

# INDIA'S ANTI-GMO RHETORIC: WIELDING GANDHIAN THOUGHT TO UNDERMINE CORPORATE-CAPITALIST AGRICULTURE

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## Abstract

As a predominantly rural and densely populated developing nation, India is positioned at the vanguard of the global debate surrounding GMOs. As concerns related to food security mount, what transpires in India is of great importance. Citizens' collective memory of the country's colonial experience and Gandhi's role as an independence leader, however, have made for a poignant encounter with biotechnology. A range of diverse anti-GMO civil society groups have risen to the fore, some of which, despite not having come together on a cohesive campaign, articulate their organizational objectives through similar rhetoric. The principles of *satyagraha*, *swaraj*, *swadeshi*, and food as a reflection of identity that were espoused by Gandhi at the time of Indian independence from Britain serve as tools with which to dissect both the means and ends of civil society advocacy groups. When grounded in contemporary context, these principles reveal an underlying incompatibility between pragmatic, regulation-oriented approaches to GMOs and emotive Gandhian language. Radical organizations such as the Karnataka Raiya Raitha Sangha (KRRS) and Navdanya employ Gandhian rhetoric both in their mobilization efforts and in the articulation of their alternative societal visions, while organizations such as Gene Campaign avoid such rhetoric in their pursuit of legislative and regulatory reforms.

## Introduction

As the most densely populated nation in an increasingly globalized world, India occupies a unique place among developing countries. China's rapid

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urbanization has rendered India the last of the large nations in which village life and traditional farm production persist, and it will soon claim the largest population of farmers in the world (Angotti 2012, 128). The implications of its decisions regarding agricultural biotechnology extend far beyond its borders, as this subject has come to occupy a central place in international development discourse. The debate about genetically modified (GM) crops “has become a much wider one: about the future of agriculture and small-scale farmers, about corporate control and property rights and about the rules of global trade” (Scoones 2008, 315). While some hail biotechnology as a tool with which to increase crop yield and ensure food security for a swelling global population, others contend that farmers will suffer increasing costs of inputs and declining diversity of seed choice, allowing for the domination of corporate-capitalist agriculture (Lalitha 2004, 187; Scoones 2008, 317). What transpires in India, therefore, is of great consequence, and it hinges on the efforts of some of the world’s most savvy activists that – fuelled by media interest and intensifying global debate – have launched a broad, albeit uncoordinated, movement against the country’s approval of genetically modified organisms (GMOs) (Stone 2004, 128).

Various organizations are incorporated under the anti-GMO umbrella, each of which tends to have a distinct view and charismatic individual leader. This paper will focus on three such organizations and the discourse they have employed in their mobilization efforts (Scoones 2008, 336). In combating the adoption of biotechnology, these actors within the anti-GMO movement have fostered doubt among Indian citizens with regard to the technology’s safety and desirability, and the civil society actors’ utilization of Gandhian rhetoric in order to appeal to the public as well as other national groups has been central to this process (Newell 2008, 133). Understanding the nature and intention of this discourse offers valuable insight into the large-scale resistance to agri-biotechnology occurring throughout the country and such insight is necessary to assess the relevance and replicability of India’s anti-GMO movement for other developing nations. This paper, therefore, seeks to answer the following question: To what extent and for what purpose do India’s anti-GMO civil society actors employ Gandhian thought in framing and executing their organizational objectives?

## Theoretical Framework and Literature Review

My approach to this question is grounded in the theoretical area of social movements, particularly nongovernmental organizations (NGOs) and civil society advocacy. Furthermore, acknowledging that individual social movements are the products of particular historical circumstances, I have chosen to include a postcolonial perspective in my analysis of India's anti-GMO movement discourse, focusing on the manner in which Gandhi's rhetoric has been removed from its original context and applied to contemporary issues of food sovereignty in India. Ishizaka and Funahashi's *Social Movement and the Subaltern in Postcolonial South Asia* (2013) as well as Ashcroft, Griffiths, and Tiffin's *Post-Colonial Studies: The Key Concepts* (2013) develop the framework that guides my discussion and analysis. I have made a concerted effort to maintain objectivity and not allow my personal bias against GMOs to distort my treatment of this topic.

On a general level, Hasegawa and Machimura (2004) define a social movement as "a transformation-oriented collective action, which derives from people's discontents with the present conditions or certain prospective situations" (19). In the case at hand, Indian anti-GMO activists are motivated both by their discontent with the manner in which GMOs have thus far been handled as well as the prospect of additional GMOs entering the country. In terms of location-specific social movement theory, according to Ishizaka and Funahashi (2013), models derived from studies in Europe and America have proven to be ineffectual in explaining the proliferation of various subaltern social movements in South Asia witnessed since the 1980s. Scholars, therefore, have recently begun to construct theoretical frameworks for the specific analysis of Indian social movements. One such framework is the "dual politics" theory put forth by Ray and Katzenstein (2005), which asserts that "the most common and distinctive characteristic of social movements in India is that they always focused on the twofold objectives of 'equality' and 'identity' simultaneously" (25). With regard to equality, most Indian social movements have sought the amelioration of unequal or unfair political-economic-social relations and, in terms of identity, "the formation or consolidation of collective (rather than individual in many cases) identities for specific castes, religions, classes, or regions" (Ishizaka and Funahashi 2013, 5). Furthermore, according



to Ashcroft, Griffiths, and Tiffin (2013), “the issues emerging from the engagements of post-colonized societies in a ‘global’ age have demonstrated the usefulness of postcolonial analysis” (74). As was the case with India, political independence did not necessarily mean “a wholesale freeing of the colonized from colonialist values, for these, along with political, economic and cultural models, persisted in many cases after independence” (Ashcroft, Griffiths, and Tiffin 2013, 74). Indeed, for many Indian citizens, particularly farmers, enduring neoliberal reforms and the imposition of elements of corporate-capitalist agriculture has been painfully reminiscent of colonialism under Britain. In *Grassroots Activism Builds Wall Against Western Imperialism*, Cartalucci (2014) captures this sentiment: “Just as the British Empire had done to India economically and sociopolitically, big-agri [sic] and other multinational corporate rackets are attempting to impose similar models of servile dependence via patented, monopolized biotechnology.”

