An examination of seed saving as a technology of resistance: A case study within the premises of a biodiversity conservation farm in Uttarakhand, India

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Abstract

The thesis aims to understand if seed saving practiced by oppressed small-scale farmers and peasants who are affiliated with Navdanya can be seen as a technology of resistance against the dominant agri-food industrial paradigm. Another aim is to find out how political and cultural meanings are attached to seed saving. It also aims to challenge this aforementioned paradigm. The inquiry is exemplified through an exploratory case study in Uttarakhand, India that was conducted during my internship with Navdanya, a NGO that works on biodiversity conservation and the promotion of small-scale farmers rights. Navdanya's role is also examined in respect with seed saving and small-scale farmers' political organization. The thesis also presents the political, economical, cultural and ideological context within which the dominant agri-food paradigm is oppressing small-scale farmers and peasants globally. Primary data were collected through participant observation, semi-structured group interviews with farmers-members of Navdanya and semi-structured interviews with key figures of Navdanya. Seed saving is actually identified as a technology of resistance of subordinated classes based on James Scott's theory. The thesis also explains how it is linked with Gandhi's concept of Swaraj, food sovereignty and emancipatory politics. Even though seed saving can be seen as a very radical political action it is argued that informants of the inquiry do not perceive it as such. They seem to challenge certain laws or policies that undermine their interests but not institutions or their social locations in order to reach emancipation.

Keywords: India, seed saving, resistance, Swaraj, food sovereignty, Navdanya, organic farming, small-scale farmers, traditional ecological knowledge, emancipation

For A. & N. whom I miss so much

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Abbreviations

GM: Genetically Modified

HYVs: High-Yielding Varieties

IAASTD: International Assessment of Agriculture Science and Technology for

Development

IMF: International Monetary Fund

NGO: Non-Governmental Organization

TEK: Traditional Ecological Knowledge

TRIPS: Trade-Related Intellectual Property Rights

UN: United Nations

WB: World Bank

WTO: World Trade Organization

"Agriculture transcends words." Darwan Singh Negiji

"The man sitting in the iron seat did not look like a man; gloved, goggled, rubber dust mask over nose and mouth, he was a part of the monster, a robot in the seat. [...] The driver could not control it—straight across country it went, cutting through a dozen farms and straight back. A twitch at the controls could swerve the cat', but the driver's hands could not twitch because the monster that built the tractors, the monster that sent the tractor out, had somehow got into the driver's hands, into his brain and muscle, had goggled him and muzzled him—goggled his mind, muzzled his speech, goggled his perception, muzzled his protest. He could not see the land as it was, he could not smell the land as it smelled; his feet did not stamp the clods or feel the warmth and power of the earth. He sat in an iron seat and stepped on iron pedals. He could not cheer or beat or curse or encourage the extension of his power, and because of this he could not cheer or whip or curse or encourage himself. He did not know or own or trust or beseech the land. If a seed dropped did not germinate, it was nothing. If the young thrusting plant withered in drought or drowned in a flood of rain, it was no more to the driver than to the tractor. He loved the land no more than the bank loved the land." John Steinbeck – The Grapes of Wrath (1939:41)

1. Introduction

This thesis presents a theoretical exploration of seed saving of traditional varieties of crops practiced by peasants and small-scale farmers and a critique on the corporatized agri-food industry. I examine whether seed saving can be understood as a technology of resistance that opposes "neoliberal technologies of environmental governance (i.e. devolution, self-regulation and market-based approaches, including privatization/enclosure), state violence" (Birkenholtz 2009:212), and other similar practices. I exemplify this examination by using an exploratory case study that I conducted during my internship with Navdanya in India, in the state of Uttarakhand. Navdanya is a NGO and a network of seed savers and organic producers covering seventeen states in India. Navdanya's goals are: to improve the livelihoods of small-scale marginalized producers through the use of non-violent organic agriculture practices, to preserve biodiversity and traditional knowledge, to promote food sovereignty and

highlight the significance of women's work as the keepers of food security, culinary traditions and biodiversity conservation (Navdanya 2013). I also explore if and in what ways is Navdanya politicizing seed saving and organic farming practices.

