



Coffee Production

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"Coffee – the favourite drink of the civilized world." Thomas Jefferson

**This is a collation of resources aligned to syllabus requirements for Stage 6:
People and Economic Activity**

Syllabus outline: People and Economic Activity

The focus of this study is a geographical investigation of economic activity integrating the local and global context.

Students learn about:

Global economic activity

- a description of the nature, spatial patterns and future directions of ONE economic activity in a global context.
- factors explaining the nature, spatial patterns and future directions of the selected economic activity such as
 - biophysical: climate, soils, topography, site
 - ecological: sustainability and resource use
 - economic: competitive advantage, consumer demand, mobility of labour and capital
 - sociocultural: tradition, changing lifestyles, labour participation rates
 - organisational: ownership, decision making and control
 - technological: transportation, information transmission and flows, biotechnology
 - political: quotas, tariffs, compacts, agreements
- the environmental, social and economic impacts of the economic activity such as pollution, resource depletion, labour exploitation, cultural integration, provision of infrastructure, job creation, transfer pricing.

Local case study

- a geographical study of an economic enterprise operating at a local scale. The case study should explore

- the nature of the economic enterprise
- locational factors
- ecological dimensions including environmental constraints, climate, and human impacts on the environment such as pollution and ecological sustainability
- internal and external linkages and flows of people, goods, services and ideas
- effects of global changes in the economic activity on the enterprise.

An introduction to Coffee

A great resource for introducing the topic is *Black Coffee*, a 2007 Canadian documentary film examining the complicated history of coffee and detailing its political, social, and economic influence from the past to the present day.

The film details how coffee is the eighth most traded legal commodity in the world. It is also the fourth most valuable agricultural commodity. However, only one cent of a \$2 cup of coffee goes to the grower. This inequality has helped shape the history of continents and the Cold War.

Episode 1 – The Irresistible Bean

This episode explores coffee's origins in Ethiopia and its spread over five Continents and associated consequences such as slavery.

Episode 2 – Gold in Your Cup

This episode examine coffee's 19th century dominance in Brazil and Central America.

Episode 3 – The Perfect Cup

Examine coffee as the first global industry to experiment with Fair Trade practices and co-operative farming.

Source: <http://www.imdb.com/title/tt0963976/plotsummary>

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A description of the nature, spatial patterns and future directions of ONE economic activity in a global context

HISTORY

The National Coffee Association of the USA website provides a detailed history of coffee production.

Source: <http://www.ncausa.org/About-Coffee/History-of-Coffee>

Global production

A brief extract

"Coffee grown worldwide can trace its heritage back centuries to the ancient coffee forests on the Ethiopian plateau. There, legend says the goat herder Kaldi first discovered the potential of these beloved beans."

The story goes that that Kaldi discovered coffee after he noticed that after eating the berries from a certain tree, his goats became so energetic that they did not want to sleep at night.

Kaldi reported his findings to the abbot of the local monastery, who made a drink with the berries and found that it kept him alert through the long hours of evening prayer. The abbot shared his discovery with the other monks at the monastery, and knowledge of the energizing berries began to spread.

As word moved east and coffee reached the Arabian Peninsula, it began a journey which would bring these beans across the globe"

Headings in this resource include:

- The Arabian Peninsula
- Coffee comes to Europe
- The New World
- Plantations around the World
- Comin to the Americas

Coffee in Australia

The following website examines the development of coffee production and a coffee culture in Australia

'For the love of Beans' (A Blog about coffee)

<https://steaming.wordpress.com/tag/australian-coffee/>

A brief extract

"The first big coffee boom was in the mid 1800's when a couple of farmers in Queensland took advantage of the perfect growing climate. The taste was also above par because, according to Australia's nationwide coffee consultant, Gary Trye, the 'low acidity in Australian soil, gives Australian coffee its mild body and caramel flavour'.

Australian coffee won awards throughout Europe in the late 1880's. It was 'roasted and ground on the premises' in most food stores nationwide and a staple in the Australian diet. Unfortunately, the lack of cheap labour and a tsunami wiped out our coffee market in the early 1900's; it has only become popular to grow in the past three decades."

What is Coffee?

Students need an understanding of the source of coffee to understand how and where it is grown

The National Coffee Association website provides a detailed examination of the coffee plant and the steps involved in producing a cup of coffee.

<http://www.ncausa.org/About-Coffee/What-is-Coffee>

A brief extract



'Coffee trees are pruned short to conserve their energy and aid in harvesting, but can grow to more than 30 feet (9 meters) high. Each tree is covered with green, waxy leaves growing opposite each other in pairs. Coffee cherries grow along the branches.

Because it grows in a continuous cycle, it's not unusual to see flowers, green fruit and ripe fruit simultaneously on a single tree.

It takes nearly a year for a cherry to mature after first flowering, and about 5 years of growth to reach full fruit production. While coffee plants can live up to 100 years, they are generally the most productive between the ages of 7 and 20. Proper care can maintain and even increase their output over the years, depending on the variety. The average coffee tree produces 10 pounds of coffee cherry per year, or 2 pounds of green beans.

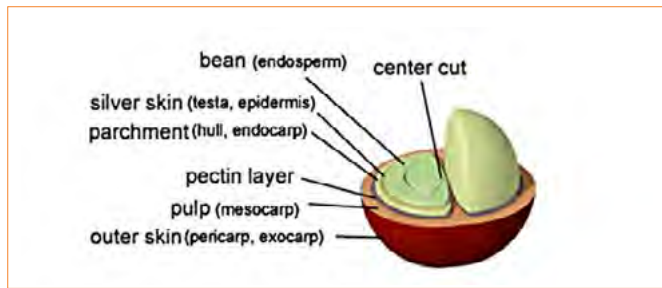
All commercially grown coffee is from a region of the world called the Coffee Belt. The trees grow best in rich soil, with mild temperatures, frequent rain and shaded sun'



Images of coffee bushes, the flower and beans

Source <http://www.ncausa.org/About-Coffee/What-is-Coffee>

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Source <http://www.ncausa.org/About-Coffee/What-is-Coffee>

A brief extract: The anatomy of a coffee cherry

The coffee cherry's outer skin is called the exocarp. Beneath it is the mesocarp, a thin layer of pulp, followed by a slimy layer called the parenchyma. The beans themselves are covered in a paper-like envelope named the endocarp, more commonly referred to as the parchment.

