

King Aśoka and Medicinal Plants: Sustainability, Biodiversity, Forestry, Ethnobotany, State welfare and the Plant Foreign Diplomacy of the Mauryan Empire

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Abstract:

The Mauryan emperor Aśoka (c. 268–232 BCE) governed the first pan-Indian imperial polity (322–185 BCE) (Hū et al., 2026), and his rock and pillar edicts are the oldest large corpus of royal inscriptions in the subcontinent, whose central theme is *dhamma* — morality, virtue, and goodness (Singh, 2020). This paper examines the environmental and botanical dimensions of the Aśokan program: the provision of two kinds of medical treatment — for humans and for animals — and the import and planting of medicinal herbs, roots, and fruits; the creation of the world's first known veterinary hospitals; the protection of named animal species; the forestry and "green management" policies documented in the edicts and the Arthaśāstra, including the *vr̥kṣāyurveda* ("science of trees"); and the ethnobotanical knowledge base of ancient Indian medicine preserved in the Charaka and Sushruta compendia. The paper then analyzes Aśoka's foreign policy as an early exercise of "plant diplomacy": extending medical facilities, cultivating herbal medicines, and sharing beneficial plants with neighbouring kingdoms and with the territories of the Hellenistic king Antiochus, the Cholas, the Pandyas, the Keralaputras, and Sri Lanka (Long, 2021; Prasad et al., 2023; Varier, 2020). Situating the Aśokan record within the broader tradition of Indian environmental ethics — sacred groves, nature worship, and faith-based conservation — the paper concludes that the Mauryan state under Aśoka constitutes the ancient world's most systematic experiment in the sustainable governance of medicinal plant resources, and that its diplomatic deployment of those resources anticipates, by more than two millennia, the modern convergence of environmental protection and international goodwill.

Keywords: Aśoka; Mauryan Empire, medicinal plants, sustainability, biodiversity, forestry, ethnobotany, *vr̥kṣāyurveda*, Arthaśāstra, Ayurveda, conservation, sacred groves, foreign policy, plant diplomacy, environmental history, Dhamma, vrikshamahamatra, survabhutahitha, medical centres, dharmavijaya, sacred grooves, pharmacology

1. Introduction

The Mauryan empire, spanning 322–185 BCE, was the first imperial formation to unify most of the Indian subcontinent (ऋषि et al., 2026). Its third emperor, Aśoka, is the first ruler in world history to have documented his own policies on stone at scale, and among those policies — alongside nonviolence, social welfare, religious tolerance, and the fair administration of justice — modern scholarship explicitly lists *environmental protection* (Long, 2021). The edicts reveal a king who ordered the planting of medicinal herbs, the digging of wells, the planting of shade trees along roads, the establishment of medical centres for human beings and animals, and the legal protection of named animal species (Boesche, 2003; Gaál & Tóth, 2018; Norman, 1967). They further reveal an emperor who carried this program beyond his frontiers, establishing medical facilities in foreign lands and sharing beneficial plants with neighbouring countries as acts of goodwill (Long, 2021).

This paper offers a historical analysis of the Aśokan regime as a case study in the state management of medicinal plant resources. Its approach is fourfold: textual-historical, reading the edicts alongside the statecraft manual of the Mauryan milieu, the Arthaśāstra, and the classical Ayurvedic compendia; environmental-historical, situating the Aśokan measures within ancient India's broader traditions of forestry and biodiversity protection; ethnobotanical, examining the indigenous medicinal plant knowledge that the Aśokan program presupposed and propagated; and diplomatic-historical, analyzing the foreign policy dimension of the king's botanical generosity. The paper argues that the Aśokan state was, in effect, an early *sustainability regime* — a government that managed renewable plant and animal resources for the welfare of all beings (*sarvabhūtahita*), and that deployed those resources as instruments of peaceful statecraft (Long, 2021; ऋषि et al., 2026).

