



Sesame seeds (*Sesamum indicum*) from the TN Mukharji collection, India, 1887
Museum Victoria

Botanical fortunes

TN Mukharji, international exhibitions, and trade between India and Australia

by Cherie McKeich

Abstract

This article examines Museum Victoria's collection of economic botany products collected by TN Mukharji in the late 1880s. The preservation of this collection provides an opportunity to interpret the nascent trade relationship between the colonies

of Australia and British India during this period. That Mukharji, a Bengali civil servant, was employed in the collection and documentation of economic products for local and international exhibitions demonstrates how Indians performed a necessary role in the dissemination of their culture within the British Empire.

Introduction

The meaning of an object is determined by the context in which it is displayed. This axiom can be no more accurately applied than to colonial exhibitions of the late nineteenth century. These events emphasised the commercial potential of objects, an approach at variance with the aesthetic and didactic displays in museums of the period.¹ Items of manufacture and raw products were assembled and presented, classified, organised, displayed and judged according to their place and mode of production, method of distribution, material or themes. Thus, exhibitions were unique in their fusing of cultural material with imperial, economic, political and ideological interests.² The relationship between imperial Britain and India has, in the context of exhibitions, been subject to frequent discussion by writers such as Tim Barringer. Yet similar cultural and economic connections cultivated between India and Australia during the latter part of the nineteenth century have attracted little attention.

Evidence of this tendency is revealed in the century-old specimens of economic products of India held in the stores of Museum Victoria: a vast melange of seeds, bark, pods and nuts, gums, resins and dried leaves, grown pale and brittle with time. Oils aged in narrow bottles are now dark and viscous, and exude a musty fragrance like cloves or spices. Each specimen is carefully labelled with its botanical name, and identified simply as presented by the 'Indian Government, Calcutta' in 1887, collected by one TN Mukharji.

Little is known outside India of the Bengali civil servant Trailokya Nath Mukharji (1847–1919). His name is most familiarly associated with catalogues he produced of the 1883 *Amsterdam Exhibition*, the 1886 *Colonial and Indian Exhibition* and

the 1888 *Glasgow International Exhibition*. His most studied work is the 1889 travel memoir, *A Visit to Europe*, inspired by his journey to England for the *Colonial and Indian Exhibition*. Although Mukharji was a prominent exhibition official and collector for the British Raj, his mark on the economic history of empire has gone relatively unnoticed.³

The present study explores the history of Museum Victoria's collection of economic products of India, collected and arranged by TN Mukharji, and presented by the Indian Government in 1887. The acquisition was documented in Museum Victoria's register of that year. The importance of botanical products for Indian trade within the Empire is patent in the writings of Mukharji, who collected, catalogued, described and documented raw materials and art manufactures for display in the Indian Courts of colonial exhibitions. These exhibits stimulated Australia's economic involvement with India during the late nineteenth century. That Mukharji was an educated, upper-caste Indian operating at the height of British rule was also significant.

The works of TN Mukharji

The collection, study, classification, cultivation and marketing of profitable plant specimens increased considerably in the early modern era, a consequence of colonial expansion, global trade, scientific endeavour and the translation of knowledge.⁴ India's diversity was to the British an abundant source of knowledge and as a colony enabled the freedom for scientific pursuits.⁵ In 1787 the British East India Company established the Royal Botanic Gardens (now Indian Botanical Gardens) in Calcutta — a kind of horticultural laboratory where plants were cultivated for observation,

experimentation and commercial enterprises. A herbarium stored dried specimens for reference and scientific study.⁶ By the late nineteenth century this sense of opportunity and discovery and the value attributed to naming, identifying and displaying India's products impelled the establishment and extension of local museums and exhibitions. In 1878 colonial India's largest and most prestigious museum, the Indian Museum, opened in Calcutta, in which Indian natural history was exhibited and interpreted within a Western, scientific framework. The imperial system of ordering and classifying natural products was given a similarly significant role in the local and international exhibitions of the period. However, unlike museums, exhibitions operated predominantly as functional forums to expand commerce and promote knowledge of India's economic resources.⁷ In the latter part of the nineteenth century these objectives were achieved in collaboration with the Department of Revenue and Agriculture.

