


Research Document

SUSTAINABILITY

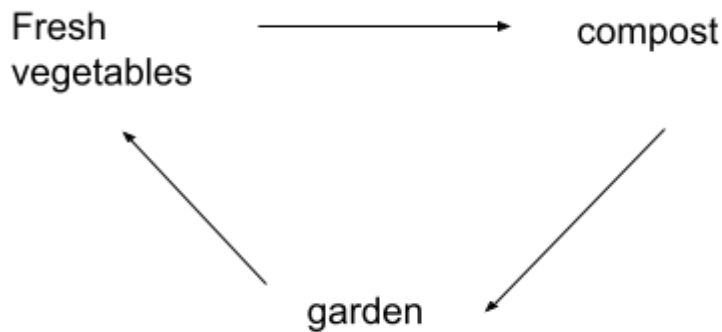
food source ideas

→ *What are the best sources to get produce, ex. Farms, wild, and how do they benefit the environment?*

- Crave Fishbar: NYC's first 100% sustainable seafood restaurant - 
 - Shares their story and the importance of sustainability
 - Explains sustainable seafood practices
 - Sources food from responsible fishers who protect marine habitats and prevent pollution, disease, and fish escape
 - Highlights local food sourcing
 - Discusses the importance of sustainable seafood
 - Details their sustainability efforts
 - Provides ways for readers to practice sustainability

our application

- Garden in restaurant, grow fruits and vegetables>acres of farm land in upstate New York
 - Use hydroponics: 98% less water usage, higher efficiency and yield, less space due to vertical farming, more sustainable, does not lead to soil degradation, climate does not matter, not dependent on seasons, lower risk of contamination, less food waste. 99% less land usage
 - Nutrients mixed into water include
 - Phosphorus
 - Nitrogen
 - Calcium
- Have lots of indoor plants
- Buy milk, flour, and eggs from local farms
 - By buying our produce from local farms, we lower our carbon footprint by using less transportation. Local farms also tend to use more sustainable practices rather than large scale farms, and the produce is generally fresher.
- Seasonal menu: use currently ripe and locally available food instead of long-distance shipping and freezing
- Compost bins behind restaurant building for food scraps
 - Minimize odor
 - Cost effective
 - Compost for garden
 - Worms to speed up the process
 - Used for root vegetables like carrots, potatoes, onions, and beets



Cycle:

INTERACTIVE SCRIPTS

FARM:

- Cow: Our milk is sourced from local cattle that are treated with the utmost care and respect, as they are considered sacred in Indian traditions. The cows live in the local grazelands of upstate New York, minimizing travel costs and our carbon footprint. Our ethical approach to dairy farming ensures healthy and stress-free cows that produce milk of the highest quality.
- Chicken (eggs): To prioritize the quality of our eggs and the welfare of our chickens, the chickens have free range in addition to coops on our pastures.
- Palm Tree (coconuts)
- Calamansi
- 1. Our Pastures (paragraph) → Our farm, located in upstate New York just 30 miles from the city, is a self-sustaining system where we grow our fresh produce and raise our animals. The healthy cows graze freely on open pastures, allowing them to move naturally and live comfortably. This type of grazing also helps the environment by spreading manure across the land, adding nutrients to the soil. It supports stronger plant growth, helps soil microbes thrive, and even stores more carbon in the ground, making the land healthier. Our farm also includes pastures for raising hens, with clean coops and outdoor areas for foraging. This setup helps maintain healthy chickens and better-quality eggs while allowing us to naturally manage food scraps. In addition to our pasture space, we grow a variety of fruit trees in climate-controlled greenhouses, which allow us to harvest year-round. During the warmer months, our tropical greenhouse supports calamansi trees and coconut trees, which are used in many of our desserts and signature dishes.

Slide 2:

- Greenhouse: Our greenhouses with hydroponic technology serve as a microbiome of Asia, including ingredients from East, Southeast, and South Asia. The freshness paired

with the sustainability of our food growth creates an ecosystem that makes your mouth water.

- ➔ 2. Innovative Growth (paragraph): Our farm uses advanced hydroponic systems and greenhouses to grow fresh produce efficiently and sustainably. By using vertical hydroponic technology, we reduce land use by up to 99% and water use by 98% compared to traditional farming methods. Hydroponics doesn't rely on soil, so it avoids problems like erosion, tilling, and nutrient runoff. Our enclosed greenhouses also protect nearby land by keeping pests out, eliminating the need for chemical pesticides and harmful runoff. Besides keeping pests out, our crops are also shielded from unpredictable weather and contamination, giving us a consistent year-round harvest. Hydroponic technology also improves our consistency by establishing a controlled environment where we can monitor our plants and deliver them a carefully balanced mix of nutrients—like nitrogen, phosphorus, and calcium—directly through the water. This leads to faster growth and higher crop yields, 240 times greater than traditional farming, while also reducing waste from spoilage, runoff, and overuse of inputs.