With this theoretical framework that blends civil society advocacy with postcolonialism established, I provide the historical and contemporary context necessary to properly ground my discussion of India’s contemporary anti-GMO movement. Following a discussion of four of Gandhi’s principal concepts and a description of India’s current agricultural crisis, in the central section of this paper, I adopt a qualitative approach in order to examine the rhetoric employed in articulating the missions, visions, and strategies of three of India’s most active anti-GMO civil society organizations, as identified by Scoones (2008). Through discourse analysis, I assess the extent to which they include undistorted Gandhian thought and to what effect. While this relatively small selection of cases is somewhat limiting and not necessarily representative of the full breadth of anti-GMO civil society actors in India, given the high-profile status of the three organizations to be discussed, an analysis of their dynamics offers important insight. It is important to note that there are myriad other factors at play that undoubtedly influence the relative success of the groups I have chosen to examine. Due to the scope of this paper, however, I am only able to acknowledge the presence of such variables and cannot control for them. Finally, I characterize the organizations in question based on categories provided by Scoones (2008) before drawing broad conclusions as to the relevance and applicability of Gandhian thought for different activist purposes. The contextual information to follow provides the critical framework of Gandhian ideology and rhetoric that informs the remainder of this paper.

## Historical and Contemporary Context

On August 9, 1942, Mahatma Gandhi urged Indian citizens to participate in civil disobedience in an effort to topple British rule. Sixty-nine years later, on August 9, 2011, a gathering of NGOs, health activists, and environmental organizations held a national day of action against GMOs in India, addressing Monsanto in particular. Both events shared the slogan "Quit India!" – the former demanding national sovereignty and the latter demanding food sovereignty (Kaur, Kohli, and Jawal 2013, 622). This event in 2011 was not the first to take this slogan out of its original independence-era context and apply it to the contemporary issue of GMOs; activists first seized upon the catalytic power of this phrase in 1988 to launch a campaign against Monsanto's Terminator technology (Sanford 2013b, 70). The continued reemergence of this slogan in India's anti-GMO movement is profound and intentional; the revolutionary spirit that animated India's struggle for independence has been given new life in the country's campaign against biotechnology (Angotti 2012, 391). Anti-GMO activists and advocacy groups have defined GMOs as a threat to Indian identity and the national interest, drawing directly from Gandhi's anti-colonialist perspective, which warrants close examination (Fuchs and Glaab 2011, 734).

### ***Gandhian Values: Satyagraha, Swaraj, Swadeshi, and Food As a Reflection of Identity***

In the mid-twentieth century, although he never held government office, Gandhi was regarded as India's supreme political and spiritual leader. Throughout the nation's struggle for independence from Britain, he advocated nonviolent protest, emphasizing that self-control and self-discipline were crucial in order to achieve independence (Sanford 2013b, 80). He coined the term *satyagraha* to represent this concept of civil disobedience, which is the first of four Gandhian tenets to be examined in this paper. The famous Salt Satyagraha, or Salt March, that Gandhi led on March 12, 1930, against the British salt monopoly in India serves to exemplify this style of protest.

Furthermore, Gandhi conceived of and experimented with a set of societal values, among them regional self-sufficiency, or *swaraj*, and local economy. The concept of *swaraj* constitutes the second Gandhian concept of relevance. In terms of enacting these values, Gandhi insisted on the development of human-scale, appropriate village-based technologies that enhanced agricultural productivity while returning the benefits to village



residents – central tenets of the concept of *swadeshi*, which is the third Gandhian concept central to the analysis of this paper (Sanford 2013b, 78). He evaluated appropriate technologies by determining who benefited – an approach that was neither anti-science nor anti-technology. Instead, he strove to demonstrate that “appropriate technologies diffused knowledge, fit local conditions, and benefited local economies and so represented alternative and more equitable paradigms for development” (Sanford 2013b, 78). Gandhi was not, therefore, a Luddite, as evidenced by his promotion of locally produced cloth, or khadi, over imported textiles, which fit this model and simultaneously constituted a rejection of the inevitable dislocations of the global marketplace. Wearing khadi became “for Gandhi and many Indians a means to demonstrate their allegiance to the incipient Indian state and to related Gandhian ideals such as local economies” (Angotti 2012, 392; Sanford 2013b, 74-75).

Given that food, like clothing, is central to humans’ individual and social identities, food and, by extension, agriculture presents the opportunity to enact socially and environmentally sustainable choices (Sanford 2013b, 75). For Gandhi, food was more than a means to satiate hunger or a source of nourishment; he believed it to be “instrumental in shaping human consciousness.” This conviction led him to conduct numerous experiments with food on his own body in what became a lifelong search for the perfect diet (“The Story of Gandhi’s Experiments” 2008). These experiments began during his days as a student in London when he first adopted vegetarianism, and he later experimented with an all-fruit diet, a raw diet, and, later still, a diet of grains (Gandhi 1957, 56). He identified the taste, relish, and pleasure of food as serious problems with eating and, therefore, reduced the volume of his consumption dramatically and fasted for extended periods of time.

These later experiments were motivated more by religious and moral considerations than hygienic and physical ones, and they deepened his belief in the “intimate connection between food and health and to the unhygienic properties of a grossly corrupted modern civilization” (Atler 2000, 33). This fourth principle, albeit more nebulous than the aforementioned three, is the final Gandhian concept to be analyzed. Beyond these intimate personal experiments, however, the societal values put forth by Gandhi in the mid-twentieth century emphasized – in contemporary terms – sustainability, equity, and social justice regarding natural resources. The tenets of *satyagraha*, *swaraj*, *swadeshi*, and food as a reflection of identity were, for a time, central to India’s development policies, and civil society groups have effectively extended them to the present (Sanford 2013a, 96-97).