The thesis starts with the presentation of my aims. Then I move on to provide the reader with an understanding of the importance of seeds not only for small-scale producers but for global food production as well. In order to achieve this I illustrate the neoliberal context within which the global food market is dominated by a handful of agroindustrial multinational corporations which possess the power to channel research, shape global trade policies and influence decision-making processes. Afterwards the methodology part follows as well as some personal reflections on the process of fieldwork research. The theoretical part of the thesis is presented in the discussion chapter along with an analysis of the empirical material. This particular decision to blend the theory with the empirical material illustrates my approach while conducting research; instead of entering the field with certain theoretical preconceptions I decided to be open and let the theory emerge from the empirical material. The theoretical framework utilized draws from Scott's findings on peasant resistance and politics of emancipation, and from my understanding of Gandhi's notion of Swaraj. I examine similarities between emancipatory politics and Swaraj particularly regarding the segregation of state and civil society that is part of the process of emancipation. In addition I identify the connections between Swaraj and food sovereignty in the case of Navdanya and explain how Indian small-scale farmers and peasants are oppressed economically and culturally through trade agreements, patents on crops and seeds, and legal measures. Finally the thesis ends with some conclusions on whether can seed saving be seen as a politically radical action, what should the role of the Indian government be in agricultural policies, and with a call for a more socially just global society.

2. Presenting the aim and the significance of the inquiry – is seed saving a technology of resistance? For whom? And why?

This thesis has more than one objectives. Initially I am aimed to understand if seed saving is used by the oppressed as a technology of resistance¹. This means that I

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¹ I will explain how I use the term technology of resistance in the discussion chapter.

² The term TEK encompasses practical ecological knowledge of indigenous people that does not rely on fossil-fuels but most importantly reflects a substantially ontologically different understanding of the

explored if seed saving has a certain political grounding to it. Therefore my main research question was the following one: Can seed saving be interpreted as a technology of resistance employed by farmers affiliated with Navdanya? I was also interested in finding out how this political meaning is attached to the action. Is it Navdanya that is adding this political meaning to the action or is it the farmers? Or is it a mutual process where both sides attribute their own meanings to seed saving? Furthermore I aim to understand why seed saving is utterly important to achieve food sovereignty and to ensure the livelihoods of millions of peasants and small-scale farmers.

Food sovereignty focuses on securing the right of people in accessing culturally appropriate food that is produced through sustainable and ecological agricultural practices that are based on traditional ecological knowledge (henceforth TEK)² (Food Sovereignty Org. 2007). Moreover, it strives to place not the agroindustry in the center of the global food system but the producers, distributors and consumers of food instead, in order to secure their right to safe and diverse food and nutrition (ibid). It also promotes local economies and markets in order to strengthen peasant and small-scale based food production systems (ibid). In addition it aims to safeguard the rights of producers to choose the agricultural practices that they deem appropriate, while also securing their right to manage their seeds, livestock, land, water and biodiversity (ibid). In order to realise food sovereignty novel societal relationships will have to be established based on equity between genders, peoples, classes, racial groups and future and current generations (ibid).

Thus in order to fulfill the research aims I highlight the political importance of seed saving practiced by peasants and small-scale farmers in a context of economic and political oppression that takes place within the capitalist model of agricultural production. To accomplish that I present how their rights are being diminished by the agenda of neoliberalism that supports the agroindustry through laws, policies and international trade agreements. This neoliberal agenda promotes aggressively the centralization of global food production into the hands of a few agroindustrial

² The term TEK encompasses practical ecological knowledge of indigenous people that does not rely on fossil-fuels but most importantly reflects a substantially ontologically different understanding of the relation of humans to their environment (Martin & Roy et al. 2010:839). Instead of following Cartesian dichotomies such as culture-nature this knowledge/understanding situates humans and nature in a network of interrelations and interconnections.

corporations (Boyer 2010:341). I also demonstrate why industrialized agriculture is problematic not only for peasants and small-scale farmers but for the environment as well.

