

FISH FOR FOOD

Exploring ways to get fish on the table in Bolivia

POSTED BY BRIAN OWENS ON APRIL 21, 2016

People in Bolivia don't eat much fish — among South American nations it has the lowest per-capita consumption — despite having a large number of lakes and rivers.

But local, sustainably sourced fish could be a good source of protein and help reduce food insecurity, as well as provide a new source of income for poor, rural populations. So the International Development Research Centre and Global Affairs Canada have teamed up with academics and NGOs in Canada and Bolivia on the [Amazon Fish for Food project](#), which is trying to find ways to encourage the sustainable use of the country's fish resources through fishing and aquaculture.

"We want to build the value chain to get people to eat more fish, and to get fish into markets," says Joachim Carolsfeld, executive director of the [World Fisheries Trust](#), and one of the project's leaders.

The project aims to increase fish consumption by developing a fishery for the invasive paiche and through small-scale aquaculture for the native pacu.

Paiche are native to the lower Amazon, but were introduced to the upper Amazon about 40 years ago when a Peruvian aquaculture project went bust and released its fish. Since then they have "gone wild" in the river's upper reaches, says Carolsfeld. The monstrous fish, which can be as long as three metres, could provide new opportunities and new markets if managed sustainably.

A big advantage of paiche is that as a new fishery, there is an opportunity to rethink how the production chain works. Currently, most of the money from Bolivia's fisheries goes to middlemen, rather than the fishers themselves, so Carolsfeld and his colleagues in Bolivia are trying to negotiate more equitable arrangements for the paiche fishery. "The challenge is we're dealing with the established social status quo," says Carolsfeld. "We have to manage not only the resource, but how people think about it."

In other parts of the Bolivian Amazon, the project is encouraging people to take up fish farming of pacu, a kind of giant vegetarian piranha, in small earthen ponds. In some regions, there is a tradition of women raising fish, so the goal is to spread the practice to other areas to provide a livelihood for rural communities. Mark Flaherty, a geographer at the University of Victoria who is part of the project team, is working with a Bolivian rural development bank, CIDRE, to develop loans and other financial products to help people set up small aquaculture operations in their communities. "We're trying to verify the assumption that people are interested," he says. "We want to find out what they need to get started, and if credit is an issue."



A Bolivian fisherman on a tributary of the Amazon River paddles back to shore with his catch of paiche. (Photo: Fernando M. Carvajal-Vallejos)

They also want to build up local technical expertise rather than rely on foreign experts who will disappear when the project ends — a problem other community-based aquaculture projects in the developing world have encountered before, says Flaherty. "The fancy for it ends when the project ends," he says. "People need skin in the game."

With that in mind, the team is working to identify and train lead farmers who can help launch new aquaculture projects.

But none of this will matter if people in other parts of Bolivia aren't interested in eating the fish. So Luis Badani from the Bolivian marketing consultant IMG is surveying markets around the country to find out why people eat so little fish, and what might change their minds. The main complaints, he has found, are that fish is generally expensive, smells bad and has too many bones.

Badani's team is working on ways to solve those problems — improving the supply chain so that the fish arrive to market in better condition, with more diverse choices and better prices, as well as designing a permanent media campaign to encourage people to try fish. Paiche and pacu currently make up just a small part of the market for fish in Bolivia, so there's plenty of room for growth, he says.

There could also be major export markets for both paiche and pacu in neighbouring countries, says Badani, but it could take several years for Bolivia's nascent industry to develop to the point where it meets international quality standards. "The priority in these years is to meet domestic demand and achieve reasonable levels of consumption at the national level," he says.

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READING AS THINKING

Answer the following in complete sentences.

1. Complete the following questions to figure out what the main idea of the article is.

a) How does the title of the article relate to the reading?

b) Locate three important ideas in the first two paragraphs of the article.

c) A topic sentence tells us what the article is about. What is the topic sentence in this article?

d) You now have enough information to determine the main idea. Record the main idea of the article and three supporting details.

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2. a) What does the article tell us about paiche and pacu?

b) Compare and contrast the information provided in the article about the two types of fish.