### ***Neoliberal Reforms in Agricultural Policy***

At the time of India's independence from Britain, nearly the entire population lived in rural areas and small towns. Those who came to power identified as urban elites, but they confronted an overwhelmingly rural population demanding government action to improve rural life. Given this reality, the new government developed a program that focused on investments in the countryside, drawing heavily from the work of Gandhi. His earliest writings reinforced the aforementioned value of local self-reliance, and his seminal work *Hind Swaraj* detailed the philosophical basis for India's policies promoting rural development. Gandhi recognized that an integrated, holistic approach to human development was necessary, or the large metropolises of Kolkata and Delhi, former British strongholds, would develop and be divorced from the land and its productive capacity (Angotti 2012, 391). In the decades to follow independence, therefore, policies were decidedly anti-urban and priority was given to investments in rural infrastructure such as roads, dams, and irrigation systems. While some of these projects, dams in particular, exacerbated problems among villages and displaced millions of people, the robust support by the Indian government for agriculture ultimately helped to sustain the village economy (Angotti 2012, 382-383).

Beginning in the late 1980s, however, the government began to shift its economic strategy to reflect the neoliberal priorities put forth by the World Bank. Loans and subsidies to rural areas decreased substantively, and services once financed by the central government were made the responsibility of local governments. The new public-private partnerships that have necessarily emerged from this decentralization served to undermine rural peoples' self-reliance and are reminiscent of "similar arrangements that were the hallmarks of the British colonial period" (Angotti 2012, 397). Concurrently, spending in research and development and extension spending increased, both of which have tended "to favor the expansion of large-scale, industrial agriculture" (Angotti 2012, 382, 389). These trends have produced an agricultural landscape in which rural producers, due to the privatization of the seed industry, are growing increasingly dependent on industrially produced seeds, and experimentation with GMOs threatens to deepen this reliance on corporate suppliers. With the implementation of these neoliberal reforms, farmers have become increasingly disenfranchised, turning to grassroots resistance movements to demand reparation. Movements against displacement in both rural and urban areas first emerged during the Indian government's implementation of Green Revolution initiatives, primarily in response to dams





and irrigation systems that were designed to appropriate water for industrial agricultural purposes. While these struggles remain pertinent, they have been subsumed by the more recent anti-GMO movement (Angotti 2012, 394-396).

### ***Flirting with GMOs: 'Golden Rice,' Bt-Cotton, and Bt-Brinjal***

The events that transpired surrounding the introduction of three GM-crops into the Indian marketplace serve to demonstrate civil society's role and leverage on the national stage. While the GM crops to be discussed are not the only three to have breached Indian borders, a brief examination of their cases leads to a greater understanding of the reception of GMOs by Indian civil society. It is important to note that, throughout the deliberations surrounding these GM crops, concerns over biopiracy remained high; in a way, these initial events sensitized the Indian public to the issue of GMOs and set the tone for what has become a decades-long battle. The first of these crops, 'Golden Rice,' was invented in 1999 with the express purpose of combating malnutrition, particularly vitamin A deficiency; nearly two decades after its initial production, however, the GM-rice remains unavailable in India. NGOs and activist networks, together with scientists critical of GM crops, have been able to challenge the proposed benefits of 'Golden Rice,' establishing a deeply critical stance and protracting its introduction (Fuchs and Glaab 2011, 733-734).

In 2002, however, following five years of testing and acrimonious debate, India approved the sale of a different GM crop – Bt-cotton (Stone 2004, 128). Not only is cotton India's most significant agricultural commodity, but Gandhi's promotion of khadi throughout the independence movement endowed hand-spun cotton with great symbolic importance (Yamaguchi and Harris 2004, 467). It is, therefore, a crop of great economic and cultural importance, compelling civil society actors to participate intensively in Bt-cotton discourse (Yamaguchi, Harris, and Bush 2003, 47). Myriad anti-GMO activists have been uncompromising in their assertion that India's staggering rates of farmer suicides are a direct result of the market dominance of Monsanto's Bt-cotton, and this crop remains at the center of national attention (Cartalucci 2014). Finally, controversy in India over its would-be first GM food – Bt-brinjal (eggplant) – is ongoing and complicated further by the widespread use of brinjal in traditional Hindu medicine. Large-scale field trials of Bt-brinjal were conducted in 2006, coinciding with escalating public skepticism regarding the crop due to activist efforts. Ultimately, in response to apprehension expressed by India's top brinjal-growing states, Minister



Ramesh issued a moratorium on Bt-brinjal in February of 2010 (Kudlu and Stone 2013, 21, 25, 32). Given that only one of the three aforementioned crops was ultimately commercialized, the approach taken by civil society and activist groups has proven to be relatively effective and to resonate deeply with an Indian public in the midst of an agricultural crisis.

### ***Agricultural Instability***

At the time of the 2001 census, nearly 60 percent of India's labor force was engaged in agriculture, either living on and cultivating the land or working as agricultural laborers. This constitutes a 20 percent decrease from the time of independence. Furthermore, agriculture revenues in 1973 comprised 41 percent of GDP, and this value had decreased to 20 percent by 2005. Neoliberal policies have encouraged private investment in agriculture at a rate far faster than public investment, and agricultural subsidies have been channeled primarily into fertilizers or food price supports, which disproportionately benefit larger farmers. Amid these profound structural changes in agriculture, rural populations face mounting inequality and food security concerns (Angotti 2012, 386-387). It is in this context that India's anti-GMO movement has risen to the forefront.

### **Movement Dynamics: Civil Society Actors and Their Strategies**

While India's anti-GMO movement is relatively dispersed and fragmented, the messages put forth by its various civil society actors are bound by a central theme and strategy that allow the movement to maintain a semblance of coherency (Angotti 2012, 394). The following three organizations were identified by Scoones (2008) as "main groups presenting an anti-GM position over the past decade," and their operational dynamics offer insight into the degree to which activist anti-GMO rhetoric incorporates Gandhian thought and to what effect.

### ***Gene Campaign***

Of the three civil society organizations to be analyzed, Gene Campaign is the youngest, most pragmatic, and least incendiary. Furthermore, its rhetoric and strategies are the least Gandhian in their construction.