Inside the parchment, side-by-side, lie two beans, each covered separately by yet another thin membrane. The biological name for this seed skin is the spermoderm, but it is generally referred to in the coffee trade as the silver skin.'

A selection of infographics about coffee production can be analysed in conjunction with using the websites. A Google Search can be used to find the most recent images.



Source: <https://myvirtualcoffeehouse.com/coffee-from-around-the-globe>



Source: <https://naturalon.com/facts-world-coffee-coffee-world-infographic/>

Factors explaining the nature, spatial patterns and future directions of the selected economic activity such as – biophysical: climate, soils, topography, site

Biophysical factors

For a detailed coverage of the physical requirements for coffee production the Coffee Research Organisation, National Coffee association has comprehensive information

Coffee Research Organisation –

<http://www.coffeeresearch.org/agriculture/environment.htm>

National Coffee Association –

<http://www.ncausa.org/About-Coffee/Coffee-Around-the-World>

Information on these sites includes:

- the best climate for growing coffee beans
- what impacts the flavour of coffee including production in over 50 different countries.

Factors explaining the nature, spatial patterns and future directions of the selected economic activity such as – ecological: sustainability and resource use

Ecological factors

Information about the sustainable production of coffee can be found on the following websites.

The Coffee Research Organisation – <http://www.coffeeresearch.org/politics/sustainability.htm>

International Coffee Organisation –

http://www.ico.org/sustaindev_e.asp

Sustainable farming

Extracts

'There is no clear definition of a sustainable farm or sustainable farming, and definitions that have been proposed are never agreed upon by those individuals who wish to make "sustainability" a term used to market coffee. The definition of coffee sustainability, however, is logical. Sustainable coffee is coffee grown in a manner that is kind to the environment and its people'

A sustainable farm gives back as much to the land and people as it receives. It seeks independence from non-renewable resources, using renewable resources when possible. Sustainable farming also minimizes pollution, takes steps to care for the environment, and cares for its employees.

A sustainable farm will reuse coffee husks as heating fuel rather than cutting down eucalyptus trees. It will plant new trees for those used during heating, or it will

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implement pollution free coffee dryers such as the solar coffee dryer developed by Coffee Kids.

Sustainable farming implements practices to minimize water consumption and to clean the water used. Water from the fermentation tanks should never be returned to rivers or lakes, but rather filtered naturally through the earth and then used for coffee irrigation. Some excellent farms such as Agribahia in Bahia, Brazil ferment pulped coffees without water for a short time before sending the coffee to demucilating machines. This cuts down on water waste while allowing them to consistently provide some of Brazil's best coffees.

A sustainable farm will replace the natural nutrients of the land by spreading fertilizers and organic matter (composted coffee pulp) under the coffee trees and between the coffee trees. This type of fertilization has been found to increase yields over time and to produce a more uniform and natural mineral content in the ground.

Sustainable farms will also engage in practices such as shade growing, biodiversity, organic farming, and sustainable agriculture. In addition to seeking renewable energy resources, they will promote education programs, provide medical care for workers, and provide decent wages and working conditions for their employees'

Source: <http://www.coffeeresearch.org/politics/sustainability.htm>

Environmental and social sustainability

Extracts

'The contribution made by coffee growing and trading to environmental and social issues is highly positive, certainly compared with most alternative economic activities. On the environmental side coffee is an evergreen shrub, hence an important contributor to carbon sequestration, and is effective in stabilizing soils. It also permits the preservation of much of the original bio-diversity in planted areas.

One of the main problems for some regions is water pollution arising from wet processing. To address this issue, the Organization assists coffee farmers in producing countries to use environmentally-friendly technologies for the washing process through pilot projects in Africa and Latin America.

It is vital that coffee production and processing should take into account environmental needs to ensure sustainability. It is also necessary that the economic environment should encourage stability and reasonable living standards for the populations

involved with coffee, and ensure the maintenance of quality. In practical terms, the ICO encourages coffee quality improvement through projects dedicated to improving cultivation, processing, storage, transportation and marketing practices. It also encourages efforts to strengthen regional capacity in the field of coffee certification and verification such as through a multi-country project in Eastern Africa to create a regional centre for certification and an outreach programme for producers.

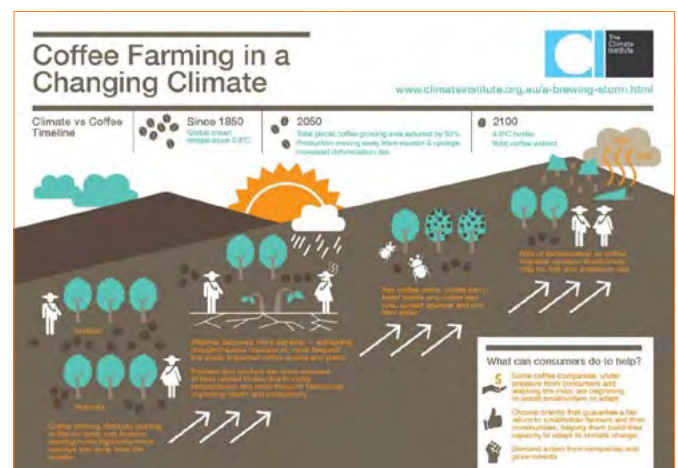
Coffee also makes a positive contribution on the social side to maintaining substantial rural employment and stable communities. Improving the living standards of coffee producers, especially smallholders, is a priority for Governments, as highlighted at the last World Coffee Conference. Relevant ICO activities include building the capacity of institutions, improving access to credit and risk management mechanisms, reducing vulnerability to income volatility and promoting gender equality.

