Chapter 4

Ecosocial Activism of Wangari Maathai, Vandana Shiva and Arundhati Roy

Wangari Maathai : The Ecosocial Activist.

‘The earth was naked, for me the mission was to try to cover it with green’

Wangari Maathai.

Conferring the 2004 Nobel Peace Prize on Dr. Wangari Maathai, The Norwegian Committee said, ‘ peace on earth depends on our ability to secure our living environment, Maathai stands at the front of the fight to promote ecologically viable social economic and cultural development that embraces democracy, human rights and women’s rights in particular. She thinks globally and acts locally…. Maathai combines science, social commitment and active politics. More than simply protecting the existing environment, her strategy is to secure and strengthen the very basis for ecologically sustainable development. She founded Green belt Movement where, for nearly 30 years, she has mobilized poor women to plant 30 million trees. Her methods have been adopted by other countries as well. We are all witness to how deforestation and forest loss have led to desertification in Africa and threatened many other region of the world-in Europe too. Protecting forest against desertification is a vital factor in the struggle to strengthen the living environment of our common earth.’ (Maathai, The Green Belt Movement ix).

Maathai’s writings and activism have transformed the lives of many people, especially the women in Kenya. When she founded The Green Belt movement in 1977,

1 Quoted by Jeanette Winter in ‘Wangari’s Trees of Peace’
her goal was simple, to empower the women, to help to improve the lives of Rural women (and men) by improving the environment on which they depend for water, food, fuel and medicine by planting trees. Maathai observes “…women, too, have become empowered in a number of ways. It has become more evident to them that, though deprived in some aspects they have the potential to make a difference in their communities. They have initiated group projects while others have become independent leaders and decision-makers capable of addressing various community related issues…” (The Green Belt Movement 69). While listing out the empowerment of women she adds that ‘this way women’s groups gained financially. All community members who planted trees benefited from an increased wood fuel supply and enriched soil (through agro-forestry), and from the sale of timber. Even those in the community who did not plant trees still gained from the improves environment and scenic beauty. (37).

In 2004 Maathai became the first woman out of only six Africans to win the Nobel Peace Prize. She joined other African Peace Prize Laureates namely Albert Luthuli, Anwar Sadat, Desmond Tutu, Nelson Mandela, Frederik Willem de Klerk and Kofi Annan. The Norwegian Nobel committee decided to award her the Nobel Prize for her contribution to sustainable development, democracy and peace (Norwegian Nobel Committee, 2004). However, the Award of the 2004 Nobel Peace Prize to Maathai sparked controversy because many failed to see the connection between environmentalism and peace. Critics felt that awarding the prize to Maathai for fighting deforestation and advocacy for democracy and women's rights de-emphasised the current condition of the world. Tyler explains that at a time when the world is experiencing war,
notably the conflict in the Middle East, it seemed conflicting to critics for politics to be overlooked in this award. (Tyler Web).

Maathai in commending on receiving the Nobel peace prize stated: ‘… to find myself at this moment in the company of the people who have been honoured because they have worked in these areas really overwhelmed me, to know that the environment has been brought to the central focus. Environmentalism and politics though they may appear different are in fact intimately connected as most environmental movements are deeply political as shown in the case of the Green Belt Movement’.²

Maathai's message was simple: *one person, one tree*, (The Green Belt Movement 25) and she worked tirelessly to build a sustainable relationship between human beings and the land. To her the tree was the practical solution to the complex causes of poverty and environmental degradation in rural communities. It also became an emblem of her struggle for peace, democracy and civil liberties, which threw her into direct confrontation with the regime of the Kenyan president Daniel Arap Moi.

Wangari Maathai was born in 1940 in Nyeri, a coffee-growing region in the shadow of Mount Kenya in the central highlands. She recalled as a child watching the destruction of wildlife and flora as the forests around her home were cleared to make way for commercial plantations. She was educated by nuns before winning a scholarship to study biology in the United States. She returned to Kenya and the University of Nairobi

and became the first woman in the country to earn a doctorate, before being appointed a Professor of veterinary anatomy, another first for Kenyan women.

Her interest in the environment grew when she was called upon, as director of a branch of the Red Cross, to set up an environmental centre. In 1975 she became part of a group of women discussing issues to take to a UN conference on women and, having spoken to women struggling to gather enough firewood for fuel or clean drinking water, proposed the idea of planting trees to assist rural communities. Kenya's delicately balanced ecology is dependent on the survival of its forest, especially for its water supply. However, after more than a century of environmental degradation, under both the policies of the colonial British and post-independence governments, Kenya's tree cover had shrunk to less than 2 per cent. Rivers, such as those flowing from the great Mau forest in the Rift Valley, began to dry up.

Maathai, with a small group of women, set about planting trees on the land around schools, churches and their homes. Her idea was initially to provide a simple, cheap method of breaking the chain of poverty and environmental degradation, each exacerbated by the other. "It wasn't something I had given much thought to," she later said. "But it turned out to be a wonderful idea because it is easy, it is do-able, and you could go and tell ordinary women with no education: 'OK, this is the tree. We're going to observe the tree until it produces seeds. When they're ready, we'll harvest them. We'll germinate them. We'll nurture them. We'll plant them in our gardens. If they are fruit trees, within five years we will have fruits. If they're for fodder, our animals will have fodder.' " (Danielle 5) In 1977 she founded the Green Belt Movement with the aim of encouraging people, especially women, to plant trees and protect green spaces and forests.
for their communities. The number of planting groups were soon numbered in their thousands.

Maathai’s as an ecosocial activist tried to solve all social, economic, political and feminist problems through the Green Belt Movement. The Green Belt Movement is a grassroots non-governmental organization (NGO) based in Kenya that focuses on environmental conservation, community development and capacity building mainly through a nationwide grassroots tree planting campaign as its core activity. The Green Belt Movement was conceived and nurtured in the National Council of Women in Kenya (NCWK) in 1977. The formation was in response to needs identified by Kenyan rural women such as lack of fire wood, clean drinking water, balanced diets, shelter and income. (The Green Belt Movement 22).

However, it soon became clear to Maathai that the survival of the forests could be guaranteed only with a democratic, responsible system of governance. By the 1980s - with Moi in power and tracts of forest being consumed in illegal land grabs by his cronies and by state-backed deforestation - her conservation fight had become part of a much bigger struggle against the power abuses and endemic corruption of Moi's regime.

She was a fearless opponent, organising sit-downs and holding seminars to educate communities on how their land was being destroyed, as well as taking the government to court for illegal land grabs. In 1989 she took on one of Moi's ministers and campaigned against his plans for a high-rise building on the green space of the Uhuru Park in central Nairobi. Her protest was violently broken up but she was successful and foreign investors withdrew their money. Labeled a "crazy woman" by the Moi regime,
she was criticised for not behaving like a traditional African woman and interfering in male-dominated affairs.³

Maathai, a native of Kenya, was first exposed to environmental activism while studying in the United States when environmentalists in Philadelphia pushed to rid the city of air pollution. After college, she returned to Kenya’s capital, Nairobi. Over the next decade and through her work at the Kenya Association of University Women, the Environment Liaison Centre, the United Nations Environment Programme, and the National Council of Women of Kenya, Maathai formed the conclusion that the overwhelming majority of Kenya’s problems were linked to environmental degradation. She explored this even further in *The Challenge for Africa*. In this and other writings, she discusses the ubiquitous practice in Africa of subsistence farming techniques, which cause soil erosion and water loss. In addition, she discusses Africa’s legacy of colonialism and the ways in which this legacy’s repercussions still influence Africa politically and culturally.

Maathai not only cares deeply about the environment, but about the nations of Africa and Africa’s future. She realizes that the people of Africa can assert their independence after years and years of complete domination by Western countries, while at the same time acknowledging the factors keeping Africa from breaking free of these countries’ influences: political ties, corruption, and environmental degradation. In *The Challenge for Africa*, Maathai writes, “Nobody knows the solution to every problem;
rather than blindly following the prescriptions of others, Africans need to think and act for themselves, and learn from their mistakes.” (121).

The Green Belt Movement encourages the planting of trees to help reverse the devastating effects of deforestation. For years, Africa’s land was pillaged for its colonial rulers’ gain; now, a combination of corrupt politicians who want to stay in their former rulers’ pockets and a citizenry which has been taught to enable these politicians has slowed Africa’s reemergence from colonial rule to a snail’s pace. Since starting the Green Belt movement, Maathai has not only led women to plant trees—millions and millions of them—but to educate African women on their ability to make a difference and to teach African men and women the correct usage of land while farming for their livelihoods.

Maathai is extremely solemn about what Africa has already lost and will never get back. Reflecting on her mother’s death, Maathai recounts that in her mother’s childhood, the Gura River would flow full and clear down from the Aberdare Range. Many years later and after much “raping” of the land, Maathai writes, “the river says nothing.” Making it clear, the present status of Kenyan soil. (Danielle 5).

Wangari Maathai’s Green Belt Movement is led by and for rural Kenyan women. What began with planting a few tree seedlings grew to forever reshape the political landscape of Kenya and the world. Maathai trained thousands of women on everything from water conservation to civic leadership, and they've planted 35 million trees in a country devastated by deforestation. Along the way, they also helped overthrow a dictatorship. In 1977, Biologist Wangari Maathai answered the call of rural Kenyan women. Typically responsible for collecting firewood and growing food, these women
were hit hardest by the effects of mass deforestation in Kenya. They saw their source for wood disappearing and their soil drying up and eroding.

Maathai’s solution was to teach them to plant and raise new trees. The trees gave needed shade and kept the soil from washing away. As they grew, they would provide firewood and building materials as well as fruit to combat malnutrition. The trees also provided a rare income-generating opportunity for the rural women. Maathai’s new grassroots organization, called "The Green Belt Movement," paid the women a small amount for each tree they planted. Women organized, started tree nurseries and exchanged knowledge honed from years of experience gained from working with the land, becoming, what Maathai calls "foresters without diplomas."(Unbowed 136). The more Maathai investigated solutions to Kenya's environmental problems, the more she realized that these were only symptoms of a much larger cause. She says it was impossible to disconnect the country's natural resources from social problems, its economy and its politics. “The issues and the problems that people were bringing to the table were symptoms of problems that needed to be addressed from the root. And so I kept going more and more towards the root. I began addressing politics, addressing democracy, conflict issues, rights of the vulnerable, of women and children." (Jannet, Web).

Maathai’s activism began to make political waves in the country, often putting her, and her supporters, in danger. Targeted by Kenya's dictator Daniel Arap Moi, Maathai was regularly arrested and jailed, even forced into temporary exile. During one demonstration, she was beaten unconscious by police.
But the movement had become strong, and momentum of Green Belt women's organizing, led by Maathai, started to turn the political tide. Maathai made it her personal mission to protect a strip of forest which was being carved up and auctioned off to the government's supporters. Women, men, students and the international community rallied behind her in such a force that they helped oust Moi in 2002. That same year, Maathai ran for Kenya's parliament, winning her seat with 98 percent of the vote. The next year she was appointed Assistant Minister for the Environment, Natural Resources and Wildlife.

As a parliamentarian, she encouraged military personnel to plant trees around their barracks, telling them to "hold a gun in one hand and a tree in the other." (The Green Belt Movement 135). The soldiers have taken up the environmental cause seeing the connection between defending territory and defending Kenya's natural resources. Today, Maathai's environmental and human rights activism has grown beyond Kenya's borders. The Green Belt Movement combats environmental devastation and promotes women's empowerment across Africa and around the globe.

In order to understand her ecosocial activism, it is necessary to study the situation in Africa, especially in Kenya. In her own words, “... the minute we began to work ecologically, we realized that we are dealing with symptoms of much deeper issues and as we tried to look at the source of problems, we were led into issues of human rights, governance and poverty. Eventually as we organized ourselves to take action, we were dealing with a Movement.” (Unbowed 35) so she had to remind the present generation about the actual situation. In a tree planting ceremony the participants reaffirm their dedication by reciting their committal: “Being aware that Kenya is being threatened by
the expansion of desert like conditions; that desertification comes as a result of misuse of
the land and by consequent soil erosion by the elements; and that these actions result in
drought, malnutrition, famine and death; we resolve to save our land by averting this
desertification through the planting of trees wherever possible. In pronouncing these
words we each make a personal commitment to save our country from actions and
elements which would deprive the present and future generation from reaping the
bounty (of resources) which is the birth right and property of all.” (The Green Belt
Movement 21).

In 2009, participating in the Prince Charles’ ‘climate change’ meeting along with
20 Nobel laureates in London she pointed out, the status of African so far as the
environment degradation is concerned, it is women and Africans who must bear the
brunt of climate change and pay for the west's profligacy. While the scientists, academics
and politicians talked of technological shifts and the need to bring the best brains in the
world to bear on the problem, the former professor of biology at University of Nairobi
said bluntly that the answers were known. "We all know what to do. Why don't we do it?
The question is how are we to ensure something is done?" (John Vidal 5).

The reality, Maathai says, is that of the nine billion people expected to be on the
planet in 2050, eight billion will be in what are now developing countries. "Climate
change is life or death. We could be accused of being alarmist, but if we have faith in
science then something very serious is happening. Climate change and global warming is
the new global battlefield. It is being presented is as if it is the problem of the developed
world. But it's the developed world that has precipitated global warming. There will be a
much greater negative impact on Africa because of its geography. But instead of adapting
we are scraping the land, removing the vegetation and losing the soil. We are doing things to make it worse." Besides, it's in the interests of the rich to help Africa adapt to climate change and preserve its forests. By allowing them to be destroyed a lot of the efforts made in the rich world will be negated and undermined."( Challenges for Africa 140).

Maathai links ecology and culture and argues that the challenge for Africa is to look to itself and reclaim not just the land, but its cultures and resources. "If the soil is denuded and the waters are polluted, the air is poisoned and the mineral riches are mined and sold beyond the continent, nothing will be left that we can call our own. Our real work is reclamation - bringing back what is essential so we can move forward. Planting trees, speaking our languages, telling our stories are all part of the same act of conservation. We need to protect our local foods, recall our mother tongues and rediscover our communal character."(138).

Instead, "some Africans are asking themselves whether we are being exposed to a new wave of colonialism," says Maathai. "Yes, there is a grab for resources. We are vulnerable to anyone who wants to exploit us. It's like the 18th-century. Africa finds herself with raw materials but does not have the ability to add the technology. She cannot control the process. So she grinds herself without cash. Africa is paying in raw materials. She pays with her soil. In the past people entered Africa by force. These days they come with similarly lethal packages, but they are camouflaged to persuade Africa's leaders and people to co-operate"( Unbowed 37).

The changes that have taken place in Ihithe (Mathaai’s native Village in Kenya) since the 1950s reflect the linked environmental and social crises now burdening so much
of Kenya and the rest of Africa, she adds. "I have seen huge changes. The population has grown enormously. All that area was wooded. There were small farms, full of maize, millet and sorghum. The rivers were huge and clean. There was no tea. Today we see tea, tea, tea. Mother never planted tea. Tea has become slave labour. Farming has become the production of a commodity which people cannot process or eat. You cannot process your own tea. Tea without good governance is serfdom and only leads to environmental and social problems." (Unbowed 121-122) But above all, she says, “…there has been deforestation, with the family woodlots grubbed up to plant tea and the hills all around denuded for firewood. Realisation that communities were destroying their own resources led her to start the Green Belt movement. What began as a few women planting trees is now (2012) a network of 600 community groups that care for 6,000 tree nurseries. They have together planted at least 40 million trees on degraded private and public land, in reserves, and in cities all over Kenya. The movement, which operates in 30 countries, is far more than a tree planting scheme: it has become an unofficial Kenyan agricultural advice service, a community regeneration project, and a job creation plan all in one. There is a change taking place. We can hardly keep up with the requests for help. The tree is just a symbol for what happens to the environment. The act of planting one is a symbol of revitalising the community. Tree planting is only the entry point into the wider debate about the environment." (The Green Belt Movement 2-3).

She had taken steps to protect the Congo forest, the world's second largest stand of trees. If the Congo goes, she says, “…not only will tens of millions of people lose their livelihoods, but the climatic effects would be catastrophic and be felt as far away as Britain and the US. Britain and Norway have together put up £100m but it means
working with some of the most war-ravaged and corrupt countries and companies on earth.” (John Vidal 5).

Responding to the request of Ten African governments to be their representative in the Congo basin initiative she told, "I know they want to take advantage of the peace prize and raise the public awareness," she added., "I know there is apprehension. But refusal to take up the challenge of the Congo forest would be wrong. I have no illusions. But there is no option." In the end, though, aid is not the answer. "Donors come to be seen as Santa Claus, bringing with them money, materials and input. The people clap and dance in welcome until the tap runs dry. At the same time, donors' money can corrode responsibility. An attitude exists that one does not have to accountable for the use of funds that have originated outside the country. Individuals and governments misunderstand or subvert the donors' intentions." (Unbowed 181).

Her message in London has been fierce and urgent. "Nature is still being taken for granted. Yet when it is destroyed, life itself goes. Politicians are putting immediate needs ahead of the long term. We must challenge the decision makers. We must appeal not just to their heads, but to their hearts. I can only see getting worse things if we do nothing." (John Vidal 5).

“Wangari Maathai was a force of nature. While others deployed their power and life force to damage, degrade and extract short term profit from the environment, she used hers to stand in the way mobilise communities and agree for conservation and sustainable development over destruction,” said Achim Steiner, executive Director of UNEP while condoling her death. (Achim Steiner Web) . This tells about what she was and what she stood for. She was truly an ecosocial activist.
The Green Belt Movement founded by Wangari Maathai is considered as an Ecosocial Movement which advocates ecological solution to Kenya’s problems. In order to understand the importance of Green Belt Movement it is necessary to understand the environmental challenges faced by Kenya. Maathai in reflecting on the environmental challenges facing Kenya asserts that few forests are left as a result of deforestation.

Kenya is located in Eastern Africa and has a size of 582,644 square kilometers. Kenya's relief is varied with altitudes ranging from sea level to slightly over 5000 meters. Its relief features include plateaus, plains, highlands, the lake basin and the rift valley. The natural vegetation of the country includes heath and moor land, savannah grassland, scrub, semi desert and forest. Currently the total forested area in Kenya covers about 1.7% with scrub and semi desert covering the largest area. The level recommended by the United Nations Environment Program (UNEP) is about 10% at the very minimum. (The Green Belt Movement 2-3).

Maathai in an interview with Fadahunsi explains that forests provide numerous services to humanity, namely ecological balance of the earth by absorbing carbon, preventing loss of soil and subsequent desertification and offering safeguards against flooding. They also provide reservoirs for genetic resources, they control rainfall patterns and serve as catchments areas for freshwater and rivers. Forests therefore have been a source of wealth and inspiration throughout centuries and the decline of ecosystems worldwide has led to adverse effects such as drastic climate change. In Kenya specifically, the clearing up of forests has led to the drying up of rivers and stream, loss of biodiversity, and erratic rainfall. (Fadahunsi Web).
Indeed, in her Nobel Peace Prize acceptance speech Maathai states: “I reflect on my childhood experience when I would visit a stream next to our home to fetch water for my mother. I would drink water straight from the stream. Playing among the arrowroot leaves I tried in vain to pick up the strands of frogs' eggs, believing they were beads. But every time I put my little fingers under them they would break. Later, I saw thousands of tadpoles: black, energetic and wriggling through the clear water against the background of the brown earth. This is the world I inherited from my parents. Today, over 50 years later, the stream has dried up, women walk long distances for water, which is not always clean, and children will never know what they have lost.” (Maathai Web).