2. Sources and Method

The primary sources for this study fall into three classes. First, the edicts themselves: the Major Rock Edicts (including the Gīrnār and Kālsī versions), the Pillar Edicts (including the Delhi-Toprā pillar), and the Minor Rock Edicts, whose central concern is *dhamma* (Singh, 2020). Second, the contemporary statecraft literature, above all the Arthaśāstra traditionally ascribed to Kauṭilya, the chief minister of the founder of the Mauryan dynasty — a text that contains "a whole set of rules for the cultivation and protection (but also commerce) of plants, trees and crops" ("Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions," 2016), and which modern scholarship credits with being the first Indian treatise to stress the economic importance of forests in the formulation of state policy (Ray, 1996). Third, the classical medical compendia of Ayurveda — the Charaka Samhita and the Sushruta Samhita — which "document thousands of medicinal plants, minerals, and animal products" and laid the empirical foundations of Indian pharmacology (Biswas et al., 2024), together with the Vedic literature in which the medicinal use of plants such as *Soma* is already recorded (Saleem et al., 2013). To these textual sources are added the modern scholarly record: epigraphic studies of Indian medical heritage (Prasada et al., 2020), the ethnobotanical literature on Indian medicinal plants (Jain, 2007; Siraj, 2022), environmental histories of ancient India (Bhattacharya, 2014; Dixit & Singh, 2024; Lodh, 2020), and the political-science literature on the Aśokan state and its foreign policy (Boesche, 2003; Long, 2021). The method is comparative and interdisciplinary, correlating the inscriptional testimony with the institutional and botanical record.

3. The Ethical Foundations: Dhamma, Sarvabhūtahita, and Environmental Protection

The environmental policy of the Mauryan state was not an administrative afterthought; it was an expression of the Dhamma itself. Recent scholarship on the environmental consciousness of ancient Indian rulers observes that in the Mauryan period this outlook was "most organized" in the Arthaśāstra and in Aśoka's dhamma edicts: the king adopted the policies of *sarvabhūtahita* (welfare of all beings) and *prāṇidayā* (compassion toward living creatures), making tree planting, the construction of reservoirs, and the prevention of animal violence constituent parts of his *dharmavijaya* — his conquest by righteousness (Hū et al., 2026). Roger Boesche's condensation of the edicts captures the same ethic: "compassion, which includes respect for others, kindness even toward slaves and prisoners, 'reverence toward elders, and gentleness to animals'" (Boesche, 2003). Long, in his study of the Aśokan empire as a "proof of concept" for Buddhist statecraft, lists environmental protection among the governing principles of the reign, alongside social welfare and nonviolence (Long, 2021).

Two features of this ethic deserve emphasis. First, it was universal in scope: the welfare calculus extended to animals and plants as well as humans, hence the twin provision of medical treatment for men *and* beasts, and the planting of trees "for the use of men and animals" (Boesche, 2003). Second, it was public and administrative: Boesche notes that the medical centres, roads, wells, and shade trees were policies "that he thought best carried out by the centralized administration of government" (Boesche, 2003). The ethical foundations of the Aśokan environmental regime were thus simultaneously religious (rooted in Buddhist compassion), political (embodied in the welfare-state ideal of *yogakṣema*, the state's duty to protect the property and happiness of its subjects (Dwivedi, 2021)), and administrative (executed by the Mauryan bureaucracy). Even the earliest European observers of the Gīrnār edicts recognized this: a 1900 report on the Junagadh rock described Aśoka's code as "a code of morality and civilization which is for all ages," aimed at "the amelioration of the condition of his subjects, the observance of charity and kindness to men as well as to animals" (Mr et al., 1900).

4. Medicinal Plants in the Aśokan Edicts

4.1 The Second Rock Edict: A Royal Pharmacopeia

The foundational document for the study of Aśoka and medicinal plants is the Second Major Rock Edict. As Raghava Varier summarizes it, the edict "makes a categorical statement showing that he made arrangements for two kinds of treatments, that is, treatment for humans and for animals" — and, decisively for the foreign-policy dimension, this provision extended into the territories of the *yavana* king Antiochus, the Cholas, the Pandyas, and the Keralaputras, and beyond these as far as the island of Sri Lanka (Varier, 2020). The edict's botanical content — the importation and planting of medicinal herbs beneficial to humans and animals, and of roots and fruits where they were lacking, together with the digging of wells and planting of trees along roads for travellers — is confirmed across the modern literature: Boesche records "medical centers for human beings and animals, the construction of roads for good communication, along with the digging of wells and the planting of trees for shade" (Boesche, 2003), and the epigraphic literature on Indian medical heritage explicitly notes that "Ashokan inscriptions" document "plantation of medicinal plants and setting up of treatment facilities for men and cattle" (Prasada et al., 2020).

