its *My Community* model as the most appropriate to deliver and reinforce the messages. *My Community* is an adaptive method that involves local

communities in the creation of stories that aim to influence knowledge, attitudes, and behaviours.

In this paper, we look at the design of the programme and some of the tools that were created. We will consider how the theories are translated into practice, and the lessons learned along the way. Finally, we will look at options for future iterations of the programme and explore ways in which the approach could be replicated and scaled in different scenarios and to address different issues.

## **Education-Entertainment as a Catalyst for Change**

Overfishing and a lack of regulated replenishment zones have contributed to dwindling fish populations in Belize. Unsustainable fishing practices and poor land-use practices both contribute to the degradation of marine ecosystems. Fishing communities are already feeling the impact of a problem which, left unchecked, will devastate marine life and threaten the livelihoods of those dependent on the fisheries.

On a global scale, climate change is further undermining fisheries with longterm impacts on food security and livelihoods as a result of rising sea levels and temperatures, ocean acidification, and increasing incidences of natural disasters. Locally-targeted behaviour change communications will not be able to significantly contribute to preventing some of these issues. But important messages about mitigation of the impacts of climate change will build resilience into communities and ecosystems.

The goals of the programme were identified as:

- Build a community of supporters that engages in activities to promote the benefits of marine protected areas (MPAs) and replenishment zones, also known as No Take Zones (NTZs); and
- Promote positive change in the relevant knowledge, attitudes, interpersonal communication, and behaviours towards responsible fishing, MPAs and NTZs. Two additional goals would leverage and build upon the support generated in communities:
- Strengthen the capacity of organisations across Belize to effectively design and implement communications strategies for long-term change; and
- Foster political support for the expansion and designation of NTZs and marine resource conservation more generally.

Formative research conducted by PCI Media identified some resistance to conservation messages. Many in the fishing community felt that conservation could only come at the expense of their livelihood. Prior campaigns had not managed to achieve the critical buy-in, which is fundamental to behaviour change success.

One interview sums up the challenge. Roger had been fishing for more than 30 years and like most fishermen in Hopkins, a coastal community south of Belize City, he came from a long line of fishermen. Roger explained that he considered himself

a responsible fisherman but he admitted that this has not always been the case. "I didn't like conservation, you know. I argued with them [the authorities] when they came here. I would say, 'Nothing is wrong with conservation, but it must be sustainable and quite often it is not sustainable. No take zone, all of this is a take zone. That is not right. Like everything in life, when you make changes, people will revolt. That was the thing with conservation. We did not see the benefits because they only came and said we will conserve but they didn't explain the benefits and we did not understand".

To reach out to people like Roger and his peers, research looked at where they sourced their information. Fishers were asked how they kept informed about fisheries regulations. The most important channels were word of mouth (52%), the radio (44%), Fisheries Department wardens or rangers (27%), fishing coops/associations (23%), and newspapers (17%). Therefore, word of mouth and radio were considered crucial in making this programme a success.

Some more information about radio listening habits in the target communities reinforced this view. Radio ownership was generally high on both land (76% to 91% across the surveys), and at sea on their fishing boat (63% to 90%), and most fishers listened to the radio 4 to 6 days per week (52% on land and 66% at sea).

The ideal solution would involve a radio-based format which would initiate and develop conversations which led to behaviour change. Entertainment-Education was considered to be a format likely to fulfil this ambition – as a known impact of serial radio dramas is that they usually stimulate new interpersonal communications among listeners about the subject content of the drama.

## My Community

The *My Community* model was developed by PCI Media to manage the implementation of high-quality productions through a participatory planning approach. Deeply rooted in partnerships and capacity building, this model ensures cooperation between PCI and local communities across all stages of the project, including design, implementation, and evaluation process. At its core, *My Community* ensures that programmes are driven with a clear technical vision while still rooted in realities, challenges and conditions of target audiences. Together, PCI and local organisations use cutting-edge media technologies with the joint goals of educating the public and simultaneously stirring policy actors into creating an inclusive environment for the marginalised.