From Maathai's account, her home, which is in the Mount Kenya region, was once a place vibrant with nature's biodiversity such as a stream, tadpoles and fertile soils ensuring a regular food supply. The close proximity of the stream to her home meant that she could easily fetch water. This destruction was occasioned by the deforestation of the forests in Mount Kenya as well as in other forests in the country. Maathai's political conscience was stimulated when she realized that the government had destroyed huge parts of Kenya's forests in order to plant cash crops. Indeed, Maathai and the Green Belt Movement have been at the frontline in fighting against forest destruction in Mount Kenya. In particular, Maathai has been opposed to the *shamba* system, which has been

---

*Shamba* is a Swahili word which means "field". The term "shamba system" is generally defined in Kenya as a form of agroforestry through which farmers are encouraged to cultivate crops on previously clear cut forest land on condition that they replant the forest trees. After three years of cultivating, the trees are expected to be grown enough to overshadow the agricultural crops. The farmer then moves out of the allocated plot and is eligible for another plot to be cleared.
advocated by politicians encouraging their constituents to cultivate in forests, thereby diminishing the forest cover. In her view the practice has been rife with corruption and has put species, watersheds, soil and even local climates at risk. The shamba system was introduced by the British and maintained by Kenya's post-independence rulers. Thomas-Slayter & Rocheleau reiterate that destruction of the forest cover began with the advent of British colonial rule. Kenya was colonized and ruled by the British from the late nineteenth century until 1963 when the country received independence.

Changes brought about by colonialism led to a shift in land uses and consequently an increase in the sedimentation of major rivers, depletion of forests, soil and water resources available to the poor. Further to this, the colonial system interfered with the social structures of African communities. (Thomas 46)

The pre-colonial period in Kenya was characterized by a great amount of wildlife and plant species as well as human communities that sustained themselves and their environment for themselves and for posterity. The communities and the environment did not co-exist easily but the pre-colonial people purposefully made use of certain land management strategies, forms of traditional knowledge and mutually beneficial relationships with various cultural groups to maintain ecological and socio-cultural sustainability. Therefore, as Wamalwa in her examination of traditional natural resource management systems in Eastern Africa indicates, Kenyan pre-colonial society was geared towards conservation. (154).

Moreover, during pre-colonial Kenya, land was communally owned through indigenous forms of land tenure and natural resource management systems. Individuals did not have private rights to land. Instead, a political group or lineage authority was
responsible for ensuring all community members had fair access to the land. The fair allocation was done through clan lineage. Each clan was given specific areas and all the members, including the women who were married to members of the clan, were able to acquire land for use. This ensured that every household had access to plots in diverse micro-ecosystems in the area. Kenyan traditional societies therefore tended to reinforce holistic Views of the world and encouraged techniques that would lead to sustainable resource management for years prior to British colonial rule. These techniques did not require much in terms of specialization of occupation, though differentiation of occupations did exist between men and women.

Mikell indicates that the women were symbolically linked to the earth, fire and water, three of the four elements in traditional culture. This division relegated women to the more laborious tasks of food preparation, fuel wood gathering and tilling the soil. Due to their role as food and firewood gatherers, women were then involved in developing strategies based on limited resources and population density that allowed for the healthy co-existence of communities. Men were given the responsibility for the fourth symbolic element, namely the air which carried speech and therefore gave them more opportunities for public and community leadership. However, in the agricultural cycle, the sexual division of labour ensured that men took part in agricultural production. (98). Maathai explains that both men and women practiced farming but they grew different crops. Women were in charge of annual crops, which they stored in granaries, while men were in charge of perennial crops like yams, cassava and bananas, which they stored on the farm. Moreover, according to Maathai the social structure of these communities was such that it was difficult to make distinctions between domestic and public economic gender
roles. It then appears that both women and men's rights were carefully defined and mediated within social structures of sub clan, clan or ethnic community even though there were uneven relations of power between men and women. (Unbowed 123-156).

The indigenous systems of ecological and social sustainability were disrupted by British colonial rule. The industrial development in Europe necessitated permanent occupation of the colonies by colonial powers and the destruction of the local natural economy. The old world order of cooperation between humans and nature was replaced by a mechanistic worldview of modern science, which led to the death of nature by sanctioning unchecked commercial and industrial expansion consequently leading to environmental destruction. British colonial efforts in Kenya were therefore based on a patriarchal and capitalist socioeconomic ideological framework that emphasised the domination and domestication of nature and the imposition of extractive and exploitative relationships that benefited British economic and technological expansion at the expense of the sustainability of human and natural resources. The concept of nature as a resource to be dominated and exploited for human beings was imposed upon the Kenyan land during the British colonial period with far-reaching consequences. Kanogo points out that in this regard, the colonial period was characterized by a reorganization of traditional land tenure and agricultural systems and a massive redistribution of land for the benefit of white settlers that had devastating effects on the majority of Kenyan rural communities.

During the colonial rule, the British government allocated themselves land, which they referred to as the White highlands. The Colonial Land Acts resulted in the repossession of communal land considered uncultivated and uninhabited by the British from Kenyans and made it government property. The colonial government then
introduced individual land ownership by demarcating land and issuing title deeds. Consequently, many people were dispossessed of their community land and were denied user rights when the European settlers legitimated their ownership through colonial legislation. Demarcation of land complicated peoples’ lives in that they could no longer freely harvest branches from trees for firewood, as they were now privately owned under English law. Before the Land Adjudication Acts in Kenya of the 1950s, collecting fuel wood was a free, communal act and there was little or no commercialization of fuel wood or charcoal. (Challenges for Africa 156).

Further to this, the disruption of a collective land-tenure system and of fallow shifting cultivation interfered with the free access to land use enjoyed by women through their lineage or man-image. Colonialism therefore denied women land and tree rights. These changes severely influenced natural resource management, agricultural practices and women's access to fuel wood.

According to Emmon the most destructive aspect of colonialism was the internalization of colonial and capital-centered worldviews by the Kenyan people. The colonial administrators ensured that the indigenous governments who took over the government, embraced capitalist principles of socio-economic organization and would therefore continue supplying Britain with resources and cheap exports. This served to create internal colonies and perpetuate old colonial relationships. The end of the colonial period therefore did not lead to the end of British exploitation of Kenyan resources, human labour and systems of production. Consequently, Kenya has continued to relate with Britain in a way to preserve British capitalist interests and socioeconomic dominance in the global economy. (Emmons Web) Kenya's postcolonial presidents have
been effective in perpetuating capital-based dependency relationships between the North and the South in the postcolonial era. This is evidenced by the economic policies instituted under the Kenyatta and Moi regimes, which favoured foreign investments, foreign ownership of resources and capitalist principles of production and resource exploitation in Kenya. These policies have led to environmental degradation and impoverishment in Kenya. Etkins corroborates that resource extraction does not benefit indigenous people but the wealthy governments and foreign companies and the elites of the South resulting in great disparities in resource and income distribution. The diversion of natural resources to market economies then generates a scarcity for ecological stability and creates new forms of poverty. Consequently, policies favouring foreign ownership of resources lack sustainable solutions to the problems of the majority of the Kenyan people, especially the ones living in the rural areas. (36).

The Green Belt Movement’s goal is to establish public green belts and fuel wood plots by local people, especially women in the spirit of self-reliance and empowerment as well as to combat soil erosion. The movement over a period of nearly thirty years has mobilized poor women to plant an estimated thirty million trees. Tree planting therefore has served to provide fuel, food, shelter, building materials, fencing material and income to support their children's education through the sale of timber, firewood and fodder. The tree planting activity also creates employment and improves soils and watersheds. (The Green Belt Movement 67). Furthermore, the Green Belt Movement has used tree planting as an entry point to community development. Whilst tree planting has always been the central activity, the Green Belt Movement programmes have expanded to include civic education, advocacy, food security, green belt eco-safaris, and "women for change". In
the area of civic education, the Green Belt Movement has established a pilot civic education and advocacy project to raise public awareness on the need to protect the environment and be active participants in the political process by voting. The Green Belt Movement Learning Centre in Nairobi offers seminars on good governance, advocacy, culture, environment and environmental justice (28).

Through its advocacy programmes, the Green Belt Movement has initiated advocacy activities since the late 1980s directed towards preventing forest destruction, ending poor governance and ending human rights atrocities such as tribal clashes and corruption. In 1997, the GBM established a Pan-African Green Network to share the Green Belt Movement approach through two-week training workshops. The overall goal of the programme was to share the approach while raising awareness on the importance of conserving local biodiversity.

‘Women for change’ is the newest Green Belt Movement program. Commissioned in early 2003, the program aims to assist, especially young girls and women, to confront the challenges of growing up, such as to make complex decisions about their sexual and reproductive health, and to gain knowledge and skills to protect themselves against HIV and AIDS. (Unbowed 303). The programme also aims to facilitate the establishment of income generating activities such as tree planting, bee keeping and food processing to engender economic empowerment. Tree planting has also been useful in providing a platform for women in leadership. According to Maathai through their involvement in the Green Belt Movement, women gain some degree of power over their lives, especially their social and economic position and relevance in the family. (The Green Belt Movement 37).
Maathai, has been at the forefront in opposing the capitalist mindset of the Kenyan government. As mentioned earlier, the Kenyan government has tended to favour capitalist principles of production and resource exploitation, which benefits few individuals in government and foreign investors. The Green Belt Movement has been involved in advocacy activities against environmental degradation. One such activity was the effort against the government's decision to construct a multimillion dollar high-rise complex in Uhuru Park in the middle of Nairobi city in 1989. According to Maathai the construction of the multi million high-rise building would have obliterated much of Uhuru Park, one of Nairobi's largest green belts. As a result of her opposition to this project, Maathai encountered the wrath of a male dominated Kenyan parliament. The former Kenyan president called her a "crazy woman" and accused her of being a puppet of foreign masters and a threat to the order and the security of the country. (Unbowed 196).

Through the Green Belt Movement, she used the tree as a symbol of peace and conflict resolution during the ethnic conflicts to reconcile disputing communities. Maathai claims that mismanagement of the environment due to undemocratic practices leads to conflict over scarce resources and the abuse of human rights. In Maathai's view, it is always the women who shoulder the main burden of poverty and conflict.

The Green Belt Movement, as explained so far, represents an ecosocial activism within an African feminist model in the struggle to participate in Kenya's democratic structures as well as in highlighting environmental issues. This is evident in the use of tree planting to motivate democratic reform. Indeed, in her Nobel Peace Prize acceptance speech Maathai confirms that although initially the Green Belt Movement's tree planting
activities did not address issues of democracy and peace, it soon became apparent that responsible governance of the environment was impossible without democratic change and reform (The Green Belt Movement xv).

This is most noticeable in the case where the Green Belt Movement in 1992 gave support to the mothers of political prisoners who demonstrated in Uhuru Park for the release of their sons. Their sons had been jailed for advocating for democracy, better management of resources, an end to corruption and the introduction of a multiparty political system in order to develop democratic space. Trees of peace were planted at Nairobi's Uhuru Park, at Freedom Corner, and in many parts of the country to demand the release of prisoners of conscience and a peaceful transition to democracy. Maathai and the Green Belt Movement can then be seen as an African ecosocial activism in their bid to advocate for democracy in Kenya's political and economic structures while still resisting western imperialism.

Maathai and the Green Belt Movement can therefore be seen to be representative of the ecosocial movement, which believes that a reorganization of the political, social and economic system would be more effective as opposed to environmentalism, which merely prioritizes green issues within existing political and economic structures. The Green Belt Movement therefore can be seen to provide agency for women in the earth struggles. This is evident in Maathai’s fight for the introduction of a multiparty system in Kenya as opposed to a state with one-party rule. Indeed, in 1997 in the second multiparty elections, Maathai decided to challenge the system once more by running for the Kenyan presidency. She was not only harassed, but she was displaced from the race when false reports of her withdrawal were widely distributed. However, in December 2002, Maathai
was elected to parliament with an overwhelming 98% of the vote after Mwai Kibaki defeated Maathai's long-time political nemesis, Daniel Arap Moi. She was subsequently appointed Assistant Minister for the Environment, Natural Resources and Wildlife in Kenya's ninth parliament. (The Green Belt Movement).

The Green Belt Movement, through tree planting as an African ecosocial Movement demonstrated peoples's capacity to play leading roles in communal, regional and national development.. Maathai and the Green Belt Movement however have been at the forefront in resisting western imperialism by advocating for indigenous Kenyan systems, which lead to the protection of indigenous local biodiversity and sustainability. For instance, the Green Belt Movement is involved in educating farmers on sustainable farming methods such as organic farming to maintain soil fertility instead of using chemical fertilizers, which inhibit the regenerative capacity of the soil. 'Empowerment of her country men was the underlying principle of Ecosocial Movement of Maathai, the Green Belt Movement.

What Maathai conceived was not limited solely to tree planting. The programme worked in concert with the national Council of women of Kenya to provide such services to Kenyan women and villages including family planning, nutrition using traditional foods, and leadership skills to improve the status of women. The Movement had resulted in planting 40 Million trees, had spread to 30 African Countries as well as US and had provided income Eighty Thousand people. (Activism Web).

Speaking on the empowerment of women Maathai said “Twenty years down the road, the women have gained many skills and techniques that they continue to share among themselves. They become self reliant in tree planting and the foresters are now the
first to acknowledge and applaud their accomplishments. Many women had indeed become foresters without diplomas.” (The Green Belt Movement 28).

The women of ‘Naaro’ ( A Village in Kenya) narrate stories of the difficult past, when they used to walk long distances to fetch or purchase wood fuel and then slowly walk home carrying backbreaking loads. They also talk of the times when they had to change their diets because there was not enough fuel to cook with. Today, however, they proudly tell how they can quickly obtain sufficient supplies wood fuel at no cost since it is now available in their farms. They also acknowledge a decline in soil erosion, the return of wild life to their farms (especially birds and small mammals), and the benefit of cleaner air and shade. The men are grateful and full of praise for the women because to the wonderful work that they have done for the community.( The Green Belt Movement 24).

Through the Green belt Movement, she was not only planting trees, the project became a means of allowing women to work to support themselves and their families. It was a practical response which benefited both rural women and environment. As she mentioned in an interview; “…much more important than the trees themselves is the mobilization of rural populations in large numbers – populations that we normally think are helpless, are dependent, are not able to do things for themselves. They organized themselves and started to address the issues in their own communities to improve their quality of life. At its peak, we have had over 6000 groups of women and men planting trees. In the process they educate themselves and address governmental issues. Eventually we became a pro democracy movement.” ( Jennet Web).
The Ecosocial Activist: Vandana Shiva

Dr. Vandana Shiva is a phenomenon of the Environmental Movement, world renowned as an environmental philosopher and Activist. She is known for her energetic, good nurtured and powerfully argued champion of the rights of Rural women and farmers against the might of the global seed corporation who wish to patent ‘nature’. (Rancher 128). She is a leading voice in struggle for global justice. She is a great voice of the exploited who raises her voice against capitalist globalization, genetic food engineering, cultural theft and natural resource privatization. She is the Director of the Research Foundation for Science, Technology and Ecology. She is also the founder of Bija Vidyapeeth which offers conference and seminar facilities in an ambiance which reinvigorates our vital link with Nature at the Navdanya Biodiversity Conservation and Agroecology Farm in the foothills of the Himalayas. Hers is a powerful voice emanating from deep conviction and grounded in solid research. Her ability to combine intellectual study with grassroots activism in the field of ecofeminism, biopiracy and intellectual property rights has won her many international awards including the Right to livelihood, the Earth Day International Award and Global 500 Award.

Speaking about Shiva’s courage to raise issues that concerns the environment and people, Asha Mirza says “….who else in our time has described so beautifully the evolutionary bond between the soil and the weeds, the rice and the rivers, the moth and the seeds,. The farmlands and the women? Who else but Dr. Shiva would explain us better the magnificent history and evolution of thousand years of farming, and how is it being taken over and ripped apart by giant agro-food corporations like, Monsanto, Dupont and Cargill.” (Asha Mirza Web)
She added further that “… who else but her has been fighting so indefatigably against Monsanto’s genetically modified cotton, which systematically trapped millions of farmers throughout the world in fierce cycle of pesticides, herbicides and debt. Vandana Shiva has been warning us again and again, how carelessly Coca Cola draws water and contaminates thousands of hectares of ground water each year, how the lethal greed of Wall Street manufacturers trillion-dollar electronic money merely by gambling and speculating on peoples’ staple food and farmers’ seeds and pushed to buy seeds from American Companies. Who else to explain us better, the horrifying connection between the hiking price of our staple food and the climbing hype in the Wall Street? Who else in our time, would tell us so bluntly that the Indian double-digit economic growth has in fact delivered an over all eight million displaced farmers, accompanied by an extra hundred thousand dead ones!” (Asha Mirza Web). The above observation speaks all about Vandana Shiva and what she stand for. She is an ecosocial activist in all respects.

Shiva also thought that the biological wealth of poorer countries was too often appropriated by global corporations that neither sought their host’s consent nor shared the profits. In her book, ‘Biopiracy: the plunder of Nature and Knowledge’, She argued that these practices would amount to biological theft.(87) Shiva expounded upon her ideas on corporate trade agreements, the exponential decrease in the genetic diversity of crops, and patent laws in ‘Stolen harvest: The Hijacking of the Global Food Supply.(120-35) Tomorrow’s Biodiversity and ‘Water wars: Privatization, Pollution and Profit’ criticizes corporations for attempting to privatize water resources. Shiva continued to articulate the problems caused by corporate domination and foster the development of

Francis Roeny in ‘Exceptional women Environmentalists’ speaks about the situations when Shiva was initiated into ecosocial activism, ‘Shiva was shocked when returned to Dehra Dun in 1978, vast areas of the ancient and much loved forests that had provided food and work for the local people were gone, replaced by apple orchards imported from thousands of miles away. The way of life of the people was seriously threatened. Shiva had discovered how easy it is for large companies and other in power to distort facts in order to justify massive destruction of forests and increase their profits. She returned home to find exactly that happening in her home town. She joined Chipko Movement which had been started in the early 1970s to fight against the further destruction of the forest. Women run Chipko and do most of the work, and almost all its volunteer work. They are known as India’s ‘tree huggers’ because they have formed lines around trees and held on to them when necessary to prevent them from being cut down. The women have stood up to abusive company officials’ beatings, chain saws and guns. Despite the international forces against them, members of Chipko Movement have saved vast areas of Indian forest. (Exceptional women Environmentalists 146).

Shiva’s grassroots activism started to grow when she returned home as a research scientist with the Indian government, though, she spent 10 years in Canada researching how natural resources have been treated throughout history and particularly since 1960’s (Exceptional women Environmentalists 147). In the late 1970’s she started

---

4 ‘Chipko’ is a Hindi word means to stick to (like glue). Since members of the Chipko movement stick to trees to save them, the word has come to mean ‘save trees’.
Navdanya. This movement collects and saves the seeds of traditional, long used plants in order to prevent species from becoming extinct.

As a physicist she has played a leading role in the ecosocial movement called Navdanya which is working for the conservation of biodiversity. She is Director of the Research Foundation for Science, Technology, and Ecology. She uses her analytical ability to uncover the semantic engineering that goes on when global corporations colonize and destroy traditional agriculture in the Third World. This is evident in her 2000 BBC Reith lecture. It is a sustained critique of how global corporations, with the active support of many politicians, are forcing genetic engineering and commercial agriculture on rural communities. In her lecture Shiva denounces the eradication of a sustainable way of life in the name of modernization and science. Shiva’s works ‘Stolen Harvest: The Hijacking of the Global Food Supply’, and ‘Water Wars: privatization, pollution and Profit,’ uncovers the metaphors and the models underlying the so-called modernization of agriculture. This is designed to benefit no one but the western corporations which are pursuing it. This process parallels one already far developed in Europe. (Shiva Web). Shiva’s approach can be read on two levels. First we have the factual, objective analysis of how rural traditions in India are being dismantled and a call to resist them physically and politically. Then, on the meta-analytical level, Shiva critically delineates how the myths associated with neo-liberal projects and solutions are being formulated.

5 The Reith Lectures is a series of annual radio lectures given by leading figures of the day, commissioned by the BBC and broadcast on BBC Radio 4 and the BBC World Service. The lectures were inaugurated in 1948 by the BBC to mark the historic contribution made to public service broadcasting by Sir John Reith, the corporation's first director-general.
As Shiva says: “The global free trade economy has become a threat to sustainability and the very survival of the poor and other species is at stake not just as a side effect or as an exception but in a systemic way through a restructuring of our worldview at the most fundamental level. Sustainability, sharing and survival is being economically outlawed in the name of market competitiveness and market efficiency.” (Earth Democracy 141).