Source http://www.ico.org/sustaindev_e.asp

Climate change

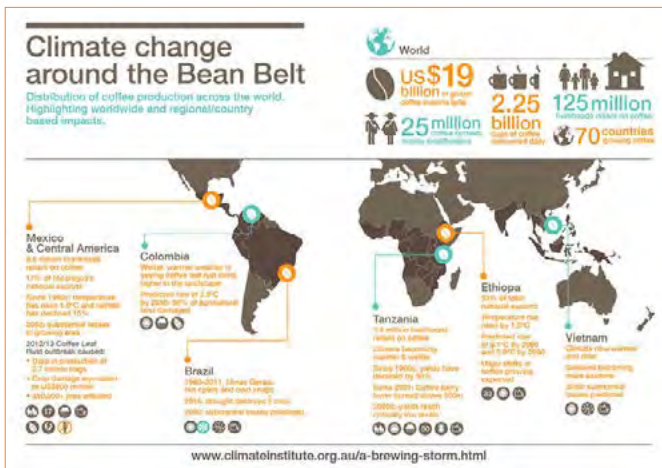
Extract

Several adaptation and mitigation strategies for coffee producers have been put forward in response to the challenges facing the sector. Short-term adaptation strategies include improved farming practices and better post-harvest processing. Longer-term strategies include capacity-building, improved monitoring of climate data, enhancing soil fertility, introducing or preserving different production models, and developing drought and disease-resistant varieties. In more extreme cases, the solution may be to diversify out of coffee or shift production to more suitable areas. Mitigation strategies include calculating and reducing greenhouse gas emissions on the farm, and facilitating the creation of carbon sinks.



Source: <http://www.climateinstitute.org.au/coffee.html>

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Source http://www.ico.org/sustaindev_e.asp

Source: <http://www.climateinstitute.org.au/coffee.html>

Factors explaining the nature, spatial patterns and future directions of the selected economic activity such as:

- economic: competitive advantage, consumer demand, mobility of labour and capital
- socio-cultural: tradition, changing lifestyles, labour participation rates

Economic / Socio-cultural factors

An analysis of the social factors linked to coffee including social and economic influences as well as customs and methods of production can be found at http://www.cafedecolombia.com/particulares/en/sobre_el_cafe/mucho_mas_que_una_bebida/impacto_social/

A brief extract

'Coffee unifies various characteristics that make it a crop with an enormous social and economical significance. On one side, this product was for many years the second most traded commodity in international commerce, after petroleum, making it one of the principal sources of income for nearly 50 countries. The main exporters of the commodity still are in Africa, Asia, as well as in the developing and less developed countries of the American continent. The income generated by this product has traditionally been considered as a source of social and economical stability for more than 25 million farming families in tropical and subtropical regions around the world

Additionally, and given that a good portion of those coffee producers are owners of farms with limited dimensions, the export of coffee is an important source of income distribution. In fact, in the absence of market distortions the income from coffee operations is circulated amongst a broad population base, in contrast

with other products such as petroleum, whose income produces profits mostly for the governments and companies in charge of its exploration, refinement and distribution'

Factors explaining the nature, spatial patterns and future directions of the selected economic activity such as – organisational:ownership, decision making and control

Organisational factors

Relevant to this section is the role and influence of the International Coffee organisation and international coffee agreements.

Detailed information can be found on the website http://www.ico.org/mission07_e.asp?section=Meetings_and_Documents

A brief extract

'The International Coffee Organization (ICO) is the main intergovernmental organization for coffee, bringing together exporting and importing Governments to tackle the challenges facing the world coffee sector through international cooperation. Its Member Governments represent 98% of world coffee production and 83% of world consumption. The ICO's mission is to strengthen the global coffee sector and promote its sustainable expansion in a market-based environment for the betterment of all participants in the coffee sector.

- developing coffee consumption and markets for coffee through innovative market development activities
- encouraging the development of strategies to enhance the capacity of local communities and small-scale farmers
- promoting training and information programmes to assist the transfer of technology relevant to coffee
- facilitating information on financial tools and services to assist producers
- providing objective and comprehensive economic, technical and scientific information on the world coffee sector.'



Source: Good.is <https://www.good.is/articles/infographic-the-money-inside-your-daily-fix>

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Factors explaining the nature, spatial patterns and future directions of the selected economic activity such as – technological: transportation, information transmission and flows, biotechnology

Technological Factors

Technology is involved in many stages of the coffee production process. This can be studied through the 'Steps in coffee production' and an investigation of coffee 'supply chains'

Coffee Industry supply chain

https://saylordotorg.github.io/text_the-sustainable-business-case-book/s13-02-the-coffee-industry-supply-chain.html

The Amazing Supply Chain of Your Morning Coffee

<https://www.allthingsupplychain.com/the-amazing-supply-chain-of-your-morning-coffee/>

Commodity chain and commodity prices

<http://www.kencaf.com/commodity-chain-and-coffee-prices/>

Economics of coffee

https://en.wikipedia.org/wiki/Economics_of_coffee

Extract

'The coffee industry currently has a commodity chain that involves producers, middlemen exporters, importers, roasters, and retailers before reaching the

