

28. Sutton's Seeds Sign

In this response, Surajit Sarkar of the Centre for Community Knowledge, Ambedkar University, Delhi, and Executive Committee Member of the ICOM-Affiliated International Association of Agricultural Museums, shares unique perspectives on the role of seed trade and business in the context of Indian agriculture and commerce, both past and present.

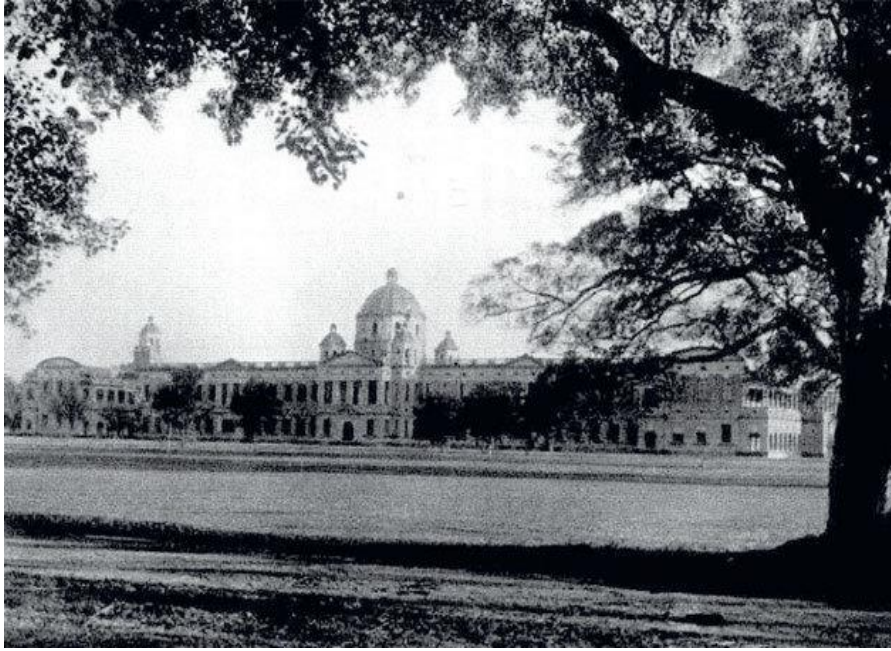
Sutton & Sons Ltd, Indian branch office sign, circa 1950s



This Sutton & Sons Ltd plaque marked the company's office in Calcutta (Kolkata), India (MERL 2019/50).

Stories of Seed Trade and Exchange in India

This Sutton & Sons Ltd company plaque, and the work of the company it references, gives a glimpse into different ways botanical seeds have been perceived in India, from colonial times onwards.



In 1786, Colonial India created its first Botanic Gardens at Calcutta (Kolkata). Serving as depots for the exchange of plants within the Empire, receiving seeds from its collectors and agents, and propagating them in the 'green-houses', and sending those plants with their economic possibilities to regions with suitable soils and climates. For example, by 1860, India grew many plants from South America, the aloes, the anonas (sugar-apple) of south India, the green capsicum and red pimento, the papaya of which it is today the largest producer in the world, the potato, tobacco, maize (corn), pineapples, American cotton, and the cinchona. The cultivation of tea in the Himalayas remains an important event in the social history of British India.

Cut to 1912

Written in English, Bengali, and Hindi, the Sutton & Sons Ltd brass plaque hung outside the Calcutta offices of the firm until the Indian company name changed to Sutton's Seeds in 1970. The company now deals in organic fertiliser, and plant and vegetable seeds for gardening or for urban farming. However, the local shopping site (lbb.in) mentions that it is almost impossible to spot the store in its site on Russell Street at first glance.

During the Second World War, supplies of seeds to India were cut off, hence seed production was started. However, only by 1945 was production sufficient for export, and Sutton & Sons Ltd was involved in this.

During the 1960's, seeds of temperate vegetables were supplied by Sutton & Sons Ltd, and systematic breeding work contributed to standardisation of seed production technology by the World Seed Year in 1961.

Cut to 1934

The Agricultural Research Institute and College was established at Pusa, Bihar, with the financial assistance of Henry Phipps, Jr., an American philanthropist and family friend of Lady Curzon and Lord Curzon, the Viceroy of India. His donation of £30,000 was used to establish the Agricultural Research Institute (ARI) in 1905. A reason for establishing it in Pusa (Phipps of USA) in northern Bihar was its proximity to the indigo plantations, a major commercial crop in the nineteenth and twentieth centuries in India and an extremely remunerative export.

The policy of commercialisation of agriculture by the British encouraged market oriented production of cash crops such as opium, tea, coffee, sugar, jute, and indigo. Colonial land revenue systems with their high fixed rent on land, forced peasant farmers to grow cash crops that spoiled the fertility of the land, while ensuring no other crop could be grown on it. With arable land dispossessed from small landowners, a minimum of subsistence cropping led to widespread impoverishment of the Indian agriculture and the cultivators, and repeated famines.