In her interview with A Rishi, she speaks about her transformation form a Physist to eco social activist, “The Ministry of Environment invited me in 1981 to study the effect of mining in the Doon valley. As a result of my report, the Supreme Court banned mining here in 1983. That was the first time I was doing something about conservation professionally. It was not just an analytic engagement divorced from action or consequences and I found it so fulfilling to work with communities and make a difference to society.” (Rishi Web).

Being an ecosocial activist she was searching for an organization to carry forward her activism which resulted in starting RFSTE (Research Foundation for Science, Technology and Ecology). ‘I cared enough about the environment to really see it saved, and I knew that research by itself would not do it. Empowered communities are the place where action will happen. Therefore I started the Research Foundation for Science, Technology and Ecology in 1981-82 to connect to communities and treat them as experts. That is essential, as I learnt in Chipko where it was the women who really knew about what was going on in their environment because trees were their livelihood, as also natural water dams, sources of fodder, fuel and fertilizer. Chipko taught me that those of us who have PhDs don't necessarily know everything! There is so much knowledge in
our communities, and with our grandmothers. I also decided upon a holistic approach to research because, for instance, geology cannot tell us that we are destroying the water resources, geo-hydrology does that. It was that aspect of my work that was recognized when the Right Livelihood Award was given to me in 1993, for creating a new paradigm of research and working in novel ways with communities.” (Rishi Web).

While speaking on the realities associated with Green Revolution she says that “The great drought in Karnataka in 1984 made me realize that the very way we do agriculture is flawed. That year also saw the rise of militancy in Punjab I wrote The Violence of the Green Revolution for the UN, linking the violence in Punjab with the Green Revolution that had given rise to a non-sustainable form of agriculture that pretends to give us more food but is actually destroying nature, our sense of self, and is creating war within society In the same interview she says what made her to choose Seed as a tool to fight against modern imperialism. In 1987, during a meeting at the UN, I began thinking that Mahatma Gandhi used a charkha (spinning wheel) to spearhead his satyagraha (Gandhian movement). I came up with the seed as an equivalent of the charkha for our modern satyagraha against Multi National Companies' appropriation of agriculture. Navdanya was born in that moment of awareness, although it did not become a full-fledged institution until 1991. (Moyers Web).

The historical context that radicalized Vandana Shiva and many others was the Green Revolution and the vast globalization of the mid to late twentieth century. Shiva refers to this model of economic development as maldevelopment. “Maldevelopment militates against equality in diversity, and superimposes the ideologically constructed
category of western technological man as the uniform measure of the worth of classes, cultures and genders” (Staying Alive 5).

The “Green Revolution” is a misnomer used by U.S. industrial agriculture and biotechnology seed and chemical corporations (Monsanto, Cargill, Dekalb, ADM, et al) to aggressively promote the implementation of their products to farmers in the “third world.” As Shiva explains in a lecture given in 2003 6 these corporations convinced farmers in India to shift from subsistence farming (where a family grows food primarily to meet their own food needs, and trades a small amount of their crop for other local goods and services) to growing a monoculture (growing a single plant species over a large area) of a cash crop bound for the global food market (for example, growing potatoes in India that end up as French fries at a McDonald’s in Detroit, Michigan).

This method of farming, aggressively forced on Indian farmers by the WTO (World Trade Organization) and the IMF (International Monetary Fund) in the 1980s and 1990s, was disastrous for the farmers of India. Cash crop industrial agriculture caused farmers to go into debt to the multinational seed and chemical companies, and when their crops failed, the result was over 20,000 farmers taking their own lives by drinking the chemical fertilizers and pesticides sold to them by the corporations that held their insurmountable debt. (Shiva, Yoked to Death 88-89).

The Green Revolution is a term used to describe the worldwide transformation of agriculture that led to significant increases in agricultural production between the 1940s and 1960s. The Green Revolution was a result of programs of agricultural research and

---

infrastructural development founded by the Rockefeller foundation. The foundation produced biotic and abiotic engineered seeds in order to help food production keep pace with worldwide population growth.

India was the second country in which the Green Revolution was introduced. It was first introduced in Punjab, the in Uttar Pradesh and West Bengal. The foundation introduced a package of three products: High yielding variety seeds (wheat, rice etc.), fertilizers (NPK), and pesticides (chemical concentrates which needed to be diluted with water). Double-cropping was another feature of the Green Revolution. Instead of one crop season per year, the decision was made to have two crop seasons per year. The one-season-per-year practice was based on the fact that there is only natural monsoon per year. In for this to work there had to be two “monsoons” per year. One would be the natural monsoon and the other an artificial ‘monsoon.’

Thus crop diversity was lost and water resources were depleted. In Punjab, due to double cropping (the Kharif crop was wheat, and the Rabi crop was rice) there was a dearth of nitrogen fixing leguminous crops (i.e. lentils, beans) and thus the underprivileged masses lost out on protein. Millet, which is also called the poor man’s cereal and which has higher protein content than rice and wheat was planted in smaller quantities due to the green revolution. There was a stress on NPK fertilizer, but the soil has other requirements such as Molybdenum. Parts of Punjab became prone to desertification due to planting of excess of wheat and rice. Small farmers in Punjab and U.P. had to leave farms and move to cities due to excessive increase in the water table, water logging, salinization and fluoride poisoning.
Even today, India’s agricultural output sometimes falls short of demand. The Green Revolution, howsoever impressive, has thus not succeeded in making India totally and permanently self-sufficient in food. In 1979 and 1987, India faced severe drought conditions due to poor monsoon; this raised questions about whether the Green Revolution was really a long-term achievement. In 1998, India had to import onions. In 2006, India imported sugar.

Although there was an increase in rice production from 292,000 metric tons to 3,228,000 metric tons and in wheat production from 1,916,000 to 7,694,000 metric tons between 1965 and 1980, India is still not self-sufficient. There was also a steep decline in the production of oilseed and pulses during the same time period. Due to the Green revolution, there are 40 new insect pests and 12 new diseases in rice monoculture. 10 million hectares of canal irrigated land has been water logged and 25 million hectares subjected to water salinization. (Sameer Boray Web).

Vandana Shiva credits Article 27.53b of the General Agreement on Tariffs and Trade (GATT), which allows corporations to hold patents on forms of life, for pushing her to become an ecofeminist social activist. Under this article, it is illegal to save seeds and plant them the following year if a corporation holds a patent on that plant. For a farmer, this means that he or she cannot be independent, but must now pay the corporation every year to plant that seed. For the corporation, it means that it can appropriate any life form (such as basmati rice, which had been developed over thousands of years in India through traditional breeding and selection techniques), apply for a patent, and is thereby granted complete legal and biological control over that species, anywhere in the world. In resistance to these violent forces of globalization,
Shiva founded Navdanya in 1991, an organization in India that saves seeds, promotes biodiversity, empowers women and children, and protects indigenous knowledge. (Rachel Web).

Realising the adverse impact of green revolution and GM (genetically modified) seeds she started her campaign against GM seeds. Shiva in her article ‘Create Food Democracy,’ ‘Occupy our Food Supply’ (Bhavani Prakash Web) speaks about the reasons behind starting Navdanya, in response to the attempts made by Multi National Companies in hijacking native seeds and the food of the common people.

The biggest corporate takeover on the planet is the hijacking of the food system, the cost of which has had huge and irreversible consequences for the Earth and people everywhere. From the seed to the farm to the store to your table, corporations are seeking total control over biodiversity, land, and water. They are seeking control over how food is grown, processed, and distributed. And in seeking this total control, they are destroying the Earth’s ecological processes, our farmers, our health, and our freedoms more so for third world women, whose identity and livelihood depends on the delicate ecological balance which needs to be maintained.

It starts with seeds. Monsanto and a few other gene giants are trying to control and own the world’s seeds through genetic engineering and patents. Monsanto wrote the World Trade Organization treaty on Intellectual Property, which forces countries to patent seeds. As a Monsanto representative once said: ‘In drafting these agreements, we were the patient, diagnostician and physician all in one.’ (Rosie Spinks Web). They defined a problem, and for these corporate profiteers the problem was that farmers save seeds, making it difficult for them to continue wringing profits out of those farmers. So
they offered a solution, and their solution was that seeds should be redefined as intellectual property, hence seed saving becomes theft and seed sharing is criminalized.

Contrary to the claims of corporations, the chemical-based “green” revolution and genetic engineering do not produce more food. Navdanya’s report on Genetically Modified Organisms, *Health per Acre*, shows that the GMO emperor has no clothes. Biodiverse organic farming protects nature while increasing nutrition per acre. We have the solutions to hunger, but it’s not profitable for major industrial agriculture companies like Monsanto and Cargill to implement those solutions.

Shiva says in one of her interviews that ‘Cargill, the world’s biggest grain giant, wrote the WTO’s agriculture agreement, which has destroyed local production and local markets everywhere, uprooted small farmers, devastated the Amazon, and speculated on food commodities, pushing millions to hunger. A global corporate-controlled food system robs farmers of their incomes by pushing down farm prices, and robs the poor of their right to food by pushing up food prices. If a billion people are hungry today, it is because of greed-driven, capital-intensive, unsustainable, corporate-controlled globalized industrial agriculture. While creating hunger worldwide, agribusiness giants collect our tax money as subsidies in the name of removing hunger. This system has pushed another 2 billion to food-related diseases like obesity and diabetes. Replacing healthy, local food culture with junk and processed food is achieved through food safety laws, which are ‘pseudo-hygiene’ laws. At the global level these include the Sanitary and Phyto-sanitary agreement of the WTO. At the national level they include new corporate-written food safety laws in Europe and India, and the Food Safety Modernization Act in the US.’ (Moyers Web).
The final link in the corporate hijacking of the food system is retail giants like Walmart. People like Shiva have been resisting the entry of Walmart in India because Big Retail means Big Ag, and together the corporate giants destroy small shops and small farms that provide livelihoods to millions.

She points out that we must occupy our food supply because corporations are destroying our seed and soil, our water and land, our climate, and biodiversity. Forty percent of the greenhouse gases that are destabilizing the climate right now come from corporate industrial agriculture. Seventy percent of water is wasted for industrial agriculture. Seventy-five percent of biodiversity has been lost due to industrial monocultures. We have alternatives that protect the Earth, protect our farmers, and protect our health and nutrition. To occupy the food system means simultaneously resisting corporate control and building sustainable and just alternatives, from the seed to the table. One seed at a time, one farm at a time, one meal at a time — we must break out of corporate food dictatorship and create a vibrant and robust food democracy.’

Shiva as a ecosocial activist is at war against the Genetically Modified seeds which destroys the indigenous seeds and crop pattern and destroying the livelihood of the farmers in India. She told Alert Net in an interview in London that ‘Faced with growing demand for food and increasingly unpredictable weather, many developing nations are debating whether to relax restrictions on the use of genetically modified crops. Seed developers promise that a coming generation of genetically modified (GM) food crops will have climate-resilient features, from drought resistance to saltwater

tolerance. But widespread adoption of GM varieties by small farmers would be “suicidal in terms of climate change,” said Vandana Shiva, an Indian social activist, environmentalist and proponent of small-scale farming. “The GM system is more about companies making money from farmers than food security.” (Vandana Shiva  Web).

Adopting GM crops puts small farmers at greater financial risk because they often have to borrow money to buy more expensive GM seeds. If their crops fail, particularly repeatedly, they can find themselves unable to repay the loans, she said. Worldwide, crop failures are increasingly harder to predict because the climate is becoming more erratic. In recent years there has been an unprecedented spate of suicides by heavily indebted cotton farmers in Central India, Shiva said. More than three quarters of the suicides, her research shows, have been committed by farmers using GM cotton seed and struggling to repay loans. GM suppliers sell their seeds on the condition that farmers buy fresh seed each year – something many growers can’t afford if their crop fails. A decade ago, 80 percent of Indian farmers saved part of their harvest as seed to plant the following season’s crops, Shiva said. Her answer to this was Navdanya Movement.

In her speech delivered at the Women’s Conference on Environment in Asia and the Pacific on 3 September 2000, she speaks about the falsehood of technology in agriculture and its impact on ecology and human health, propagated by the vested interest groups in the form of multinational companies and developed nations. She says ‘The point I learned in these twenty years spent working on environmental issues, is that many of these so-called “advanced” techniques are really techniques of war. They were brought from the military sphere into the food production sphere at the end of the Second World War. Nuclear technology is one of them. Nowadays, nuclear radiation is being applied to
food systems around the world with very, very little assessment regarding its impacts.

Besides the fact that it extends storage life, one also needs to find out what it does to our health and the environment’. (Vandana Shiva Web). She added this presentation focuses on two particular technologies, which originate from war technologies. The first one is the group of technologies that came to be known as the “Green Revolution”. This was not a very green transformation of agriculture, and it was definitely not revolutionary. It basically increased the control of powerful corporations and countries, and rich landlords in the Third World over food production and agriculture, displacing women and poorer peasants, and removing poor consumers from their entitlements to food. What were these technologies? They were basically technologies that stopped the production of organic and diverse food, and started employing chemicals that had been used during the war. Some of them became fertilisers, like nitrogen, which was basically used in explosives. Others became pesticides.

As Rachel Carson has written in her book *Silent Spring*, chemicals that man had evolved to kill other people were transferred to agriculture with the assumption that they would eradicate insects that feed on crops. (247) It actually had the opposite effect and increased our pest problems in agriculture. We have experienced a 1,200 percent increase of pests as a result of applying pesticides, and in addition created numerous problems for our health. Pesticide residues are now recognised as a major cause of cancer, allergies and other health problems. Another book, written two years ago by Theo Colborn⁸ a woman scientist in America, entitled “Our Stolen Future”, records how the poisons we

---

⁸ Theo Colborn is Founder and President of The Endocrine Disruption Exchange (TEDX), based in Paonia, Colorado, and Professor Emeritus of Zoology at the University of Florida, Gainesville. She is an environmental health analyst, and best known for her studies on the health effects of endocrine disrupting chemicals.
are using in our everyday lives are threatening our health and that of other species. (Shiva Web).

In India, the Green Revolution was brought over in the sixties (1965-1966). The wheat variety used in this case had actually been imported from Japan by the Americans during the war. It was called “Norin wheat” and is a dwarf variety. The reason dwarf varieties were needed was that huge amounts of chemicals could not be pumped into traditional seeds that women use in South Asia. Our seeds, just like women, say ‘No to toxins’. They lodge, and the lodging of traditional crop varieties is a rebellion of nature against chemical contamination. But if chemicals were to be applied to agriculture, then you somehow needed to change the crops so they could withstand the rapid growth and not collapse and lodge. Feeding the hungry was not really the challenge of the Green Revolution. The real challenge was how you feed the chemical companies by creating plants that are adapted to these chemicals. A United Nations study conducted in the seventies showed that these plants were not high yielding varieties that produce more food. They were basically varieties that responded well to chemicals. They were designed for chemicals, not for feeding the hungry. One just has to consider some of the basic data. It takes five units of inputs in an ecological system to produce 100 units of food. It takes 300 units of inputs in an intensive chemical system to produce the same 100 units of food. Nevertheless we are told that a system that wastes 95 units is a productive system. Apart from not being very productive or very efficient, it also destroys the environment, harms our health, and displaces peasants. (Earth Democracy 101).

---

9 Wheat Norin 10 is a semi-dwarf wheat variety with very large ears that was bred at an experimental station in Iwate Prefecture, Japan. In 1935, it was registered as a numbered variety by Ministry of Agriculture and Forestry Nōrinshō. Norin 10 grew to just two feet tall, instead of the usual four, which made it less prone to wind damage.
This group of technologies also had another dire consequence on the environment and people’s health. Environmental sustainability requires diversity. Shiva adds “…if you have naturally occurring nitrogen-fixing crops in your field, you will not need to apply nitrogen fertiliser that contaminates your ground water and forces you to pump deeper and deeper causing arsenic poisoning, as in the case of Bengal. The people of Bengal had to drill deeper wells in order to water these new ‘advanced’ crops, which need five times more water. As you go deeper into the ground to obtain water, you come into contact with arsenic residues, resulting in contaminated water. Some other places also experience fluoride or selenium poisoning. All that rich diversity, which naturally fixes nitrogen and provides diverse nutrients is wiped out by the Green Revolution. The Green Revolution, especially in Asia, is essentially based on rice and wheat mono-cultures, which rely heavily on pesticides. When you apply herbicides for instance, you also wipe out other greens that provide you with vitamin A and iron. Today iron deficiency and anemia is the single most important nutrient deficiency and health problem facing the women of Asia.”

She adds further that “…we were not meant to be deficient in iron. It has been created by the so-called ‘advanced’technologies that were efficient in destroying iron, vitamin A and other nutrients in our agricultural systems. Some of the rich sources of vitamin A are amaranth leaves, coriander, cabbage, curry leaves, drumstick leaves, fenugreek leaves and radish leaves. These plants contain 1,200 to 1,300 micrograms of vitamin A per 100 grams, and the human body needs about 750 micrograms per 100 grams for its daily diet. In Bengal, over 200 kinds of greens are cultivated. Women eat

and cook them, and know each of them. Most agricultural scientists will not be able to identify any of these plants. In the hill areas, from the Himalayas, no farm has less than 250 to 300 plants growing, meeting the diverse nutrition needs of the people.”(Earth Democracy 105-106).

Speaking on the follies associated with the GM crops Shiva says “…most people will have heard of Golden Rice.\footnote{Golden rice is a variety of \textit{Oryza sativa} rice produced through genetic engineering to biosynthesize beta-carotene, a precursor of vitamin A, in the edible parts of rice. The research was conducted with the goal of producing a fortified food to be grown and consumed in areas with a shortage of dietary vitamin A, a deficiency which is estimated to kill 670,000 children under 5 each year.} This type of rice is supposed to be genetically engineered with vitamin A in it. It sounds wonderful, vitamin A-rich rice that will get rid of the vitamin A deficiency, which affects 2 million children, making many of them go blind. Who would be against that? At this point, however, the scientists do not really know how much vitamin A this rice will produce. All they have managed to do is use another military technology to create the tools that would make it happen ten years down the line, not today, but ten years down the line. These tools are called “gene guns” and “gene cannons”. You literally take gold particles and shoot them with genes from another organism. If you wish to put toxin genes from the BT bacteria you can. If you want to use scorpion genes, which they want to use as a way of controlling pests, it is also feasible. In fact, you can take genes from animals, humans, plants or bacteria and shoot them into the organism, into the seeds or the plant material where you want these genes to be incorporated.” (108).

Speaking on the corporate control over genetic modification she says “…this technology of gene guns and gene cannons is the monopoly of two corporations, Monsanto and DuPont, and no matter where in the world a scientist works he/she has to
pay royalties for them each time. They use this technology to create a so-called ‘transgenic’ plant or a genetically modified (GM) crop. Transgenic because it mixes genes across species boundaries. Right now they do not really know how much vitamin A this will be capable of producing because all they have learned is how to shoot the genes from other organisms into the rice plant. They do not know where in the rice genome this goes, they don’t know how it behaves, they have no idea what it does to the plant and they have no idea what impact that transgenic plant will have on the ecosystem.”

These advanced technologies are not about feeding a hungry world. They are about seeking control over the natural world, over people, and taking away the productive capacity of women. The McKinsey Corporation, a large international consultant firm, recently produced a report, which stated that in India only one percent of food is processed. This would lead you to imagine that India, with one billion people, is merely a land of hunter-gatherers where people dig up roots and pick fruits off the wild trees. It is not, however, that 99 percent of the food is not processed, but that it is mainly processed by women at home, as our laws have so far ensured that food processing remained a small-scale activity, confined to women’s cottage industry. “These laws are now being dismantled, allowing big companies to come in and start taking over food processing. India just witnessed a protest action by women against Cargen, the biggest food trader in the world, controlling 70 percent of the world’s food trade. On the 26th of August 2000, Cargen launched this new brand called “Nature Fresh Flour”. They stated ‘untouched by hand, gone through 40 steps of industrial processing and they expected Indians to be

thoroughly impressed by this. We are literate enough to know what 40 steps of processing do. So the women launched a campaign stating, ‘You’re lying by calling something ‘nature fresh’ that has been heavily processed. We give you two months to allow the women’s groups to visit your factories so that we can inform consumers about what exactly you are taking out of the flour and what you are putting into it. “Nature fresh” is only what comes out of our local mills, which are closing down.’ (Shiva Web).