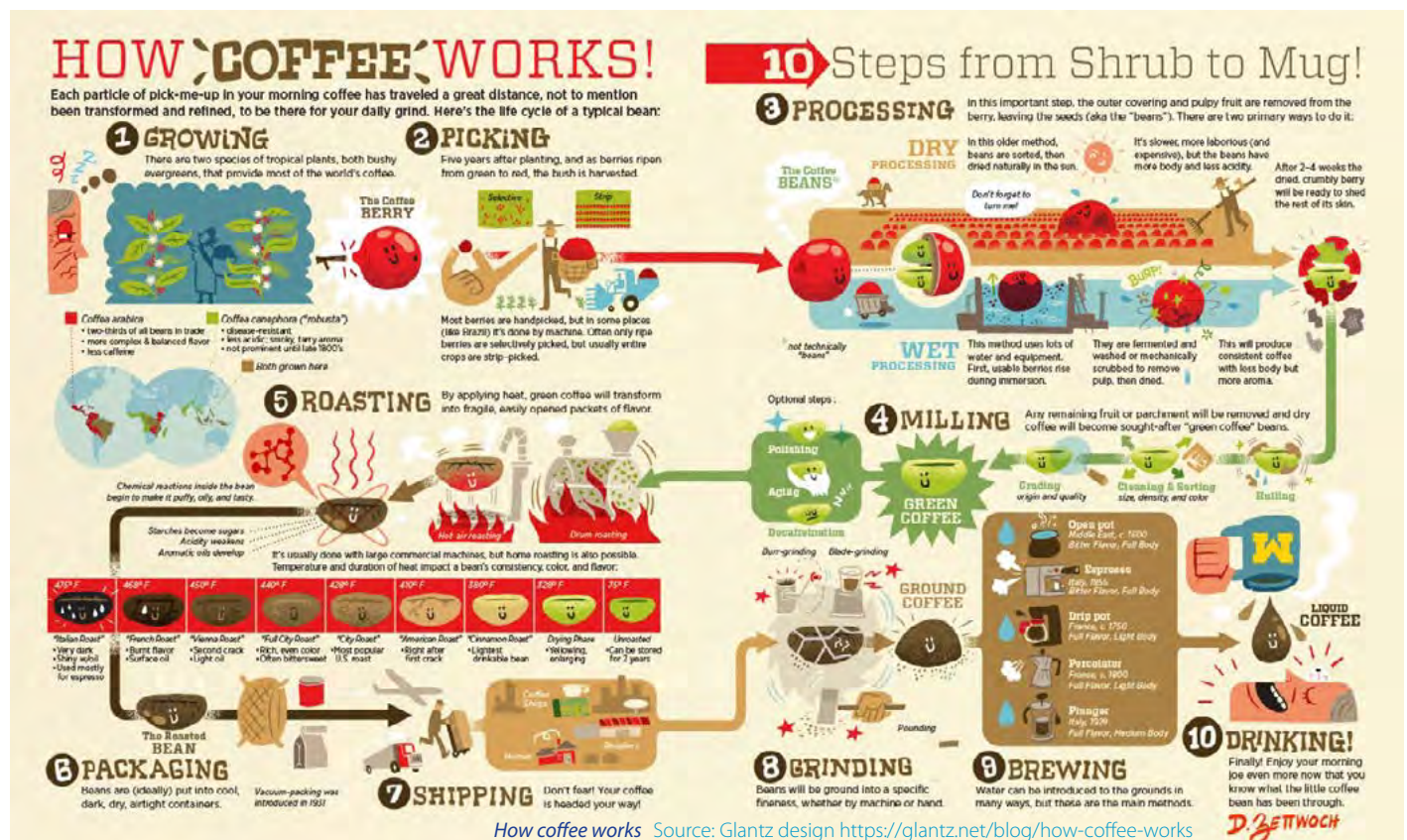
consumer. Middlemen exporters, often referred to as coffee "coyotes," purchase coffee directly from small farmers. Large coffee estates and plantations often export their own harvests or have direct arrangements with a transnational coffee processing or distributing company. Under either arrangement, large producers can sell at prices set by the New York Coffee Exchange'

Green coffee is then purchased by importers from exporters or large plantation owners. Importers hold inventory of large container loads, which they sell gradually through numerous small orders. They have capital resources to obtain quality coffee from around the world, capital normal roasters do not have. Roasters' heavy reliance on importers gives the importers great influence over the types of coffee that are sold to consumers.

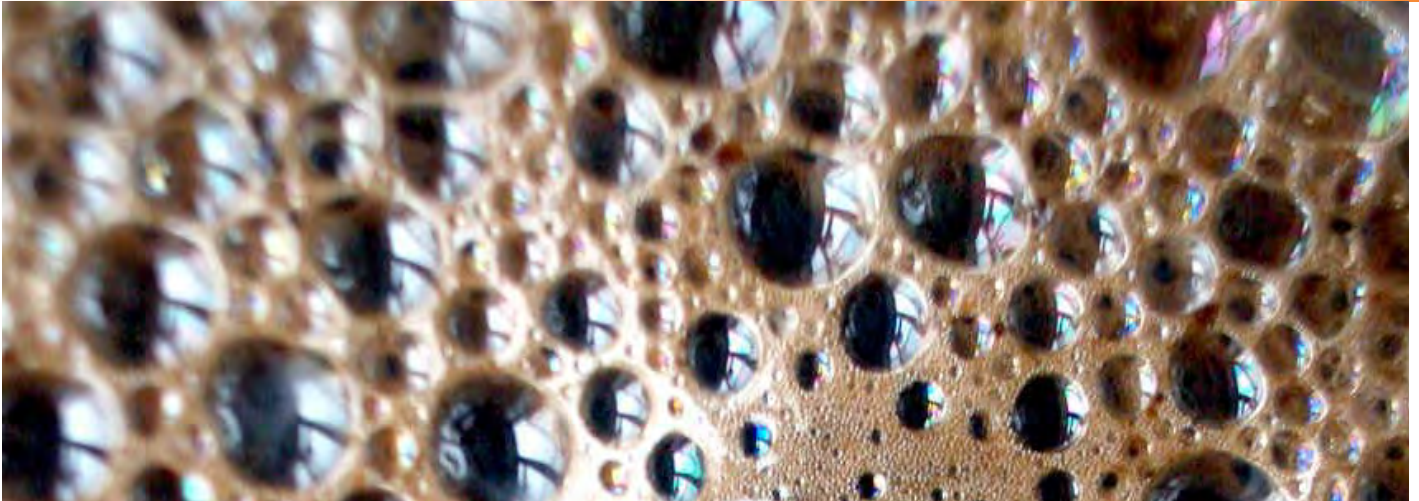
Coffee reaches the consumers through cafes and specialty stores selling coffee, of which, approximately, 30% are chains, and through supermarkets and traditional retail chains. Supermarkets and traditional retail chains hold about 60% of market share and are the primary channel for both specialty coffee and non-specialty coffee. Twelve billion pounds of coffee is consumed around the globe annually, and the United States alone has over 130 million coffee drinkers.

Coffee is also bought and sold by investors and price speculators as a tradable commodity'

Source: https://en.wikipedia.org/wiki/Economics_of_coffee



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Steps in coffee production: Bean to cup

1. Planting
2. Harvesting cherries
3. Processing cherries
4. Drying beans
5. Milling beans
6. Exporting beans
7. Tasting the coffee
8. Roasting the coffee
9. Grinding the coffee
10. Brewing the coffee

Newest Trends in Coffee

Extract

'Below are the top five just now emerging. Some will undoubtedly continue to grow and significantly impact the industry this year while others will simply fade away. It will be interesting to see how each of them fare.'