My Community is executed in a way that integrates local experiences and processes, as well as previous knowledge about the issues addressed by the programme. This method values existing talents and skills, and strengthens the community's ability take control of the creative representation of their everyday realities, including community outreach campaigns to deepen reach and expedite change. The ultimate purpose of My Community is to allow local communities to

use Entertainment-Education effectively. The capacity building model works in four phases:

#### *Phase 1 – Coalition Building and Formative Research*

Identification and recruitment of a diverse group of coalition members who are critical for understanding the context, culture, language and needs of local communities. Coalitions drive formative research, which includes a review of legal frameworks, existing research and literature as well as an evaluation of compatible programmes and partners.

### *Phase 2 – Training and Programme Design*

Workshops bringing together coalition partners such as thematic experts, media professionals and community members. The workshops include analysis of the formative research, training in using communications for social change and Entertainment-Education processes, development of a communications strategy for the programme as well as tools for effective community engagement and moblisation.

#### *Phase 3 – Mentoring and Production*

Coalition partners are supported in the creative development and revision of scripts and other media materials to produce Entertainment-Education serial dramas using the media resources available in radio, television and digital media.

#### Phase 4 – Broadcast and Community Moblisation

Both on-site and distance mentoring continue during broadcast and implementation of all components of the *My Community* programme. This support typically includes training, design and implementation of interactive radio and TV call-in shows as well as community action campaigns.

A rigorous learning, monitoring, and evaluation strategy backs up the method, and is implemented from Phase I onwards, starting with the initial identification of overall objectives and indicators of success. This strategy measures impact and learning against the programme's objectives: quantitative assessment tools, including but not limited to pre-and post-survey questionnaires for Knowledge, Attitudes, and Practice (KAP) assessment; focus groups, in-depth interviews, registries of audience participation in the radio show and community events; and logs of audience SMS messages, internet activity, e-mails, phone calls, letters, and comments.

## "Finally, There is a Show about Us"

The serial radio drama *Punta Fuego* was born out of the formative research and the application of PCI Media's *My Community* model. It is a fast-moving drama that has the familiar soap opera themes of romance, injustice, jealousy and betrayal. It is centred upon the fictional coastal fishing village of the same name. The show follows Ritchie and Karen, a fisherman and his wife, and the community around them. Because the show competes against other entertainment options available to

its target audiences, it must be entertaining and have high production values. WCS and PCI Media hired experienced Belizean script writers and voice actors. It was essential to create dialogue and characters which sounded authentic. Using a local production team allowed the show to reflect customs, mannerisms, and colloquialisms to ensure that the audience bonded with the characters and storylines. Most importantly, the radio drama was written to reflect the 'values' that have been identified through research and consultation with partners and community members.

To ensure quality production, a professional-standard recording studio was installed at the WCS offices and PCI Media consultants conducted extensive training and capacity-building sessions.

Learning points about sustainable and responsible fishing were built into the storylines in an unobtrusive way. The project 'mapped' characters so that each one would influence the target audience differently, with audience pre-tests to assess the mapping effectiveness.

Each episode of *Punta Fuego* is 15 minutes long. The 26 episodes of Season 1 of *Punta Fuego* were broadcast from February to August in 2015 and the 20 episodes of Season 2 were broadcast from June to November 2016 on LOVE FM radio, Belize's premier national radio station. Season 3 is in development in 2018.

Following every episode of *Punta Fuego* is a live call-in show, named *Talking Fuego*. This 30-minutes show features experts and opinion leaders to address specific questions raised by listeners. The purpose of this national radio talk show is to "turn up the volume" on the issues presented in the drama.

The interactive call-in format allows listeners to engage, ask questions, and learn about available resources from a discussion with expert guests. The host of the show facilitates the discussion, and is trained in the necessary techniques to keep the conversation flowing and on topic.