The principal role of the Department of Revenue and Agriculture, created in 1871 by the Indian Government, was to improve and develop the country's agricultural resources. The department's initial duty was to 'collect, collate, and disseminate information as to the condition of India in its agricultural aspects'.⁸ Until 1905, a separate branch existed that was devoted to exhibitions and museums, its secretaries being Dr George Watt and Sir Edward Charles Buck. Watt was an expert in the fields of medicine and botany who wrote the monumental, six-volume *Dictionary of the Economic Products of India*, published between 1889 and 1893. Buck was a member of the Bengal Civil Service between 1862 and 1897, and exerted his bureaucratic skills to organise the department and its projects. In 1880 he acted as the President of the Commission



Fennel (*Nigella sativa*) seeds used as food and for medicinal purposes, from the TN Mukharji collection, donated by the Indian Government, Calcutta, 1887
Museum Victoria

for the Indian Court at the *Melbourne International Exhibition*, and he was the Executive Commissioner at the 1886 *Colonial and Indian International Exhibition* in London. From 1882 to 1897 he was employed as Secretary to the Government of India.⁹

The Department of Revenue and Agriculture commonly engaged local Indian professionals to collect and organise artworks and raw products for official scientific, cultural and commercial projects. Trailokya Nath Mukharji, a government class II assistant/clerk employed as assistant for exhibitions, was the highest-ranking of these Indigenous experts. Mukharji worked directly with Watt and Buck, and was

responsible at first for the collection of raw products. Later he contributed to the index of Watt's *Dictionary of the Economic Products of India*. Mukharji was also the assistant curator in the Art and Economics Section of the Indian Museum. Interestingly, according to Markham and Hargreaves of the Museums Association, the employment of Mukharji in 1887 initiated a steady expansion of Indian officers appointed by the museum.¹⁰ How he gained such a position is difficult to determine, since details of Mukharji's biography have thus far proven elusive.

Mukharji's expertise in his field permitted him to compose various official publications and catalogues that accompanied India's displays in local and overseas shows.¹¹ His slim but fastidious *Hand-Book of Indian Products*, for example, from the 1883 *Calcutta International Exhibition*, introduces and concisely describes the exhibited Indian art ware and commercial products.¹² Mukharji declares the aim of the work: 'to interest European visitors at the Exhibition in the old Indian arts ... and to invite the attention of mercantile gentlemen to the innumerable raw materials which abound in every part of India many of which are capable of being developed into articles of commerce'.¹³

For the 1888 *Glasgow International Exhibition*, Mukharji wrote *Art Manufacturers of India*. This influential publication identified significant Indian art manufactures, and showcased the ingenuity of Indian artisans. Original examples of art-workmanship were featured from the fine and decorative arts, including pottery, glass, leather and textile manufactures, tracing their history, places of manufacture and prices. A collection of art works displayed in the Indian Court of the exhibition, attended by Mukharji, is currently housed in the Kelvingrove Art Gallery and Museum in Glasgow.

Mukharji's public activities gained prominence when he journeyed in 1886 to

the *Colonial and Indian Exhibition* in London. There, he introduced Indian arts and economic products and answered visitors' questions about the Indian exhibits. He participated in debates about India at the Royal Society of Arts, and delivered lectures on the Raj's resources. For nine months, from April to December 1886, Mukharji had opportunity to travel in England and on the Continent as an official expert and representative of the Indian government and its public institutions, a rare activity for an Indian at that time.¹⁴ Mukharji documented his experiences in a journal, initially published as a newspaper serial and subsequently as a book in 1889, simply titled *A Visit to Europe*. In it he wrote in considerable detail of the *Colonial and Indian Exhibition*:

India formed by far the most interesting section of the Colonial and Indian Exhibition. Passing the vestibule at the main entrance, the visitor would stand before the clay models of the military races, which uphold the power of England in the East. He would then be led to that gorgeous display of costly jewellery, gold and silver plate, brass and copper vessels with tasteful designs, minute wood carving, inlay work on metal, stone and wood, lacquered ware of ruby, emerald and golden hues, costly fabrics woven by patient hands unrivalled in the world, and various other articles which from time immemorial excited the wonder and commanded the admiration of the western nations. As the visitor stood facing this vast panorama of India's artistic wealth, he could watch on his right the multitude crowding to the spot where the jungle life in India was illustrated in a rather over-drawn vividness.¹⁵