RESTAURANT:

- ➔ Truck: Our farm's proximity to our restaurant reduces our CO₂ emissions from transportation and removes the need for long distance shipping. It also allows us to serve our customers the freshest food without the need for long term preservation.
- ➔ Chef: Our sustainability practices go beyond just our pastures and hydroponics. Our workers compost all food scraps, which helps eliminate waste in our restaurant. They also use reusable cutlery and green cooking appliances to lower our carbon footprint.
- ➔ 3. Our Restaurant (paragraph): Agriculture and the food supply chain contribute between 21% and 37% of global CO₂ emissions. By sourcing our ingredients directly from a farm located just 30 miles away, we significantly reduce the need for long-distance transportation. This helps us minimize fuel consumption, packaging waste, and refrigeration needs. We are also able to serve our customers fresh food that does not depend on energy-intensive preservation methods. Our staff also actively works to minimize food waste by collecting leftover produce and scraps, which are returned to the farm to be composted. This composting process not only keeps food out of landfills, where it would have released methane—a greenhouse gas over 25 times more potent than carbon dioxide—but also turns waste into something useful for the soil. By closing the loop between our restaurant and farm, we reduce emissions, limit waste, and contribute to a more balanced and environmentally responsible food system.

PROCESS

- 4. The Compost Cycle (paragraph) Embêr promotes sustainability. At our restaurant, food waste is collected and separated. Dairy waste is disposed of and vegetable waste is thrown into bins and taken back to our farms. Vegetable waste taken from our restaurant is allowed to decompose over time, becoming compost rich in nutrients. Compost made at our farm is applied to soil used in our farms and greenhouses. The nutrient-rich compost allows us to grow the necessary vegetables needed for our restaurant as well as the crops used to feed our livestock! Staying committed to regenerative farming, we collect organic waste from our restaurant and turn it into compost. This compost is used throughout the farm to support plant growth and improve soil without relying on synthetic fertilizers. By recycling nutrients and keeping outside inputs low, we reduce our environmental impact and create a balanced system where animals, plants, and food waste all work together to support long-term sustainability.

MENU + THEME

Cooking techniques

- *What ingredients (oils, seasonings) should be used?*
- *What methods of cooking (i.e. frying, baking, air frying) should be used?*
- *How can cross-contamination be prevented in the kitchen?*

Preparation Process

- At Ember, we strive to give our customers the best taste, starting with how our food is prepared. While we are a fusion restaurant focused on innovative taste, we still want each dish to embody what came before it. We use traditional cooking techniques and ingredients to ensure that our dishes maintain bits of identity from the cuisines we fuse. For example, woks and grills are utilized for stir-frying. Dumplings and Dim Sum are prepared by hand to ensure quality.

For our cutlery and cooking utensils, everything is reusable. Each item is also hand-washed by our staff, whose goal is always sanitation. As per New York City Regulations, we always follow the necessary sanitary processes to ensure our food does not spread harmful bacteria or diseases. Our equipment, such as woks and pans, is frequently washed. Specific pans are also designated for allergens to ensure we avoid cross-contamination. With food hygiene inspections every 6-12 months by the NYC Health Department, we can guarantee your food is prepared with the highest sanitation standards.

Cleanliness:

- We emphasize a clean cooking environment, unlike indian street food
- Sanitation, staff and customer safety are our top priority
- We follow all department of health regulations and inspections on restaurants

Ingredients

- Calamansi (delicious for flavoring soups and more)
- Red bean and ube (great for deserts)
- Paneer (really great meat alternative—better than tofu)
- Tofu
- Coconut oil (cheaper than some other oils but also healthy and sustainable)

Methods of cooking

- Steaming
 - Provides a healthier alternative to stirfrying in oil
 - Common in Asian countries
- Stir-frying
 - While not healthy, better tasting
 - Maybe using coconut oil or vegetable oil if healthiness isn't a consideration

Cross-contamination

- Be cautious of dairy, peanuts, tree nuts, sesame, soy, and gluten
 - Create an indicator for each of these in the menu
- Ask about allergens while taking orders and alert staff to cook separately in these cases

Style

→ *What cuisines? What dishes?*

Appetizers:




- Lumpiang aloo 
 - <https://panlasangpinoy.com/filipino-lumpia-recipe/>
 - Potato + pea-filled spring rolls
 - Serve with indian dipping sauces??
- Paneer Siumai 
 - <https://www.recipetineats.com/siu-mai-shumai-steamed-dumplings/>
 - Steamed dumplings with paneer inside
- Light Calamansi Chaat Salad 
 - Chickpea salad with calamansi dressing (healthy)
- Masala Nian Gao 
 - <https://www.recipetineats.com/siu-mai-shumai-steamed-dumplings/>
 - Sticky rice cake with spicy masala flavoring
- Jackfruit Siopao or bao buns with chutney sauce 
 - Steamed dumplings with jackfruit inside and mint-coriander sauce
- Aloo Dim Sum 
 - <https://asiasociety.org/reference/what-dim-sum-beginners-guide-south-chinas-traditional-brunch-meal>