1. Adding Nitrogen to Cold Brew

Both the National Coffee Association and research company Mintel agree that cold brew will be very strong in 2017 while iced coffee begins to decline. But Mintel goes one step further by predicting the introduction of nitrogen to cold brew. A few national coffee chains are already using the trick to create a creamy cold coffee beverage that is rather unique. If they can make it work, we expect more companies to be experimenting with nitrogen cold brew.

2. Marketing Will Focus on the Experience

Millennials are now the single largest demographic group in America despite the aging population of

baby boomers. As such, the coffee industry will be targeting millennials quite a bit more this year. That means focusing the message on the social experience of coffee rather than brewing that morning cup of joe before heading off to work. Focusing on the experience will be seen in everything from packaging to advertising. There will also be less emphasis on price, given that millennials are more likely to freely spend for an experience they appreciate.

3. A New Emphasis on Coffee Processing

With the industry now focusing more on millennials, they are also looking at new ways to present coffee. We expect to see a greater emphasis on coffee processing to create new flavors and styles. Processing occurs between harvest and grinding; it includes everything from roasting to aging.

4. Greater Demand for Bottled Coffee

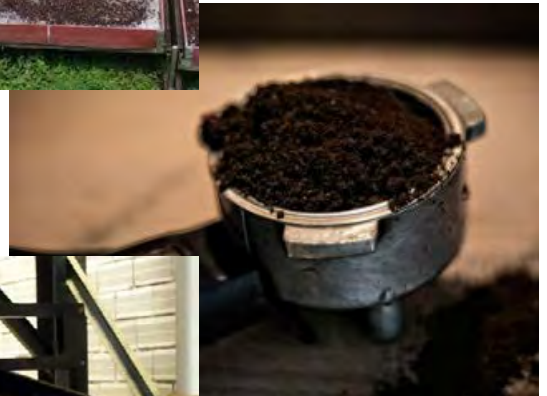
Though iced coffee ought to decline while cold brew grows, both trends could be overshadowed by higher demand for bottled coffee. Known in the industry as ready-to-drink (RTD), this coffee product generated revenues in excess of \$2 billion in 2015. Late last year, Coca-Cola and Dunkin Brands even entered into a partnership to bring new bottled coffee products to market in 2017.

5. The Convergence of Coffee and Alcohol

Lastly, younger coffee drinkers have been looking for the local coffeehouse and the bar next door to merge for a long time. It looks like 2017 could be the year for such an enterprise. Industry watchers expect more coffeehouses to start serving alcohol in 2017. Some of them will undoubtedly find ways to infuse their coffee with alcohol to create unique, new beverages'

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<http://galaxiecoffeeblog.com/top-5-coffee-industry-trends-for-2017/>

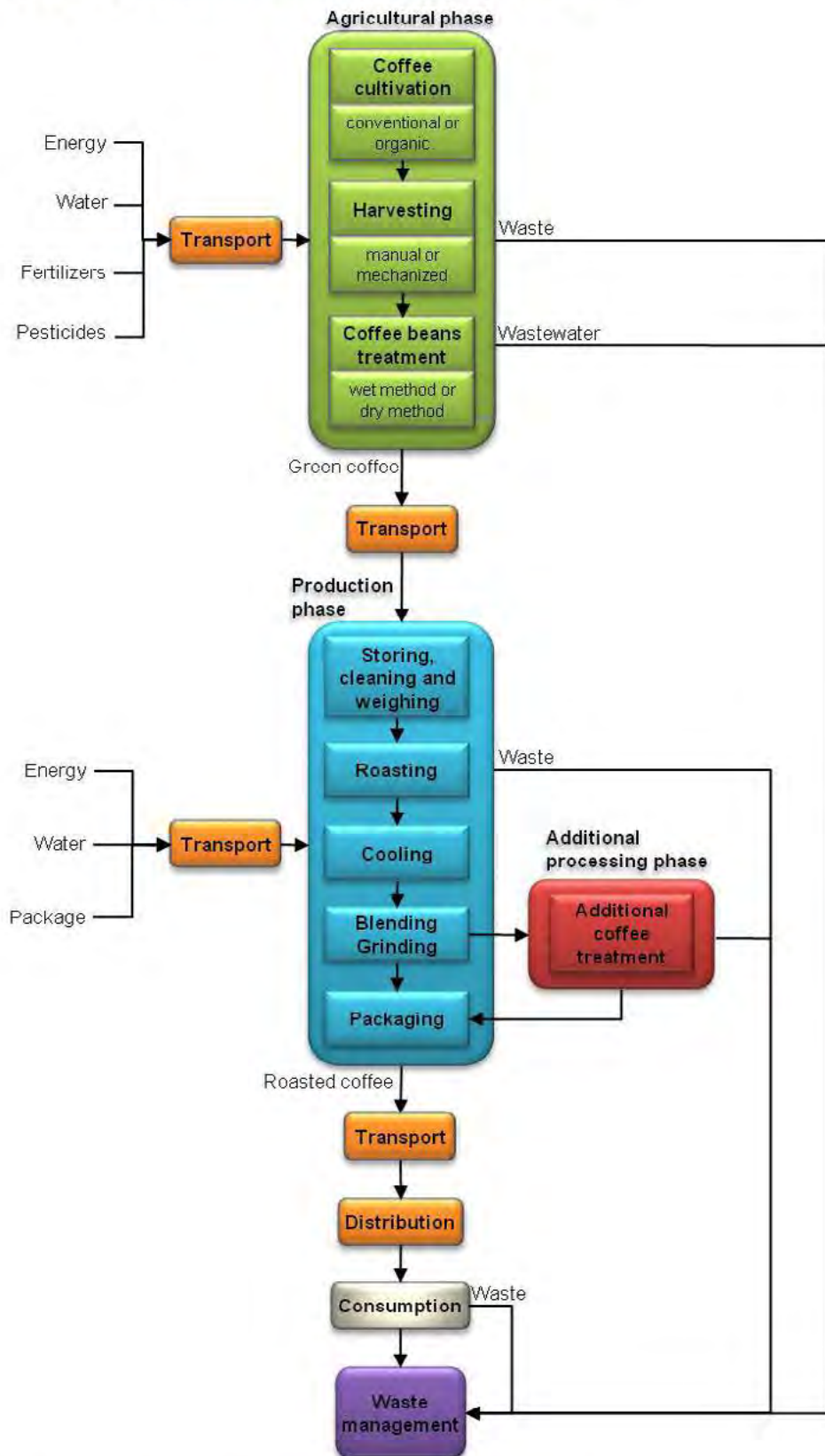


Activity: Can you match the steps of coffee production from Bean to Cup in the following photographs?