In most of the rural areas, women still grind fresh flour and pound the rice every morning. If these protests and campaigns do not stop Cargen and other companies what we will have is a hundred million people, most of them women, losing their livelihoods in food production and processing.

Speaking about genetic engineering and the issue of shooting with gene guns, there are currently two other interesting cases where these techniques are being applied. One of them being GM Soya beans. The beans are basically made resistant to Roundup, a herbicide manufactured by Monsanto, which ‘kills everything green that comes into contact with it’. That’s how Monsanto advertises Roundup. If you apply it to your crops, you will need to make them resistant so that everything else will die except the seeds that have been genetically engineered. In other words, Roundup will get rid of all those 200 species that meet our vitamin A and iron needs. It will also make you dependent on the chemical company and make you spray more and more herbicide on your land each year and Roundup is recognised to be the most important reason for illnesses on farms in California, and yet Monsanto markets it around the world as an absolutely safe herbicide. These resistance genes can also move into related crops and species, thereby creating
super weeds that will overtake our farms as it is already the case in India, where rice fields are being taken over by weeds.

The second application is one that puts toxins from bacteria into a plant, with the plant then constantly manufacturing its own poisons in each and every cell. The roots start to kill soil organisms as one of the side factors. The leaves fall and degrade, also killing soil organisms. The monarch butterfly, for example, was killed because of the pollen from these kinds of crops. Beetles that we need to control pests are dying as they eat the aphids that eat these plants. Consequently, the entire ecosystem is being contaminated with poison-producing plants, and these are being called advanced technologies. Shiva adds that “… it is also a known fact, that in two or three years, the bugs that you want them to be resistant to will actually be resistant to the plant and the toxin. Eventually, you will end up with super bugs, you will have super pests, and the super pests will then start to destroy our agriculture and the companies of course, say: “This doesn’t matter. We look after it by creating new seeds that are even more toxic, with scorpion genes and rat genes and snake genes in them.” (David Kemker Web).

Shiva proceeded to work on grassroots campaigns to prevent clear-cut logging and the construction of large dams. She was perhaps best known, however, as a critic of Asia’s green revolution, an international effort that began in the 1960s to increase food production in less developed countries through higher-yielding seeds stocks and the increased use of fertilizers. The green Revolution, she maintained, had led to pollution, a loss of indigenous seed diversity and traditional agriculture knowledge, and the troubling dependence of poor farmers on costly chemicals. In response to this Shiva started seed banks throughout India to preserve the Countries agricultural heritage while training
farmers in sustainable agricultural practices. Taking Clues from the Gandhian form of revolt, Shiva came up with the seed as an equivalent of ‘Charka’ for modern ‘Satyagraha’ against MNCs’ appropriation of agriculture, who promotes GM crops and mono culture. The farmers could come to her farm and see 250 varieties of rice and 800 species of plants growing in the same field.

Navdanya Movement was her answer to the hazardous industrial agriculture and a means to provide healthy food to feed the growing population. Seed was her tool for empowering the farmers especially the women. Navdanya is actively involved in the rejuvenation of indigenous knowledge and culture. It has created awareness on the hazards of genetic engineering, defended people's knowledge from bio-piracy and food rights in the face of globalisation and climate change. Navdanya started as a program of the Research Foundation for science, Technology and Ecology (RFSTE), a participatory research initiative to provide direction and support to environmental activism. ‘Navdanya’ means nine crops that represent India's collective source of food security. The main aim of the Navdanya biodiversity conservation programme is to support local farmers, rescue and conserve crops and plants that are being pushed to extinction and make them available through direct marketing.

Navdanya is a women centered movement for the protection of biological and cultural diversity. Four of its five trustees are women. The Executive Committee has all women members. Out of the total staff members 20% are women. Activities of Navdanya broadly include mobilisation and organisation building; capacity building; engaging with movements, networks and alliances; research, advocacy and lobby. It also produces a fair number of reports that are disseminated widely.
Navdanya means “nine seeds” (symbolizing protection of biological and cultural diversity) and also the “new gift” (for seed as commons, based on the right to save and share seeds). In today’s context of biological and ecological destruction, seed savers are the true givers of seed. This gift or “dana” of Navadanyas (nine seeds) is the ultimate gift – it is a gift of life, of heritage and continuity. Conserving seed is conserving biodiversity, conserving knowledge of the seed and its utilization, conserving culture, conserving sustainability. Navdanya is a network of seed keepers and organic producers spread across 16 states in India. (Shiva, Earth Democracy 68-69).

Since its creation, Navdanya’s mission has been “To protect nature and people’s rights to knowledge, biodiversity, water and food.” Therefore, its main objective is “to promote peace and harmony, justice and sustainability.” Quoting its charismatic leader, Vandana Shiva: “We strive to achieve these goals through the conservation, renewal and rejuvenation of the gifts of biodiversity we have received from nature and our ancestors, and to defend these gifts as commons. The setting up of community seed banks is central to our mission of regenerating nature’s and people’s wealth. Keeping seeds, biodiversity and traditional knowledge in people’s hands to generate livelihoods and provide basic needs is our core program for removal of poverty.” (Shiva web).

When Vandana Shiva started the Biodiversity Conservation Farm in the outskirts of Dehra Dun, her initial idea was two fold. On the one hand, she wanted to prevent the disappearance of seed diversity in India caused by the Green Revolution and the farmers’ obsession and monomania with high-yielding seed varieties (HYV), thereby forgetting and forsaking their ancestral legacy of agro-biodiversity. On the other hand, her ambition was to demonstrate to Indian agriculturists’ tangible proof of the superiority of organic
and bio-diverse agriculture compared to chemical farming, in terms of yielding, preservation of the soil quality and underground water purity along with the nutritional value of food. Hence, the Seed Bank was the first building constructed on the farm. (Earth democracy 69).

Navdanya has helped set up 65 community seed banks across the country, trained over 5,00,000 farmers in seed sovereignty, organic farming, food sovereignty and sustainable agriculture over the past two decades, and helped setup the largest direct marketing, fair trade organic network in the country. Navdanya's biodiverse conservation and organic farm is nestled between the Himalayas, the Ganga and the Yamuna. The biodiverse and highly productive 8-acre farm has rejuvenated the soil once left barren and desertified by years of eucalyptus monoculture and now produces more than 600 varieties of plants, including 250 rice varieties, 30 wheat varieties, and diverse varieties of millet, pulses, oilseeds, vegetables and medicinal plants.

Over the last few years Navdanya has won 3 bio-piracy cases, (patent on the fungicidal properties of neem (no. 436257 B1), against Basmati biopiracy (Patent No. 5663484), against patent on the Indian variety of wheat “Nap Hal”) lobbied against the seed law, prevented the privatization of water in Delhi, established a strong bio-safety framework, highlighted the issues related to the agrarian crisis and farmer's suicides in the country (Shiva Web), apart from promoting a large network of farmers within the country. Navdanya continues to play a very crucial role in terms of tracking and lobbing against the introduction of GM seeds in the country.

Navdanya has also set up a learning center, Bija Vidyapeeth (School of the Seed) on its biodiversity conservation and organic farm in Doon Valley, Uttarakhand, North
India. In her interview with A Rishi she says that Navdanya was started as a constructive response to the perverse dreams of controlling life through genetic engineering and patents. “The very idea of patenting life is abhorrent and speaking against it has become an ethical engagement. Patenting assumes life in all its diversity to be a human creation. It also allows Western arrogance to loot indigenous knowledge, as in the case of neem or turmeric or ashwagandha, and then charge royalties on it. It reminds me of the Salt Laws imposed during the British Raj where Indians could not make salt so that the British could charge royalties. Mahatma Gandhi stood up and said: "Why should I pay for something that the sea gives me for free?" (Shiva, Earth Democracy 151). Today, we have to realize that the seed is free, the neem is free. Why should we pay royalty to Ricetec for basmati? I have been challenging this tyranny by going to the WTO, and other international Organisations for a fair deal to the farmers from poor countries.” (Rishi A Web).

The Navadanaya project was a part of Research Foundation for science, Technology and Natural resource policy founded by Vandana Shiva in 1882, strove to combat the growing tendency toward monoculture promoted by large corporations. It has set up numerous seed banks in India and attempted to educate farmers on the benefits of conserving their unique strains of seed crops. Shiva argued that particularly in a time of climate change, the homogenization of crop production was dangerous. Unlike native seed strains, developed over long period of time and therefore adapted to the conditions of a given area, the seed strains promoted by large corporations required application of large amounts of fertilizer and pesticides. In addition, many such seed strains were genetically engineered and patented, preventing farmers from saving seeds from their
harvests to plant the following season and instead of forcing them to purchase new seed each year. Shiva’s idea was that a decentralized approach to agriculture, based upon a diverse array of locally adapted seeds, would be more likely to weather the vagaries of a changing climate than a system relying on only a few varieties. She anticipated the danger of the World Trade Organisation (WTO), Trade Related Intellectual Property Rights (TRIPS) agreement, which allowed for patenting of life forms and would therefore make it possible for corporations to essentially require farmers to continue to purchase their seeds after local varieties, had been eliminated. Shiva had launched Diverse Women for Diversity, an International version of Navdanya.

She did not stop her activities with the establishment of navdanya, to fulfill its objective she established Seed University –Bija Vidyapeeth. It was founded along with the leading environmental activists Satish Kumar in 2001. The school promotes a vision of holistic solutions rooted in deep ecology and democracy as an alternative to the current world order that is characterized by blind policies guided by greed, destruction and war.

In a world dominated by greed and competition, speed and restlessness, pollution and ecological destruction, war and violence, Navdanya's educational initiative Bija Vidyapeeth, in partnership with the Schumacher College in UK, offers a unique opportunity to explore and practise the art and science of sustainability based on

---

13 This Navayanda-sponsored program was founded by Dr. Shiva, Dr. Jean Grossholtz and Ms. Beth Burrows of the United States and Dr. Christine von Weizsacker of Germany to give women at the local and grassroots level a voice at the global level in support of biodiversity and food and water security. It is known nationally as The National Alliance of Women’s Food Rights (the “Alliance”) and locally as Women’s Food Sovereignty (Mahila Anna Swaraj). The Women’s Charter on Food Rights, issued by The National Alliance, presents the Alliance’s position on globalization, genetic engineering, food distribution and food prices in a strongly-worded, 14-point demand for protection of women’s and children’s food rights.
ecological principles at the peaceful pollution-free setting of Navdanya's organic farm in Doon Valley.

Navdanya’s mission is conservation of biodiversity and promotion of bio-diverse organic farming. Its experimental farm and Biodiversity conservation center provides the learning and educational terrain for teaching associate farmers and important and up to date information on organic farming methods. From the need to disseminate natural organic seeds as well as knowledge about natural resources to farmers, the need for a Seed University (Bija Vidyapeeth) emerged. In addition, the farmers’ supply of organic products needed to secure a demand in order to be able to sustain itself. Therefore, consumers needed to be educated, informed of the benefits of organic food and prioritize quality over quantity, simple and healthy food over industrial and fast-food. In addition to Vandana Shiva and the many other pioneers of the Navdanya farm, there were many other noteworthy promoters and catalyzers, including sage and philosopher Satish Kumar. Satish’s ambition was to propagate Gandhian philosophy through direct experimentation of what would be a Gandhian lifestyle, that is to say, a combination of intellectual and philosophical reflection with dharmic physical action in a harmonious blend of cheerfulness, love and simplicity.

Shiva relates environmental movements with social justice movements, in her interview with Scott London she says “For me, ecological sustainability and social justice are very closely linked, because my view of ecology comes from the margins of Indian Society, from the agricultural producers who make up 70 percent of India- people who are dependent on natural resources, on biodiversity, on the land, the forests, the water. Nature is their means of production. So for them ecological destruction is a form
of injustice. When the forest is destroyed, when the river is dammed, when the biodiversity is stolen, when fields are waterlogged or turned to saline because of economic activities, it is a question of survival for these people. So our environmental movements are justice movements” (Scott London Web).

Her activities of Ecosocial activism did not stop with the establishment of Navadanya and Bija Vidyapeeth, she went on a step further to develop the concept of Earth Democracy. According to her “earth democracy protects the ecological process that maintain life and the fundamental human rights that are the basis of right to life, including the right to water, the right to food, the right to health, the right to education, and the right to jobs and livelihoods. Earth democracy is based on the recognition of and respect for the life of all species and all people.” (Shiva, Earth Democracy 8). About Earth Democracy she says that “Earth democracy is not just a concept, it is shaped by the multiple and diverse practices of people reclaiming their commons, their resources, their livelihoods, their freedoms, their dignity their identities and their peace. While these practices, movements and actions are multifaceted and multiple , I tried to identify clusters that present the ideas and examples of living democracies, living cultures and live economies which together build Earth Democracy” (5). For Shiva the root cause of many of the social problems can be traced back to the environmental degradation. “The privatization of public goods and services and the commoditization of the life support systems of poor is a double theft that robes people of both economic and cultural security. Millions, deprived of a secure living and identity are driven toward extremist, terrorist, fundamentalist movements. These movements simultaneously identify the other as enemy and construct exclusivist identities to separate themselves from those with whom, in fact,
they are ecologically, culturally and economically connected. This false separation results in antagonistic and cannibalistic behaviour. The rise of extremism and terrorism is a response to the enclosures and economic colonization of Globalisation. Just as cannibalism among factory-farmed animals stops when chicken and pigs are allowed to roam free, terrorism, extremism, ethnic cleansing, and religious intolerance are unnatural conditions caused by globalization” (Earth Democracy 3).

We see the ultimate ecosocial activist Vandana Shiva when she speaks about earth democracy in her latest book *Earth Democracy: Justice Sustainability and Peace*. From an ordinary participant in the Chikpo Movement she traveled a long way to reach earth democracy, which is the blend of ecology, sustainability and human society. In earth democracy she visualizes Seed Sovereignty (*Beej Swaraj*), Food Sovereignty (*Anna Swaraj*), Water Sovereignty (*Jal Swaraj*) and Land Sovereignty (*Bhu Swaraj*).(92).

She strongly believes that to have a peaceful world we need a new movement, which allows us to move from the dominant and pervasive culture of violence, destruction and death to a culture of non-violence, creative peace and life. That is why in India, Navdanya started the Earth democracy movement, which provides an alternative worldview in which humans are embedded in the Earth Family, we are connected to each other through love, compassion, not hatred and violence and ecological responsibility and economic justice replaces greed, consumerism and competition as objectives of human life.

Following Gandhiji’s inspiration from the Salt Satyagraha Shiva declared the launch of ‘Bija Satyagraha’ against Seed Laws and Patent Laws that seek to make sharing and saving of seed a crime by making seed the “Property” of companies like
Monsanto, forcing us to pay royalties for what is our collective heritage. The Bija Swaraj campaign, launched by Navdanya, demands that Indian laws do not legalise patents on seed and food, and Trade Related Intellectual Property Rights is reviewed to exclude patents on seed and food. Under Bija Swaraj, they pledge to protect sovereignty to save our seeds and grow our food freely without Multi National Corporations domination and control. We have received the precious gift of biodiversity and seeds from nature and our ancestors and we pledge to protect our rich biological heritage and fundamental freedom to save and exchange seeds.

At the Anna Panchayat (Public Tribunal on Hunger) in May 2001, Navdanya launched its campaign on food rights and food sovereignty (Anna Swaraj) for a genuinely decentralized democratic and sustainable food system. The entry of companies like Cargill into direct procurements, transportation and processing is leading to the closure of small local and larger agro-processing units that provide livelihoods to lakhs of people. She demanded that food be accepted as a Fundamental Human Right and is produced and distributed in a democratic manner.

Pressured by the World Bank, World Trade Organisation and corporate interests, the Indian government has been trying to sign away water rights to giant Multi National Corporations like Coca Cola and Vivendi, ignoring concerns for people’s needs, sustainability and democratic access to water. In the year 2000, Navdanya launched the ‘Jal Swaraj Movement’ to protect our water from privatization and commodification and to promote traditional water harvesting systems and equitable access to water. RFSTE and Citizens Front for Water Democracy (a coalition of more than 100 groups) have successfully stopped the World Bank scheme of privatizing Delhi’s water supply to Suez,
effectively stealing Ganga water from farmers. ‘They have also stopped Coca Cola’s thievery of Kerala’s ground water, creating profits by hoarding from and polluting the water that belonged to the commons. Shiva and her team also collaborating with farmer groups from Bundelkhand and Uttarankhand to fight against the River Linking Projects like Ken-Betwa and Sharda-Yamuna, which are nothing but theft of our water and water heritage.’( Earth Democracy 152).

_Bhu Swaraj_ is the foundation for economic and food security especially for the rural women who take care of the food requirements of an ordinary rural household. Nevertheless, India’s economic growth has violently dispossessed millions from their land and fundamental rights, as massive land grabs are perpetuated by the state and corporations. She opposes this corporate hijack because land is a sacred trust for human sustenance and cannot be used as a commodity with no concern for the lives of people. Strongly believing that land must belong to those who till it and nurse it and for whom it is a source of sustenance.

In an interview with Bill Moyers, she speaks about the nature of her activism ‘… my entry point was a physicist. If I am engaged in ecological research and activism or fighting globalization or fighting for peace it is because of the reality of today- a very contemporary reality- in which small farmers can’t make a living.’ (Bill Moyers Web). Shiva is not against globalization or Internationalism her ‘Ecosocial Activism’ is oriented towards Earth Democracy, where all of us being citizen in the planet. She feels that we need a globalization that is based on countries making their decisions, communities making their decisions. The current globalization is trying to build a roof by
eating out of the foundation. And there is a panic because it is a false building and it is going to crumble.

Supporting the Gandhian view of village self sufficiency and village self reliance she says in the same interview ‘there is no reason to not have International Trade. There is no reason not to have International interaction. There is no reason not to have International democracy. But an International democracy is genuinely democratic only if national democracies are intact and local democracies are vibrant.’ (Earth Democracy 184).

As an Ecosocial activist it is her firm belief that ‘if we accept illegal illegitimate laws, structures and rules, we lose our freedom – our living cultures and democracies. As Gandhi taught, freedom can be reclaimed only by refusing to cooperate with unjust immoral laws. The fight for truth – employing the principles of civil disobedience, non-violence and non-cooperation – is not just our right as free citizens of free societies. It is our duty as the citizens of the earth. (Earth Democracy 184).

Vandana Shiva’s ecosocial activism resulted in empowering the farmers in keeping the native seeds and taking up eco friendly agricultural practices. There are about 54 community seed banks, established by her Movement Navadanya which saved 3000 rice varieties.
**Arundhati Roy and Ecosocial Activism**

Arundhati Roy, since her Booker Prize winning novel *The God of Small Things* has devoted mainly to non-fiction writing and politics as well as working for social causes. She is a spokesperson of the anti globalization Movement and a vehement critic of neo-imperialism and of the global policies of the United States. She also criticises India’s nuclear weapon policies and approach to industrialisation and rapid development as currently being practiced in India, including the Narmada Dam Project and the power company Enron’s activities in India. Arundhati Roy, labelled as a ‘writer-activist’ protests against her categorization as a writer for her novel *The God of Small Things* (1997) and as an activist for her essays. She argues that her novel is as much political as her essays. She states that her idea of morality prompts her to write both fiction and non-fiction with an environmental and ethical concern.

In "The Ladies Have Feelings, So…," an essay in the *Algebra of Infinite Justice* (2002), Arundhati Roy had asked: "What is the role of writers and artists in society: do they have a definable role? Can it be fixed…? Should it be?" (190). The question that arises, as a corollary to these, is: should a writer or artist be branded as a literary activist if he/she engages directly and emphatically with one or more polemical and controversial issue(s) and continues to write about it/them, as has been done in the case of Roy herself?

