If you only have 30 minutes …

Examine how both traditional and technological farming and aquaculture practices contribute to sustainable food systems around the world.

Text Mining (8 minutes)

Skim the reading. Identify and locate an example of traditional and technological method of food production.[1]

Traditional type of method (farming or fishing)	
Location	

Technological type of method (farming or fishing)	
Location	

Text Analysis (18 minutes)

In pairs or small groups, choose two traditional and two technological farming or aquaculture methods from the article. You may build on the examples you found during text mining or choose new ones. For each, explain the practice and its benefit to society.[2]

Traditional Method	Location	Practice	Benefit

Technological Method	Location	Practice	Benefit

Synthesis (4 minutes)

Write a one-sentence thesis that explains why Steinmetz includes both traditional and technological examples in his work. What message is he trying to convey about the future of food production?[3]

Common Core Standard(s) Met:

CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCRA.R.3 Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

RH.9-10.3 Analyze in detail a series of events described in a text; determine whether earlier

events caused later ones or simply preceded them.

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1 Answers may include any of the following:

Traditional: 1) Type: Fishing; Location: Spain (Cadiz); 2) Type: Fishing; Location: Bali, Indonesia; 3) Type: Fishing; Location: Mauritania; 4) Type: Fishing; Location: Alaska (Bristol Bay).

Technological: 5) Type: Aquaculture; Location: Coastal regions of China; 6) Type: Agriculture; Location: Global, aerial monitoring; 7) Type: Fishing management; Location: Alaska; 8) Type: Data collection; Location: Global, via photography.

2 Answers may include any of the following:

Traditional: 1) Type: Fishing; Location: Spain (Cadiz); Practice: Almadraba—a 3,000-year-old method using a labyrinth of nets to trap tuna; Benefit: Sustainable, protects bluefin tuna stocks, provides income for local fishers, preserves heritage. 2) Type: Fishing; Location: Bali, Indonesia; Practice: Seaweed farming by hand in shallow waters; Benefit: Environmentally friendly, creates local jobs, does not damage marine ecosystems. 3) Type: Fishing; Location: Mauritania; Practice: Octopus fishing under government-set quotas; Benefit: Helps restore declining octopus populations, maintains long-term viability of fisheries. 4) Type: Fishing; Location: Alaska (Bristol Bay); Practice: Monitoring salmon migrations using tower-based scientists; Benefit: Ensures enough fish reproduce before fishing begins, supports future harvests and sustainability.

Technological: 5) Type: Aquaculture; Location: Coastal regions of China; Practice: Large-scale fish farms “floating villages”; Benefit: Increases seafood supply for growing populations. 6) Type: Agriculture; Location: Global, aerial monitoring; Practice: Use of drones to photograph and monitor land-use patterns; Benefit: Reveals global agricultural trends; raises awareness of land-use impact. 7) Type: Fishing management; Location: Alaska; Practice: Fishery control via river checkpoint and data; Benefit: Balances ecological needs with economic goals, prevents overfishing. 8) Type: Data collection; Location: Global, via photography; Practice: Visual documentation of land-use policy impacts through aerial

imagery; Benefit: Informs public and policymakers, fosters accountability in global food production systems.

3 Sample answers may hit on a blanched perspective, where sustainable food production doesn’t depend on one method alone; environmental awareness, in which some traditional methods protect ecosystems, while technological methods allow us to manage resources better; global interdependence, in which both types hep us see how different communities contribute to feeding the planet; encouraging thoughtful choices, in which people “vote with their forks.”