## *Mission & Vision*

Founded in 1993 by Indian activist Suman Sahai, Gene Campaign declares a focus primarily on research, engagement with policy, and advocacy. The campaign is actively working towards “a just and equitable policy framework for research incorporating traditional and modern science” that enables “sustainable agriculture, self reliant [sic] farmers and food for all” (Scoones 2008, 336; “Vision and Mission”). Its manifesto professes a dedication to “protecting the genetic resources of the Global South and the rights of the farmers of these regions.” On the subject of GM crops, Gene Campaign “advocates for proper regulation and stringent biosafety testing of GM products,” asserting that the “careless and biased fashion” with which India has thus far implemented GM technology is highly irresponsible and dangerous (“About Gene Campaign”).

While Gene Campaign’s call for self-reliance may be construed as a nod to Gandhi’s concept of *swaraj*, given the dominant rhetoric of this organization’s mission and vision, the use of this term is more likely in line with the larger discourse of sustainable agriculture and, therefore, not necessarily a Gandhian association. Furthermore, unlike the following organizations to be discussed, Gene Campaign does not advocate an outright ban on GMOs; instead, it calls for the radical reformation of India’s testing and regulatory processes. This organization views GM crops not as the products of an oppressive corporate-capitalist agriculture reminiscent of British rule but as a potentially beneficial scientific innovation, and it is precisely this view that they convey to the Indian public. Given the reckless nature with which these crops have thus far been introduced, Gene Campaign adopts an anti-GMO stance, but its position is not unyielding; it is contingent on India’s regulatory capacity. This organization believes that there is an appropriate place in Indian agriculture for responsibly administered GMOs.

## *Strategy*

In terms of its strategic approach and activities, Gene Campaign has devoted some of its organizational energy to the conservation of agrobiodiversity through the collection, characterization, and conservation of India’s agro-biodiverse rice. Additionally, it has established seed banks in order to conserve traditional varieties of seeds for future use, endeavored to protect indigenous knowledge, and initiated “large-scale awareness generation programs... explaining the process of globalization and... developments that

could threaten food and livelihood security." Moreover, its advocacy work generally involves the careful framing of pivotal legislation with regard to seeds, biodiversity, and intellectual property rights ("Best Practices"). Through this work, Gene Campaign credits itself with "raising the national debate on the dangers of seed patents" and the threats posed to food security and sovereignty. Its efforts on behalf of farmers' rights culminated in 2001 with the Protection of Plant Varieties and Farmers' Rights – unprecedented legislation that grants farmers legal rights to save, use, exchange, and sell farm-saved seed ("About Gene Campaign"). Finally, with the formal release of Bt-cotton in 2002, Gene Campaign held a high-profile conference in Delhi, asserting the need to overhaul the regulatory system – an event that serves to exemplify the strategic approach employed by this organization (Borras 2008, 152).

Gene Campaign's methods are highly pragmatic, allowing this organization to maneuver its way through formal societal institutions in order to orchestrate meaningful change, as exemplified by the passage of the Protection of Plant Varieties and Farmers' Rights. The encouragement of nonviolent protest, or satyagraha, that is central to the strategies of the following organizations to be discussed, however, is absent here. Based on the strategies it does advocate, Gene Campaign is advancing a responsibly modern take on Indian agriculture in which globally aware farmers have both traditional and modern science at their disposal. This approach, albeit noble and seemingly effective, constitutes a departure from Gandhian thought. Aside from the fleeting mention of self-reliance among farmers, the Gandhian tenets of swaraj and swadeshi are not readily apparent, and the same is true of Gandhi's beliefs surrounding food.

### ***Karnataka Raiya Raitha Sangha (KRRS)***

Unlike Gene Campaign, India's Karnataka Rajya Raitha Sangha (KRRS), the Karnataka State Farmers' Association, is explicitly Gandhian in its objectives and direct in its action. A more seasoned agrarian movement comprised primarily of middle- and upper-class farmers, it was formally created in 1980 by the late M.D. Nanjundaswamy and has become a prominent actor both in India's anti-GMO movement and the global peasant movement (Scoones 2008, 336). Due to its particular history and "capacity to launch dramatic actions against transnational and GM seed companies," it has become a close ally of La Vía Campesina, an organization that "defends small-scale sustainable agriculture as a way to promote social justice and dignity" and



“strongly opposes corporate driven agriculture and transnational companies that are destroying people and nature” (“Organisation” 2011). With regard to the global efforts of La Vía Campesina, the KRRS has come to assume the role of ‘gatekeeper’ in South Asia; it is operating, therefore, with a global development agenda at the forefront of its organizational objectives (Borras 2008, 24, 107).

### *Mission & Vision*

While its efforts are focused primarily on food sovereignty, the KRRS aims for broad social change based explicitly on Gandhi’s philosophy of *swadeshi*, which emphasizes local technologies and economies. Its stated final objective is the realization of the Gandhian “village republic” – “a form of social, political and economic organization based on direct democracy, economic and political autonomy, and self-reliance.” It follows that the basic unit of this organization’s political structure is the village, and each participating village determines the breadth of its finances, programs, and actions (Khadse and Bhattacharya 2013, 1-2). Furthermore, while expressing a deep commitment to Gandhi’s principle of nonviolence, the KRRS engages in confrontational politics against what it perceives as unfair socioeconomic systems.

### *Strategy*

Towards this end, the KRRS has been staging direct actions and nonviolent protests since its inception, leading the way with the destruction of Bt-cotton field trial sites in 1998. With the launch of Monsanto’s ‘terminator’ technology and the controversy that followed, the KRRS announced the ‘Cremate Monsanto’ campaign, and Nanjundaswamy launched a series of similarly sensational slogans including ‘Stop Genetic Engineering,’ ‘No Patents on Life,’ and ‘Bury the WTO.’ The leader also announced that all trial states in the southern Indian state of Karnataka would be burned, inviting the attendance of the media. Similarly, in the early 1990s, nearly one thousand farmers engaged in highly symbolic action, infamously ransacking the headquarters of global agribusiness giant Cargill Seeds Company, which is now owned by Monsanto, in Bangalore and dismantling its seed unit in Karnataka. Throughout the action, the KRRS echoed Gandhi’s independence movement tactics by pressuring multinational seed companies to “Quit India!” According to organization representatives, it was through this Cargill action that the KRRS officially launched the Bija (seed) Satyagraha, “inspired by Gandhi’s Salt Satyagraha, and used peasant seeds as a symbol of peasant resistance against

seeds patented by multinational companies." These events prompted both national and global groups to voice their solidarity, further connecting the KRRS to international networks of organizations confronting unjust economic globalization (Khadse and Bhattacharya 2013, 2-3).