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Images source: <http://www.ncausa.org/About-Coffee/10-Steps-from-Seed-to-Cup>

The roasted coffee supply chain



Please note that only the main processes and the main inputs/outputs of the supply chain are indicated

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There are many different diagrams (such as the one below) that can be used to show coffee supply chains

Source: <http://gengenz.net/coffee-grounds-vs-espresso-grounds/>

Factors explaining the nature, spatial patterns and future directions of the selected economic activity such as – political: quotas, tariffs, compacts, agreements

Political factors

Political factors have impacted on development, trade and international agreements

Often political and economic factors are related

Sources of information include:

Café de Colombia website http://www.cafedecolombia.com/particulares/en/sobre_el_cafe/mucho_mas_que_una_bebida/un_producto_norte_sur/th

The Role and Impact of Coffee in Global Development
<http://globalwa.org/issues/coffee/>

The Seattle Times article:
Ensuring Coffee-Growing Communities Get a Fair Shot



<https://www.seattletimes.com/seattle-news/ensuring-coffee-growing-communities-get-a-fair-shot/>

North / South production and consumption

Source: http://www.cafedecolombia.com/particulares/en/sobre_el_cafe/mucho_mas_que_una_bebida/un_producto_norte_sur/th

A brief extract

'Coffee is produced in more than 60 developing countries. Approximately 25% of worldwide exports come from Brazil, followed by Vietnam with a 15% and Colombia with around 11%. The remaining half of worldwide exports is shipped from countries of Central and South America, Asia and Africa. On the other hand, the main importers are the United States (25%), Germany (18%), Japan (8%) and Italy (8%). The enclosed map illustrates, by the size of the red circles, the relative size of the biggest markets. It underlines the fact that the biggest importing countries are in the "North". The blue

circles identify coffee growing areas by their relative size of coffee production, and exports.

During the 19th century and a good part of the 20th century, coffee was the second commodity more transacted in the worldwide economy, after oil. To the extent that more than twenty five million peasants produce and depend on coffee, and that a great proportion of the demand is concentrated in developed countries, the coffee industry acquired in the post war world a great geopolitical relevance. The western developed countries, conscious of the high social impact of coffee and the dependence in the external income for dozens of producer countries felt that this product could constitute an effective way of cooperation during the Cold War. Thus, the international coffee prices became the focus to implement cooperation schemes to assure that a predictable level of coffee income to producing countries, and in that way to be able to contribute to their political and social stability'

Source: http://www.cafedecolombia.com/particulares/en/sobre_el_cafe/mucho_mas_que_una_bebida/un_producto_norte_sur/th

The Role and Impact of Coffee in Global Development

Extract

'The coffee industry faces a litany of challenges. The most pressing issues are disease, climate change, urbanization and the loss of farmland, fluctuating prices, an aging workforce and urban migration. The coffee industry has looked at how to address these issues in ways that support the triple bottom line of profits, people and planet.

What is Sustainable Coffee?

The World Commission on Environment and Development defines sustainable development as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable coffee comprises economic, social and environmental components that relate to the challenges facing today's coffee industry.

Economic Sustainability

The coffee industry employs roughly 100 million people worldwide, most of whom live in developing countries. Many small-holder farmers lack the business skills necessary to consistently produce quality coffee for the international market. Certifiers and roasters have invested in education programs since improved farming husbandry usually yields better coffee harvests and higher prices from companies looking for a stable and long-term supply of coffee. Farmers then use this money to access education, health care and food supply,

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thus raising their overall standard of living. Training programs also help farmers diversify their crops in order to weather price fluctuations that have historically hurt communities heavily dependent on one commodity.

Social Sustainability

Once coffee production becomes more stable and economically sustainable, it can have positive spillover effects on other areas of society as cooperatives and communities invest in improved facilities, risk management tools and education. Many organizations and cooperatives focus on institutional capacity building, gender-based programs that bring women into the formal economy or microfinance projects that support the local economy as it grows around coffee. These programs provide economic and social opportunities to young people who previously had to migrate to larger cities in search of work.

Environmental Sustainability

The coffee industry has been active in the environmental sustainability debate, as changes in climate inevitably affect the quality and taste of your latte. NGOs and companies are creating programs to improve farming practices and post-harvest processing, develop disease and drought-resistant varieties, enhance soil fertility and explore new production models. Whether in regards to deforestation, ocean acidification or drought, the coffee industry is exceptionally aware of the importance of a healthy environment in bringing coffee from bean to cup.

The environmental, social and economic impacts of the economic activity such as pollution, resource depletion, labour exploitation, cultural integration, provision of infrastructure, job creation, transfer pricing.

IMPACTS OF COFFEE PRODUCTION

Environmental impacts

Café de Columbia

http://www.cafedecolombia.com/particulares/en/sobre_el_cafe/mucho_mas_que_una_bebida/cafe_y_medio_ambiente/

What's your coffee costing the planet? Environmental impact of the coffee trade

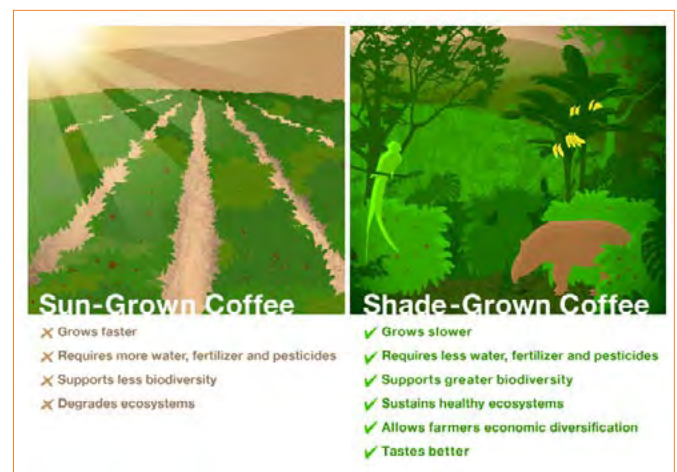
<https://www.sustainablebusiness toolkit.com/environmental-impact-coffee-trade/>

Given that most coffee growing regions are also home to some of the most delicate ecosystems on earth, the potential for serious damage is great.