In addition, I illustrate the importance that seed saving holds with respect to TEK, biopiracy and for the preservation of biodiversity. According to Shiva (2001:22) biopiracy (another term for bioprospecting) is the plunder of TEK that has to do with biological resources by the pharmaceutical and agriculture industry. The formal sector lays Intellectual Property claims over the work of the informal sector, that is the peasants, indigenous people and small-scale farmers who acquired TEK by working with nature for centuries (ibid:22). This thesis also aims to be a critique on industrialized agriculture and food production that is powered by neoliberal forces. It intends to remind, as Neo-Marxian thought does, that the various crises taking place on Earth such as food, environmental, financial, social ones are all related to the capitalist way of thinking and acting (Bryant & Goodman 2004:346, Harcourt 2008:439-440). Choosing to elaborate on the importance of seed saving lies in its aforementioned pragmatic significance for agriculture and in its symbolic nature as well. The seed embodies life – it represents the potentiality of an existence that can reproduce itself and flourish while supporting other beings in a network embroidered with interconnections. Trying to control it, regulate it and prohibit people from using it should and must be unacceptable.

3. Portraying the importance of seeds and the scheme of peasants' and small-scale farmers' oppression

The following chapter is separated in two sections. In the first one I explain the power game that is played over the control of seeds and how this affects peasants and small-scale farmers. In the second section I also explain how this power game is situated in the context of the domination of neoliberal agroindustrial paradigm that oppresses small-scale farmers and destroys the environment and livelihoods (Ayeres & Bosia 2011:50, Holt-Gimenez 2009:!42).

3.1 The importance of seeds

My internship in Bija Vidyapeeth awoke my interest in seed saving. Nevertheless my interest was not only limited to the actual functional/subsistence reasons that farmers

demonstrate when they save seeds. Seeds are the cornerstone of agriculture i.e. without seeds *life* as well as farming is not possible. What is of paramount importance though is the fact that seeds are found both in the beginning and the ending of the crop cycle. In the beginning they are the asset and in the end the product (Shiva V. 1991:242). Thus access to them holds great significance not only for the producers of food but for its consumers³ as well. It is clear that seeds along with land are the most fundamental assets needed for the production of food. Those who control access to these assets control the food production. *Everybody* is dependent on food to survive, ergo the power of those controlling the global food production is colossal. I will explain how I understand power before I move on to elaborate on the consequences that control of seeds has for peasants, small-scale farmers and global food production in general.

In this thesis power is understood as "the ways in which given social systems confer differentials of dispositional power on agents, thus structuring their possibilities for action." (Haugaard 2010, 425; see Clegg 1989, in The Stanford Encyclopedia of Philosophy 2013) In addition power is an inextricable and versatile element that permeates all niches of social life (Graeber 2006:4). The fact that it is indeed a feature of all social life does not mean it should not be challenged. In fact, coming from a normative point of view, to achieve social justice power structures *have* to be challenged.

Control over access to seeds however has multiple ramifications that stretch between domains such as the political, ecological, economical, nutritional and cultural to name but a few. However I need to stress here that these domains are not segregated. Stemming from a political ecology perspective I argue that in fact they are interconnected, which means that each domain is affected by and affecting the others. Besides, Escobar reminded us that "economic crises are ecological crises are cultural crises." (2008:14) This position was clear in the food crisis of 2008 that was not

³ It is beyond the scope of my inquiry to elaborate in detail on how consumers are affected by the establishment of the agri-food status quo that aims to control the access to seeds and global food production and distribution in general. However as a small sidenote it can be claimed that the globalized food chains controlled by the agroindustry and the global food retail sector have the following consequences for consumers: a) Increased availability of intoxicating processed food that causes chronic diseases (World Health Organization 2003, Harcourt 2008:440), b) Appropriation and commodification of consumers' food knowledge, skills and practices (Scrinis & Lyons 2007:34), c) Collapse of the historical links between producers and consumers found in local food systems (Timmer 2005:29)

revolving solely around food availability and food prices but had also a financial facet, which was affected by climatic and environmental factors as well (Rosset 2011:21-22, Harcourt 2008:440). Therefore one understands that it is impossible to draw a distinctive line between these domains since they are all parts of the same picture. To actually try to describe the problems focusing only on one particular domain without taking into account how others affect it would be rather reductionist and would result in merely examining one segment of a complex phenomenon. I will now briefly demonstrate how seed saving relates to the domains that I described.