More recently, the KRRS uprooted Dupont's GM rice field trials being conducted illegally without farmers' prior knowledge in Doddballapur, Karnataka. Dramatic events such as these were and continue to be executed with the media in mind, providing journalistic opportunities and inspiring widespread replication by similar organizations throughout the world (Borras 2008, 161). The KRRS supplemented these direct actions with a series of citizens' juries held in Karnataka in 2000 and Andhra Pradesh in 2001, which "provided foci for activists to denounce GM crops and their associated future for agriculture" (Borras 2008, 151).

Additionally, the KRRS is in the process of erecting an "international sustainable peasant development centre called 'Amrutabhoomi' in the Chamrajnagar district of Karnataka" with the express purpose of reviving traditional farmer knowledge and technologies. The center is set to include an agroecological training school to promote exchange among farmers, a seed conservation center to encourage the 'in situ' conservation of native seeds, and seed banks to facilitate the development of new varieties by farmers. Together, this center will "provide a space in which farmers can realize their new paradigm of self-reliance" and work to "reverse the disasters caused by green revolution technologies" (Khadse and Bhattacharya 2013, 4). A final initiative developed by the KRRS, although somewhat underdeveloped at this juncture, has been direct farmer-to-consumer marketing through village-level shops called Namdu, which means "ours." These stores enable farmers to avoid middlemen and sell their products directly to local consumers, and the KRRS vows to expand these marketing efforts in the near future (Khadse and Bhattacharya 2013, 5).

In comparison to Gene Campaign's research- and policy-oriented approach to achieving a middle ground between traditional and modern science, both the strategies employed by the KRRS and its ultimate objectives are far more radical. In the midst of what it perceives as destructive globalization, this organization embraces the central tenets of Gandhian thought and rejects biotechnology in its entirety. Its call for a new paradigm of self-reliance, pursuit of the "village republic" and strengthening of farmer-consumer linkages, and participation in the Bija Satyagraha are drawn directly from Gandhi's concepts of swaraj, swadeshi, and satyagraha, respectively. While Gene Campaign concentrates on regulatory and legislative progress, the KRRS focuses on



revolutionary movement-building and impactful protest closely following Gandhian thought. Its organizational objectives and strategies are similar to those of the final group to follow.

### ***Research Foundation for Science, Technology, and Ecology (RFSTE) and Navdanya***

In 1982, perhaps the most celebrated and controversial of anti-GMO activists, Vandana Shiva, founded the Research Foundation for Science, Technology, and Ecology (RFSTE) in Dehra Dun, Uttar Pradesh “as a participatory research initiative... to provide direction and support to environmental activism” (“Research Foundation”; “Introduction”). Five years later, the RFSTE established the program Navdanya, a network of seed keepers and organic producers spanning 17 states in India. This pair of organizations works with networks of local and global groups towards the realization of its ultimate societal vision, and its approach, while similar in many ways, is distinct from those previously discussed.

#### *Mission & Vision*

Together, the RFSTE and Navdanya profess a mission of “improving the well being of small and marginalized rural producers through nonviolent biodiverse organic farming,” and their vision is “to accomplish such a development that all beings have a healthy environment to live, should have enough healthy food to eat and also have equal right to live, grow and evolve to their full potential through their self organisation [sic]” (“Our Mission”; “Our Vision”). Navdanya in particular is working to enact a vision of Earth Democracy – an alternative worldview in which seed sovereignty, food sovereignty, land sovereignty, and water sovereignty are paramount. The organizations deems GMOs to be incompatible with this vision, and the extensive research and campaigning of the RFSTE and Navdanya have sought to raise serious concern about their ecological and health impacts (“Food Sovereignty”). Navdanya is deeply engaged in the rejuvenation and protection of indigenous knowledge against the threats of globalization and, ultimately, demands a complete ban on GM seeds and foods in India (“GMO Free Campaign”). While these organizations’ missions and visions are not explicitly Gandhian, as is the case with the KRRS, Gandhi’s central principles permeate their language and strategy.

## Strategy

Navdanya has been actively campaigning against the commercialization of GM crops and food in India since 1991, and the nearly decade older RFSTE has been responsible for research- and policy-oriented initiatives. After the initial importation of Bt material in 1999, for example, the RFSTE presented objections as a court petition, "with public interest litigation following thick-and-fast." The petition entailed extensive hearings at the Supreme Court and presented massive amounts of evidence (Scoones 2008, 319). Together, the RFSTE and Navdanya employ many of the same strategies as Gene Campaign and the KRRS, respectively, but there are a number of salient distinctions, particularly with regard to Navdanya, which has somewhat eclipsed the presence of the RFSTE in the anti-GMO movement. Furthermore, there is a dearth of information available on the RFSTE and its recent undertakings.

Like the KRRS, Navdanya derived inspiration from Gandhi's Salt Satyagraha and claims credit for launching the Bija Satyagraha. Navdanya did not stop at the Bija Satyagraha, however; it has used this event to kick-start its Bija Swaraj campaign, pledging to protect seed sovereignty and protesting the legalization of Indian patents on seeds and foods. This particular movement brings together "people from all walks of life including farmers, activists, scientist [sic], legal experts and students... committed... to the fight for the protection of seed sovereignty" in an effort to establish a national alliance of actors with which to "reclaim India's seed freedom and biological diversity" ("Bija Swaraj"). In this way, the Bija Swaraj is representative of Navdanya's integrative approach and broad constituent base. While the KRRS is comprised of and engages with primarily farmers, Navdanya draws in a diversity of participants.