This article examines

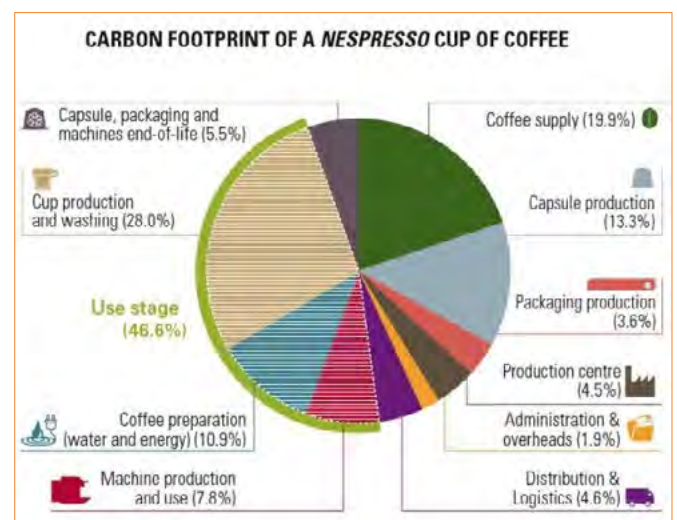
- Traditional and sustainable forms of growing coffee (agroforestry)

- Sun Cultivation Coffee where forest is cleared to grow coffee in rows as a monoculture with no canopy which with the addition of fertilizer, creates high yields destroys biodiversity
- Deforestation to make way for coffee farming
- Water pollution and contamination from the processing of coffee beans that triggers eutrophication of waterways and loss of aquatic biodiversity
- Agrochemical Usage causing increased contamination of waterways and aquifers.
- Waste impacts on soil and water sources because of coffee pulp being dumped into streams
- Soil quality reduction due to canopy removal and increased erosion



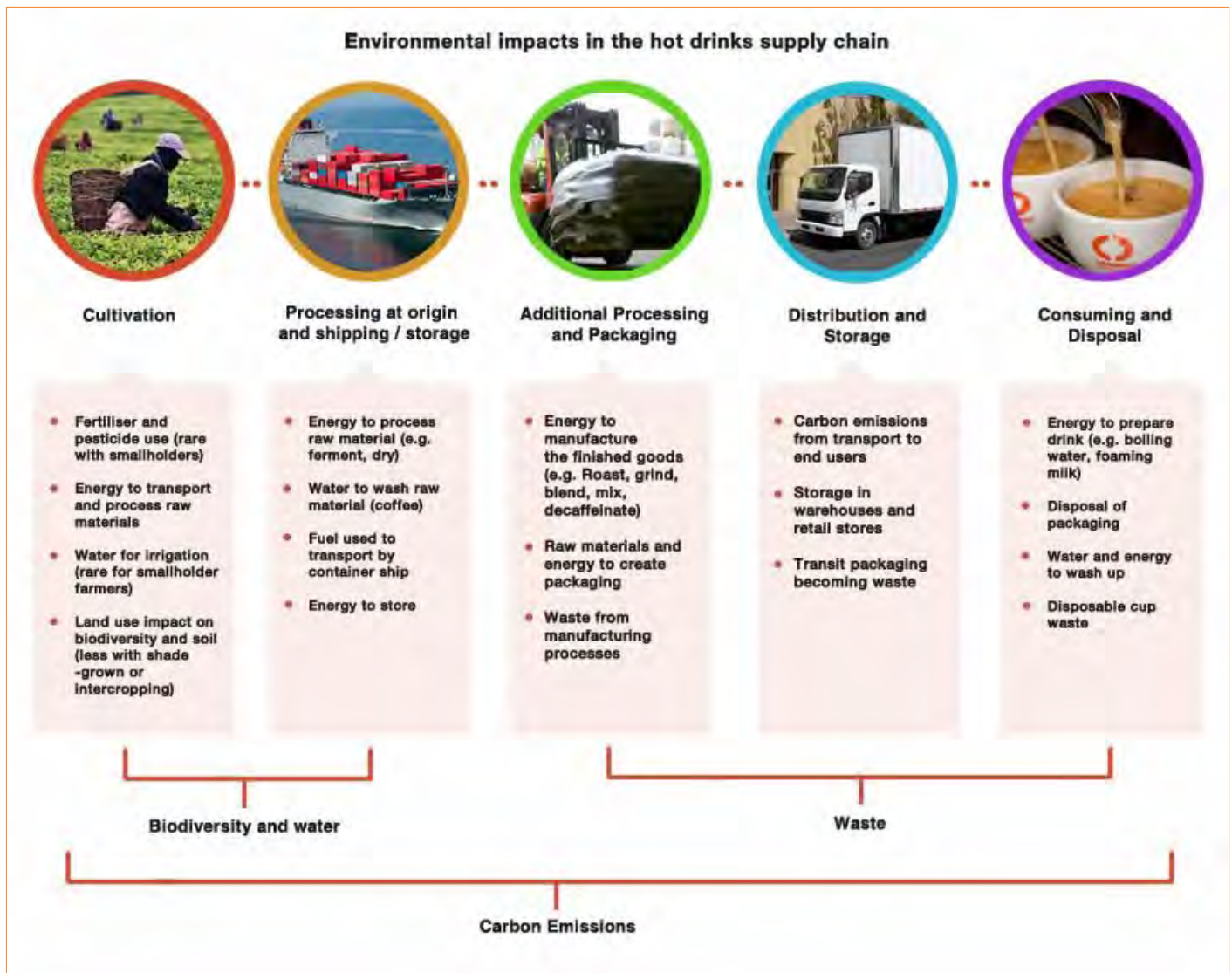
Source: Conservation International – <https://www.conservation.org/SiteCollectionImages/infographic-shadegrowncoffee.jpg>

Is the coffee pod craze brewing an environmental disaster?