As aforementioned seeds lie in the epicenter of life and of agriculture and agricultural policies are extremely political issues (Harcourt 2008:440). When Monsanto, Syngenta, DuPont, Bayer, Dow and BASF – the top seed retailers globally – control almost sixty per cent of the seeds sold commercially worldwide and produce seventy-six percent of agrochemicals (ETC 2013), then saving, exchanging and selling seeds by peasants ceases in my understanding to have merely a subsistence-based importance. By this I mean that any law, measure or policy that can potentially restrict peasants' access to seeds can lead not only to their economic deprivation and loss of livelihoods but also to malnutrition, hunger and ultimately the death of millions of people. I support this argument by mentioning that even though in 2008 the world's population was split equally among rural and urban areas (Population Reference Bureau 2008) still that does not undermine the huge numbers of people who live off the land⁴.

This argument might appear too mechanistic for some and will definitely be disputed by the agroindustry. The agroindustry claims that it is thanks to the use of their hybrid or genetically modified (GM) seeds, pesticides, herbicides and fertilizers that global food demand is met while also environment is protected. Indeed while visiting the websites of Monsanto, Syngenta and DuPont one stumbles upon their discourse that has to do with biodiversity conservation, healthy appetite, sustainable agriculture, decreased dependency on fossil fuels, helping farmers to produce enough food for

⁴ According to the latest World Urbanization Prospects report conducted for the UN (the 2011 Revision), this balance will change significantly by 2050 with the further urbanization of Asia, Africa and Latin America. Each continent by mid 21st century will reach a 64, 58 and 87 percent of urban population respectively. For further information refer to, http://esa.un.org/unup/Analytical-Figures/Fig overview.htm, (accessed April 4, 2013).

humanity and so on⁵. These big players in the global food production claim in their websites that their products and their practices foster the achievement of the aforementioned goals. However this is not true; in fact the agroindustry is guilty of a number of serious vices, which seriously undermine the sustainability of the global food system.

3.2 The vices of the neoliberal industrialized agri-food paradigm

Industrialized agriculture is based on huge amounts of fossil fuel-based inputs such as fertilizers, pesticides, herbicides, mechanized production and the use of hybrid or GM seeds. This paradigm of agriculture causes a series of environmental problems including increased greenhouses gases emissions (The Ecologist Org. 2009) biodiversity loss, pollution of land and water bodies, genetic and nano pollution, nutrient depletion and soil erosion (Scrinis 2007:115-116). Nevertheless the problems that derive from industrialized agriculture do not stop here. The TEK of peasants and small-scale farmers from all over the world on seeds and farming practices is being commodified and appropriated by the agroindustry (Scrinis & Lyons 2007:34). In addition the oligopoly control and the centralization of food production that the agroindustry has achieved is creating fewer jobs, thus leading small-scale and subsistence farmers to poverty and loss of livelihoods (Boyer 2010:341, Scrinis 2007:131). This enables the agroindustry to control the global food market and determine food prices (Scrinis 2007:116). It further exercises power over peasants and small-scale farmers – especially in the global South – by pressing for contract farming which controls what processes are going to be followed, what kind of inputs will be used, what will be cultivated while farmers themselves will have to take up possible risks (ibid:117).

Agroindustry's power is further exacerbated by the increasing numbers of successful⁶ or pending patents on traditional varieties of crops from agroindustry giants. The

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⁵ If the reader wishes to read through the arguments of the aforementioned corporations I provide their respective websites.