- Dim sum with samosa aloo filling
- Served with tamarind chutney

Main dishes:

- Tofu Eggplant Kare Kare 
 - <https://panlasangpinoy.com/kare-kare-recipe/>
 - Filipino peanut stew with Indian masala served with jasmine rice
 - Can add sichuan peanuts to add chinese element
- Tofu laing 
 - <https://panlasangpinoy.com/kare-kare-recipe/>
 - Tofu mixed in sauce of taro leaves and coconut
 - Add indian spicing for extra flavor??
- Stir-Fried Noodles with Paneer and Sweet-Chili Sauce 
 - Stir-fry noodles with vegetables + paneer cooked in sweet chili sauce
 - <https://www.wellplated.com/stir-fry-noodles/>
- Palak (Spinach) Dumplings 
 - Served with soy-ginger dipping sauce
- Sweet and sour tofu served with Mango Chutney 
 - <https://www.modernhoney.com/sweet-and-sour-chicken/>
- Gobi Manchurian 
- Tofu Sisig 
 - <https://panlasangpinoy.com/pork-sisig/>
 - Served with Biryani(or Pulao) [indian spiced rice]

Desserts:

- ★ Kheer (Rice pudding) D
- ★ Ube coconut mochi 
- ★ Ice cream (vanilla and chocolate)
- ★ Chai Leche Flan 
 - <https://panlasangpinoy.com/leche-flan/>
 - Caramel custard with chai spices
- ★ Black Sesame Halwa 
 - <https://www.indianhealthyrecipes.com/halwa/>
 - Halwa made with ghee, jaggery, semolina, and lots of sesame seeds
- ★ Taro coconut kulfi
 - Pureed taro and coconut milk and sweetener (condensed milk) frozen (basically a popsicle)
- ★ Ube naan thing
- ★ Coconut ice cream, ube ice cream
 - Used a lot in India and the Philippines

Drinks:

- ★ Mango Lassi
- ★ Matcha
- ★ Masala Chai
- ★ Matcha chai latte

Theme

→ (*solidify*)

- Spicy food → Indian, Chinese, and Filipino

AESTHETICS

non-copyright images →

images

- <https://pexels.com>
- <https://unsplash.com>

host images for free → <https://postimages.org/> (use the direct link when going into attribute of

fonts →

font pairing: <https://fontjoy.com/> (matches any font u want with the subcategories)

title

- <https://fonts.google.com/specimen/Playfair+Display>
- <https://fonts.google.com/specimen/Libre+Baskerville>
- <https://fonts.google.com/specimen/Lora>
- <https://fonts.google.com/specimen/Merriweather>

Headings

- <https://fonts.google.com/specimen/Quicksand>
- <https://fonts.google.com/specimen/Work+Sans>

words

- <https://fonts.google.com/specimen/Nunito>
- <https://fonts.google.com/specimen/Karla>

color palette →

primary colors (Main Identity Colors)

Deep Forest Green (h) – Represents nature, freshness, and organic ingredients.

Sage Green (#A3B18A) – A softer, refined green to add a touch of elegance.

Warm Beige (#EDE4D3) – Neutral and sophisticated, perfect for backgrounds.

secondary colors (Accents & Highlights)

Gold (#D4A373) – Adds a luxurious and high-end feel.

Charcoal Gray (#2B2D42) – Provides contrast while maintaining elegance.

Terracotta (#C76D3A) – A warm, organic tone that complements natural foods.

typography enhancements→

- Pairing Generator: <https://fontjoy.com/> (helps find font combinations)
- Icon Fonts: <https://fontawesome.com/> (great for UI icons)

fun elements→

scroll effects: <https://scrollrevealjs.org/> (free API so we can use it)

open source UI for buttons, and other elements: <https://uiverse.io/> (maybe allowed?)

cute icons: <https://fontawesome.com/>

gradient: <https://cssgradient.io/>

favicon: <https://realfavicongenerator.net/> (like the little thing next to ur tabs when multiple)

brand maker: <https://looka.com/>

animista: <https://animista.net/play/exits> (library of animations → don't need JS)

flexbox tool: https://www.w3schools.com/css/css3_flexbox.asp (learn more → eases hassle)

WEB DESIGN

Potential Frameworks:

- Bootstrap vs Tailwind
- React.js

Favorite web features:

- <https://stripe.com/> + <https://vercel.com/>
 - Hover animation of navigation bar
- <https://houseofidlies.com/>
 - Spinning components as you scroll down
 - Order now link under restaurant name