4.2 The Pharmacological Backdrop: Ayurveda and the Ancient Books

The Aśokan pharmacopeia presupposed a mature indigenous medical botany. The Ayurvedic tradition, one of the world's oldest medical systems, "has utilized approximately 7,000 medicinal plants for over 5,000 years," with the Charaka Samhita and Sushruta Samhita laying the foundation of the practice ([Nandal et al., 2025](#)). The Sushruta Samhita, "compiled in 1000 B.C.," includes a comprehensive chapter on herbal therapeutics, and Charaka and Sushruta together "have cited about 700 medicinal plants" ([Saleem et al., 2013](#)). The Vedic background is older still: the Rigveda, "written between 4000 and 1600 B.C.," provides information about the medicinal use of the plant *Soma* by the Indo-Aryans ([Saleem et al., 2013](#)), and the Ayurvedic tradition (conventionally dated to c. 2000 BCE) treated certain plants as "holy medicinal plants" whose collection "was undertaken only by a guiltless, pure, and religious individual" ([Siraj, 2022](#)). The famous remedies of this tradition — sandalwood, clove, pepper, cardamom, caraway, ginger, benzoin, cannabis, castor oil, sesame oil, and aloe — were commodities of the Indian Ocean trade long before Aśoka, and thus natural instruments of diplomatic generosity ([Siraj, 2022](#)). Aśoka's edicts, in short, gave royal and administrative force to a pharmacopeia that the ancient books had already canonized.

4.3 The Edicts as Green-Management Policy

The link between the Arthaśāstra's forestry science and the Aśokan edicts has been drawn explicitly in the botanical literature: "The edicts of Aśoka (reigned 265–232 bce) confirm this preoccupation and demonstrate governmental policies in matter of green management," with the Seventh Pillar Edict and the Second Rock Edict cited as the operative texts ("[Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions](#)," 2016). The Girnār version of the Second Rock Edict — the very stone whose proclamation of medical provision for humans and animals survives today — is thus a document of *applied forestry*: a royal order to plant medicinal herbs, roots, fruits, and shade trees ([Prasada et al., 2020](#); "[Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions](#)," 2016). The construction of reservoirs and water bodies, recorded in the same policy complex, extended the "green management" to water resources ([मधु et al., 2026](#)).

4.4 Sacred Groves and the Wider Conservation Tradition

Beyond the state, the conservation of forests was sustained by religion. India's sacred groves (*tapovana*) — "small packets of forests dedicated to local deities" — were "rich in biodiversity and ecological wealth," and modern forest and biodiversity policy in India is "directly or indirectly influenced by the traditional knowledge developed in the ancient India" ([Bhattacharya, 2014](#)). The sacred-groves literature documents how "our ancestors were aware of the symbiotic relationship between the bio-physical ecosystem and socio-economic institutions," and how nature worship "has helped to conserve many natural ecosystems in India," preserving "pristine forests" that have become "part of the 'biosphere reserves' of India" and "the last refuge of the rare flora and fauna which have otherwise disappeared from the modern world" ([Amirthalingam, 2016](#); [Sinha, 1995](#)). The conservation mechanism is cultural: the five elements are revered "as a body of God," and species — the cow, black buck, monkey, peacock, snake, and trees such as mango, coconut, khejri, emblica, tamarind, *ashoka*, madhuca, and wood apple — are protected through divine association ([Kandari et al., 2014](#); [Sinha, 1995](#)). Aśoka's edicts gave this religious conservation a royal, administrative form; his *dhamma* provided the ethic that the groves had long embodied.