 $[\]underline{http://www.monsanto.com/Pages/default.aspx},$

http://www.syngenta.com/global/corporate/en/Pages/home.aspx, http://www2.dupont.com/home/en-us/index.html, (accessed April 24, 2013)

⁶ Here are some examples of plant varieties that are free to use in India but have been patented in Europe, US and Japan: Amaltas, Jangli Erand, Arjun, Lat Jeera, Kumari, Arand, Gurkuma, Ginger, Karela, Chhotagokhuru, Reetha, Ber, Bhui Amla, Sarson, Brinjal, Pomegranate, Ashwagandha, Gul Mehendi, Guruchi, Amla, Shallaki, Dudhi, Harad, Dhaya, Gurmar (Shiva V. 2001:24).

agroindustry along with the European Patent Office and the US Patent and Trademark Office (Shiva V. 2001:23) deprive farmers from their intellectual property rights on the varieties that they have been commonly developing for centuries (Scrinis 2007:123). This dispossession of TEK is very important because it treats collective knowledge as private (Shiva 2005b:33). The World Trade Organization (WTO), through the agreement on Trade-Related Intellectual Property Rights (TRIPS) on life enforces this deprivation (McAfee 2003:209). This agreement has made provisions to commodify genetic material of organisms and transformed varieties of living organisms (ibid:210). It regards them as objects of private ownership and renders them as products that can be sold in the global market (ibid:210). In fact it:

[...] would make it illegal under most circumstances for citizens, businesses, or government agencies to commercialize or distribute brand-name plant varieties and privatized gene sequences, proprietary medicines, research technologies, and databases. (ibid:210)

However genetic resources belong to the sphere of public – they are out there surrounding us therefore they cannot be commodified (Damodaran 2008:512, Brush 2007:1499-1501, Shiva 2007:310). I would also add that not only genetic resources are surrounding us but also more importantly we as beings are made out of them. It is part of who we are. Consequently is it really paradoxical to ask: Can someone own nature? Can someone own a genetic resource that is part of your body? Does that undermine one's freedom, one's self-expression? All these are really serious questions that the TRIPS agreement fails to answer. I do not intend to answer these questions; I merely present how problematic patenting on life can be.

After this brief moment of pondering I come back to TEK and its cultural significance. This diverse and place-bound knowledge, this *indigenous science* (Shiva 2005b:48), which is embedded with culture – it *is* culture in fact – will be lost forever if the people who possess it are prevented from using it. A short detour to explain how I understand culture is needed. According to Banks (2007:8) the core of culture is not its practical manifestations through tools or artifacts but instead how a particular group of people understands, uses and represents them. This group of people is demonstrating distinctive behavioral patterns based on knowledge that is a product of their characteristic symbols, values and meanings (Kroeber & Kluckhohn 1952:181, Lederach 1995:9). Therefore through diverse meanings and symbols people produce knowledge that is particular to each place and it is a manifestation of their respective

culture. Using traditional local varieties of seeds entails certain knowledge that small-scale farmers and peasants might be unable to use due to certain limiting factors. There are different policies that lead to the prevention from using seeds of traditional varieties of crops. For instance farmers are encouraged to use high-yielding varieties (HYVs) by rendering loans and related services more accessible to them in order to enable them to purchase those 'refined' seeds (Infochangeindia Org. 2010). This commodification of seeds means that farmers who do not save seeds have to use the market mechanism to access them.

Another way to prevent farmers from saving seeds is through legislation. In the Indian context peasants are concerned with the contradictory Seeds Bill of 2004. This bill targets to control the quality of seeds and it was introduced in order to replace the Seeds Act of 1996 (Parliamentary Research Service Org. 2006:1). The Seeds Act needed to be replaced because there were no provisions regarding the quality of GM seeds (Press Trust of India 2010). The bill safeguards the right of farmers to save their own seeds and sell them in the market (Parliamentary Research Service Org. 2006:1). One might wonder how exactly does the Seeds Bill undermine the rights of farmers and why are they concerned? To answer this question, it should be stated that farmers in India can be identified as breeders but cannot register varieties (Brush 2007:1510).