In order to describe literary activism, Adair Jones had cited the case of Arundhati Roy: "Her first and only novel, *The God of Small Things*, won the Man Booker Prize in 1997, which brought her instant international fame. She traded on this in the best of ways, donating time, money and attention on the issues at the heart of her novel…." (Jones Adair Web) In other words, she turned into an activist fighting, through her writing, for
many good causes. But even before this, she had to learn the necessity of activism from her own experience with the novel. Jones tells us that before all the accolades and prizes, Roy was charged with obscenity in India, which made her aware of the real value of literature: the right to speak freely. She faced imprisonment, yet returned to India, fought to clear her name and succeeded. She had, presumably, learnt a lot about the relationship between one's writing and the society. But, as Jones points out, for Roy, the real fight had only begun. To have her novel associated with obscenity took attention away from the issues she was hoping to bring to light and, consequently, incited Roy to deeper, more meaningful activism. (Jones Adair Web).

It is precisely the phenomenon of literary activism and its pejorative connotations that Roy questions with reference to her own writings. In "The Ladies Have Feelings, So…” she asked: "Why am I called a 'writer-activist' and why … does that make me flinch ?" (Ladies- Algebra 196) She herself tells us that it is because "after writing The God of Small Things I wrote three political essays" but then, evoking the right of authors to write in any mode or form that one chooses, she raises a counter-argument that creates a framework for this discussion. Roy wrote: “Now, I've been wondering why it should be that the person who wrote The God of Small Things is called a writer, and the person who wrote the political essays is called an activist? True, The God of Small Things is a work of fiction, but it's no less political than any of my essays. It is true, these essays are works of non-fiction, but since when did writers forgo the right to write non-fiction? “(196).

According to Roy, since she chooses to write both fiction and nonfiction to represent a specific "position" or "point of view" (197) that she believes in , she is burdened with "this double-barreled appellation" (196) of being a writer-activist. But to
her, the whole point is that the two cannot be separated. In fact, she writes clearly that a meaningful act of writing is synonymous with socially responsible activism to her: “There is an intricate web of morality, rigour and responsibility that art, that writing itself, imposes on a writer…. And that's not always easy. It doesn't always lead to compliments and standing ovations. It can lead you to the strangest, wildest places…. The trouble is that once you see it, you can't unsee it. And once you have seen it, keeping quiet, saying nothing, becomes as political as an act as speaking out. There's no innocence. Either way, you're accountable.” ("Ladies" Algebra 191-193).

When Roy writes that an author is accountable for every act related to her decision to write about a particular situation in a particular way, she is telling us that a writer, according to her, has a significant role to play in a given society, economy, political state and culture. In this capacity, Roy writes to instill knowledge and fear in her audience; she tries to warn so that it creates a possibility of collective awareness and action which might yet help in survival and sustenance of life, both at the global and local level. This is probably why she has written so much and for so long a period against nuclear tests and weapons and the destruction of the lives and livelihood of millions of villagers subsisting on and with the ecology of the Narmada valley? In other words, she is an activist writing for a positive change in the state of affairs that can effect an improvement in our environment, physical as well as human societal. Arundhati Roy is unabashedly political in her writings for the sustenance of the environment.

In her Interview with N. Ram, the Editor of Frontline in 2001, she speaks about her role as a writer “I'm screaming from the bloody rooftops. And he and his smug little club are going Shhhh... you'll wake the neighbours! But I want to wake the neighbours,
that's my whole point. I want everybody to open their eyes” (The Shape of the Beast 13).

The writer should awake the consciousness of the society and make them to work for its betterment.

Subsequent to the publication of *The God of Small Things* in 1997, Roy had published *The Algebra of Infinite Justice* (2001), *An Ordinary Person's Guide to the Empire* (2005) and *Listening to Grasshoppers: Field Notes on Democracy* (2009). In each of these, she had criticized both global and national political and economic policies and the mode of implementation of government decisions in terms of, again, both short-term and long-term impact on the population and the environment. A close reading of her works would prove that her politics has always been on behalf of the poor, mostly illiterate victims of environmental disasters created by gigantic financial institutions and State policies. She wrote about the impact of the Sardar Sarovar Dam on the lives of the villagers facing eviction from the valley in these terms in the ironically-titled essay, "The Greater Common Good" in the book *The Algebra of Infinite Justice* : “All over the world there is a movement growing against Big Dams. In the first world, they're being decommissioned, blown up…. They're a Government's way of accumulating authority (deciding who will get how much water and who will grow what where). They're a guaranteed way of taking a farmer's wisdom away from him. They're a brazen means of taking water, land and irrigation away from the poor and gifting it to the rich. Ecologically too, they're in the doghouse. They lay the earth to waste. They cause floods, water logging, salinity, they spread disease. There is mounting evidence that links Big Dams to earthquakes.” (Algebra 57-58).
A close reading of The God of Small Things brings to the forefront the idea that Roy is an ecosocial activist who is very much concerned about the degradation of the environment which was caused by human intervention. It is analysed here in some detail, often with extensive quotations, to bring out Roy's idea of politics regarding the environment. This text, when subjected to a rigorous ecocritical reading, reveals that this work was her response to environmental crisis. The degradation of environment and fall of few characters reflects the ways of relating the state of environment and ecology or nature with that of culture. In The God of Small Things, where Chacko - Rahel and Estha's Oxford-educated Rhodes-scholar uncle - lectures them on history.

Then, to give Estha and Rahel a sense of historical perspective…he told them about the Earth Woman. He made them imagine that the earth - four thousand six hundred million years old - was a forty-six year old woman…. It had taken the whole of Earth Woman's life for the earth to become what it was. For the oceans to part. For the mountains to rise. The Earth Woman was eleven years old, Chacko said, when the first single-celled organisms appeared. The first animals, creatures like worms and jelly-fish, appeared only when she was forty. She was over forty-five - just eight months ago – when dinosaurs roamed the earth. 'The whole of human civilization as we know it,' Chacko told the twins, 'began only two hours ago in the Earth Woman's life. As long as it takes us to drive from Ayemenem to Cochin.' It was an awe-inspiring and humbling thought, Chacko said… that the whole of contemporary history, the World Wars, the War of Dreams, the Man on the Moon, science, literature, philosophy,
the pursuit of knowledge - was no more than a blink in of the Earth Woman's eye…. 'And ... everything we are and ever will be - are just a twinkle in her eye,' Chacko said grandly…. (53-54).

Chacko's lecture is suited to be intelligible to children. But the essential point is that given the late arrival and monopolization of the Earth by human beings, a lesson in humility towards her and all the living and non-living existence that she supports, would be necessary. In this historical context (chronologically speaking, in the broadest sense), if we begin to view the role played by the fictional characters in *The God of Small Things*, then quite a few instances of environmental degradation due to the phenomenon of uneven development emerge. But even before that, right at the beginning of the novel, we seem to come across a world where nature and culture have remained integrated enough for years to perpetuate a stable, abiding and harmonious environment:

…by early June the south-west monsoon breaks and there are three months of wind and water with short spells of sharp, glittering sunshine that thrilled children snatch to play with. The countryside turns an immodest green. Boundaries blur as tapioca fences take root and bloom. Brick walls turn moss green, Pepper vines snake up electric poles. Wild creepers burst through laterite banks and spill across the flooded roads. Boats ply in the bazaars. And small fish appear in the…PWD potholes on the highways. (1)

The visible effects of development activities seem to merge with nature. There is, apparently, no lack of harmony between nature and culture. This is in the beginning of the novel, but in the later part of the novel the story of the environment emerges in an
aggravated condition. Mukherjee in the book ‘Postcolonial Environments’ blames the process of globalization firmly for this state of both environmental and cultural degradation by pointing out that:

with Estha and Rahel's return in 1991, we are ushered into the next stage of Kerala and India's development in the era of the post-Fordist global capitalism often crudely known as 'globalization' (as if this had not always been the tendency of historical capital over the past five or six hundred years). Within and outside India, the neo-liberal mantra endlessly circulated without much critical analysis presents this as a kind of utopian border-crossing available to all the citizens of the world who sign up to its prescription of 'structural adjustments' and the corporatization of economic and political process. Roy's novel punctures this myth by showing it to be a continuation of the despoliation and degradation of the Indian environment and peoples that had accelerated under colonialism and has now taken on an unprecedented velocity. (98-99).

To Mukherjee then, the environmental degradation of Ayemenem in 1991 is a direct result of the process of global capitalism and this is proved by various situations of foreign economic and cultural domination that are projected prominently in The God of Small things. For instance, in 1991, when the silent Estha goes on long walks along the local Meenachal river (reminding us of the meaning of 'meen' as fish in Indian culture and in this sense, signifying that the river is the natural habitat of fish), this is what greets his senses: "Some days he walked along the banks of the river that smelled of… pesticides bought with World Bank loans. Most of the fish had died. The ones that survived suffered from fin-rot and had broken out in boils" (The God of Small things.13).
In the highly sarcastic naming of a chapter as 'God's Own Country', Roy gives us another view of Ayemenem in 1991, this time seen through Rahel's eyes: "Years later, when Rahel returned to the river, it greeted her with a ghostly skull's smile…. Downriver, a saltwater barrage had been built, in exchange for votes from the influential paddy-farmer lobby…. More rice, for the price of a river"(124). As a result, the river had turned into "a swollen drain"(124). The poor and dispossessed had made a slum by its side, adding to the pollution. While upstream, "…clean mothers washed clothes and pots in unadulterated factory effluents" and "people bathed", downstream at Ayemenem, slum-"…children hung their bottoms over the edge and defecated directly onto the squelchy, sucking mud of the exposed river bed" and the net result would be that "… on warm days the smell of shit lifted off the air and hovered over Ayemenem like a hat" and naturally, even the History House transformed into a luxury hotel was not exempt from either the stench or the "thick and toxic" water. (125). In a really concise manner, Roy points out how both farming and factories pollute nature and also hinted at the unholy nexus between the globalization, greed and lack of far-sight in post-colonial India. And added to this was pollution of the cultural environment: the hotel, called 'Heritage', "had bought" "smaller, older, wooden houses -ancestral homes… from old families and transplanted" them "around the History House in attitudes of deference." (126).

Civilization’s jealous oppression of nature is not only visible in the destruction of the lovers but in other parts of the novel as well. Together with Velutha, nature occupies the bottom rung in the hierarchy of oppression in the novel. Ayemenem river that once took the life of Sophie Mol twenty-three years ago is now a mere shrunken ribbon after
people appropriated it for agricultural convenience. The river greets Rahel with the face of death.

Years later, when Rahel returned to the river, it greeted her with a ghastly skull’s smile, with holes where teeth had been, and a limp hand raised from a hospital bed. ... Downriver, a saltwater barrage had been built, in exchange for votes from the influential paddy-farmer lobby. The barrage regulated the inflow of salt water from the backwaters that opened into the Arabian Sea. So now they had two harvests a year instead of one. More rice, for the price of a river. ... Once it had the power to evoke fear. To change lives. But now its teeth were drawn, its spirit spent. It was just a slow, sludging green ribbon lawn that ferried fetid garbage to the sea. Bright plastic bags blew across its viscous, weedy surface like subtropical flying-flowers. (118-119)

In contrast, the narrator’s loving concern for nature is vividly recorded in the opening passage where nature including the river is the center of attention as if it were the protagonist.

May in Ayemenem is a hot, brooding month. The days are long and humid. The river shrinks and black crows gorge on bright mangoes in still, dust green trees. Red bananas ripen. Jackfruits burst. Dissolute bluebottles hum vacuously in the fruity air. Then they stun themselves against clear window panes and die, fatly baffled in the sun. (3).

Nature is intimately intertwined with the life of the lovers who meet nightly at the History House, the deserted former residence of the Englishman Kari Saipu.
They laughed at ant-bites on each other’s bottoms. At clumsy caterpillars, sliding off the ends of leaves, at overturned beetles that couldn’t right themselves. At the pair of small fish that always sought Velutha out in the river and bit him. At a particularly devout praying mantis. At the minute spider who lived in a crack in the wall of the back verandah of the History House and camouflaged himself by covering his body with bits of rubbish a sliver of wasp wing. Part of a cobweb, Dust, Leaf rot, The empty thorax of a dead bee. *Chappu Thamburan*, Velutha called him. (320).

The lovers also find metaphor of their love in nature, that is, the spider they name Lord Rubbish. One day they put a flake of garlic skin into his camouflage armor and he rejects the whole armor as if it were an outmoded world-view like the lovers who defy an outmoded class barriers with their passion. For a few days he lives without the protective armor, remaining in this suicidal state of disdainful undress.

In fact Velutha identifies himself with nature. On his back is a light brown birthmark in the shape of a leaf. He says it is a Lucky Leaf that makes the Monsoons come on time (70). He views himself as a being in communion with nature. Living on friendly terms with nature and protecting and loving the abandoned woman and her children, the rejects of human society, he is the most despised being but is simultaneously the God of Small Thing, things that are weak and underprivileged.

Her criticism against industrialization and globalisation is very much visible in her fiction and non-fiction works, making her essentially an ecosocial activist. In her essay ‘*The End of Imagination*’ which was written immediately after the Pokhran
Nuclear test she cautions the government and the people of the terrible consequences of a nuclear war and its effect on the ecology:

If there is a nuclear war, our foes will not be China or America or even each other. Our foe will be the earth herself. Our cities and forests, our fields and villages will burn for days. Rivers will turn to poison. The air will become fire. The wind will spread the flames. When everything there is to burn has burned and the fires die, smoke will rise and shut out the sun. The earth will be enveloped in darkness. There will be no day - only interminable night. What shall we do then, those of us who are still alive? Burned and blind and bald and ill, carrying the cancerous carcasses of our children in our arms, where shall we go? What shall we eat? What shall we drink? What shall we breathe? The Head of the Health, Environment and Safety Group of the Bhabha Atomic Research Centre in Bombay has a plan. He declared that India could survive nuclear war. His advice is that in the event of nuclear war we take the same safety measures as the ones that scientists have recommended in the event of accidents at nuclear plants’ (The Algebra of Infinite Justice, 5-6).

In an interview given to David Barsamian in 2001 she says about the Indian nuclear test, ‘It's so frightening, the nationalism in the air. I'm terrified by it. It can be used to do anything. I know that a world in which countries are stockpiling nuclear weapons and using them in the ways that India and Pakistan and America do to oppress others and to deceive their own people is a dangerous world. The nuclear tests were a
way to shore up our flagging self-esteem. India is still flinching from a cultural insult, still looking for its identity. It's about all that’. (David Barsamian Web)

**Roy and Narmada Bachao Andolan:**

The Ecosocial activist Roy does not restrict herself into writing alone, like Wangari Maathai, who is associated with ‘Green Belt Movement’ and Vandana Shiva with ‘Navdanya’, Arundhati Roy is very much involved in the Narmada Bachao Andolan. Speaking about her participation, “She is one of the few eminent persons who do more than just signing statements” says Mr. Sripad Dharmadhikari of the Andolan, “The celebrated author of *The God of Small Things* painstakingly went through reams and reams of material on the controversial Sardar Sarovar Project and other proposed dams on the Narmada before she visited the valley and saw for herself the plight of thousands of tribals and dalits who had been displaced and who were to be displaced from their ancestral lands. She went through the Morse Commission Report on Sardar Sarovar.” Arundhati Roy donated all of her Rs.15 lakh Award money to the Narmada Bachao Andolan because she “really supports everything they stand for. I believe the time has come for alliances to be made by individual people in civil society and the other world that is being cut off.” (Nirmala George Web). Roy shocked the ‘civil society’ with her strong, forthright and fearless support to the Narmada Bachao Andolan (NBA) led by Ms. Medha Patkar against the controversial Sardar Sarovar Project in Gujarat and other proposed dams in the Narmada Valley. Not only Roy's generous donation, but also her open support has been deeply appreciated by NBA activists who began a satyagraha in the valley in Maharashtra and Madhya Pradesh to meet the worst-ever submergence of people's ancestral lands this monsoon.’ (Nirmala George Web).
Narmada Bachao Andolan: a bird’s eye view

Narmada Bachao Andolan is the most powerful mass movement, started in 1985, against the construction of huge dam on the Narmada river. Narmada is the India's largest west flowing river, which supports a large variety of people with distinguished culture and tradition ranging from the indigenous (tribal) people inhabited in the jungles here to the large number of rural population. The proposed Sardar Sarovar Dam and Narmada Sagar will displace more than 250,000 people. The big fight is over the resettlement or the rehabilitation of these people. The two proposals are already under construction, supported by US $550 million loan by the World Bank. There are plans to build over 3000 big and small dams along the river.

It is a multi crore project that will generate big revenue for the government. The Narmada Valley Development plan is the most promised and most challenging plan in the history of India. The proponents are of the view that it will produce 1450 MW of electricity and pure drinking water to 40 million people covering thousand of villages and towns. Some of the dams have been already been completed such as Tawa and Bargi Dams. ‘But the opponents say that this hydro project will devastate human lives and bio diversity by destroying thousand of acres of forests and agricultural land. On the other hand it will overall deprive thousands of people of their livelihood. They believe that the water and energy could be provided to the people through alternative technological means, that would be ecologically beneficial. (Roy, The Algebra of Infinite Justice 60).

Led by one of the prominent leader Medha Patkar, it has now been turned into the International protest, gaining support from NGO'S all around the globe. Protestors are agitating the issue through the mass media, hunger strikes, massive marches, rallies and
the through the on screen of several documentary films. Though, protesting peacefully, they been harassed, arrested and beaten up by the police several times. The Narmada Bachao Andolan has been pressurizing the World Bank to withdraw its loan from the project through media.

In an interview given to David Barsamian\textsuperscript{14} she says about her association with Narmad Bachao Andolan, “When I first met people from the Narmad Bachao Andolan, they told me, "We knew that you would be against the dams and the World Bank when we read The God of Small Things." The remarkable thing about the NBA is that it is a cross-section of India. It is a coalition of Adivasis India's indigenous people, upper-caste big farmers, the Dalits (formerly known as Untouchables), and the middle class. It is a forging of links between the urban and the rural, between the farmers and the fishermen and the writers and the painters. That is what gives it its phenomenal strength, and it is what a lot of people criticize it for in India, saying, you know, these middle class protesters! That makes me furious. The middle class urban engineers are the people who came up with this project! You can't expect the critique to be just Adivasi. You isolate them like that, and it's so easy to crush them. In many ways, people try to delegitimize the involvement of the middle class, saying, how can you speak on behalf of these people? No one is speaking on behalf of anyone. The point is that the Narmad Bachao Andolan is a fantastic example of people linking hands across caste and class. It is the biggest, finest, most magnificent resistance movement since the independence struggle.”

\textsuperscript{14} David Barsamian is an author and Journalist. The founder and director of Alternative Radio, based in Colorado. His interviews appear regularly in The Progressive and Z Magazine.
By associating herself with this movement she became the voice of the voiceless people.

Opposing the construction of the dam she says that there are many issues concerned with the Dam. ‘First of all, you have to understand that the myth of big dams is something that's sold to us from the time we're three years old in every school textbook. Nehru said, "Dams are the temples of modern India." (Sharma, Modern Temples of India 40-49). So they're like some kind of huge, wet national flags. Before the Narmad Bachao Andolan, it was like, the dam will serve you breakfast in bed, it will get your daughter married and cure your jaundice. People have to understand that they're just monuments to political corruption, and they derive from very undemocratic political institutions. You just centralize natural resources, snatch them away from people, and then you decide who you're going to give them to.’ (Shape of the Beast. 44).

Analysing follies of the Big dams she says in The Algebra of Infinite Justice ‘The first dam that was built in the Narmada was the Bargi, completed in 1990. They said it would displace 70,000 people and submerge 101 villages. One day, without warning, the government filled the reservoir, and 114,000 people were displaced and 162 villages were submerged. People were driven from their homes when the waters rose. All the affected people could do was run up the hill with their cattle and children. Ten years later, that dam irrigates 5 percent of the land that they said it would. It irrigates less land than it submerged. They haven't built canals. Because for contractors and politicians, just building the dam in itself is a lot of money.’ (56).