5. The Ethnobotanical Dimension: Indigenous Medicinal Plant Knowledge

The Aśokan program of medicinal-plant cultivation intersects with a scholarly field — ethnobotany — whose Indian record is exceptionally rich. Ethnobotany is the scientific study of how indigenous communities use plants for healing, and India's contribution to it is documented from ancient texts to modern pharmacognosy (Biswas et al., 2024; Siraj, 2022). The foundational survey of Indian ethnobotany by S. K. Jain reports that "vast ethnobotanical knowledge exists in India from ancient time": India has about 45,000 plant species, medicinal properties have been assigned to several thousand, about 2,000 figure frequently in the literature, and indigenous systems commonly employ 500 — a knowledge base condensed in Jain's own dictionary of Indian folk-medicine and ethnobotany, which includes 2,532 plants (Jain, 2007). The origins of this tradition are dated by Jain to 4500–1500 BCE, with Ayurveda's long history of usage despite periods of official neglect (Jain, 2007).

The Aśokan moment matters for this history in two ways. First, it *institutionalized* the folk knowledge: the edicts' order to import and plant medicinal herbs wherever they were lacking represents the first documented state-directed transfer of ethnobotanical plant material across regions (Prasada et al., 2020; Varier, 2020). Second, it anticipated the modern trajectory from ethnobotany to pharmacology: the contemporary literature traces the journey "from ethnobotany to ayur-botany," in which traditional plant remedies — aspirin from willow bark, reserpine from *Rauvolfia serpentina* — are validated and industrialized, while emphasizing "sustainable harvesting" and "cultivation of high-value medicinal plants" as the contemporary imperatives (Biswas et al., 2024). That the same imperatives — sustainable harvesting and deliberate cultivation — were already operative in the Mauryan state is the strongest evidence for reading Aśoka's botanical policy as an early sustainability regime (Nandal et al., 2025).

6. Foreign Policy: Medicinal Plant Diplomacy to Neighbouring Countries

6.1 The Geographical Reach of the Second Rock Edict:

The foreign-policy dimension of Aśoka's medical botany is explicit in the Second Rock Edict. As Varier emphasizes, the edict's provision of two kinds of treatment — for humans and animals — extended "in the territories of the yavana king Antiokhia, in the areas of the Cōlās, the Pāndyas, and the Keralaputras, and beyond these, upto the river, that is, Sri Lanka" (Varier, 2020). The edict thus names the entire arc of Aśoka's diplomatic horizon: the Seleucid west, the three Tamil kingdoms of the deep south, and the island of Sri Lanka. The veterinary literature adds the complementary detail that Aśoka "arranged cultivation of herbal medicines for men and animals in his empire and adjoining kingdoms" (Prasad et al., 2023) — cultivation, not merely donation, in the adjoining states.

6.2 Soft Power and the Sharing of Beneficial Plants

The most developed modern account of this policy is Long's, which frames Aśoka's foreign policy as founded "on principles of nonviolence, nonaggression, conciliation, stability, and improved understanding among international actors through diplomacy and mutually beneficial commerce," and which singles out the botanical dimension: "Aśoka even practiced the exercise of 'soft power' by establishing medical facilities in foreign lands, sharing beneficial plants, and installing infrastructure beyond his immediate borders as acts of goodwill toward neighboring countries" (Long, 2021). This is plant diplomacy in the strict sense: the strategic, peaceful deployment of botanical and medical resources to build goodwill across frontiers — an instrument that modern states have only recently begun to formalize in the language of soft

power, public diplomacy, and medical diplomacy. That Aśoka "governed in Asia in the third century B.C.E." makes the achievement all the more remarkable (Long, 2021).

6.3 The Welfare-State Context

The diplomatic generosity was continuous with domestic policy. The Aśokan state is described in the historiography as a welfare state: Boesche's catalogue of the edicts' social program — medical centres, roads, wells, shade trees, and "an unusual concern for the poor in rural areas" (Boesche, 2003) — matches the Arthaśāstra's welfare ideal of *yogakṣema*, in which "the happiness and welfare of the king lies in the happiness and welfare of the subjects" (Dwivedi, 2021). The Mauryan fiscal system exempted pregnant women, minors, personal servants, the physically handicapped, and the sick from taxation, and provided support for orphans, the aged, and the afflicted (Dwivedi, 2021). Foreign plant diplomacy, on this reading, was the international extension of a welfare ethic: the same compassion that built hospitals at home impelled the sharing of medicinal plants abroad (Long, 2021; Prasad et al., 2023).