With the categorisation of botanical specimens and material culture for local and international exhibitions, colonial officials were increasingly dependent on 'native informants' to supply critical information on

indigenous products.¹⁶ Mukharji collected, classified, documented and published catalogues promoting the commercial properties of India's raw materials and art manufactures, and attended exhibitions as an official representative of the Empire. While the Indian populace was undoubtedly expected to adapt to the impact of colonial change, Mukharji's work reveals that the British did in fact borrow, and indeed learn, from India.¹⁷ The point here is not to temper the profound history of conflict between 'conquerors and natives', but to acknowledge evidence that suggests in late nineteenth century India, British officials demonstrated an appreciation for local indigenous knowledge, and accordingly often employed local talents.¹⁸ Mukharji, as an educated Indian, acted as an intermediary between the two worlds of empire and colony, a situation he himself was acutely aware of:

We look upon our European brethren to teach us how to develop the resources of our country, and to share with us the profits arising from it. Neither should we think them as intruders, nor should they think us mere hackers of wood and drawers of water.¹⁹

Furthermore, as the historian Gyan Prakash observes, since Western science and classification systems were represented in native material, 'neither the status of science as Western nor its separation from the Indian could be maintained — European knowledge and institutions emerged pursued by the shadow of its colonial birth'.²⁰ Mukharji expressed a similar thought when he wrote, in 1883:

The Indians now use only articles of which they learnt the use three thousand years ago. But the world has changed, and what in their eyes is mere rubbish may, if seen through the scientific eyes of the Europeans become a source of national wealth.²¹

The economic botany collection

Museum Victoria's extensive collection of economic botany collected by TN Mukharji — in excess of 750 specimens — provides a rare, tangible example of his collection work and contribution to exhibitions and museums, a distinctive visual and olfactory record that illuminates and gives form to his written publications. The collection, like the Royal Exhibition Building itself, is an enduring legacy of Melbourne's significant involvement, during an era of prosperity, in international exhibitions and the political economy of imperial knowledge. Written labels on the bottles of several specimens state that the samples of raw materials categorised as medicinal products, food substances, dyeing materials, fibres, minerals and oily substances were displayed in the 1888 *Centennial International Exhibition* at Melbourne's Royal Exhibition Building. However, this seems doubtful. At this exhibition India was in attendance as a 'minor court', sending few exhibits for display, but not officially represented by commissioners. Moreover, the *Official Record* for the exhibition does not identify raw products in its short list of exhibits for the Indian Court.

The breadth of Museum Victoria's economic botany collection is in closer accord with the selection of raw products shown in the Indian Court at the *Melbourne International Exhibition* of 1880–81. The *Official Record* for the exhibition supplies a list of exhibits from the North-West Provinces of British India, presented for display by the Department of Agriculture. Botanical products that resemble those held by Museum Victoria are recorded as follows:

Class 45 — Agricultural Products, Not Used for Food: Raw fibres, oil, oil seeds, oil cakes, dyeing substances

Class 46 — Chemical and Pharmaceutical Products: Khair salt, red earth-impure sulphate of soda, saji, saltpetre, borax, wax, lac & c.

Class 67 — Cereals, Farinaceous Products, and Products Derived from Them: Wheat, rice, barley, millet, Indian corn, peas, pulse & c.

Class 72 — Condiments and Stimulants, Sugar and Confectionary: Red pepper, ginger, cumin, coriander seed, rock salt, lake salt.²²

Additionally, a favourable appraisal of the Indian Court, noting the categories of raw products, was published in a review of the *International Exhibition* in the *Age* on Friday 1 October 1880:

The Indian Court is an exceedingly attractive one, as it possesses numerous curious articles of oriental manufacture ... The representation of raw products of the empire is on an extensive scale, and are for the best part made up of samples of cotton, jute, fibres, silk, indigo, lac, spices, drugs, dyes, tannery materials, tobacco, cigars, coffee and tea; of this last product there is an especially good show ... Altogether it may be said that this court will prove a source of attraction to visitors.²³

The transience and impermanency of exhibitions, and the peripatetic life of objects displayed, means exhibited treasures from the colonies of Britain are now located in collecting institutions around the world. At the close of exhibitions, displays were often exchanged, donated or purchased by imperial and colonial representatives and commissioners. These contacts occurred not only between London and the colonial authorities — Kew Royal Botanical Gardens in London hold collections of Mukharji's collected raw products from the 1886 *Colonial and Indian Exhibition* — but between Calcutta and Melbourne also.²⁴

The *Calcutta International Exhibition 1883–84 Report of the Royal Commission for Victoria* refers to exchanges with the Indian Government. The President Joseph Bosito writes:

Following out the custom adopted in connexion with other Exhibitions, the collections contributed by the various Government departments of Victoria were presented at the close of the exhibition for distribution amongst the Imperial museums, educational institutions, and other public bodies ... For all of these suitable exchanges were promised, and already several collections of plants and seeds, books and other publications, obtained from the Indian Government for presentation to various public institutions in Victoria, have arrived, and it is understood that no time will be lost by the officers of the Indian Government in completing and forwarding other collections for this colony.²⁵

Evidence suggests that the collection of economic botany specimens was assembled by Mukharji following the exhibition, and presented to the Industrial and Technological Museum, as Museum Victoria was then called, in 1887, having taken some time to prepare. This occurred in South Australia with the supply to the government of a collection of economic products of India, also dated 1887 and 'collected and arranged by TN Mukharji'. These specimens were prepared and despatched by the Bengal Government after the *Calcutta Exhibition* of 1884, in return for exhibits received from the South Australian Court.²⁶ A comparison between the *List of Economic Products Supplied to the Government of South Australia* and Museum Victoria's register shows similarities in the categorisation and presentation of the collections.

Museum Victoria's collection of intricate clay 'Poonah' figures exhibited in the Indian Court of the 1880 *Melbourne International*



Indian Court at the *Melbourne International Exhibition*, 1880
 La Trobe Picture Collection, State Library of Victoria

Exhibition could as well be considered such an exchange. Handcrafted in Bengal, the figures are dressed in costumes representing the various castes and occupations of the Indian populace. These exchanges, as Hoffenberg observes, ‘helped position experts within colonial society, and to position their colonies’ role within the wider imperial cultural system. In this way, the colonial subjects participated in the construction, circulation, and evaluation of knowledge as recognised experts.’²⁷

The economic botany specimens acquired by Museum Victoria feature prominently in Mukharji’s 1883 *Hand-Book of Indian Products*, making the publication a significant source for interpreting the collection. For each product he gives the botanical and English common name, followed by its Bengali,

Hindi, Tamil, Telugu and/or Burmese names, and a brief description of its use. A browse through the pages of the handbook reveals the following examples:

Murraya Keonigii (*Curry Tree*) Vern. — *Bengali*, Barsanga; *Hindi*, Gandia; *Tamil*, Kamwepila; *Telugu*, Karepak, A small tree of the outer Himalayas, South India and Burma. The leaves are used for flavouring curries; the seeds yield a clear, transparent oil, called *Simboli* oil; the root is slightly purgative; both the root and bark are considered stimulant and are used in skin diseases and to check vomiting.²⁸

Tamarindus indica (*Tamarind*) Vern. — *Sanskrit*, Tintiri; *Bengali*, Tetul; *Hindi*, Imli; *Tamil*, Puli; *Telugu*, Chinta; *Burmese*, Magyi. A large evergreen tree, cultivated throughout India and Burma. It produces large quantities of

an acid fruit which is eaten raw with rice or used as a condiment in cooking vegetables, pulses, fish &c. It is dried and kept in almost every house in Bengal. This is one of the Indian products which should form an article of export to Europe. In medicine it is used as a laxative and antiscorbutic; mixed with sugar it forms a good refrigerant drink. An infusion of the leaves is given as a cooling drink in dysentery. The kernel of the seeds is stomachic. The wood is very tough, but highly prized for cart-wheels, mallets, and sugar, oil and rice mills. Powdered and mixed with gum, the seeds form a strong cement.²⁹

Curcuma longa (*Turmeric*) Vern. — *Sanskrit*, Haridra; *Bengali*, Halud; *Hindi*, Haldi; *Tamil*, Manjal; *Telugu*, Pasupu. Turmeric is cultivated all over India for its rhizomes, which are used as a condiment in cooking vegetables and meat. They are also extensively used as a yellow dye, the colouring principle being known as *Curcumin*, which is soluble in alcohol or ether, and changes with alkali into a deep red. Macerated turmeric is in some places rubbed on the body by women and is considered cooling. Native practitioners consider turmeric stimulating; used for external application in pains and bruises; and for internal administration in disorders of the blood.³⁰

The entries demonstrate how Mukharji's exhibition activities enabled him to manage the archives of his own culture. Yet his methods of classification, display and documentation of cultural material were those adopted from empire, as were the economic interests engendered that propelled the trade of Indian materials to countries such as Australia.³¹

Indian trading connections with Australia

Mukharji considered raw products a crucial component of international exhibitions owing to their inherent properties and

diversity of applications, and hence, their potential to fuel the Indian economy. He writes in *A Hand-Book of Indian Products*:

