

ETHIOPIA COFFEE VILLAGE

Precedents & Agronomic References

A curated reference annex supporting the Schematic Design Review

Companion to the Schematic Design Review · Status: Draft for discussion · May 2026

How to use this annex

This annex supports two recommendations in the Review: that the architecture be deepened by studying places that work as living productive landscapes rather than themed objects, and that the coffee-planting concept be validated against the site's real altitude and climate. The precedents are offered for their transferable logic, not for direct copying. The agronomic references are intended to brief the client and to be put to the design team and to Ethiopia's national coffee institutions. Sources are listed at the end and should be read in full before decisions are taken.

Part A — Architectural and destination precedents

A1. Antinori nel Chianti Classico — Bargino, Italy (Archea Associati, 2012)

One of the strongest built parallels for the project's architectural and visitor-experience ambitions. A large production and visitor complex embedded in a hillside, its roof returned to productive vineyard, with the building revealed only by sculpted openings that bring controlled daylight into the interior. Visitors ascend through production, museum, library, auditorium, tasting and shop while the product descends by gravity; the palette is reddish earth tones, terracotta, timber, weathering steel and glass; the earth-sheltered mass provides passive thermal stability and rainwater is harvested.

Why relevant: It resolves, at full quality, the exact moves the Coffee Village is reaching for — a building married to a productive landscape, a “crack” of light as a designed conservation device rather than an open slot, weathering-steel-and-earth materiality, and a choreographed visitor-versus-process section.

What to take: The roof-light as a controlled daylighting instrument; the earth-sheltered passive strategy; the disciplined material palette; the gravity/visitor section logic.

What to adapt, not copy: It is a private commercial winery; the Coffee Village must remain a public, national, inclusive institution, and its identity must be Ethiopian, not Tuscan.

A2. Coffee Cultural Landscape of Colombia (UNESCO World Heritage, 2011)

A national coffee identity expressed as a living, productive cultural landscape across six farming areas and eighteen settlements, supported by visitor infrastructure including the Parque Nacional del Café and, in the wider region, large craft pavilions such as

Simón Vélez’s bamboo Zeri Pavilion. It demonstrates how an origin country can institutionalise its coffee story around farmers, terrain and tradition rather than a single building.

Why relevant: It is the leading international model for treating coffee origin as a living landscape and national narrative — directly aligned with the “coffee as the operating system” thesis.

What to take: Landscape and farming community as the primary exhibit; a national-coffee-park layer; locally crafted, sustainable pavilion construction.

What to adapt, not copy: Avoid the theme-park register some Colombian parks adopt; Ethiopia’s authenticity is its strongest asset and should not be staged.

A3. Babylonstoren — Western Cape, South Africa

A working farm estate in which the productive landscape is the business rather than the backdrop, with dining, retail, learning, events and online continuation all reinforcing one land-based identity under a single creative direction — the clearest contemporary example of a “dwell economy” and vertical integration on one site.

Why relevant: It models the operational and commercial logic the Review recommends: design for a range of visit lengths and repeat visitation, integrate the value chain on site, and hold the whole under one editor.

What to adapt, not copy: Its luxury-estate tone, hotel and exclusivity are not appropriate; borrow the system, not the lifestyle package. The Coffee Village must remain generous and national.

A4. Further references the team should study

The Eden Project (Cornwall, United Kingdom) — a living ecological and education destination created on a regenerated derelict site — is a useful reference for landscape-led visitor institutions where ecology, learning and the visitor economy reinforce one another. It should be reviewed alongside A1–A3 when the landscape and interpretation strategy is developed.

Part B — Agronomic and site references

These points bear directly on the “living coffee groves” concept and the site’s representation. They are summarised here for the client and should be validated by qualified agronomists, and by Ethiopia’s national coffee institutions, before the landscape concept is fixed. The lead sources are intergovernmental and scientific (FAO, NOAA, UNESCO, Royal Botanic Gardens Kew); trade and media sources are used only for corroboration.

- **Arabica climate and site requirements.** FAO’s Arabica guidance places the species in cooler, elevated tropics, generally at 1,000 m or more, and treats elevation, temperature, rainfall, water supply, soil, slope and aspect as the governing site-selection factors, with Arabica frost-susceptible. NOAA gives Arabica’s optimal mean temperature as about 18–21°C, tolerating up to roughly 24°C; above that, ripening accelerates and quality falls. Independent academic

work places indigenous Arabica roughly between 1,000 and 2,000 m, with cultivated plantations from sea level to about 2,800 m and sustained temperatures below about 4°C lethal. [1][2][3]