Talking Fuego segments have included information on accessing locally available resources, reports on local activities (especially success stories), public service announcements, and opportunities for the audience to voice their opinion through call-ins, as well as music, competitions and prize giveaways. Talking Fuego grew to have an even larger audience than Punta Fuego and saw a rise in listeners from 58% to 66%.

The shows are also platforms for the community moblisation activities, which are spun off from the series, such as road shows, cast visits, and the *Punta Fuego Fisher of the Year Contest*, an annual award for local fishers who practice sustainable fishing.

After the show's first season, a survey of fishers in Belize City and three small Belizean coastal towns determined that 34% listened to *Punta Fuego*. Those who listened were more likely to possess accurate knowledge of Belize's fisheries regulations, recognise the benefits of MPAs, and share their knowledge with other fishers. In the evaluation, one fisher/listener said, "Finally, there is a show about us". Another added: "Someone is talking to us, speaking to our issues".

## **Impact**

There is strong evidence that slightly more than half of all fishers in Belize were exposed to *Punta Fuego* by the end of 2016, and that their perception of the programme's quality improved substantially between Season 1 and Season 2, and more fishers became regular listeners in Season 2. Further, most of the listeners to the drama show also listened to the associated talk programme. This was ideal because the two were designed to be complementary, with the radio drama providing a realistic but captivating story to attract listeners' attention and to provide identifiable characters to role model behaviour change, while the more didactic radio talk show was a better format to convey information, such as facts about how No Take Zones work or fishing regulation changes.

The survey contained a full set of questions designed to look at changes in knowledge, attitude, interpersonal communication and behaviour among the target audience. Across the board, these key metrics showed marked improvement. The research indicated that those who listened to the show were more likely to: (1) possess correct knowledge regarding Belize's fisheries regulations; (2) recognise the benefits of marine protected areas; and (3) share their knowledge with other fishers.

In one example, respondents were asked whether they agreed or disagreed with the following statement: "Fishers that respect regulations and boundaries miss out on getting good catch".

Table 1: Attitudes Indicators that Increased Over Time (Baseline-end line)

Attitudes Indicators <sup>1</sup>	%Baseline	%End Line
Fishers that disagreed that "Where I fish is nobody's business by my own"	22%	54%
Fishers that agreed "NTZs are important for maintaining the health of fish stocks"	49%	70%
Fishers that disagreed that "Fishers that respect regulations and boundaries miss out on getting good catch"	49%	56%
Fishers that agreed "NTZs are very important to my livelihood"	49%	66%
Fishers that agreed "if fishers took too many fish, it threatened the sustainability of the fishery"	49%	66%
Fishers that disagreed that "Fishers are not worried about fishing in NTZs because they will not get punished"	55%	63%
Fishers that agreed "It is important that all fishers respect NTZ boundaries so that all fishers can get the benefits"	64%	84%

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<sup>&</sup>lt;sup>1</sup> For all these attitude questions, the "Strongly agree and Agree" or the "Strongly Disagree and Disagree" categories are combined.

Fishers that agreed "NTZs are like my bank account for fish. I need to protect and manage it to get benefits"	52%	72%
Fishers that agreed "I need to take care of the area I fish in"	80%	91%

The number disagreeing rose from 49% at baseline to 56% post-broadcast, and was higher among listeners (63%) than non-listeners (47%).

Given the relatively recent timescale since *Punta Fuego's* inception, and the difficulty of assigning causality to large-scale attitude shifts, it is less conclusive to point to definitive success in the widest of the programme goals: to foster political support for the expansion and designation of NTZs and marine resource conservation more generally. However, there were several attitude questions in the post-programme research which shed light on two important aspects of this goal.