Beyond its partnerships with seed-saving groups, organic farmers' groups, and grassroots farmers' organizations, it has forged alliances with women's groups, school and children's groups, volunteer organizations, globalization-focused networks, international organizations, and numerous others ("Our Partners"). Navdanya's utilization of the terms *satyagraha* and *swaraj* throughout these constituent- and partnership-building initiatives demonstrates the organization's commitment to Gandhian ideals and its confidence in their transformative power. Navdanya has a number of additional campaigns and research endeavors, but the organization's concerted efforts to enact its alternative vision on a large-scale are what most distinguish it from other organizations active in India's anti-GMO movement.





Navdanya has facilitated the establishment of 111 community seed banks across India and reports having trained more than 500,000 farmers in seed sovereignty, food sovereignty, and sustainable agriculture techniques. Additionally, it created Bija Vidyapeeth (School of the Seed/Earth University) on its biodiversity conservation and organic farm site in Uttarakhand, North India (“Navdanya”). Operating out of this central site, Navdanya has organized more than 50 international courses on subjects such as biodiversity, food, biopiracy, sustainable agriculture, water, globalization, business ethics, and, tellingly, Gandhian philosophy (“About Us”). One such course, ‘Gandhi and Globalization,’ explores “the contemporary relevance of Gandhi’s key concepts of Swaraj, Swadeshi and Satyagraha” and the manner in which they can inform living “peacefully, equitably, and sustainably on this fragile planet” (Shiva 2011, 35).

In sum, Navdanya, which has come to serve as a more visible extension of the RFSTE, incorporates Gandhian thought into the language of its organizational mission and vision, albeit less explicitly than the KRRS. The approach of the RFSTE is somewhat comparable to that of Gene Campaign, while the strategies employed by Navdanya are similar to those of the KRRS. Together, they cover a great deal of ground within the anti-GMO movement; efforts towards institutional change and the ultimate prohibition of GMOs are coupled with programs designed to bring about an alternative system of agriculture and, more broadly, Indian way of life. While Navdanya participates in protests of the satyagraha nature, it generally does not associate itself with the destruction of sites related to corporate-capitalist agriculture. Its methods, therefore, are unequivocally nonviolent. Furthermore, as evidenced by Navdanya’s comprehensive educational and training offerings and diversity of partner organizations, the breadth of its cause extends far beyond agriculture and, specifically, GMOs. More so than the KRRS, which relies almost exclusively on the involvement of its farmer members, Navdanya engages disparate activist communities in working towards the realization of a new societal model with which GMOs are inherently incompatible. While much of the Gandhian thought employed by the KRRS is for mobilization purposes, Navdanya makes use of Gandhian rhetoric primarily in its alternative society-building endeavors. This distinction, along with those previously discussed, provides an opening for the further characterization of the three anti-GM organizations examined here.

## **Analytical Insights**

In a survey of anti-GM activist groups in the southern Indian city of Bangalore alone, Scoones (2008) identified more than 20 organizations, among them the KRRS, "with an explicitly stated anti-GM stance." These organizations could be readily separated into four distinct camps: "those working practically in the field through demonstration projects on sustainable and organic agriculture, seed saving and biodiversity"; "those with a broader development focus"; "those with an explicit focus" such as workers' rights or consumers' rights; and "those with an environment focus." Also among the groups surveyed were political parties and academic networks (Scoones 2008, 336-337). Identifying in which camp/s the three previously discussed organizations are positioned is a productive exercise in that it allows broad connections between organizational purpose and the relevance of Gandhian rhetoric to be made.

## ***Further Characterization***

### *Gene Campaign*

Gene Campaign's mission, vision, and strategic approach characterize it as a group "with an explicit purpose," and that purpose is regulation. Gandhian thought, however, is notably absent from this organization's rhetoric and operational dynamics. Moreover, Gene Campaign does not require a robust activist following to do its bidding at the national level but, instead, a handful of politically savvy negotiators. Towards this end, Gene Campaign's conservation initiatives and seed banks do not represent extensive "in the field" work or serve to advance an alternative development paradigm; instead, they bolster the organization's credibility through the availability of evidence. This research foundation allows Gene Campaign to back up its claims at the national level. Perhaps most significantly, however, this organization is advocating an adaptive, modern approach to agriculture that incorporates traditional elements – not radical societal transformation. For this purpose, Gandhi's revolutionary rhetoric is not appropriate.



### *The KRRS*

The KRRS, conversely, due to its pursuit of the Gandhian “village republic,” can be characterized primarily as an organization “with a broader development focus.” The approach by the KRRS to undermine corporate-capitalist agriculture, particularly GMOs, is blatantly made to mirror Gandhi’s protests against British colonial rule. Its tactics are incendiary, dramatic, and meant to convey a sense of revolution, as the KRRS wholeheartedly rejects the increasingly dominant modern agricultural system. Unlike Gene Campaign, the success of the KRRS is contingent on mass mobilization. Gandhian rhetoric, therefore, proves particularly useful not only in articulating an alternative for development and vision for the future, but also for engaging and inspiring a deep constituent base of farmers. Indeed, throughout India’s struggles for independence, Gandhi sought to move Indian citizens towards an alternative future of national sovereignty, and the same is true of today’s KRRS with regard to seed and food sovereignty. Furthermore, the KRRS is working “practically in the field” and has plans to expand this area of the organization’s function. In this way, as the organization builds revolutionary momentum, it is simultaneously enacting and disseminating its alternative agricultural model.