- **Ethiopian growing altitudes.** Most Ethiopian Arabica is grown roughly between 1,100 and 2,200 m: Sidama approx. 1,500–2,200 m; Yirgacheffe approx. 1,700–2,200 m; Guji approx. 1,800–2,200 m; Harrar approx. 1,500–2,100 m; Jimma approx. 1,400–2,100 m; Limu approx. 1,100–1,900 m. Some sources cite an extreme ceiling near 2,750 m in particular microclimates. [4][5]
- **Site elevation and suitability.** Addis Ababa ranges from about 2,100 m (Akaki, south) to about 3,100 m (Entoto, north); the Yeka upper-catchment forest sits broadly in the 2,300–3,000 m band, characterised in local studies as a temperate (“Dega”) highland zone associated with temperate fruit and bee-keeping. The Coffee Village site at roughly 2,300 m should therefore be treated as sitting at the upper edge of Ethiopia’s usual productive Arabica range. Its suitability for open-air coffee groves is likely to be microclimate-dependent and should not be assumed before testing aspect, cold-air pooling, frost risk, soil, shade, wind exposure, drainage and water availability. [6][7]
- **Existing vegetation.** The Yeka and wider Addis upper-catchment forest is predominantly an introduced monoculture plantation (Eucalyptus, with Cupressus and Pinus) over Juniperus procera; natural dry Afromontane vegetation has largely been lost. Eucalyptus was introduced under Emperor Menelik around 1894–95; the Addis Ababa structure plan itself recommends phasing out eucalyptus in favour of indigenous species. The mature indigenous forest shown in the renders is therefore a 15–25-year restoration outcome, not an opening-day condition. [6][7][8][9]
- **Origin, genetic diversity and the climate narrative.** Ethiopia’s south-western montane forests — protected as the UNESCO Kafa and Yayu Coffee Forest Biosphere Reserves — are the centre of origin and genetic diversity of wild *Coffea arabica*, holding thousands of wild variants, and are increasingly threatened by climate change. These are agronomic references for variety and provenance and, equally, narrative references: the origin story and the climate threat to coffee-growing altitudes are exactly what the museum should interpret. [10][11]

Implication for design. The “living coffee groves” concept should be validated, before the landscape is fixed, by Ethiopia’s national coffee research and regulatory institutions — for example the Ethiopian Coffee & Tea Authority and the Ethiopian Institute of Agricultural Research (Jimma Agricultural Research Centre) — and against World Coffee Research’s variety guidance. If productive open-air Arabica proves marginal at this altitude, the design should rely on protected microclimates, demonstration plots, nursery and research plantings, and interpretive planting, and should present the climate threat to coffee-growing altitudes as part of the visitor story.

Critically, the Coffee Village does not need to function as a commercial coffee farm; it needs a credible, maintainable and educational coffee landscape. The planting strategy can therefore combine open-air demonstration plots, protected microclimates, nursery and research plots and interpretive planting, provided the design is honest about what can realistically thrive on opening day and what is a long-term ambition.

Sources

All sources below were consulted directly and are provided for the client and design team to read in full; the figures above are summarised and rounded. Sources 1–3 and 6–11 are intergovernmental, scientific or institutional; sources 4–5 are industry references used for corroboration only.

1. Arabica site selection (elevation, temperature, rainfall, soil, slope, aspect; frost susceptibility): FAO, Arabica coffee manual — “Coffee plant & site selection”. <https://www.fao.org/4/ae939e/ae939e03.htm>
2. Arabica optimal temperature (about 18–21°C; tolerance to about 24°C) and climate-change pressure: NOAA Climate.gov, “Climate & Coffee”. <https://www.climate.gov/news-features/climate-and/climate-coffee>
3. Indigenous altitude band and frost tolerance (academic): Schmitt, C. B. (2006), as cited in Barista Hustle, “Altitude and Latitude”. <https://www.baristahustle.com/lesson/t-1-03-altitude-and-latitude-a-balancing-act/>
4. Ethiopian coffee regions and altitudes (corroborating): Perfect Daily Grind, “Yirgacheffe, Sidamo & More: A Guide to Ethiopian Coffee”. <https://perfectdailygrind.com/2019/09/yirgacheffe-sidamo-more-a-guide-to-ethiopian-coffee/>
5. Ethiopian coffee regions and altitudes (corroborating): Impact Roasters, “Coffee Regions in Ethiopia”. <https://impactroasters.dk/blogs/news/ethiopias-coffee-regions>
6. Addis Ababa / Yeka elevation and plantation forest: Desta & Tulu (2015), “Mapping of Plantation Forest in the Upper Catchment of Addis Ababa”, Int. J. Environmental Sciences. <https://www.researchgate.net/publication/281460707>
7. Entoto / Yeka floristics, elevation and eucalyptus dominance: Atinafe et al. (2020), Int. Journal of Forestry Research, Wiley. <https://onlinelibrary.wiley.com/doi/10.1155/2020/4936193>
8. Addis Ababa urban-forest land cover (eucalyptus dominance; structure-plan recommendation): Urban Forestry & Urban Greening (ScienceDirect). <https://www.sciencedirect.com/science/article/abs/pii/S1618866713000307>
9. Indigenous-species reforestation context (exotic-species reliance; Green Legacy): Arboriculture & Urban Forestry (2024). <https://auf.isa-arbor.com/content/50/2/169>
10. Wild Arabica origin and genetic diversity: UNESCO MAB, Kafa Biosphere Reserve. <https://www.unesco.org/en/mab/kafa> (and the Yayu Coffee Forest Biosphere Reserve, UNESCO MAB, 2010)
11. Wild coffee forests, conservation and climate threat: Royal Botanic Gardens, Kew, “Mainstreaming conservation and climate resilience in Ethiopian coffee”. <https://www.kew.org/read-and-watch/mainstreaming-biodiversity-coffee-ethiopia>
12. Variety selection (recommended resource for the design team): World Coffee Research — Coffee Varieties Catalog. <https://worldcoffeeresearch.org/>

13. Antinori nel Chianti Classico (Archea Associati): ArchDaily.
<https://www.archdaily.com/371521/antinori-winery-archea-associati> · Dezeen.
<https://www.dezeen.com/2013/05/04/antinori-winery-by-archea-associati/>
14. Coffee Cultural Landscape of Colombia: UNESCO World Heritage Centre, List entry 1121. <https://whc.unesco.org/en/list/1121/>
15. Babylonstoren (official site, for the team's study): <https://www.babylonstoren.com/>
· The Eden Project (official site): <https://www.edenproject.com/>