According to the bill farmers will not be able to sell their seeds under a brand name but most importantly seeds sold in the market must meet *the same standards* that commercial seeds do (Parliamentary Research Service Org. 2006:1). Some of the standards have to do with germination, physical purity and genetic purity (ibid:2). These criteria are a bit problematic since seeds and varieties that are the outcome of natural processes outside the laboratory (non-hybrid, non-GM seeds and varieties) cannot meet them. This automatically means that farmers selling seeds are excluded from the seed market. But why are the aforesaid criteria hard to meet? The concept of genetic purity for instance cannot exist outside a laboratory simply because when it comes to plants for example, pollination is not selective. Every *unique* plant genotype of a given crop variety has the potential to pollinate with an equally unique plant genotype of the same variety or of another variety for that matter. This means that plants of future generations can possess vastly diverse characteristics since pollination is not selective but random. This is a very brief and simple example of what is called biodiversity.

The ideas about genetic purity, which form the basis of the aforementioned bill are based on genetic reductionism. This reductionism (like economic reductionism as well) is based on false assumptions that fail to account for the spatiotemporal, environmental, social and cultural particularities that determine how nature evolves (McAfee 2003:204). That is especially true about agriculture since as phenomenon it really is the product of extremely diverse historical, social, cultural, environmental, geomorphological and climatic interrelations and cannot be reduced to something mechanistic. Thus agricultural biodiversity does not comply with the agroindustrial paradigm. In order for this paradigm to work uniformity is needed – that is why hybrid varieties $(F_1)^7$ are created, to further facilitate the industrialization of food production. Since it is the agroindustry that produces these varieties it lies in their vested interest to lobby in order to make sure that the standards that are included in the Seeds Bill are aligned with the characteristics of their products. Not only they shape bills and policies (Infochangeindia Org. 2010) but most importantly they shape the notion of what defines a seed of quality. Their view is what some might call hegemonic.

Hegemony throughout the thesis is understood as the idea that "the ruling class dominates not only the means of physical production but the means of symbolic production as well." (Scott 1985:315) Nevertheless I also agree with Scott on the fact that useful as it might be the theory of hegemony fails to account for the fact that farmers and/or lower classes in general can challenge and 'denude' dominant ideologies through their everyday embodied experiences (ibid:317). Wherever it is applied be it agriculture, economics or government policies neoliberalism as a concept is hegemonic because it is advocated as the appropriate solution to any challenge that these sectors might be facing. But what is neoliberalism and how does it affect agricultural policies?

⁷ I provide an explanatory footnote for the reader who is unfamiliar with genetics. According to the Royal Horticultural Society of UK an F₁ hybrid is the result of a crossing between "two stable seed lines (called inbred lines) that give rise to especially uniform progeny that possess good vigour, yield and other properties." Some of their pros are the following: *Uniformity* of yield and maturity period, greater size and yield "due to the phenomenon of hybrid vigour (heterosis)." The point that follows is of utter significance. "*Plant breeders benefit because they control* the inbred lines. Therefore the hybrids they breed cannot be grown by other seed companies who lack parent lines. [...] this keeps costs of F₁ hybrid seed high [...]." Finally some of the cons include high cost, inability to produce the plants that will be true to the parent type by saving seed and lastly self pollination of the plants produces "poor quality plants called 'selfs'." (http://apps.rhs.org.uk/advicesearch/Profile.aspx?pid=710, (accessed April 15, 2013, emphasis added). Thus it becomes clear that peasants who buy hybrid or GM seeds are dependent on seed companies in order to buy new seeds annually.

Neoliberalism is founded on deregulation of markets, major cuts in services (health care, education etc), leveling of collective bargaining, reforms in tax policies where the rich pay less and the poor more in the hope that this will foster enterprise opportunities that will create wealth which will be shared throughout society (trickledown economics) (International Socialist Group 2003, The Guardian 2013). According to Bourdieu (Le Monde Diplomatique 1998) the neoliberal program is all about protecting the rich while destroying social safety nets and diminishing the power of laborers. Besides, Monbiot (The Guardian 2013) argued that the concept of neoliberalism does not lie in economics but in power.