Speaking for the displaced people and the demographic imbalance created as a consequence of the improper planning by the Government Roy says that ‘When I was
writing "The Greater Common Good," what shocked me more than the figures that do exist are the figures that don't exist? The Indian government does not have any estimate of how many people have been displaced by big dams. I think that's not just a failure of the state, but a failure of the intellectual community. The reason that there aren't these figures is because most of the people that are displaced are again the non-people, the Adivasis and the Dalits. I did a sanity check based on a study of fifty-four dams done by the Indian Institute of Public Administration. According to that study, just reservoir-displaced, which is only one kind of displacement, came to an average of something like 44,000 people per dam. Let's assume that these fifty-four dams are the bigger of the big dams. Let's quarter this average. We know that India has had 3,600 big dams built in the last fifty years. So just a sanity check says that it's thirty-three million people displaced. They all just migrate to the cities. And there, again, they are non-citizens, living in slums. They are subject to being kicked out at any minute, anytime the housewives of New Delhi's upscale areas decide that all these slum people are dangerous.'(The Greater Common good 62).

As asked by N Ram, the Editor of Frontline, in one of the interviews, whether she was against big dams or for proper rehabilitation and resettlement of the project-affected people, Ms. Roy said she was against big dams and uprooting people. She is all for small, decentralised projects. “Big dams are monuments to political corruption and power. They are technologically obsolete, ecologically dangerous and economically unviable. They are most devastating. Like a silent war”. “Not a single Big Dam in India has delivered what it promised. Not the power, not the irrigation, not the flood control, not the drought-proofing. Instead, Big Dams have converted huge tracts of agricultural land into
waterlogged salt wastelands, submerged hundreds of thousands of hectares of prime forest, and pushed the country into deeper debt...They have uprooted 40 million people, most of them ‘Adivasis\textsuperscript{15} and dalits’,\textsuperscript{16} from their forests and rivers, from lands and homes where they and their ancestors have lived for thousands of years. They have lost everything. Everything" (The Shape of the beast 19).

The three essays that make up Roy’s book, Power Politics prove that she is serious about giving equal shrift to prose and politics. She warns her readers that her political writing includes “…some disparate bits of history and geography that may mar the gentle art of story telling and it’s true that the language in Power Politics doesn’t have the just-invented freshness of that in The God of Small Things.” (Power politics 10). But Roy is aiming for clarity and impact, and her new essays accomplish those goals with a novelist’s flourish. In the essay “Power Politics: The Reincarnation of Rumpelstiltskin,” Roy returns to the subject of the Narmada Valley Development Project. She dissects the global economic forces underpinning the Maheshwar Dam — the first private dam on the Narmada River — and animates those forces with a character she calls Rumpelstiltskin.

“What kind of potentate is Rumpelstiltskin?” she asks. “Powerful, pitiless, and armed to the teeth. He’s a kind of king the world has never known before. His realm is raw capital, his conquests emerging markets, his prayers profits, his borders limitless, his weapons nuclear.”( 10). Rumpelstiltskin, she says, has sweet-talked India into importing products it could manufacture itself, taking on debt for massive private projects such as the

\textsuperscript{15} Adivasi is an umbrella term for a heterogeneous set of ethnic and tribal groups claimed to be the aboriginal population of India. They comprise a substantial indigenous minority of the population of India.

\textsuperscript{16} Dalit is a designation for a group of people traditionally regarded as untouchable. Dalits are a mixed population, consisting of numerous social groups from all over South Asia; they speak a variety of languages and practice a multitude of religions.
Maheshwar Dam, and absorbing tremendous human costs — not least the 56 million people expected to be displaced by the Narmada dams. “When the history of India’s miraculous leap to the forefront of the Information Revolution is written,” she says, “let it be said that 56 million Indians (and their children and their children’s children) paid for it with everything they ever had, their homes, their languages, their histories.”(31).

As the second essay in *Power Politics* proves, Roy is not just fighting with her pen. As an active supporter of the Narmada Bachao Andolan (the grassroots resistance to the Narmada Valley Development Project), she joined 4,000 dam opponents in a march to the Maheshwar Dam site. Roy has been accused of contempt of court because of her participation in an anti-dam demonstration outside India’s Supreme Court, and because of her alleged attacks on some men leaving the court. “On Citizens’ Rights to Express Dissent” is a reprint of her official reply to these accusations. She’s unrepentant, fearless, and sometimes funny — simultaneously attacking her accusers’ understanding of democracy and poking fun at their spelling mistakes. Even after the publication of *Power Politics*, she once again refused to apologize to the court. (Nirmala George Web).

Roy’s reputation as an activist does not always blend seamlessly with her fame as a prize-winning novelist. In the last essay in *Power Politics*, “The Ladies Have Feelings, So … Shall We Leave it to the Experts?” she ironically describes her complicated professional identity: “I am, apparently, what is known in twenty-first-century vernacular as a ‘writer-activist.’” (Power Politics 201).

As Roy readily points out, there’s a limit to the role she can play in India’s environmental politics, since she’s no expert on megawatt power production projects or
global economics. But she’s abrasive, poetic, and tough to ignore — the absolute opposite of a sofa-bed. Her powerful voice and equally potent credentials have helped her win a prominent place in the public debate over India’s environmental and social future. *Power Politics* could help bring that debate to a much larger audience than it would otherwise enjoy — and help win a fair hearing for the 56 million people for whom Roy speaks for.’ (Michelle Nijhuis Web).

The essay, *Greater Common Good* grew out of Roy’s on-the-ground involvement fighting the construction of the Narmada River dams and, in particular, the projected 139-meter-high Sardar Sarovar dam. Dams are, according to Roy, “India’s Greatest Planned Environmental Disaster.” (The Algebra of infinite Justice 86). *Greater Common Good* is a screech against big dams and, in a broader sense, against all “Big Projects” dreamt up by government notionally to improve the lives of the people as a whole but which impose seemingly intolerable costs on particular people and the environment. Roy dreams: “Perhaps that's what the twenty-first century has in store for us. The dismantling of the Big, Big bombs, big dams, big ideologies, big contradictions, big countries, big wars, big heroes, big mistakes. Perhaps it will be the Century of the Small. Perhaps right now, this very minute, there's a small god up in heaven readying herself for us. Could it be?” (62).

The above words gives the reader a glimpse into why Roy’s piece is such an arresting addition to her ecosocial activism. Roy marshals data but she writes with passion and a love of language; in short, she argues like an activist. Roy says ‘she was drawn to what was happening in the Narmada valley because, as a writer, she is drawn to stories “the way vultures are drawn to kills.” And she believes she found the story of a lifetime, the story of India in the 20\textsuperscript{th} century. Roy’s writing will jar some readers. This
is not a sterile tale, and the author uses staccato sentences and even occasional vulgarities to move the reader. Some readers will be inspired. Roy invites: “Listen then, to the story of the Narmada Valley. Understand it. And, if you wish, enlist. Who knows, it may lead to magic. Some readers will recoil.” (Roy Web).

The resource is rich as a tale of India’s development as well. The big dams against which Roy rails are part and parcel of the development strategy fostered by Jawaharlal Nehru, the country’s independence-era prime minister. To Nehru, dams were “the temples of modern India,” typical of the government mega-projects which would allow a dispassionate and benevolent state to mastermind rational development and lift millions out of poverty. In contrast, Gandhi, India’s non-violent independence activist, would not have approved of these baubles of modernity. Gandhi favored relatively self-sufficient village-level political and economic units in which men would be connected to their fellows, their God, and their environment. While Nehru favored the big, to Gandhi, small was beautiful. Roy dislikes viewing the dam controversy through the “old bottle” of Nehru v. Gandhi, but the great men do hover in the background. In the tale of the Narmada, big government (Nehru) touts the many benefits the dams will bring, extolling the good of the many over the good of the few, while activists and peasants engage in non-violent resistance (on the ground to save their homes and way of life.” (The Algebra of infinite Justice 52).

Beyond the Nehru-Gandhi debate, Roy’s essay speaks to one of the core issues of development. Development always involves choices. Something will be lost and something gained when development occurs. Roy, who insists she is no “anti-development junkie” and aware of “the isolation, the inequity and the potential savagery
of village life, would likely argue that when we engage in development we should at least go in with our eyes open, aware of who will win and who will lose and what costs will be paid (and by whom) and for what benefits (and for whom). In the particular case of the Narmada, Roy argues the villagers lose everything while the beneficiaries are far away in the cities and in the government. “India doesn't live in her villages. India dies in her villages.”(The Algebra of infinite Justice 70).

Roy also questions whether the dam will even deliver the benefits promised by the government. She details that, despite India’s fascination with record keeping, there is no single figure of the number of people displaced by India’s big dams. Using what numbers are available, Roy conjectures a figure of 33 million people displaced by India’s big dam building since independence. And this is likely a conservative figure, the real number probably being 40 or 50 million. Thinking of that army of displaced people, the population of Spain or South Korea, Roy feels “like someone who's just stumbled on a mass grave.”(Power Politics 39).

In fact, Roy asserts the dams will cost more, deliver less, and displace more people than the government claims. In the case of the Sardar Sarovar on the Narmada, the government has maintained it was building the dam to deliver water to thirsty villages, a noble cause. Roy is dubious, noting that the water would have “…to negotiate its way past the ten sugar mills, the golf-courses, the five-star hotels, the water parks,” (Roy Web) the cash crops, and several big cities to get to the thirsty villages. She considers it unlikely the water will ever reach those thirsty villagers. To update Roy’s piece, indeed the thirsty cities have taken their share (and the government of the state of
Gujarat has claimed that as a success as well). The canal delivering water to the parched area of Kutch is sometimes bone dry.

The *Greater Common Good* highlights the plight of those tens of thousands of people, many lower caste and from India’s tribal groups, who will lose the most, because of the Narmada dams. The government is only obligated to provide cash compensation in the event of displacement by an infrastructure project like a dam. But many tribal peoples have no formal title to their lands, thus making collecting compensation nearly impossible. Even where title exists, residents are often inadequately compensated or relocated to hard-scrabble areas; some have died of starvation in their new homes.

Frequently, whole communities are split up and sent to different relocation sites. There is a loss of culture, language, temples, archaeological record, and a once self-sufficient lifestyle. “The great majority is eventually absorbed into slums on the periphery of our great cities, where it coalesces into an immense pool of cheap construction labor (that builds more projects that displace more people).” Roy quotes a resident removed from the dam area: “Why didn’t they just poison us? Then . . . the Government could have survived alone with its precious dam all to itself.” (Paige Johnson Web). The unstoppable state builds its resources while using its powers to prevent opposition to its plans. In the case of the Narmada, Roy details the government’s use of the country’s Official Secrets Act to prevent demonstrators from gathering. Non-violent demonstrators have been beaten and arrested (Roy herself was briefly jailed for her dam activism). Protesters who vowed to remain in villages as the waters behind the dams rose were forcibly removed, to deprive the anti-dam movement of martyrs. In the end, Roy asks the most fundamental question of all: “Who owns this land? Who owns its rivers? Its forests? Its fish?”
Basically, who has the right? (Paige Johnson Web). It is the voice of an eco social activist.

For Arundhati, Narmada Bachao Andolan is not a fight against river or dam it is a fight against the protection of our environment and culture. ‘Whichever the way you looks at it, the Narmada valley Development Project is Big. It will alter the ecology of the entire river basin of one of India’s biggest rivers. For better or for worse, it will affect the lives of twenty-five million people who live in the valley. It will submerge and destroy 4,000 kilometers of natural deciduous forest. (The Algebra of infinite Justice 75-76).

In her political essay Power Politics, Roy compares dams to nuclear bombs "Big Dams are to a nation's 'development' what nuclear bombs are to its military arsenal. They are both weapons of mass destruction, both weapons governments use to control their own people, both twentieth century emblems that mark a point in time when human intelligence has outstripped its own instinct for survival..."(79-80).

A critical analysis of her essay ‘Power Politics one can find an ecosocial activist in Roy, as Roy has been at pains to point out, that “…during the last fifty years, as many as fifty million mostly poor, low-caste Indians have lost their homes and livelihoods as a consequence of big dam projects. The benefits go mostly to the urban rich, while many peasants still have no access to safe drinking water. And even the benefits are often exaggerated. In the case of any one big Indian dam, only five percent of the area that was promised irrigation actually received any water.(81).

The Sardar Sarovar plan to build 3,200 dams on the Narmada River, which runs through three states in western India, is designed to be the biggest dam project of all. Roy says that ‘…it will submerge and destroy 4,000 square kilometers of forestland, and
displace hundreds of thousands of people without adequate plans for relocation or compensation. The other odd aspect of this huge irrigation scheme is that it will benefit only one of the three states, Gujarat, while the sacrifices are all to be born by villagers in the other two, Maharashtra and Madhya Pradesh. Gujarat is naturally all in favor of this, as was the World Bank, at least initially. An enterprise that began as a form of Third World mimicry of Soviet methods now finds its most vociferous defenders among free-marketeers, right-wing Hindu chauvinists in the Indian government, and Western corporations.”(55). One of the most disturbing stories in Power Politics, Roy's essay against the dams, is about the way Enron squeezed billions of dollars out of the state of Maharashtra for a power plant that most local industries cannot even afford to tap.

She is such an activist who does not sit idle after asking questions, she searches for the solutions from the people concerned and also she puts across her demand at every forum, that is the reason we can find her raising the issue of dam and ecological destruction repeatedly in her essays and interviews. In power politics she says, ‘..quite apart from the human cost of big dams, there are the staggering environmental costs. More than five million hectares of submerged forest, ravaged eco-systems, destroyed rivers, defunct, silted up reservoirs endangered wild life, disappearing bio-diversity, and 10 million hectors of agricultural land that now water logged and saline. Today there are more drought-prone and flood prone areas in India than there were in 1947. Not a single river in the plains has potable water. Remember, 200 million Indians have no access to safe drinking water. Planners, when confronted with past mistakes, say sagely,” yes, it is true that mistakes have been made but we are on a learning curve.” The lives and
livelihoods of 56 million people and all this environmental mayhem serves only to extend the majestic arc of their learning curve.’ (37-38).

The writings of Roy strengthened the hands associated with the NBA. Critical studies of big dam building began to appear in India in the 1980s. The Narmada Bachao Andolan (NBA), a movement of protest specifically against the Sardar Sarovar dam, organized demonstrations and strikes through the 1980s and 1990s. Independent reports, commissioned by the Indian government as well as by the World Bank and the World Conservation Union, were highly critical of the dam, for environmental reasons as well as social reasons, and after much pressure from activists the World Bank withdrew its support. Still, the Indian Supreme Court, after being petitioned by the Narmada Bachao Andolan, decided to let the project go ahead anyway. (The Algebra of infinite Justice 97).

Anti-dam activists, including Roy, were smeared in the pro-government press as traitors, and accused of assaulting a group of lawyers at the Supreme Court. There was no evidence for this, but the case went to court, and Roy wrote in her affidavit that this showed "a disquieting inclination on the part of the court to silence criticism and muzzle dissent." As a result, she was charged with contempt of court, spent her night in jail, and paid a fine. Unwise, perhaps; but more people read about the dam problem because of her than would otherwise have been the case. (Roy Web).

When Roy got involved in the anti-dam movement, she was already a famous writer. But it was not her first brush with organized protest. Her mother, Mary Roy, is a well-known promoter of women's rights in India, so Arundhati imbibed dissent with her mother's milk. But she is also rather melodramatic about the public role of the writer. To be a writer, she says, "in a country that gave the world Mahatma Gandhi ... is a ferocious
burden." Quite where Gandhi fits in is unclear. Still, Roy writes about politics not as a famous novelist, but as a citizen, "only a citizen, one of many, asking for a public explanation." She has no "personal or ideological axe to grind." She has no "professional stakes to protect." It is simply "time to snatch our futures back from the 'experts.'"  

There is nothing wrong with this. Experts are fallible. Famous novelists are citizens, too. But there is in fact something professional at stake here. For Roy goes further than saying that a writer should use her fame to promote worthy causes. She believes that what "is happening in the world lies, at the moment, just outside the realm of human understanding." But help is at hand: it is "the writers, the poets, the artists, the singers, the filmmakers who can make the connections, who can find ways of bringing it into the realm of common understanding." (The algebra of infinite justice 24). 

Through the issues of Dam construction and intervention of foreign companies she makes a point very clear that she is not against development but against the reckless abuse of nature to satisfy the greed of few people in the world. In almost every interview and essay she returns to the issue of the Narmada valley development project. This project displaced millions of poor people, ravaged eco-system and biodiversity. The dominant corporation that produces power equipment and other power companies such as Enron want to privatize the natural resource and the infrastructure with the cooperation of Indian political party. Roy says “to snatch these away and sell them as stock to private companies is a barbaric dispossession on a scale that has no parallel in history.” (The algebra of infinite justice 136). On the contrary Indian authorities do not show any sign to protect the environment from being polluted by big factories that affects the livelihood of thousands of poor people who depend on the natural resources for survival. It suggests
that the global companies are running only for their own interest with no consideration for the poor which is unethical business strategy that is why this global companies are out of market now a days. Some studies showed that the contribution of these large dams to Indian food production is less than 10% , (Power politics 34) and ten percent of the total grain produced every year is spoiled or eaten by rats. The cost of electricity is more expensive than the existing power company. The indigenous companies are forced to be out of market that can produce the same product and sell at cheaper price. The strategy followed by Indian government on the construction of big dams to boost its economic growth was carried out without carefully studying the cost benefit analysis, consulting or informing the public about the development projects. It is important to see that with out the participation of the general public any development is not feasible and will make it unsuccessful. Now India is paying out more money in interest than its debt that is used in construction of those dams which in turn affects Indian expected economic growth.

Describing the role of Arundhati Roy as a writer activist in the down fall of U S based Enron Power Project in India, James Hamilton says ‘...it was the biggest piece of inward investment India had ever seen, a $2.9 billion bonanza, but for the Texas-based Enron it was also one of the reasons why the multinational corporation has just become one of the biggest ever corporate losses in the history of capitalism. One of the authors of that collapse is best-selling novelist Arundhati Roy whose Booker Prize winner, The God Of Small Things, catapulted her into international literary stardom. Not that her head has been turned by fame. In her book, the Hollywood agents are in the same league as multinationals such as Enron, which wanted to turn her native India into one big franchise. 'Is globalization about the eradication of world poverty or is it a mutant variety
of colonialism, remote controlled and digitally operated?’ she asked in the wake of Enron's recent fall from financial grace.” (Hamilton James Web).

And in taking on Enron, whose Dabhol Power Corporation produced one of the biggest corruption scandals in Indian history, she showed that she was not afraid of standing up to the might of international big business backed by international power politics. The story of Enron's involvement in India is one of double-dealing, corruption, violence and violation of human rights. It began in 1993 when the company signed a deal to provide much-needed electricity in a state that was desperate for power to fuel its new high-tech industries and to propel the country on its new free-market economy. Even though the World Bank said that the project was too expensive and that other forms of power would be cheaper, Enron bulldozed ahead. There were no competitive tenders, politicians were bought off with bribes estimated to run to $20 million and local police and thugs were hired to terrorize the opposition into silence. By 1997 Enron had been listed by the New York-based Human Rights Watch organization as guilty of being 'complicit in human rights violations' in the state of Maharashtra.

The scandal attracted the attention of Roy, who was already campaigning against the construction of dams on the Narmada river which would have displaced 400,000 people. When Roy agreed to head the protest movements, she was accused of inciting violence and tried at the Supreme Court - an action that she countered by writing her own affidavit and publishing it in a mass-circulation magazine.

Roy went on to write Power Politics, an essay about Enron's involvement in Indian politics. The firm's office was in a gleaming high-tech building in Bombay within reach of some of the city's worst slums, and that seemed to exemplify their attitudes. The
Indians were left with little option but to honor the deal on pain of Enron pulling out and leaving millions of people destitute. For Roy this was the classical locus of globalization 'a process of barbaric dispossession which has few parallels in history'. (16). In June 2002 Dabhol Power Corporation 's plant was closed down, work halted on the second phase of the development and all the employees were sacked.’ This is yet another example where Roy has shown enormous amount of courage to stand up for the voiceless in India.