SIMILARITIES	DIFFERENCES

3. Describe the role of Mark Flaherty in this project.

4. Why are sustainably sourced fish important? Provide evidence from the article.

5. Pictures tell important stories. Examine the picture. What moment does the picture capture?
How is this picture connected to the main idea of the article?

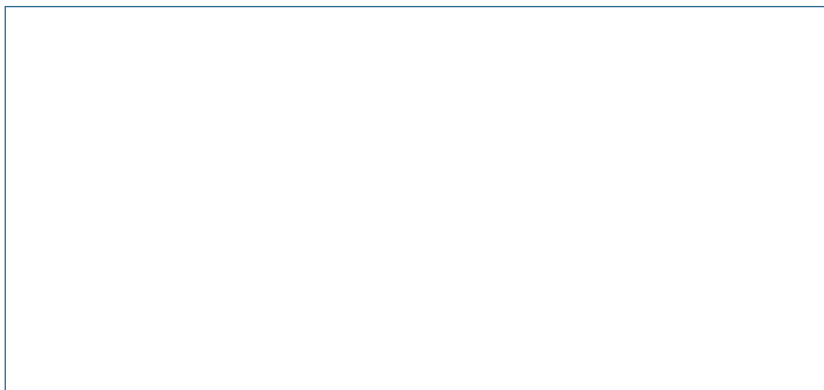
6. Evaluate the importance of the Amazon Fish for Food project.

7. In the article, Carolsfeld is quoted as saying that “the challenge is we’re dealing with the established social status quo.” What does this statement mean and how is the established social status quo a challenge?

FISH FOR FOOD

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8. What do you think are the most informative words in the article? Choose five words and sketch an image that each word brings to mind.



Think-Pair-Share

9. *Think*

Reread the last three paragraphs of the article. Pretend that you work for Luis Badani at IMG in marketing. When you work in marketing, your job is to promote and sell products. Your task is to design a media campaign to encourage people to try fish.

a) Badani has identified three main complaints that Bolivians have about eating fish. What are they?

b) Choose two of the following marketing mediums to encourage people to eat fish and defend your choices.

- Broadcast: television or radio
- Print: newspapers or magazines
- Digital and Interactive: banner ads (small ads that appear on web pages), streaming audio and video, website
- Social media: Twitter, Instagram or Facebook

FISH FOR FOOD

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- c) What is your marketing theme or central message of the campaign? Remember that your goal is to encourage people to eat more fish in their diet.

Pair

Share and discuss your ideas in a small group. In your group, choose one marketing medium and theme. Create a highly effective and engaging ad idea together.