- The attitude that NTZs are important for healthy fish stocks improved substantially across time (the "strongly agree + agree" level increased from 49% at baseline to 70% at post).
- The attitude that NTZs are important to the respondents' livelihood improved slightly across time (the "strongly agree + agree" level increased from 46% to 52%).
- The attitude that NTZs are like a bank account for fish improved substantially across time (the "strongly agree + agree" level increased from 52% to 72%).
- The attitude that NTZs should be increased in size and number improved slightly across time (the "strongly agree + agree" level increased from 23% to 26%).

All four of these attitudes about NTZs show positive trends, but there was no significant difference between listeners and non-listeners. This suggests that the trends are likely to be growing alongside, rather than because of *Punta Fuego*. Nonetheless, there is a growing awareness of the positive benefits of NTZs that could translate into political support for them, and this trend does correspond in time with the broadcast of *Punta Fuego*, *Talking Fuego* and the other community building activities of the My Community campaign.

## The Future for Punta Fuego... and Beyond

After Season 2, research interviews revealed a strong affinity for the show, and revealed some powerful anecdotal evidence of its influence.

Joel, a fisherman from the town of Dangriga, was a regular listener of *Punta Fuego*. He expressed loving the show because it motivated him to continue investing in the industry and engaging in good fishing practices. "I first start listening to it one day when I went to sea", he told the interviewer. "Even me, I learned certain things from it. I think that the show is very educational and it teaches people who are not familiar with the regulations and the rules of the sea and it is a good form of

education, because some people understand things in different ways. Something like Punta Fuego is fun and it gives people the understanding of the issues".

When asked about whether *Punta Fuego* reflected real life, he said: "Yes, it does. The show shows us many of the things that are happening at sea that are wrong. For example, during the closed season, people are going out and still working. This is something that happens every closed season. You have some fishermen that are really preserving our species but you know you always have those that will not respect the laws. They don't care about anything. They just live for the day...The Fisheries Department, they do what they can do with what they have but people just have to learn to respect the laws and give the species time to multiply and leave the small ones when you are fishing".

Understanding these issues is crucial to the survival of the industry, according to Joel. For him, listening to *Punta Fuego* has helped him to know about how to respect the no take zones and to comply when fishing season is closed.

Although the remit of the show, aimed squarely at the fishing community of Belize and those around them, is quite narrow, the lessons learned from the programme provide valuable insight into reaching communities who are often unresponsive to less compelling or targeted messages:

- Radio, even in a time of more technological communications options, remains a powerful medium.
- The emotional and empathetic impact of drama and storytelling though Entertainment-Education allows important information to be conveyed, remembered and acted upon.
- Interactivity reinforces the message and a diverse range of channels (drama, call-in, mobilisation) presents multiple ways to reach the target audience.
- Building the local capacity to continue and expand the programme in future is a key to empowering communities and ensuring lasting change.

With these insights, PCI and WCI are now producing Season 3 of *Punta Fuego*, scheduled for launch in fall 2018. Alongside the drama, which will be expanded to include new characters and themes, will be the call-in shows, and new community mobilisation campaign to be launched simultaneously across Belize. At least 20 weekly episodes will be broadcast with the potential for repeats later in the week. Ongoing monitoring will allow for responsive adjustments to storylines (as future episodes of the drama will still be in production) and the content of the radio magazine shows. In addition to the drama, the call-in shows will incorporate playful characters who will appear during the show to ask questions representing existing myths that will add some humour; but, more importantly, will help bring the community's perspective and existing perceptions into the show. Adding an SMS number for audience members to interact with the radio hosts, answer questions and interact with expert guests.

The principles and lessons of *Punta Fuego* will also be applied elsewhere. Because the philosophy which underlines the *My Community* method places

community involvement at the heart of the design, each programme will be use different channels, production methods and ways of reaching its audience. Ultimately this is a system which allows for empowerment to take place alongside behaviour change. Two fishermen were interviewed by *Punta Fuego* researchers after the first season of the show summed up the universality of the approach: "Many people don't know what we go through and so the show helps people to understand our struggles". Another added: "We gained a sense of importance and relevance to society".

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