In an interview to David Barsamian, she speaks about the reason behind this movement ‘So I'm not talking about being anti-development. I'm talking about the politics of development, of how do you break down this completely centralized, undemocratic process of decision-making? How do you make sure that it's decentralized and that people have power over their lives and their natural resources? Today, the Indian government is trying to present privatization as the alternative to the state, to public enterprise. But privatization is only a further evolution of the centralized state, where the state says that they have the right to give the entire power production in Maharashtra to Enron. They don't have the right. The infrastructure of the public sector in India has been built up over the last fifty years with public money. They don't have the right to sell it to Enron. They cannot do that. Three-quarters of our country lives on the edge of the market economy. You can't tell them that only those who can afford water can have it.’ (David web).

Roy’s essays The Greater Common Good and The End of Imagination both express Roy’s deep concern about environmental issues. ‘The Greater Common Good’ projects the environmental damage the construction of Sardar Sarovar dam on Narmada river in India will incur. The environmental damage will in turn dislocate the village
people whose lives are organically tied to the river without adequate compensation and who are in fact likely to end up being tramps. What is worse, the surmise based on Roy’s data shows that the water supply secured at such a great cost will not make significant contribution to the enhancement of the lives of the city people the project is supposed to benefit. That the lives of the poor villagers should be sacrificed for the benefit of the city people is a problem in itself, but when the sacrifice does not even serve its purpose it is a total waste. Roy traces the rationale for the construction plan all the way back to the need of the world capital to make investments that guarantee steady returns. Roy’s eloquent presentation of the case is certainly very moving and persuasive. The hierarchy of exploitation that begins with nature at the bottom extends to the sacrifice of country interest to city interest and national economic interest to the interest of the world capital.

*The End of Imagination* protests against the series of nuclear missile experiments executed by the Indian government in 1998 and those subsequently undertaken by the Pakistani government in a competitive spirit. Roy points out that while both nations profess nationalist ideology by burning imported goods and pouring coca cola into the sewer, they decided to aim the ultimate expression of the Westerners’ destructiveness and the desire for domination against the maternal body of their own nations. After the Pakistani experiment, the Indians showed the pride at their own superiority in the language of masculine bravado. ‘We have proved that we are not eunuchs any more’ and ‘We have superior strength and potency’ (106). It is apparent that misguided male aggressiveness and the male pride at potency are involved in this aggression against nature. This is the eco-feminist moment for Roy, but her more characteristic insight points to the contradiction between the nationalist resistance against the Western
domination and the uncritical adoption of the Western values and means of domination by the same people. Roy is especially sensitive to the blindness of the oppressed group to their own potentiality for turning into oppressors.

Considering her approach towards environment, ecology and present political scenario, Asha Mirza writes ‘Arundhati Roy, a rebel writer and a reckless passionate of our time, walked along with her people for long, against the state, and fought adamantly to save the mountains and the rivers of Orissa and Chhattisgarh, and the valleys and the farm lands of Narmada. In her words, “…if the flat-topped hills are destroyed (for bauxite); the forests that clothe them will be destroyed too. So will the rivers and streams that flow out of them and irrigate the plains below. So will the hundreds of thousands of tribal people who live in the forested land of India.” (Asha Mirza Web).

On speaking about Roy’s guts to stand up and speak for the voiceless Mirza adds that ‘…in the each passionate piece of her she reminded us about the destruction of titanic dams and dangerous mines, and about the endless hunger of giant companies and their ‘poor-smashing’ special economic zones and over the world wide deception of electoral democracy and the persistent lies of ‘free-media.’ Who else in our time had the impossible guts to challenge the supremacy of the state and its Supreme Court and had stood by the Maoists, with dignity. Who else but Ms Roy would say it so beautifully, that ‘there’s really no much thing as the voiceless. There are only the deliberately silenced, or the preferably unheard.” (Asha Mirza Web).

Speaking about the impact of her writings and how they have empowered the people to fight against the destructive forces of ecology and environment she says “It is a wonderful feeling when I go to the Narmada Valley, I see my essay being read in Hindi,
in Gujarati, in Marathi – Even translated orally into Bhilai. I see parts of it being performed as play. What more could a writer Ask for?” (Roy, The shape of the Beast 25). By taking a leading role in the Narmada Bacho Andolan, she was able to motivate all the stake holders of the movement by her writings. She succeeded in bringing all sections of the people together into one platform. Roy said “The point is that the NBA is a fantastic example of people linking hands across caste and class. It is the biggest, finest, most magnificent resistance movement since independence struggle.” (David Web).
The word, Seed and Tree

The Ecosocial activism of Arundhati Roy, Vandana Shiva and Wangari Maathai revolves around three themes, namely ‘Word’, ‘Seed’ and ‘Tree’. The Writer activist Roy uses ‘Word’ as a weapon to trigger her environmental activism while Shiva, the seed lady uses ‘Seed’ to spark off her ecosocial activism to empower the seed keepers: women and farmers and Maathai uses ‘Tree’ as tool to push forth her social activism by empowering the rural women in Kenya.

Roy uses the words as a weapon 18 to awake the consciousness of the Society against the dubious designs of the neo-imperialist forces. It does not bother her whether it is the American power giant Enron which was notorious for its doubling-dealing, corruption, violence and violation of human rights 19 or the world’s largest democratic government which had decided to construct Big, big dams 20 across the River Narmada displacing millions of people and animals and plants, destroying the ecology, or the Supreme Court of India 21 gives its verdict against the ‘Voiceless’ 22 or Against the USA’s foreign policy- the War in Afghanistan, or India and Pakistan for their Nuclear Weapon Tests. She does not spare either U S President George W. Bush or the British P M Tony Blair. Roy responded to the U S Military invasion in Afghanistan, ‘finding fault with the argument that this war would be a retaliation for the September 11 attacks: “the bombing

Afonin is not a revenge for New York and Washington. It is yet another act of Terror against the people of the world.” According to her, U.S. President George W. Bush and British Prime Minister Tony Blair were guilty of a big brother-kind of double think: ‘when he announced the air strikes, George Bush said: ‘we are a peaceful nation.’ America’s favourite ambassador, Tony Blair, (Who also holds the portfolio of Prime Minister of U.K) echoed him: ‘We’re a peaceful people. ‘So now we know. Pigs are horses. Girls are boys. War is peace.” (Algebra of Infinite Justice 242-243).

In an interview, in answer to the question "How do two kinds of writing - fiction and non-fiction - challenge you, as a writer, in different ways?" Roy said, "The nonfiction is wrenched out of me - it is a more immediate and more direct response to what’s going on around us… It’s about using language as a weapon. In fiction, language is, or should be, a wand. Fiction is more subversive" (Debarati 27).

The seeds of Roy’s ecosocial activism which had to germinate later into ecosocial activism can be found in the form of mild words - a wand, in her first novel The novel The God of Small Things which reaches out to the most oppressed of all human beings and examines the world and ecology from their end. Instead of adopting a bird’s eye view of the world she adopts a worm’s eye view. She used mild and polite ‘words’ to convey the impact of industrialisation and the human interventions on the ecology. This work was her response to environmental crisis. The degradation of environment and fall of few characters reflects the ways of relating the state of environment and ecology or nature with that of culture. (Environment and Literary Activism 27). But the world did not listen to what she wanted to say about the ecological degradation, though it was a mild warning. Instead, the books was criticized especially
for its unrestrained description of sexuality where she had to answer charges of obscenity. (Bumiller Elizabeth Web). But, as Jones points out, for Roy, "...the real fight had only begun. To have her novel associated with obscenity took attention away from the issues she was hoping to bring to light and, consequently, incited Roy to deeper, more meaningful activism..." (Madhavan Kutty Web).

'The environmental degradation of Ayemenem in 1991 is a direct result of the process of global capitalism and this is proved by various situations of foreign economic and cultural domination that are projected prominently in The God of Small things. For instance, in 1991, when the silent Estha goes on long walks along the local Meenachal river (reminding us of the meaning of 'meen' as fish in Indian culture and in this sense, signifying that the river is the natural habitat of fish), this is what greets his senses: "Some days he walked along the banks of the river that smelled of... pesticides bought with World Bank loans. Most of the fish had died. The ones that survived suffered from fin-rot and had broken out in boils." (13).

In the highly sarcastic naming of a chapter as 'God's Own Country', Roy gives us another view of Ayemenem in 1991, this time seen through Rahel's eyes: "Years later, when Rahel returned to the river, it greeted her with a ghostly skull's smile.... Downriver, a saltwater barrage had been built, in exchange for votes from the influential paddy-farmer lobby.... More rice, for the price of a river" (124). As a result, the river had turned into "a swollen drain" (124). The poor and dispossessed had made a slum by its side, adding to the pollution. While upstream, "clean mothers washed clothes and pots in unadulterated factory effluents" and "people bathed", downstream at Ayemenem, slum-"children hung their bottoms over the edge and defecated directly onto the squelchy,
sucking mud of the exposed river bed" and the net result would be that " on warm days the smell of shit lifted off the air and hovered over Ayemenem like a hat" and naturally, even the History House transformed into a luxury hotel was not exempt from either the stench or the "thick and toxic" water. (125).

In a really concise manner, Roy points out how both farming and factories pollute nature and also hinted at the unholy nexus between the globalization, greed and lack of far-sight in post-colonial India. And added to this was pollution of the cultural environment: the hotel, called 'Heritage', "had bought" "smaller, older, wooden houses - ancestral homes… from old families and transplanted" them "around the History House in attitudes of deference." (126).

Mukherjee in Postcolonial Environments blames the process of globalization firmly for this state of both environmental and cultural degradation by pointing out that: “Roy's novel punctures this myth by showing it to be a continuation of the despoliation and degradation of the Indian environment and peoples that had accelerated under colonialism and has now taken on an unprecedented velocity.” (98-99).

When all kinds of appeal or warning, concerning the imminent ecological disaster, fell upon the deaf ears she started to 'scream from the roof bloody tops' using powerful words compelling the world to listen. In her Interview to N. Ram, the Editor of Frontline in 2001 she speaks about her role as a writer “I'm screaming from the bloody rooftops. And he and his smug little club are going Shhhh... you'll wake the neighbours! But I want to wake the neighbours, that's my whole point. I want everybody to open their eyes” (The Shape of the Beast 13 ).
She started to scream using the power words like *The End of Imagination The Greater Common Good, The Algebra of Infinite Justice, Power Politics etc.*, to describe the unwarranted nuclear weapon test, the construction of Dams across river Narmada, American Military Policy on Afghanistan and Neo-imperialism by the multinational corporations.

She had criticized both global and national political and economic policies and the mode of implementation of government decisions in terms of, again, both short-term and long-term impact on the population and the environment. A close reading of her works would prove that her politics has always been on behalf of the poor, mostly illiterate victims of environmental disasters created by gigantic financial institutions and State policies. She wrote about the impact of the Sardar Sarovar Dam on the lives of the villagers facing eviction from the valley in these terms in the ironically-titled essay, *The Greater Common Good.* (The Algebra of Infinite Justice (47 -141). ‘But the opponents say that this hydro project will devastate human lives and bio diversity by destroying thousand of acres of forests and agricultural land. On the other hand it will overall deprive thousands of people of their livelihood. They believe that the water and energy could be provided to the people through alternative technological means, that would be ecologically beneficial’. (60).

Opposing the construction of the dam she says that there are many issues concerned with the Dam. ‘First of all, you have to understand that the myth of big dams is something that's sold to us from the time we're three years old in every school textbook. Nehru said, "Dams are the temples of modern India." (Sharma, 40-49) .So they're like some kind of huge, wet national flags. Before the Narmad Bachao Andolan, it
was like, the dam will serve you breakfast in bed, it will get your daughter married and cure your jaundice. People have to understand that they're just monuments to political corruption, and they derive from very undemocratic political institutions. You just centralize natural resources, snatch them away from people, and then you decide who you're going to give them to.’ (Shape of the Beast. 44).

Analysing follies of the Big dams she says in The Greater Common Good ‘The first dam that was built in the Narmada was the Bargi, completed in 1990. They said it would displace 70,000 people and submerge 101 villages. One day, without warning, the government filled the reservoir, and 114,000 people were displaced and 162 villages were submerged. (Mccully 87). People were driven from their homes when the waters rose. All the affected people could do was run up the hill with their cattle and children. Ten years later, that dam irrigates 5 percent of the land that they said it would. It irrigates less land than it submerged. They haven't built canals. Because for contractors and politicians, just building the dam in itself is a lot of money.’ (The Algebra of Infinite Justice 84).

In her essay The End of Imagination which was written immediately after the Pokhran Nuclear test she cautions the government and the people of the terrible consequences of a nuclear war and its effect on the ecology: ‘If there is a nuclear war, our foes will not be China or America or even each other. Our foe will be the earth herself. Our cities and forests, our fields and villages will burn for days. Rivers will turn to poison. The air will become fire. The wind will spread the flames. When everything there is to burn has burned and the fires die, smoke will rise and shut out the sun. The earth will be enveloped in darkness. There will be no day - only interminable night. What shall we do then, those of us who are still alive? Burned and blind and bald and ill,
carrying the cancerous carcasses of our children in our arms, where shall we go? What shall we eat? What shall we drink? What shall we breathe? The Head of the Health, Environment and Safety Group of the Bhabha Atomic Research Centre in Bombay has a plan. He declared that India could survive nuclear war. His advice is that in the event of nuclear war we take the same safety measures as the ones that scientists have recommended in the event of accidents at nuclear plants’ (The Algebra of Infinite Justice, 5-6).

Her criticism against industrialization and globalisation is very much visible in her fiction and non-fiction works, making her essentially an ecosocial activist. In her Essay Power Politics “…she personifies the forces behind corporate globalization and makes us believe that they are new kind of kings: powerful, pitiless and armed to the teeth. He’s a kind of king the world has never known before. His realm is raw capital, his conquests emerging markets, his prayers profits, his borders limitless, his weapons nuclear..” (The Algebra of infinite Justice, forward xi).

In her political essay Power Politics, Roy compares dams to nuclear bombs "Big Dams are to a nation's 'development' what nuclear bombs are to its military arsenal. They are both weapons of mass destruction, both weapons governments use to control their own people, both twentieth century emblems that mark a point in time when human intelligence has outstripped its own instinct for survival..."(79-80).

By making a scathing attack on the control of the Multi national Corporations (MNCs) on the poor Countries, in the name of Foreign Direct Investment, she asked in the wake of Enron's recent fall from financial grace. 'Is globalization about the
eradication of world poverty or is it a mutant variety of colonialism, remote controlled and digitally operated?" (Hamilton Web).

*The End of Imagination* protests against the series of nuclear missile experiments executed by the Indian government in 1998 and those subsequently undertaken by the Pakistani government in a competitive spirit. Roy points out that while both nations profess nationalist ideology by burning imported goods and pouring coca cola into the sewer, they decided to aim the ultimate expression of the Westerners’ destructiveness and the desire for domination against the maternal body of their own nations. After the Pakistanee experiment, the Indians showed the pride at their own superiority in the language of masculine bravado. ‘We have proved that we are not eunuchs any more’ and ‘We have superior strength and potency’ (The Algebra of infinite Justice 106). It is apparent that misguided male aggressiveness and the male pride and potency are involved in this aggression against nature, her characteristic insight points to the contradiction between the nationalist resistance against the Western domination and the uncritical adoption of the Western values and means of domination by the same people. Roy is especially sensitive to the blindness of the oppressed group to their own potentiality for turning into oppressors.

When Roy writes that an author is accountable for every act related to her decision to write about a particular situation in a particular way, she is telling us that a writer, according to her, has a significant role to play in a given society, economy, political state and culture. In this capacity, Roy writes to instill knowledge and fear in her audience; she tries to warn so that it creates a possibility of collective awareness and action which might yet help in survival and sustenance of life, both at the global and local
level. In other words, she is an activist writing for a positive change in the state of affairs that can effect an improvement in our environment, physical as well as human societal. Arundhati Roy is unabashedly political in her writings for the sustenance of the environment. (Debarati, 4-5).

On speaking about Roy’s guts to stand up and speak for the voiceless, Mirza adds that ‘in the each passionate piece of her she reminded us about the destruction of titanic dams and dangerous mines, and about the endless hunger of giant companies and their ‘poor-smashing’ special economic zones and over the world wide deception of electoral democracy and the persistent lies of ‘free-media.’ Who else in our time had the impossible guts to challenge the supremacy of the state and its Supreme Court and had stood by the Maoists, with dignity. Who else but Ms Roy would say it so beautifully, “… there’s really not much thing as the voiceless. There are only the deliberately silenced, or the ‘preferably unheard.” (Asha Mirza Web).

Speaking about the impact of her writings and how they have empowered the people to fight against the destructive forces of ecology and environment she says “It is a wonderful feeling when I go to the Narmada Valley, I see my essay being read in Hindi, in Gujarati, in Marathi – Even translated orally into Bhilai. I see parts of it being performed as play. What more could a writer ask for?” (The shape of the Beast 25).

By taking a leading role in the Narmada Bacho Andolan, and by her physical presence and moral support, she was able to motivate all the stake holders of the movement by her writings. She succeeded in bringing all sections of the people together into one platform to strengthen the NBA movement. Roy said ‘The point is that the NBA is a fantastic example of people linking hands across caste and class. It is the
biggest, finest, most magnificent resistance movement since independence struggle.’ (David Barsamian Web) She ironically describes her complicated professional identity: ‘I am, apparently, what is known in twenty-first-century vernacular as a ‘writer-activist.’ (Power Politics 201).

Roy uses her words skillfully to ignite fire in the minds of the oppressed, compelling them to stand up against the injustice. Thus Roy uses ‘The words’ as weapon to trigger her ecosocial activism.

**Vandana Shiva and the ‘Seed’**

The Ecosocial activism of Vandana Shiva revolves around the theme ‘Seed’. She finds in seed a powerful tool which can feed people, regulate climate change, stop farmers’ deaths, empower women and farmers and stop wars. She says: “Control over seed is the first link in the food chain because seed is the source of life. When corporation controls seed, it controls life, especially the life of farmers.”

While speaking on the realities associated with Green Revolution and events that made her to take up seed as a tool in pushing forth her activism, she says ‘The great drought in Karnataka (Indian state) in 1984 made me realize that the very way we do agriculture is flawed. That year also saw the rise of militancy in Punjab, ‘I wrote The

---

26 Vandana Shiva, Organic Movement: From the suicide economies to the living economies. 2 October 2010.Web. 23 May 1013<http://www.navadanya.org/organicmovement>
Violence of the Green Revolution for the UN, linking the violence in Punjab with the Green Revolution that had given rise to a non-sustainable form of agriculture that pretends to give us more food but is actually destroying nature, our sense of self, and is creating war within society. In the same interview she says what made her to choose Seed as a tool to fight against modern imperialism. “In 1987, during a meeting at the UN, I began thinking that Mahatma Gandhi used a *charkha* (spinning wheel) to spearhead his *satyagraha* (Gandhian movement). I came up with the seed as an equivalent of the *charkha* for our modern *satyagraha* against Multi National Companies' appropriation of agriculture. Navdanya was born in that moment of awareness, although it did not become a full-fledged institution until 1991” (Bill Moyers Web).

A strong critic of Green Revolution and G M seeds, Shiva launched Navdanya, meaning “Nine Seeds,” or “New Gift” in Hindi. The project, part of RFSTE, strove to combat the growing tendency toward monoculture promoted by large corporations. Navdanya formed over 65 seed banks in India and attempted to educate farmers on the benefits of conserving their unique strains of seed crops. Shiva argued that, particularly in a time of climate change, the homogenization of crop production was dangerous. Unlike native seed strains, developed over long periods of time and therefore adapted to the conditions of a given area, the seed strains promoted by large corporations required the application of large amounts of fertilizer and pesticides.

Navdanya’s started by Vandana Shiva, conducted research on the hazards of chemical farming, the costs of industrial agriculture and the risks of genetic engineering, has proved that contrary to the dominant assumptions; ecological agriculture is highly productive and is the only lasting solution to hunger and poverty and able to feed people.
For Shiva, organic agriculture is not just a source of safer, healthier, tastier food. It is an answer to rural poverty. Organic agriculture is not just a method of farming. It is saving the Earth and farmers' lives. (Shiva Web).