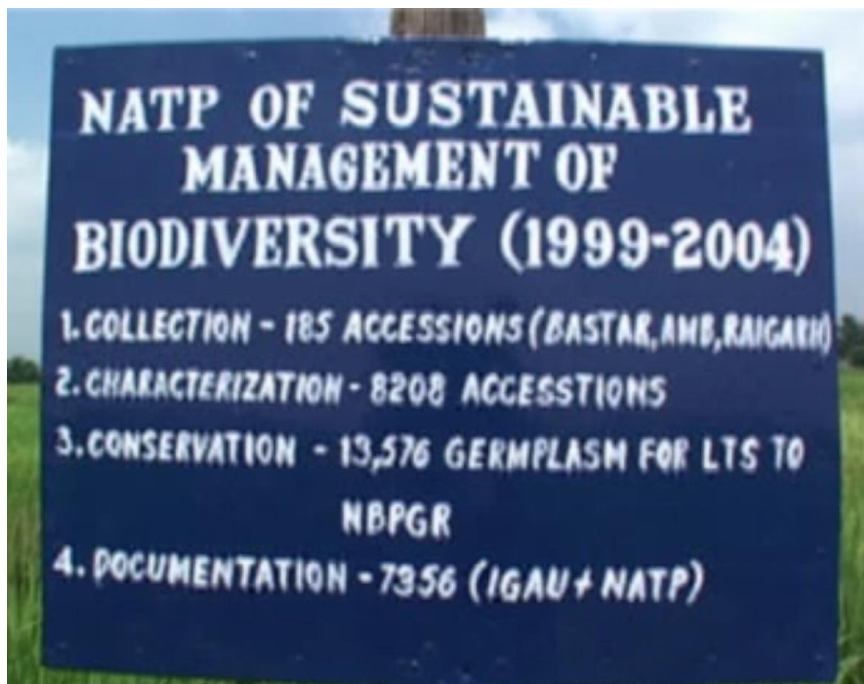
Today, the name of BASF (originally Badische Anilin und Soda Fabrik – Baden Aniline and Soda Factory), the largest chemical supplier, echoes the legacy of the synthetic dye industry, built via aniline dyes and extended via the related azo dyes. The synthesis of indigo dye in Germany made it necessary to examine methods for a possible revival of the indigo industry in Bihar. The first agricultural scientist at the Institute was the English chemist John Walter Leather. He was sent on a tour to the indigo districts in 1899 and the location in Pusa was close to the main indigo plantations in northern Bihar.

The devastating Bihar Earthquake of 15 January 1934, damaged it extensively, followed by the flooding of the indigo plantations as the rivers and streams breached their banks in the alluvial plains of the Himalayan foothills of northern Bihar broke the back of the plantation economy. The Institute was shifted to New Delhi later in 1934, and the original location was downgraded to an agricultural research station until 1970. At that time, the Government of Bihar established the Rajendra Agricultural University at the location.

Cut to 1971

Dr. R H Richharia, Director of the Central Rice Research Institute at Cuttack, was transferred from his position under pressure from the International Rice Research Institute, after he developed, for the first time in India, two rice varieties which gave the highest yield and were free from the usual pests. Out of thousands of TN-1 variety rice plants, his team selected a few, and then multiplied them for a record yield of almost 9000 lbs./acre and free from the usual pests that exist in Indian agro-climatic regions. On March 23, 1986, in his interview to the Illustrated Weekly of India, Dr Richharia stated:

“I had proposed that hybrid vigour exploitation is possible in India, by utilising vegetative propagation technology which constituted a direct challenge to the HYV dwarf plant type technology, with its over reliance on chemical inputs.”



After this transfer, he developed a collection of 19,000 rice varieties developed at the MP state Rice Research Institute, whose existence became contentious. At stake were indigenous High Yielding Varieties of rice created in situ, which gave 30 to 40 per cent higher yield. In keeping with diverse conditions, different varieties of rice have evolved over many generations thanks to the efforts of many farmers with knowledge of local seeds. It is this indigenous germ plasm which should be used for ensuring good and secure rice cultivation. After his retirement, the collection went to the Indira Gandhi Agricultural University (IGAU), Raipur, Chhatisgarh.

In 2002, the Chhattisgarh Biodiversity Security Forum, a non-profit group, revealed in local media secret negotiations between the University (IGAU) and Syngenta. These were subsequently confirmed, and the university disclosed that Syngenta would provide an undisclosed amount of research funding to the university in exchange for access to the collection. “The collection is a national wealth and the IGAU has no right to treat it like its private property,” said the research advisory committee of the National Bureau of Plant Genetic Resources.

He said that farmers having good knowledge of these indigenous seeds should be involved to work closely with farm scientists in a highly decentralised system of agricultural development in which scientists are very close to farmers and there is mutual learning particularly with respect to local seed diversity.

