

Appendix 3. Commercialization transaction costs and fishing co-ops

Description of the factors affecting the transaction costs of commercialization

Below we list and describe the factors thought to influence fishers' costs to reach the first point of commercialization for their products in the study area. These factors were determined based on long-term participant observation conducted in each community. All factors are grouped in Table A3.1:

Closest point of commercialization: Defined as the main closest point of sale or commercialization for most fishers in each community.

Distance: We provide the best approximation available of distance in Km either by land or sea to reach the first point of commercialization. Note that in most cases, significant portions of land travel are conducted on primitive dirt roads. Please refer to Figure 1 for the location of each market destination.

Presence of fish buyers: The more frequent the presence of a fish buyer to purchase fishers' catch the lower the costs of reaching the first point of commercialization for the fishers because they do not need to transport the catch themselves. We label "Yes" a constant and reliable presence of fish buyers in any given community and "No" meant a rare or unreliable presence of fishbuyers. "Sometimes" indicated an in-between constant and rare, but still unreliable presence of fishbuyers.

Costs of land travel: Incorporates perceptions of costs related to ice provision for transportation, fuel and time associated with the frequency at which fishers in those communities need to use their own vehicles (or those of the co-op) to transport their catch to the first point of commercialization, as well as the associated maintenance costs related to travel on primitive dirt roads. In this region conditions are highly variable depending on rains and other weather events. Primitive road conditions increase general vehicle maintenance costs, the use of spare parts, already hard to get in this region, and thus, vehicle reliability and general availability in any given community. Gray cells in Table A3.1 indicate where this type of cost does not apply.

Costs of sea travel: Several communities transport their catch by sea to reach the first point of commercialization. This factor incorporates perceptions of costs related to ice provision for transportation, fuel and time needed to be spent travelling by sea. Gray cells indicate where this type of cost does not apply.

Table A3.1 Closest point of commercialization per community and the factors affecting the transaction costs for reaching them in the study area

Community	Closest point of commercialization	Distance Total Km / <u>dirt road Km</u>	Presence of fish buyers [§]	Costs of land travel	Costs of sea travel	Transaction costs of reaching first point of commercialization
Agua Verde	Cd. Constitución	126 / <u>41</u>	No	High		High
Santa Martha	Agua Verde*	~9	No		Low	Low
Tembabiche	Cd. Constitución	<u>60</u>	No	High		High
Ensenada Cortés	San Evaristo	<u>~15</u>	No		Low	Low
Palma Sola	San Evaristo	<u>~30</u>	No		Low	Low
Punta Alta	San Evaristo	<u>~7</u>	No		Low	Low
La Cueva	San Evaristo	<u>~7</u>	No		Low	Low
Nopoló	San Evaristo	<u>~7</u>	No		Low	Low
San Evaristo	San Evaristo & La Paz	129 / <u>60</u>	Yes	Low		Low
El Pardito	San Evaristo & La Paz	~14	Sometimes		Low	Low
El Portugués	El Portugués		Yes	Low		Low
Punta Coyote	La Paz	~80 / <u>20</u>	Sometimes	High		High

Notes: [§] Presence of fishbuyers in any given community is very dynamic. We define “yes” as a constant, reliable presence, and “No” as rare or not reliable. *Agua Verde is not a point of commercialization, but it is the place where Santa Martha fishers take their catch and from there is taken to Cd. Constitución. Gray boxes indicate situations where the parameter does not apply either because there is no need to travel, either by land or sea to the first point of commercialization.