Share

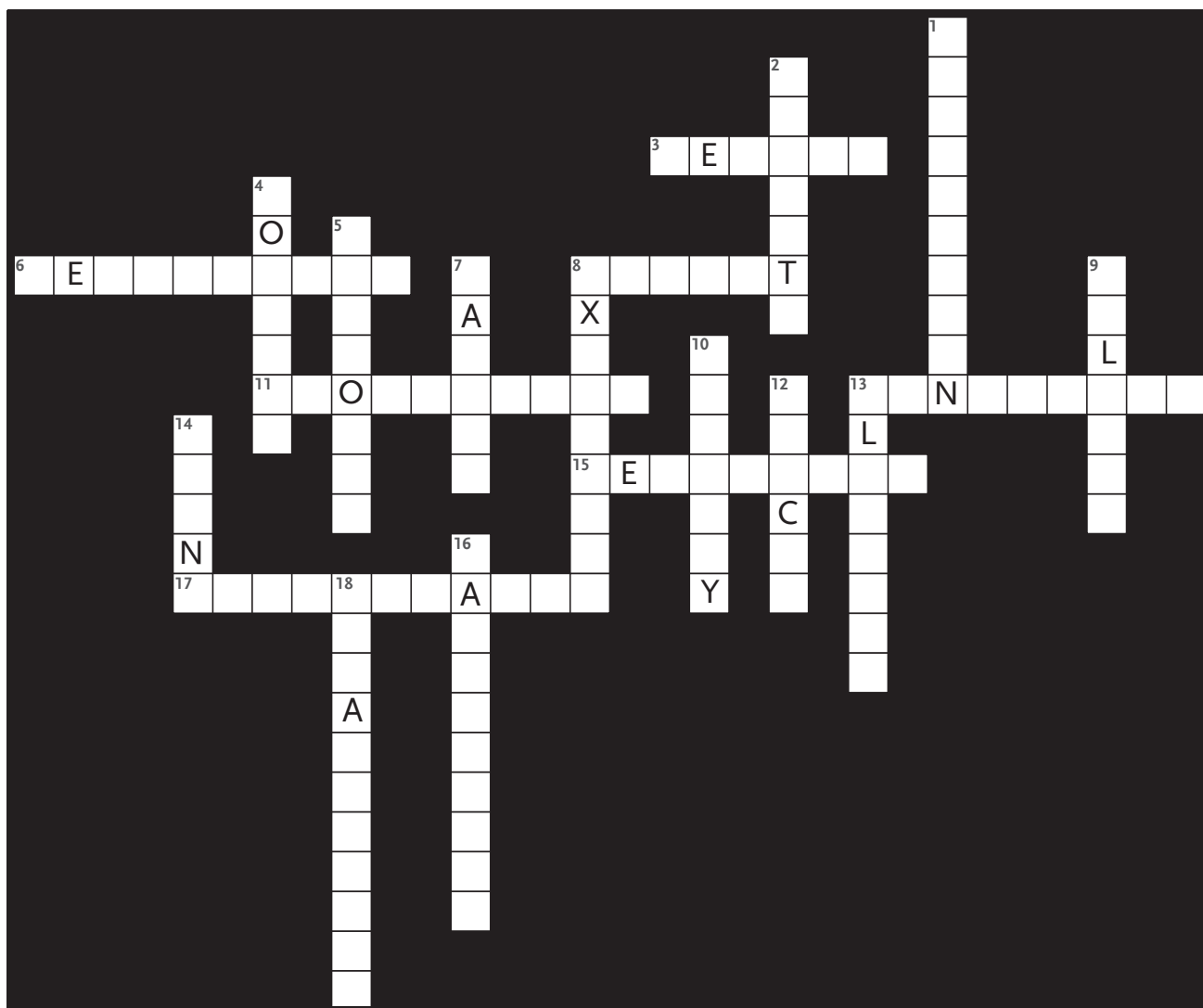
Each group can share their idea with the class.

ONLINE

1. Locate Bolivia on [Google Maps](#) and explore the country. Using the quick facts section and other research tools find the following:
 - a) a mountain range
 - b) a desert
 - c) a rainforest
 - d) the capital city
 - e) the highest navigable lake on Earth
2. Visit [Peces Para La Vida](#) (be sure to translate the page to English) and the [IDRC](#) to learn more about improving food security in Bolivia.
3. Visit the [World Fisheries Trust](#) to learn more about this and other exciting projects.
4. Watch this [video](#) to learn more about aquaculture.
5. Read about [Joachim Carolsfeld](#).
6. Read about [Mark Flaherty](#).
7. Learn more about the project on the [University of Victoria](#) website.
8. Discover more about [paiche](#).
9. Visit the [David Suzuki Foundation](#) to learn more about sustainable fishing practices.

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CROSSWORD:

Across

3. Unit of length in the metric system
6. Not eating meat
8. Sending a product to be sold in other countries
11. A person who studies geography
13. Relating to money
15. Having special knowledge about how something is done
17. Methods that do not use up a natural resource

Down

1. The act of producing
2. Geographical areas of demand for products

4. Outside of one's own country
5. An entire nation or country
7. A marketing consultant with IMG
8. The skill of an expert
9. A country in South America
10. A place where fish are reared for commercial purposes
12. A monstrous fish
13. A geographer at the University of Victoria
14. Money lent at interest
16. Executive director of the World Fisheries Trust
18. Cultivation of fish for food