Cut to 2005

In the dry land farming belt of central India in lower Madhya Pradesh, documentation of ‘against the grain’ (non-mainstream) farming practices in the light of changing rainfall patterns, led to some unexpected narratives from farmers. In the summer of 2008, farmers reported that in many hill villages across the Hoshangabad and Chhindwara districts, marginal and tribal farmers used a variety of paddy seed called *solah number* (No. 16) as the seed of choice for sowing that year.



The name itself disclosed that the seed was not a traditional variety, but obtained in the past from Government seed agencies which currently had no local record of this variety. Later, it was discovered that the name dated back to the days when locally successful varieties were collected and distributed in similar agro-ecological zones, albeit with an official title – Seed No.16. The wider release of locally successful seeds was an established practice in pre-Green Revolution days, and such distribution was discontinued as the hybrid hi-yielding varieties appeared. This variety was reported to be far superior to other rice and was the best choice for maintaining vigour in times of erratic rainfall. Farmers widely distributed it using inter-personal seed borrowing practices, and it was sown, maintained, and harvested for over half a century.

Such community adaptation aimed at food security in times of unexpected environmental and climate change draws attention to the need for integrating traditional, community-based knowledge in the larger agricultural policy of this country.

Cut to 2014

In April 2014, India made its first seed deposit to the Svalbard Global Seed Vault with one box of 25 accessions of pigeon pea (Toor Dal). Pigeon pea (*Cajanus cajan*) is an important crop for small-scale farmers in semi-arid areas. This lentil is drought resistant and can be grown in areas with less than 65 centimeters of annual rainfall. Pigeon pea is a high source of dietary protein with lots of vital amino acids and vitamins, and is an important crop in poor households in eastern Africa, Central America

and the Caribbean. As a nitrogen-fixing legume, pigeon pea supplies the soil with natural fertiliser, boosting its productivity.



As plant diversity is lost at a faster rate than before because of intensive agriculture, mono-cropping and loss of habitat for landraces and wild relatives of crops, new varieties need to produce higher-yields with less water, fertilizer and other inputs. Furthermore, unpredictable weather patterns such as unusual rains and drought spells, soil erosion and change in land use pattern are posing new challenges that need to be adequately addressed.

Till date, the tension between ex-situ and in-situ conservation to rediscover the power of seeds is a continuing dynamic in India's current agricultural situation.

Cut to 2017

By the 1980s, India's hospitality industry started picking up, which meant more demand for exotic vegetables as they entertained expats and foreigners. However, these vegetables thrived well in cold climates as seen in Europe or mountainous regions.



Jitendra Ladkat, a young farmer from Pune, set off for Israel in 1978 to learn more about greenhouse farming, later noting: *“The conditions there are similar to Rajasthan and Kutch; dry and arid. So, the most important lesson I learnt during my trip was that any kind of vegetable can be grown anywhere.”*

The quest for good quality seeds took him to Kenya, where he picked up seeds for broccoli and started growing it back home. Broccoli is a cool-weather crop, which grows best when exposed to an average daily temperature between 18°C and 23°C, so the seeds were sown in summer and the crop was covered in old sarees to keep them safe from the scorching heat. The seeds were packed in plastic bags and stored in the refrigerator for the rest of year to maintain the cool temperature.

Today, most urban neighbourhood ‘sabziwala’ (vegetable sellers) stock up on broccoli and ‘exotic’ vegetables like celery, lettuce, flat parsley, artichokes, avocados, and baby corn. These vegetables have become a staple in many urban diets. Today, Jitendra wants to launch an app-based retail platform to keep up with millennial customers.

Further Information (online):

For more information about the Suttons sign see – [MERL 2019/50](#)

For more information about the Centre for Community Knowledge at Ambedkar University see – <https://aud.ac.in/centre-for-community-knowledge>

For more information about the International Association of Agricultural Museums see – <https://www.agriculturalmuseums.org/>

For more information about Sutton’s Seeds Ltd collections held at The MERL see – <https://merl.reading.ac.uk/collections/suttons-seeds-ltd/>

Further Reading (some available online):

‘Dr Richharia’s Story – Crushed, But Not Defeated,’ *The Illustrated Weekly of India*, March 23, 1986 (reprinted at <http://satavic.org/dr-richharias-story-crushed-but-not-defeated/>) [re: ‘Cut to 1971’]

‘Apni Sankat, Apni Raah (Our Crisis, Our Resolution),’ *Jatan Trust, Pipariya, Madhya Pradesh*, 2008 (<http://www.jatantrust.org/>) [re: ‘Cut to 2005’]

‘India Deposit to the Svalbard Global Seed Vault,’ *Crop Trust*, 15 May 2014 (<https://www.croptrust.org/blog/india-deposit-svalbard-global-seed-vault/>) [re: ‘Cut to 2014’]

Meenakshi Iyer. ‘Meet the man who introduced the ‘exotic’ broccoli to India’, *Hindustan Times*, Sep 27, 2017 [re: ‘Cut to 2017’]