In an interview given to Jon Letman for Truthout Shiva said that “…only native seeds can adapt to climate change not the GM seeds as claimed by them GMOs are part of the package of industrial agriculture that is chemically intensive, loaded with toxins, loaded with pesticides. Now if you do an analysis of fossil fuel use, whether it is fossil fuel use for the making of chemical fertilizer or the fossil fuel used in transporting and then shipping these toxic GM seeds thousands of miles away, we are talking about 40 percent of all greenhouse gas emissions coming from an industrial model of farming. In our work we have seen two things. One, the more biodiverse any system is, the more it can survive a drought, a flood, unseasonal rain, cyclones – so diversity is a cushion in times of climate change. But not just any old diversity, native diversity even more. Why does native diversity exist where it is? Because over millions of years it had the capacity to adapt. It had the capacity to change with change. I have watched farms using green revolution methods fail 100 percent with one drought. I have watched after the tsunami and the cyclones and the salt water came, only local species that were salt tolerant were able to bounce back. So, native species are vital for climate adaptation, a connection that still needs to be made in a serious way.” (Shiva Web).

She believes that only seeds can stop farmers’ death. Chemical agriculture and Genetic engineering are threatening public health and leading to nutrition decline. Costs of production, which includes hybrid and genetically engineered seeds, chemicals and irrigation etc., are increasing with every season pushing farmers into the debt trap and
also to suicides. Thousands of farmers have given their life in India in last two decades because of the debt. As an insurance against such vulnerability Shiva’s Navdanya has pioneered the conservation of biodiversity in India and built a movement for the protection of small farmers through promotion of ecological farming and fair trade to ensure the healthy, diverse and safe food. (Shiva Web).

The seed has the power to stop wars. In the interview given to Jon Letman for Truthout she recollects what happened in Syria “There is actually a huge economy in selling arms and dividing people, and it needs people fighting each other. I remember Syria before the way it’s gone. There was a year of drought, and I’m just saying if those farmers had been given the kind of seeds that could survive the drought, they’d have been doing farming. They were displaced; they were angry; they were protesting. Before you knew it, they became sectarian protests; before you knew it, different sides started to arm, and American arms are everywhere. So I think it’s all of these convergences that are brutalizing, particularly the men, who are now just finding one place to find an identity: how to be the more vicious killer’. (Shiva Web).

Shiva disputes the notion that patenting genes and controlling the world’s seeds, and thus much of its food supply, will better serve humanity. Biotech companies claim their genetically engineered (GE) crops are able to withstand threats from insects, disease, and man-made pesticides and herbicides while making a serious contribution to feeding an increasingly hungry world. Such claims are straight-up fabrications – lies – according to Shiva. GMOs, she says, destroy the natural web of life, threaten biodiversity and the environment, and are a scourge for human health and society.
GM crops and their associated herbicides can harm birds, insects, amphibians, marine ecosystems, and soil organisms. They reduce bio-diversity, pollute water resources, and are unsustainable. For example, GM crops are eliminating habitat for monarch butterflies, whose populations are down 50% in the US. Roundup herbicide has been shown to cause birth defects in amphibians, embryonic deaths and endocrine disruptions, and organ damage in animals even at very low doses. GM canola has been found growing wild in North Dakota and California, threatening to pass on its herbicide tolerant genes on to weeds.\textsuperscript{29} By mixing genes from totally unrelated species, genetic engineering unleashes a host of unpredictable side effects. Moreover, irrespective of the type of genes that are inserted, the very process of creating a GM plant can result in massive collateral damage that produces new toxins, allergens, carcinogens, and nutritional deficiencies.

Speaking on the environmental damage done by the GM seeds, Shiva tells that ‘we were repeatedly told diversity is a luxury – industrial monoculture, chemically fed and now genetically modified – is the way we get our food. Nothing could be a bigger lie. When food becomes a commodity, it goes where profits can be made, and if there are more profits in biofuel, that’s where it will go. If there are more profits in animal feed, that’s where it will go. So we have to reclaim our sources of food and our sources of food are biodiversity. The work I’ve done over the last 25 years with protecting biodiversity shows that the more intensive the biodiversity, the more food you’ll have and the less you have to hurt the earth. There are no wars between the domesticated biodiversity and a

\textsuperscript{29}Ten reasons to avoid GMOS. 23 May 2013. web 12 June 2013. <http://www.responsibletechnology.org/10-Reasons-to-Avoid-GMOs>
wild biodiversity. If I grow a native plant as my food, I am encouraging native species to weave the web of life. There are that many butterflies; there are that many bees. There is that much more pollen available. And we’ve done studies that show that native rice support so many more species than the chemically-fed rice, where all soil organisms, all pollinators, all beneficial insects are killed.” (Shiva Web). The GM seeds stuffed with fertilizers, pesticides and chemicals contaminates, soil, water natural organisms causing irreparable damage to the environment. Studies\textsuperscript{30} have shown that pesticide-producing crops contaminate nearby streams, possibly affecting aquatic life. The bt toxin produced by these GM crops are far stronger than any found in nature, and are produced throughout the plant. They may harm beneficial insects. And, it has been found that previously insignificant insects which are not targeted by the GM varieties develop into pests. Then pesticide spraying resumes, on top of the potential build-up of the extra strong bt toxin in the soil. This has occurred in China, India as well as in the US.

She says further that “…those chemicals that was designed to kill human beings and are designed to kill certain pests end up killing beneficial insects, destroying the web of pest-predator balances which then creates more insect pest attacks. You spray more; you get emergence of resistance, and you are on a chemical treadmill. The harm of pesticides doesn’t stay on farms alone. The highest ocean pollution is coming from fertilizer runoff creating dead zones. All of those pesticides being sprayed on the seed

\textsuperscript{30} Ten reasons to avoid GMOS.23 May 2013.web 12 June 2013<http://www.responsibletechnology.org/10-Reasons-to-Avoid-GMOs>
farms of Monsanto and Syngenta and BASF are running down and killing the fish life because nature is integrated at every level – plant, insect, soils, marine.”

When Vandana Shiva started the Biodiversity Conservation Farm in the outskirts of Dehra Dun, her initial idea was two fold. On the one hand, she wanted to prevent the disappearance of seed diversity in India caused by the Green Revolution and the farmers’ obsession and monomania with high-yielding seed varieties (HYV), thereby forgetting and forsaking their ancestral legacy of agro-biodiversity. On the other hand, her ambition was to demonstrate to Indian agriculturists’ tangible proof of the superiority of organic and bio-diverse agriculture compared to chemical farming, in terms of yielding, preservation of the soil quality and underground water purity along with the nutritional value of food. Hence, the Seed Bank was the first building constructed on the farm. (Earth Democracy 69).

In addition, many such seed strains were genetically engineered and patented, preventing farmers from saving seeds from their harvests to plant the following season and instead forcing them to purchase new seed each year. Shiva’s idea was that a decentralized approach to agriculture, based upon a diverse array of locally adapted seeds, would be more likely to weather the vagaries of a changing climate than a system relying on only a few varieties. She anticipated the danger of the World Trade Organization’s (WTO) Trade-Related Intellectual Property Rights (TRIPS) Agreement, which allowed for the patenting of life forms and would therefore make it possible for corporations to essentially require farmers to continue to purchase their seeds after local

---

31 Ten reasons to avoid GMOS. 23 May 2013.web 12 June 2013<http://www.responsibletechnology.org/10-Reasons-to-Avoid-GMOs>
varieties had been eliminated. She spoke out against the agreement at the 1999 WTO protests in Seattle. Shiva had launched Diverse Women for Diversity, an international version of Navdanya, the previous year. In 2001 she opened Bija Vidyapeeth, a school and organic farm offering month-long courses in sustainable living and agriculture, near Dehra Dun.

Navdanya Movement was her answer to the hazardous industrial agriculture and a means to provide healthy food to feed the growing population. Seed was her tool for empowering the farmers especially the women. Navdanya is actively involved in the rejuvenation of indigenous knowledge and culture. It has created awareness on the hazards of genetic engineering, defended people's knowledge from biopiracy and food rights in the face of globalisation and climate change. Navdanya started as a programme of the Research Foundation for science, Technology and Ecology (RFSTE), a participatory research initiative to provide direction and support to environmental activism. ‘Navdanya’ means nine crops that represent India's collective source of food security. The main aim of the Navdanya biodiversity conservation programme is to support local farmers, rescue and conserve crops and plants that are being pushed to extinction and make them available through direct marketing.

32 This Navayanda-sponsored program was founded by Dr. Shiva, Dr. Jean Grossholtz and Ms. Beth Burrows of the United States and Dr. Christine von Weizsacker of Germany to give women at the local and grassroots level a voice at the global level in support of biodiversity and food and water security. It is known nationally as The National Alliance of Women’s Food Rights (the “Alliance”) and locally as Women’s Food Sovereignty (Mahila Anna Swaraj). The Women’s Charter on Food Rights, issued by The National Alliance, presents the Alliance’s position on globalization, genetic engineering, food distribution and food prices in a strongly-worded, 14-point demand for protection of women’s and children’s food rights.

Since its creation, Navdanya’s mission has been “To protect nature and people’s rights to knowledge, biodiversity, water and food.” Therefore, its main objective is “to promote peace and harmony, justice and sustainability.” Quoting its charismatic leader, Vandana Shiva: “We strive to achieve these goals through the conservation, renewal and rejuvenation of the gifts of biodiversity we have received from nature and our ancestors, and to defend these gifts as commons. The setting up of community seed banks is central to our mission of regenerating nature’s and people’s wealth. Keeping seeds, biodiversity and traditional knowledge in people’s hands to generate livelihoods and provide basic needs is our core program for removal of poverty.” 34

The main aim of the Navdanya biodiversity conservation programme is to support local farmers, rescue and conserve crops and plants that are being pushed to extinction and make them available through direct marketing. Navdanya is actively involved in the rejuvenation of indigenous knowledge and culture. It has created awareness on the hazards of genetic engineering, defended people's knowledge from biopiracy and food rights in the face of globalisation. It has its own seed bank and organic farm spread over an area of 20 acres in Uttrakhand, north India. Navdanya has so far successfully conserved more than 5000 crop varieties including 3000 of rice, 95 of wheat, 150 of kidney beans (rajma), 15 of millets and and several varieties of pulses, vegetable, medicinal plants etc.

Shiva relates environmental movements with social justice movements, in her interview with Scott London she says ‘ For me, ecological sustainability and social justice are very closely linked, because my view of ecology comes from the margins of

Indian Society, from the agricultural producers who make up 70 percent of India-people who are dependent on natural resources, on biodiversity, on the land, the forests, the water. Nature is their means of production. So, for them ecological destruction is a form of injustice. When the forest is destroyed, when the river is dammed, when the biodiversity is stolen, when fields are waterlogged or turned to saline because of economic activities, it is a question of survival for these people. So our environmental movements are justice movements.’ (Scott Web).

Vandana Shiva successfully uses the ‘Seed’ as a tool to promote her ecosocial activism.

**Wangari Maathai and ‘Tree’**

The pivotal focus of Wangari Maathi’s ecosocial activism is ‘Tree.’ For her the ‘Tree’ become a symbol of much bigger campaign to protect resources, to respect human rights, empowerment of women, enhance the dignity of the African women, community mobalisationoin and to promote social and economic justice. Maathai's message was simple: one person, one tree, (The Green Belt Movement 25) and she worked tirelessly to build a sustainable relationship between human beings and the land. To her the tree was the practical solution to the complex causes of poverty and environmental degradation in rural communities. It also became an emblem of her struggle for peace, democracy and civil liberties, which threw her into direct confrontation with the regime of the Kenyan president Daniel Arap Moi. Wangari Maathai's Green Belt Movement is led by rural Kenyan women which began with planting a few tree seedlings grew to forever reshape the political landscape of Kenya and the world. Maathai trained

---

thousands of women on everything from water conservation to civic leadership, and to date, they've planted 40 million trees in a country devastated by deforestation. Along the way, they also helped overthrow a dictatorship.36

When she founded The Green belt movement in 1997, her goal was simple, to empower the women, to help to improve the lives of rural women (and men) by improving the environment on which they depend for water, food, fuel and medicine by planting trees. Maathai observes: ‘Women, too, have become empowered in a number of ways. It has become more evident to them that, though deprived in some aspects they have the potential to make a difference in their communities. This has given them a great deal of confidence with which many continues to discover and develop their talents. Some have initiated group projects while others have become independent leaders and decision-makers capable of addressing various community related issues without as much assistance from GBM offices as they previously required. (69). While listing out the empowerment of women she adds that ‘this way women’s groups gained financially. All community members who planted trees benefited from an increased wood fuel supply and enriched soil (through agro- forestry), and from the sale of timber. Even those in the community who did not plant trees still gained from the improved environment and scenic beauty. (37).

For Maathai ‘planting trees is the planting of ideas. By starting with a simple step of digging a hole and planting a tree, we plant hope for our selves and for the future

generations. Maathai, as an ecosocial activist tried to solve all social, economic, political and feminist problems through the Green Belt Movement’s tree planting. The Green Belt Movement is a grassroots non-governmental organization (NGO) based in Kenya that focuses on environmental conservation, community development and capacity building mainly through a nationwide grassroots tree planting campaign as its core activity. The Green Belt Movement was conceived and nurtured in the National Council of Women in Kenya (NCWK) in 1977. The formation was in response to needs identified by Kenyan rural women such as lack of firewood, clean drinking water, balanced diets, shelter and income. (22).

The Green Belt Movement’s goal is to establish public green belts and fuel wood plots by local people, especially women in the spirit of self-reliance and empowerment as well as to combat soil erosion. The movement over a period of nearly thirty years has mobilized poor women to plant an estimated thirty million trees. (Nombuso Web). ‘Tree planting’ therefore, has served to provide fuel, food, shelter, building materials, fencing material and income to support their children's education through the sale of timber, firewood and fodder. The tree planting activity also creates employment and improves soils and watersheds. (The Green Belt Movement 67).

Furthermore, the Green Belt Movement has used tree planting as an entry point to community development. Whilst tree planting has always been the central activity, the Green Belt Movement programmes have expanded to include civic education, advocacy, food security, green belt eco-safaris, and ‘women for change’. In the area of civic education, the Green Belt Movement has established a pilot civic education and advocacy

project to raise public awareness on the need to protect the environment and be active participants in the political process by voting. The Green Belt Movement Learning Centre in Nairobi offers seminars on good governance, advocacy, culture, environment and environmental justice. (Nombuso Web).

The programme also aims to facilitate the establishment of income generating activities such as tree planting, bee keeping and food processing to engender economic empowerment. Tree planting has also been useful in providing a platform for women in leadership. According to Maathai, ‘…through their involvement in the Green Belt Movement, women gain some degree of power over their lives, especially their social and economic position and relevance in the family.’ (The Green Belt Movement 37).

Maathai, with a small group of women, set about planting trees on the land around schools, churches and their homes. Her idea was initially to provide a simple, cheap method of breaking the chain of poverty and environmental degradation, each exacerbated by the other. "It wasn't something I had given much thought to," she later said. "But it turned out to be a wonderful idea because it is easy, it is do-able, and you could go and tell ordinary women with no education: 'OK, this is the tree. We're going to observe the tree until it produces seeds. When they're ready, we'll harvest them. We'll germinate them. We'll nurture them. We'll plant them in our gardens. If they are fruit trees, within five years we will have fruits. If they're for fodder, our animals will have fodder.' In 1977 she founded the Green Belt Movement with the aim of encouraging people, especially women, to plant trees and protect green spaces and forests for their communities. The number of planting groups were soon numbered in their thousands. There is a change taking place. We can hardly keep up with the requests for help. The
The tree is just a symbol for what happens to the environment. The act of planting one is a symbol of revitalising the community. Tree planting is only the entry point into the wider debate about the environment. (2-3).

The Green Belt Movement, through tree planting as an African ecosocial Movement demonstrated peoples' capacity to play leading roles in communal, regional and national development. Maathai and the Green Belt Movement however have been at the forefront in resisting western imperialism by advocating for indigenous Kenyan systems, which lead to the protection of indigenous local biodiversity and sustainability. For instance, the Green Belt Movement is involved in educating farmers on sustainable farming methods such as organic farming to maintain soil fertility instead of using chemical fertilizers, which inhibit the regenerative capacity of the soil. 'Empowerment of her country men was the underlying principle of ecosocial Movement of Maathai, the Green Belt Movement.'

The green belt Movement that Maathai conceived was not limited solely to tree planting. The programme worked in concert with the national Council of women of Kenya to provide such services to Kenyan women and villages including family planning, nutrition using traditional foods, and leadership skills to improve the status of women. The Movement had resulted in planting 30 Million trees, had spread to 30 African Countries as well as US and had provided income for Eighty Thousand people.38

Speaking on the empowerment of women Maathai said ‘Twenty years down the road, the women have gained many skills and techniques that they continue to share among themselves. They become self reliant in tree planting and the foresters are now the

first to acknowledge and applaud their accomplishments. Many women had indeed become ‘foresters without diplomas.’ (Unbowed 28).

Through the Green belt Movement, she was not only planting trees, the project became a means of allowing women to work to support themselves and their families. It was a practical response which benefited both rural women and environment. As she mentioned in an interview; ‘much more important than the trees themselves is the mobilization of rural populations in large numbers – populations that we normally think are helpless, are dependent, are not able to do things for themselves. They organized themselves and started to address the issues in their own communities to improve their quality of life. At its peak, we have had over 6000 groups of women and men planting trees. In the process they educate themselves and address governmental issues, eventually we became a pro democracy movement’ (Jennet Web).

Through its advocacy programmes, the Green Belt Movement has initiated advocacy activities since the late 1980s directed towards preventing forest destruction, ending poor governance and ending human rights atrocities such as tribal clashes and corruption. In 1997, the Green Belt Movement established a Pan-African Green network to share the Green Belt Movement approach through two-week training workshops. The overall goal of the programme was to share the approach while raising awareness on the importance of conserving local biodiversity.

‘Women for change’, the newest Green Belt Movement programme, Commissioned in early 2003, the programme aims to assist, especially young girls and women, to confront the challenges of growing up, such as to make complex decisions about their sexual and reproductive health, and to gain knowledge and skills to protect
themselves against HIV and AIDS. The programme also aims to facilitate the establishment of income generating activities such as tree planting, bee keeping and food processing to engender economic empowerment. Tree planting has also been useful in providing a platform for women in leadership. (The Green Belt Movement 69).

Through the Green Belt Movement, she used the tree as a symbol of peace and conflict resolution during the ethnic conflicts to reconcile disputing communities. Maathai claims that mismanagement of the environment due to undemocratic practices leads to conflict over scarce resources and the abuse of human rights. In Maathai's view, it is always the women who shoulder the main burden of poverty and conflict. Indeed, in her Nobel Peace Prize acceptance speech Maathai confirms that although initially the Green Belt Movement's tree planting activities did not address issues of democracy and peace, it soon became apparent that responsible governance of the environment was impossible without democratic change and reform (The Green Belt Movement xv).

Women responded passionately to Maathai's suggestion, planting trees with a zeal that suggested these saplings expressed some yearning deeper than the hunger for food. In formally establishing the Green Belt Movement in 1977, Maathai was wise enough to see that for the disempowered, planting trees was in fact a radical act of self-assertion, a method of laying claim to the life-giving power of one small corner of the Earth. (Jennifer Web). In the decades that followed, not only did Wangari mobilize hundreds of thousands of women and men to plant 47 million trees, but she captured the fervent and optimistic spirit of the movement to lead a series of protests and other episodes of civil disobedience that led to real change. Beginning with that small gesture of empowerment -- the planting of a single tree -- Wangari's followers delivered a rebuke to
corrupt and oppressive leaders whose pursuit of power and riches make them indifferent to the starvation and ill-health of their own people. The great power of her vision was evident in the push-back that Wangari received. Why else should anyone mind if a simple woman from Kenya was planting trees to resurrect the water supplies, wildlife, and ecosystems (Grace Wanene Web) that could then support the health and well-being of women and families? She understood that women, working as powerful actors in their local contexts, can change the world. But women - and men - followed her because she was a visionary human leader. Indeed, she showed us that the connections that bind people to each other and to nature are the most transformative forces on earth. The most profound expression of Maathai's simple message was in the leaves of humble growing things- Trees.