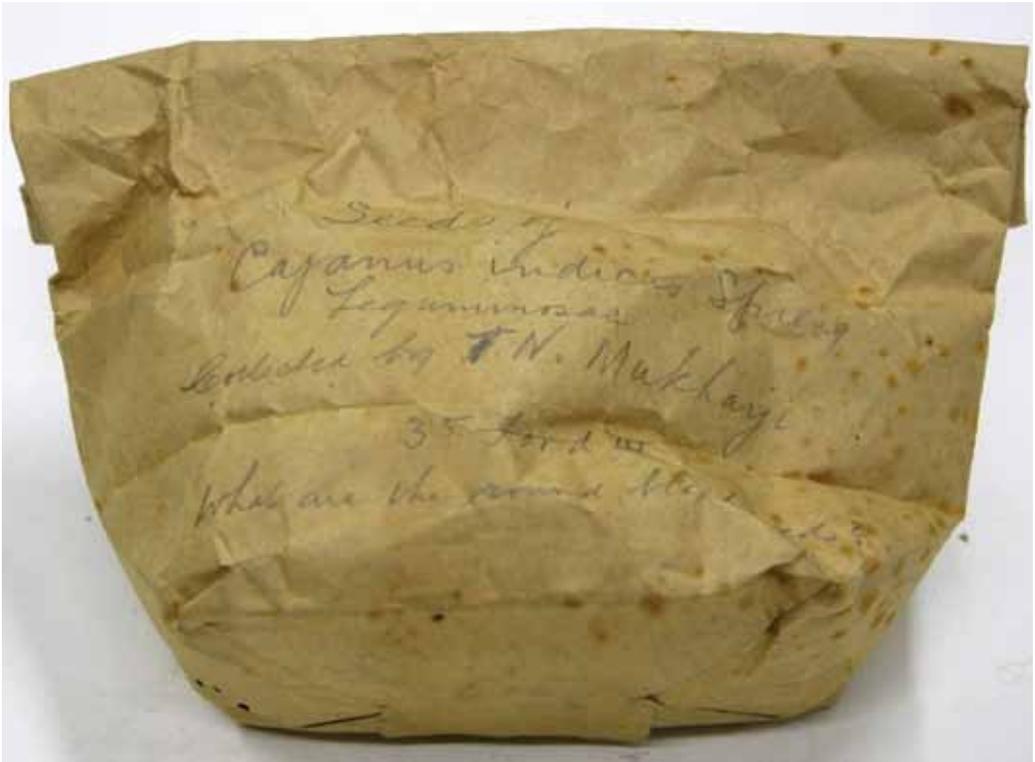
Fortunes lie scattered all over India, ready to be picked up by those who have eyes to see them, and the energy and the means to acquire them. The object of this little work is to draw the attention of enterprising capitalists, merchants and traders to the unlimited resources which India possesses.³²

The forests abound in gums, fibres, dyeing materials, medicinal products and fibrous substances of which yet only a few have been carefully tried. In short the raw material resources of India are unlimited.³³

The abundance of India's raw materials was acknowledged by Victorian delegates at the *Calcutta International Exhibition of 1883–84*, with the Economic Products of India display commended in the *Report of the Royal Commission for Victoria*:

One of the most interesting and useful features of the late Calcutta International Exhibition was the admirable manner in which the whole of the economic products of India were displayed in the Economic Court. Every care had been taken to make the representation of each article as complete as possible. If it were a fibre-yielding plant, known or unknown in commerce, it was displayed not only in its raw state, but also, in many instances, in its varied indigenous and European manufactures and uses. The same may be said of the dye plants, the tans and mordants, the foods, food stuffs and foddors ... The evident desire of this department is to obtain a thorough knowledge of the value of every plant indigenous to India, and to point out its utilitarian uses if of a prominent character.³⁴

Significant to the *Calcutta International Exhibition*, as indicated in the official report, was the emphasis on developing a trade connection between India and Australia.



Cajanus indicus (Leguminosae) seeds collected by TN Mukharji in India, 1887
Museum Victoria

A letter written by the Secretary to the Victorian Commission, and subsequently published in a leading Calcutta newspaper, grandly claimed ‘a great future before the trade of India and Australia’.³⁵ The exhibition, it was observed, had succeeded in extending knowledge of Australia and its people in India, as well as demonstrating that marketable Indian products such as jute, cotton ‘and other piece goods of native manufacture’, carpets, rice and tea could be lucratively traded. However, the writer ruefully noted that ‘one cause of the non-development of the Indo-Australian trade is undoubtedly the want of direct steam communication, and, until this is secured, it will be useless to expect any important results to follow the Exhibition’.³⁶ In 1885

the British India Steam Navigation Co. Ltd introduced a monthly Calcutta–Australia service using the *Rajpootana* steamship. Outboard cargoes from India included tea, gunnies (sacks made from jute used to carry wheat from Australia), coir and kapok. Australia exported horses for the Indian Army and wheat.