Source: <http://www.eco-business.com/news/is-the-coffee-pod-craze-brewing-an-environmental-disaster/>

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Source: Café direct <https://www.cafedirect.co.uk/discover-our-difference/environment/>

Human impacts

Farmworkers Left Behind: The Human Cost of Coffee Production

<https://dailycoffeenews.com/2013/07/17/farmworkers-left-behind-the-human-cost-of-coffee-production/>

Extract

'In general, coffee pickers, migrant workers and farmworkers are the most vulnerable groups involved in coffee production. Moreover, they have traditionally not been included in the coffee industry's sustainability efforts'

Following are some of the most common challenges dealt with in this article:

- Housing Conditions
- Working Conditions
- Lack of Contracts/Low Wages
- Children in the Fields

Fair Trade International

<https://www.fairtrade.net/products/coffee.html>

The evolution of fair trade coffee

<http://www.independent.co.uk/news/business/comment/fairtrade-movement-ethics-chocolate-coffee-a7623046.html>

Extract

'Fairtrade has done great things for raising public awareness that free markets need to be invigilated, but does its model consistently improve the lives of producers?'

Fair for who? The crisis of fair trade for coffee farmers

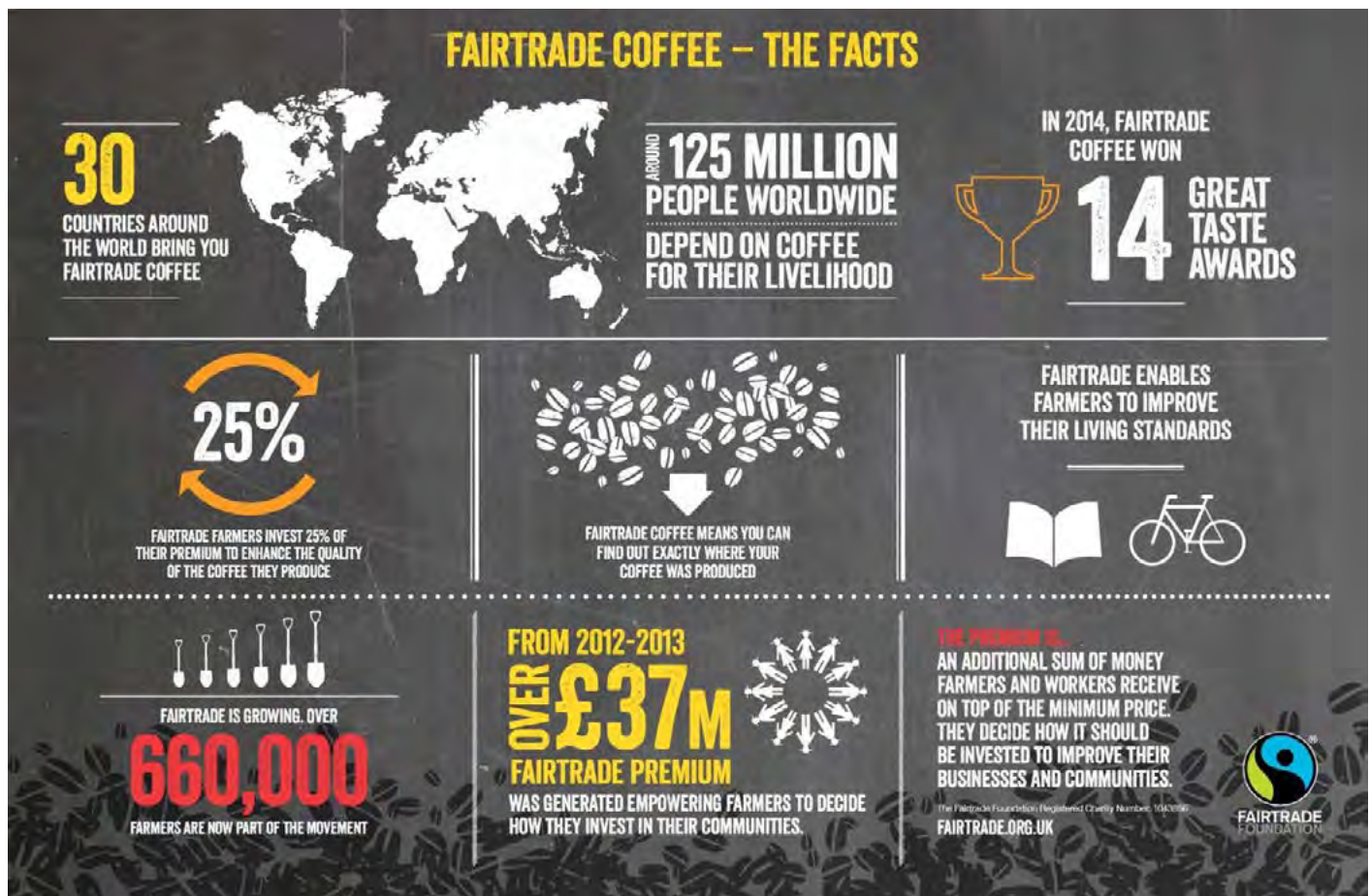
<https://theconversation.com/fair-for-who-the-crisis-of-fairtrade-for-coffee-farmers-24254>

Does fair trade actually help farmers

<https://www.sbs.com.au/food/article/2017/01/24/does-buying-fairtrade-actually-help-farmers>

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Fair Trade coffee <http://fairtrade.ca/en-CA/Buying-Fairtrade/Coffee>



Media Reports

Former Nespresso boss warns coffee pods are killing environment

<http://www.abc.net.au/news/2016-08-24/former-nespresso-boss-warns-coffee-pods-are-killing-environment/7781810>

The potential impacts of climate change. A coffee expert says the entire industry is in a 'very tricky spot'

<http://www.businessinsider.com/sam-lewontin-future-coffee-global-warming-climate-change-2016-6/?r=AU&IR=T>

Recycled coffee grounds give rise to Fremantle mushroom farm

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