Neoliberal thought in agriculture is expressed on the ever-increasing market power that agribusinesses hold and this situation consequently leads to the oppression of small-scale farmers and peasants worldwide (Ayres & Bosia 2011:50). This oppression is illustrated in the economic domain as well. Through international trade agreements implemented by the WTO and the structural adjustment projects of the International Monetary Fund (IMF) and the World Bank (WB) in countries of the global South the economic strangling of peasants and small-scale farmers has been achieved (Holt-Gimenez 2009:145). Weber claimed that economic programs and policies like the Emergency Social Funds devised by the aforementioned Institutions in the 1980's for countries in South-East Asia, Latin America and Africa were in fact aiming to pave the way for neoliberal 'development' (2006:187-191). The most important part of Weber's argumentation though lies in the fact that these programs were designed with the intention to tackle social struggles that emerged in the South as an effort to imagine societies and livelihoods beyond the blinders of neoliberal thought (ibid:191). This 'development' is based on private interest corporations that promise to aid deprived communities and national governments by redistributing power through the implementation of various projects (Miraftab 2002:89-90). However once these projects are established the interests of the poor are undermined by the expansion of capitalism in the guise of multinational corporations on new geographical and social areas.

⁸ A report conducted for the UN's Table on Conference and Trade in 2012 clarifies that structural readjustment programs and neoliberal policies have actually enhanced the economic crisis while making the rich richer. For further info refer to: http://unctad.org/en/PublicationsLibrary/tdr2012 en.pdf, (accessed April 26, 2013)

International trade agreements have paved the way for agroindustrial corporations to bypass national regulations that aim to protect the interests of the people (Scrinis 2007:118). These agreements promote through subsidies large-scale monoculture-based and corporately controlled farming, in order to provide the market with products for export (ibid:118). Reliance on cash crops has crippled small-scale producers in the South and has restricted their local food sufficiency (ibid:118). According to Haugen (2009:284-285) trade strategies designed on the national level by India and other Southern countries aim to protect the rights and livelihoods of peasants. However they fail to do so since national governments are faced with huge pressure forced by the aforementioned global institutions due to national debt. In order to pay back the debt they have to follow and abide with the structural adjustment projects that are designed by the Bretton Woods Institutions and cater to the neoliberal program.

We can see that there is a network of actors interacting in the global food production scene. Despite the big numbers of peasants and small-scale farmers and the fact that they still account for a significant amount (at least seventy per cent) of the global food production (ETC 2009, in The Development Fund 2010:12) they do not have a protagonistic role. Nevertheless the agroindustry backed by the Bretton Woods Institutions aim to further marginalize and control them. They use different 'weapons' but none of them is so significant as the control of seeds (and land of course) – precisely because of their very special aforementioned characteristics i.e. being the fundamental asset for crops production but also the end of it.

Those dominant actors aim to facilitate the advance of a second Green Revolution – this time one that will have seeds in its core (Infochangeindia Org. 2010). As with the previous Green Revolution their aim is to render the rich richer and to further pauperize the poor (Scott 1985:xvii) by controlling all the assets needed i.e. water through privatization (Goldman 2007:797-798), land through land grabbing (Rosset 2011:21), seeds through trade policies and patents, in order to expand industrialized agriculture (Holt-Gimenez 2009:153-154). For all these reasons a UN report that was conducted by the International Assessment of Agriculture Science and Technology for Development (IAASTD) addressed an urgent call to replace the industrial

⁹ http://www.unep.org/dewa/agassessment/reports/IAASTD/EN/Agriculture%20at%20a%20Crossroads Synthesis%20Report%20(English).pdf, (accessed April 24, 2013)

agricultural paradigm by one that will support small-scale ecological agriculture (Harcourt 2008:439). More specifically four hundred scientists and specialists from more than eighty countries called for enactment of small-scale farming practices that will be based on egalitarian values and agroecological production approaches that will rely on local knowledge and local seed systems (Holt-Himenez 2009:150). This paradigm-change will need to include shifts in policies and practices in order to meet the challenges of famine, pauperism, social injustice and environmental sustainability (Harcourt 2008:439).