### *Navdanya*

Finally, Navdanya, in addition to promoting “a broader development focus,” is deeply engaged in “demonstration projects on sustainable and organic agriculture, seed saving and biodiversity.” Like the KRRS, the RFSTE and Navdanya span two camps, but Navdanya invests in “in the field” projects to a greater degree than the KRRS. What the KRRS attempts to achieve through tactics of mass demonstration and civil disobedience, Navdanya seeks to do through mass agricultural mobilization. That is to say, while the KRRS devotes most of its energy to undermining the current system, Navdanya is actively realizing its alternative development vision while advocating for it. Towards this end, Navdanya maintains a diversity of partners, provides extensive training programs in agricultural techniques, and offers courses on a wide range of subjects. Gandhian rhetoric proves to be particularly relevant to these efforts as well; in terms of rejecting the trajectory of modern development and articulating a radical paradigm shift, the application of his independence-era thought is not a stretch.

### ***Underlying Incompatibility***

Based on the experiences of Gene Campaign, the KRRS, and Navdanya, it becomes clear that the extent to which Gandhian thought is utilized correlates with an organization's degree of radicalism. Gandhi's ideals are absent from Gene Campaign's pursuit of legislative progress and systematic compromise, but they permeate the revolutionary rhetoric of the KRRS and are present in that of Navdanya. This suggests an underlying incompatibility between pragmatism and Gandhian ideals, and this is likely why civil society groups elect to avoid or incorporate them into their organizational rhetoric. The former begets realism and compromise, and the latter calls for outright rejection and revolution. Groups that seek responsible reformation, such as Gene Campaign, are better off pursuing other motivational discourse strategies, while groups that demand radical societal transformation are incentivized to recycle the same revolutionary tactics that were utilized by Gandhi in the mid-twentieth century. These familiar strategies are imbued with great meaning for the Indian population. Their use deliberately appeals to citizens' latent revolutionary fervor and romantic nostalgia for times past, and it is meant to catalyze large-scale action.

### ***The Apparent Absence of Gandhi's Dietary Beliefs***

A final analytical insight that warrants discussion is the apparent absence of Gandhi's beliefs surrounding food among those organizations that made particular use of Gandhian thought. Gandhi's view of food as a reflection of identity is not promoted to the same extent as his principles of *satyagraha*, *swaraj*, and *swadeshi*; indeed, it is scarcely mentioned. While seemingly pertinent to the issue of GM food, organizations' unwillingness to wield this particular concept for the advancement of their activist efforts is likely due to the fact that Gandhi's dietary experiments were undertaken on a highly individual basis and he did not advocate for conformity to his subsequent dietary convictions (Doctor 2009). Unlike the other Gandhian principles discussed, Gandhi's beliefs on the subject of food are not as readily applicable to large-scale mobilization efforts. They can, however, be embraced at the level of the organization. Gandhi enjoyed total dietary freedom to omit those foods he believed to contain "unhygienic properties of a grossly corrupted modern civilization," and, ultimately, organizations such as the KRRS and Navdanya are working to remove these foods from India's national diet. In this way, these anti-GMO groups have scaled up Gandhi's individual process of dietary



selection and are acting on behalf of the Indian public to omit those foods they deem “grossly corrupted.” Therefore, while not articulated or necessarily expressed, this Gandhian concept is visible and operative in the organizational dynamics of the KRRS and Navdanya.

## Conclusion

India’s unique position as a predominantly rural and densely populated developing nation situates it in the vanguard of the global debate surrounding GMOs, but citizens’ collective memory of the country’s colonial experience and Gandhi’s role as an independence leader have made for a poignant encounter with biotechnology. A diversity of anti-GMO civil society actors have risen to the fore, some of which, despite not having come together on a cohesive campaign, articulate their organizational objectives through similar rhetoric. The principles of *satyagraha*, *swaraj*, *swadeshi*, and food as a reflection of identity that were espoused by Gandhi at the time of Indian independence from Britain, when grounded in contemporary context, have served as tools with which to dissect both the means and ends of civil society advocacy groups, revealing an underlying incompatibility between pragmatic, regulation-oriented approaches to GMOs and emotive Gandhian language. Organizations of the same radical nature as the KRRS and Navdanya employ Gandhian rhetoric both in their mobilization efforts and in the articulation of their alternative societal visions, and this is significant in that it casts the objectives of organizations such as Gene Campaign as submissive and damaging concessions to the forces of globalization.

With regard to those anti-GMO groups that adhere to and project Gandhian ideals, Scoones (2008) makes a critical point; considering India’s national population of well over one billion people and mounting food security concerns, the legitimacy and authority of these civil society actors may prove to be problematic. The ease with which corporate-capitalist agricultural giants such as Monsanto can dismiss slogans such as “Quit India!” is of great concern, as this calls into question the capacity of some of India’s most active anti-GMO organizations to actually influence those in power (Scoones 2008, 337). Indeed, these groups’ attempts to rally around the same words and principles that drove Indian citizens’ struggles for independence might very well be undermining their organizational legitimacy. Furthermore, the assertion of these powerful, India-specific historical linkages may limit the relevance and applicability of India’s anti-GMO campaign as a model for other developing nations. While these issues are of great consequence, however, radical anti-

GMO groups' dogged unwillingness to compromise on the subject of GMOs and, more broadly, India's development trajectory will likely not falter. In connecting the contemporary fight for seed and food sovereignty to that led by Gandhi more than half a century ago in the name of national sovereignty, demands for an "integrated, holistic approach to human development" are brought to the table. It remains to be seen whether or not the efforts of groups such as Gene Campaign will prove to be more impactful than those of the KRRS and Navdanya. Radically different societal visions are at stake – one in which GMOs are imposed externally by corporate-capitalist forces and another in which India commands its own relationship with this powerful technology. The fate of GMOs in a nation that will soon claim the world's largest population of farmers hangs in the balance. ✕