The evidence assembled to supports the claim that the Aśokan state functioned as an early sustainability regime.

Aśokan provision	Primary evidence
Two kinds of medical treatment — humans and animals	RE II (Varier, 2020)
Import and planting of medicinal herbs, roots, fruits where lacking	RE II; epigraphic record (Boesche, 2003; Prasada et al., 2020)
Wells and shade trees along roads	RE II; Pillar Edicts (Boesche, 2003; "Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions," 2016)
First veterinary hospitals; herbal cultivation in adjoining kingdoms	(Prasad et al., 2023)
Legal protection of named species	Fifth Pillar Edict (Norman, 1967); RE I (Gaál & Tóth, 2018)
Forestry science and forest classification	Arthaśāstra (Ray, 1996); <i>vṛikṣāyurveda</i> ("Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions," 2016)
Sacred groves and faith-based conservation	(Amirthalingam, 2016; Bhattacharya, 2014; Kandari et al., 2014; Sinha, 1995)
Medical facilities and beneficial plants shared abroad	(Long, 2021)

7. Two Case Studies in Medicinal Diplomacy: Antiochia and Tamraparnī:

The foreign-policy program of the Second Rock Edict can be examined concretely through its two named recipients: the Greek-speaking west and the island kingdom of Sri Lanka — in the edict's own geography, the territories of the *yavana* king Antiochus and "beyond these, up to the river, that is, Sri Lanka" (Varier, 2020).

a) The Antiochus case: The Gīrnār and Kālsī versions of Rock Edict II name *Antiyoka* — the Seleucid king Antiochus — as the first external beneficiary of the king's medical provisions, and the scholarship is categorical that the edict "makes a categorical statement showing that he made arrangements for two kinds of treatments, that is, treatment for humans and for animals in the territories of the yavana king Antiokhia" (Varier, 2020). The veterinary-historical literature adds that Aśoka "arranged cultivation of herbal medicines for men and animals in his empire and adjoining kingdoms" (Prasad et al., 2023). The diplomatic reading of this provision is Long's: the edicts show Aśoka practicing "the exercise of 'soft power' by establishing medical facilities in foreign lands, sharing beneficial plants, and installing infrastructure beyond his immediate borders as acts of goodwill toward neighboring countries" (Long, 2021). Antiochus II Theos, whose court at Antioch was the western anchor of the Mauryan diplomatic horizon, is thus the first historically documented recipient of an Indian king's medicinal-plant diplomacy — a policy executed not by proclamation alone but by the actual establishment of treatment facilities and the sharing of botanical material in his dominions (Long, 2021; Varier, 2020).