Many of Mukharji’s raw products catalogued into Museum Victoria’s economic botany collection are commonplace in Australia today. But this could be attributed more to the later influence of migrants to the country than to Mukharji’s direct efforts. Spices and herbs such as turmeric, curry, cumin and coriander occupy the spice racks of most Australian kitchens. Other plant products are frequently used in natural

remedies, as Ayurveda medicine gains popularity in Western cultures. Indian-dyed textiles, aromatic oils and jute products can be purchased inexpensively from any number of 'ethnic' outlets. Naturally, in the late nineteenth century this was not the case. Yet an article titled 'A popular condiment', published in the *Age Supplement* for the 1888 *Melbourne Centennial Exhibition* does suggest a shifting attitude towards such 'exotic' Indian products:

There is amongst people of the British race a good deal of confusion of thought as to the purposes to be served by the use of condiments. In India and in other hot climates they are largely used ... (where) the blood is more largely attracted to the surface and there is a consequent diminution of the supply to the internal organs. The digestive powers are consequently weakened, and it is to countervail this curry and the thousand and one other culinary stimulants are added to the food ... But amongst large sections of the population, who are imbued with British prejudices, and obstinately adhere to British habits, the most grotesque notions prevail as to the object to be obtained by the use of condiments. Take curry, for example. In many a household, curry is supposed to be a convenient device for disguising food that has undergone a second process of cooking.³⁷

Conclusion

The economic botany specimens collected by TN Mukharji and acquired by Museum Victoria in 1887 typify the commercial value ascribed to Indian plants and raw materials represented in colonial exhibitions of the late nineteenth century. The success of such imperial spectacles required the involvement of Indians like Mukharji who assisted in the creation and dissemination of knowledge about India. Because awareness of 'the local

terrain, resources, customs and traditions' was vital to the economic triumph of the Empire, the consultation of Indians was invaluable in attempting to transfer the 'practical skills' of Western science to a non-Western society.³⁸ Mukharji acknowledged:

The wonderful works of art, which their ingenious hands are capable of turning out after generations of uninterrupted study and practice, are dying out for want of encouragement; vast areas of land suitable for the growth of tea, coffee, indigo, tobacco, wheat and other crops, for which an almost unlimited market can be found in Europe, America or Australia, still lie uncultivated; mother earth still retains in her bosom coal, iron, copper, gold and even diamonds and precious stones, unworked and uncared for. Providence has interwoven the interests of India and England, and it seems that all these inexhaustib[e] sources of wealth are waiting to be developed by English energy and English capital to the mutual benefit of both the countries.³⁹

Mukharji's publications reflect a sense of adaptation to British rule and scientific innovation. As a civil servant he did not write with embittered resignation, but articulated desire for a mutual exchange of knowledge between India and the Empire, and an empathic concern for the Indian subjects: 'the mass of the people (who) are still as poor as they were in the worst times of the Hindu or Musalman rule'.⁴⁰ For Mukharji, the adoption of British scientific practices, represented by exhibitions, provided a means of alleviating the deficiencies of India and furthering economic development. New wealth could be introduced to the country through the trading of plant products to countries such as Australia. That TN Mukharji's name is assigned to the collection and recorded onto Museum Victoria's catalogue is legacy of

his practical and written imprint on India's imperial past, and on the history of colonial exhibitions and museums.

This paper has been independently peer-reviewed.

Notes

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- 12 TN Mukharji, *Hand-Book of Indian Products (Art Manufactures and Raw Materials)*, J Patterson, Calcutta, 1883, p. i.
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- 28 Mukharji, *Hand-Book of Indian Products*, p. 98.
- 29 *ibid.*, p. 112.
- 30 *ibid.*, p. 126.
- 31 Childers, 'Outside looking in', p. 305.
- 32 Mukharji, *Hand-Book of Indian Products*, p. 2.
- 33 *ibid.*, p. 48.
- 34 Calcutta International Exhibition of 1883–84, *Report*, pp. 20–1.
- 35 *ibid.*, p. 33.
- 36 *ibid.*
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