## Bibliography

### Print Sources

- Angotti, T. "The urban-rural divide and food sovereignty in India." *Journal of Developing Societies* 28, no. 4 (2012).
- Ashcroft, B., G. Griffiths, and H. Tiffin. *Post-Colonial Studies: The Key Concepts*. New York: Routledge, 2013.
- Atler, J. *Gandhi's Body: Sex, Diet, and the Politics of Nationalism*. Philadelphia: University of Pennsylvania Press, 2000.
- Borras, S.M. "La Vía Campesina and its Global Campaign for Agrarian Reform." *Transnational Agrarian Movements Confronting Globalization*. Wiley-Blackwell, 2008.
- Fuchs, D. and K. Glaab. "Material power and normative conflict in global and local agrifood governance: the lessons of 'Golden Rice' in India." *Food Policy* 36 (2011).
- Gandhi, M.K. *An Autobiography: The Story of My Experiments with Truth*. Boston: Beacon Press, 1957.
- Gandhi, M.K. *Village Swaraj*. Ahmedabad: Navajivan Publishing House, 1962.
- Hasegawa, K. and Machimura Takashi. "Social movements and social movement theories today" (S. Ishizaka and K. Funahashi, Trans.). *Social Movements as Public Spaces*, 2004.
- Ishizaka, S. and K. Funahashi. "Social movements and the subaltern in postcolonial South Asia." *The South Asianist* 2, no. 1 (2013).
- Kaur, A., R.K. Kohli, and P.S. Jawal. "Genetically modified organisms: an Indian ethical dilemma." *Journal of Agricultural and Environmental Ethics* 26 (2013).
- Khadse, A. and Bhattacharya, N. "India: A Conversation with Farmers of the KRRS." *La Vía Campesina's Open Book: Celebrating 20 Years of Struggle and Hope*, 2013.
- Kudlu, C. and G.D. Stone. "The trials of genetically modified food: Bt eggplant and Ayurvedic medicine in India." *Food, Culture & Society* 16, no. 1 (2013).
- Lalitha, N. "Diffusion of agricultural biotechnology and intellectual property rights: emerging issues in India." *Ecological Economics* 49 (2004).
- Newell, P. "Lost in translation? Domesticating global policy on genetically modified organisms: comparing India and China." *Global Society* 22, no. 1 (2008).



- Ray, R. and M. Katzenstein. *Social Movements in India: Poverty, Power, and Politics*. Lanham: Rowman and Littlefield, 2005.
- Sanford, W. "Being the change: Gandhi, intentional communities and the process of social change." *Social Sciences Directory* 2, no. 3 (2013a).
- Sanford, W. "Gandhi's agrarian legacy: practicing food, justice, and sustainability in India." *Journal for the Study of Religion, Nature and Culture* 7, no. 1 (2013b).
- Scoones, I. "Mobilizing against GM crops in India, South Africa, and Brazil." *Journal of Agrarian Change* 8, no. 2, 3 (2008).
- Shiva, V. "Health per acre: organic solutions to hunger." *Bija: The Seed* 58 (2011).
- Stone, G.D. "Biotechnology and the political ecology of information in India." *Human Organization* 63, no. 2 (2004).
- Yamaguchi, T., C.K. Harris, and L. Bush. "Agri-food biotechnology discourse in India." *Science, Technology & Society* 8, no. 1 (2003).
- Yamaguchi, T. and C.K. Harris. "The Economic Hegemonization of Bt Cotton Discourse in India." *Discourse & Society* 15 (2004).

*Online Sources*

- "About Gene Campaign." *Gene Campaign*. Retrieved April 11, 2014, from [http://www.genecampaign.org/about\\_genecampaign.php](http://www.genecampaign.org/about_genecampaign.php).
- "About Us." *Navdanya*. Retrieved April 13, 2014 from <http://www.navdanya.org/about-us/overview>.
- "Best Practices: India's Protection of Plant Varieties and Farmers' Rights Act." *Farmers' Rights: Resource Pages for Decision-Makers and Practitioners*. Retrieved April 11, 2014 from [http://www.farmersrights.org/bestpractices/success\\_seed\\_1.html](http://www.farmersrights.org/bestpractices/success_seed_1.html).
- "Bija Swaraj." *Navdanya*. Retrieved April 20, 2014 from <http://www.navdanya.org/news/253-bija-swaraj>.
- Cartalucci, T. "India: Grassroots Activism Builds Wall against Western Imperialism." *New Eastern Outlook*. 14 March 2014. Retrieved April 17, 2014 from <http://journal-neo.org/2014/03/14/rus-india-grassroots-activism-builds-wall-against-western-imperialism/>.



- Doctor, V. "Gandhi's Experiments with Food." *The Times of India*. 3 Oct. 2009. Retrieved April 21, 2014 from <http://timesofindia.indiatimes.com/india/Gandhis-experiments-with-food/articleshow/5083955.cms>.
- "Food Sovereignty." *Navdanya*. Retrieved April 13, 2014 from <http://www.navdanya.org/earth-democracy/food-sovereignty>.
- "GMO Free Campaign." *Navdanya*. Retrieved April 14, 2014 from <http://navdanya.org/campaigns/gmo-free>.
- "Introduction to Navdanya." *Navdanya*. Retrieved April 13, 2014, from <http://www.navdanya.org/about-us>.
- "Navdanya." *Navdanya*. Retrieved April 13, 2014 from <http://www.navdanya.org/home>.
- "Organisation." *La Via Campesina*. 9 Feb. 2011. Retrieved April 18, 2014 from <http://viacampesina.org/en/index.php/organisation-mainmenu-44>.
- "Our Mission." *Navdanya*. Retrieved April 13, 2014 from <http://www.navdanya.org/about-us/mission>.
- "Our Partners." *Navdanya*. Retrieved April 20, 2014 from <http://www.navdanya.org/about-us/our-partners>.
- "Our Vision." *Navdanya*. Retrieved April 13, 2014 from <http://www.navdanya.org/about-us/vision>.
- "Research Foundation for Science, Technology and Ecology." *Food First/Institute for Food and Development Policy*. Retrieved April 13, 2014, from <http://www.foodfirst.org/en/node/120>
- "The Story of Gandhi's Experiments with Food." *The Indian Express*. 1 Feb. 2008. Retrieved April 18, 2014 from <http://archive.indianexpress.com/news/the-story-of-gandhi-s-experiments-with-food/267935/1>.
- "Vision & Mission." *Gene Campaign*. Retrieved April 11, 2014, from [http://www.genecampaign.org/vision\\_mission.php](http://www.genecampaign.org/vision_mission.php).