b) The Tissa of Tamraparnī case: The southern counterpart of the Antiochus case is the island of Tambapaṇṇi — Sri Lanka — whose king Devanampiya Tissa (r. c. 250–210 BCE) is the most celebrated royal friend of Aśoka in the Pali chronicles (Coningham et al., 2017; Darley, 2017). The *Dīpavaṃsa* and *Mahāvāṃsa* record the relationship as a royal alliance: the chronicles, as Coningham summarizes, "treat the introduction of Buddhism into the island as a royal package sent by the Emperor Asoka to his Sri Lankan ally Devanampiya Tissa, through the former's son and daughter, Mahinda and Sanghamitta" (Coningham, 1995). The *Mahāvāṃsa* reports that Aśoka "sent missionaries to various neighboring states to spread the Dharma" and that "Aśoka's own son Mahinda was sent to Sri Lanka and, after converting Devanampiya Tissa and his entourage, Mahinda was supported by the King in spreading Buddhism to the rest of the population throughout the island," followed later by Aśoka's daughter Saṅghamittā, who brought a branch of the Bodhi tree from Bodhgaya to Anurādhapura — the very tree still venerated today at the Śrī Mahā Bodhi (Coningham et al., 2017; Darley, 2017). The chronicle tradition further records the reciprocal embassy of Tissa to the Mauryan court, "the presents... said to have included eight kinds of Ceylon pearls" (Schneider, 2013), and the friendship itself passed into the enduring memory of the Buddhist world — an eighteenth-century Siamese royal letter still invokes "the King of Siam, in name Darmasooke [Dharmāśoka], and his royal Majesty of Candia, Dewenipoetisse [Devanampiya Tissa]... in former times [who] lived in friendship with one another by sending gifts back and forth" (Lehrer, 2022). The medical dimension of the Tissa case is epigraphic. Rock Edict II extends the two-fold provision — treatment for humans and for animals — beyond the Tamil kingdoms "up to the river, that is, Sri Lanka" (Varier, 2020), and the plant-sharing policy documented by Long — "medical facilities in foreign lands, sharing beneficial plants" — is part of the same diplomatic complex (Long, 2021). The chronicles do not enumerate medicine among the recorded gifts of the embassy; what they supply is the frame of royal friendship within which the edict's medical provision for the island operated, and what the edict supplies is the state's own testimony that the provision was made. Read together, the two sources reconstruct a complete diplomatic episode: Tissa's embassy of friendship and pearls, Aśoka's response in kind with a royal package of Dhamma, missionaries, plants — and, on the testimony of Rock Edict II itself, medical care for the men and animals of Tamraparnī (Coningham, 1995; Coningham et al., 2017; Varier, 2020).

8. The Institutional Question: A Vrikṣa-Board and Vrikṣa-Mahāmātras?

The scale of the Aśokan arboriculturally program raises an administrative question the edicts themselves do not directly answer: what institutional machinery executed it? The tree-planting mandate was pan-Indian — the Second Rock Edict orders the import and planting of medicinal herbs, roots, and fruits across the empire and beyond its frontiers, while the Seventh Pillar Edict extends the program to shade trees and wells along the roads — and Boesche has shown that these welfare policies were deliberately carried out "by the centralized administration of government" (Boesche, 2003). A program of this geographical reach and logistical complexity presupposes a cadre of officials responsible for its execution, and it is here that the hypothesis of a specialized tree-administration — a *vrikṣa-board* (tree and forest department) staffed by *vrikṣa-mahāmātras* (tree officers), on the model of the dhamma-mahāmātras — becomes historically plausible, even if it remains epigraphically unattested.

8.1 The mahāmātra institution: The edicts document a mature class of specialized high officers. The Pillar Edict in which the king "sums up his dharma-related activities" explicitly records "the appointment of special officers responsible for the dharma," alongside the five-yearly inspection tours of officials that supervised the whole system (Michel & Friedrich, 2024). To apply same analogy to medicinal plant mission vriksha bords or plant bords might had established to administer the medicinal plants- procuring, planting and harnessing and distributing throughout the Jambudvīpa and neighbouring countries. The Twelfth Rock Edict itself enumerates the variety of the cadre: "Dhamma Mahamatras [high-ranking officers of morality], Mahamatras in charge of the women's quarters, officers in charge of outlying areas, and other such officers" (Larsson, 2021).

The Minor Rock Edicts show the chain of command through which a royal order travelled — from the high officials (*mahāmāta*, *pulisa*) to the chief functionary (*rajūka/lajūka*) to the regional functionaries (*raṭhika*) (Gaál & Tóth, 2018). Specialized mahāmātras for morality, for women's welfare, and for frontier zones were thus an established administrative genus; a specialized mahāmātra for the king's other pan-Indian mandate — trees, herbs, and water — would be entirely consistent with the attested pattern.

8.2 The administrative logic of scale: The hypothesis gains force from the scale of the mandate itself. The Second Rock Edict's pharmacopeia and the Seventh Pillar Edict's roadside planting are not decorative gestures; the botanical literature reads them as "governmental policies in matter of green management" ("Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions," 2016), and the Mauryan environmental outlook — *sarvabhūtahita* (welfare of all beings) and *prāṇidayā* (compassion for living creatures) — made tree planting, reservoir construction, and the prevention of animal violence constituent parts of the king's *dharmavijaya* (Hü et al., 2026). Recent structural-economic modelling of the Mauryan state confirms that its institutions were deliberately engineered to operate under "high geographic dispersion (average oversight distance ≈ 850 km)," with monitoring frictions a key constraint on imperial administration (Kamat, 2025). A program requiring the import, distribution, and planting of medicinal material across an empire of that size — and into foreign territories besides — would have been administratively unrealizable without a dedicated supervisory cadre; the natural inference, by strict analogy with the attested *dhamma-mahāmātra*, is a *vrikṣa-mahāmātra* ("tree officer") class answerable to a central tree and forest administration.

8.3 The Kautilyan scaffolding: The institutional precedent for such an office is supplied by the Arthaśāstra, the statecraft manual of the Mauryan court. The text gives "a whole set of rules for the cultivation and protection (but also commerce) of plants, trees and crops" ("Roots of Wisdom, Branches of Devotion: Plant Life in South Asian Traditions," 2016), enumerates categories of forests and is "the first" treatise to stress "the economic importance of forests in the formulation of principles and policies of the state" (Ray, 1996), and provides the dedicated functionaries: kings are instructed to "establish and manage elephant forests," with named officers responsible for their administration (Olivelle, 2016), including a "superintendent of elephants" with defined duties (Tisdell, 2005). In the Kautilyan state, forestry was a department with superintendents; the Aśokan edicts, which took the Kautilyan administration as their operative framework and added a moral dimension to it, would naturally have continued that departmental logic in the form of a tree-and-forest administration charged with the Dhamma's arboriculture commands.

It must therefore be presented as a scholarly inference — "the king *may well have* established..." — not as an attested fact, and the argument from silence should be acknowledged: the edicts' silence on the office may mean either that such officers existed under a name now lost, or that the program was executed through the general-purpose mahāmātra and provincial machinery already documented (Gaál & Tóth, 2018). Framed in this way, the vṛikṣa-board hypothesis is a legitimate and fruitful line of research — one that connects the attested moral-administrative apparatus of the Dhamma to the attested material scale of the Aśokan greening program, and that gives the Mauryan state a claim to having institutionalized environmental administration a full two millennia before the modern forest department.

9. Conclusion

The Mauryan empire under Aśoka constitutes the ancient world's most systematic experiment in the sustainable governance of medicinal plant resources. The Second Rock Edict established a royal pharmacopeia with provision for humans and animals across the empire and beyond it; the Fifth Pillar Edict enacted the first royal wildlife protection act; the Arthaśāstra supplied the forestry science and forest economics that the edicts operationalized; and the Ayurvedic compendia supplied the pharmacological knowledge base (Nandal et al., 2025; Norman, 1967; Ray, 1996; Varier, 2020). The foreign policy of the reign extended the program outward — medical facilities, cultivated herbal medicines, and beneficial plants shared with the Seleucid king Antiochus, the Tamil kingdoms, Sri Lanka, and other neighbours as acts of goodwill (Long, 2021; Prasad et al., 2023; Varier, 2020) — a diplomatic use of botanical resources that modern statecraft has only recently named "soft power." Rooted in the ethics of *sarvabhūtahita* and *prāṇidayā* (Ἐῤῥῥ et al., 2026), institutionalized in the welfare state (Boesche, 2003; Dwivedi, 2021), and continuous with the deeper tradition of sacred groves and nature worship (Bhattacharya, 2014; Sinha, 1995), the Aśokan regime demonstrates that the sustainable management of medicinal plants was not a modern discovery but a Mauryan policy — one whose lessons for biodiversity, ethnobotanical knowledge, and international goodwill remain entirely contemporary.

The vṛikṣa-board hypothesis is a legitimate and fruitful line of research — one that connects the attested moral-administrative apparatus of the Dhamma to the attested material scale of the Aśokan greening program, and that gives the Mauryan state a claim to having institutionalized environmental administration a full two millennia before the modern forest department.

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