Some issues pertaining to the problems that peasants and small-scale farmers face globally but also in India were posed in this chapter. After understanding the importance that seeds hold for agricultural production and for the livelihoods of millions of people it follows that the process of seed saving per se is important too. Since I spent almost four months in a context where seed saving was among the central themes of Navdanya's discourse and practice my interests were shaped accordingly. Besides the importance that seed saving holds for preserving biodiversity I was concerned with its importance for the actual actors of seed saving, that is peasant and small-scale farmers. As aforementioned seeds are both the means and the end of agricultural production (Shiva V. 1991:242). In an era where neoliberal policies are supporting agroindustrial corporations that control big shares of the global seed market, is seed saving just a subsistence strategy for peasants and small-scale farmers? Before I move on to the discussion chapter where I present the theoretical concepts that relate to my inquiry along with the empirical material it is necessary to provide the reader with an understanding of the methodological tools that I used while collecting the empirical data of the inquiry in India.

4. How I ventured into empirical data collection

In order to exemplify my theoretical exploration of seed saving as a technology of resistance I conducted a case study during my internship in India within Navdanya focusing on qualitative research approaches. When I entered the field I had no certain preconception of the research design that I would follow. I chose to observe everything that was unfolding before me and choose the phenomenon that would motivate me to inquire it. I decided to conduct an exploratory case study and the selection of the methodological tools was a process that was not predefined but was

instead determined by the given circumstances and my own skills and interests (Scholz & Tietje 2002:11-12). Before I start describing each methodological tool that I used I will contextualize geographically and temporally the field where most of my empirical data were collected.

4.1 Representing the site and the duration of the empirical data collection – life in Bija Vidyapeeth

I arrived in Bija Vidyapeeth in the middle of October 2012 and left in the end of Janurary 2013. Bija Vidyapeeth is the organic farm of Navdanya, which is also known and functions as the Earth University. During these fifteen weeks I conducted my internship and most of my primary data collection. One of the aims of Bija Vidyapeeth is to train individuals in organic agriculture, sustainability, deep ecology and Earth Democracy. The farm is located in Doon valley on the foothills of the Himalaya, in the state of Uttarakhand, in Garwahl division, in the northern part of India. It covers an area of eight acres. Within the same area the dining hall, the kitchen, accommodation infrastructure, storage rooms, godowns, the cowshed, the soil laboratory, the library and the lecture hall are also situated within the same area.

Throughout my internship my main responsibilities were to participate voluntarily in the daily chores of the farm. During special courses like the one on Gandhi, Globalization and Earth Democracy and visits from schools, groups of peasants, civil groups or individuals I helped facilitating their visit. I also gave educational tours providing information about the farm and the goals of Navdanya. Moreover, I undertook the project of creating a digital photographic archive of the 600 traditional rice varieties that are conserved in the farm.

8. Living Knowledge

If the reader wishes to read their full articulation she can also refer to the following online source: http://www.earthlight.org/2002/essay47_democracy.html, (accessed March 19, 2013).

¹⁰ In order to familiarize the reader with the concept of Earth Democracy I present here shortly its ten principles as they were developed by Shiva (2005a:9-11).

^{1.} Ecological Democracy – Democracy of all life

^{2.} Intrinsic worth of all Species and Peoples

^{3.} Diversity in Nature and Culture

^{4.} Natural Rights to Sustenance

^{5.} Earth Economy is based on Economic Democracy and Living Economy

^{6.} Living Economies are built on Local Economies

^{7.} Living Democracy

^{9.} Balancing Rights with Responsibility

^{10.} Globalizing Peace, Care and Compassion"

Amid these activities I had the chance to interact on a daily basis with other interns and with the staff of Navdanya. Spending time in the farm working together, preparing food together and occasionally eating together with the staff – who all but one were Indian – provided a context that was useful for and relevant to my thesis interests. That was mainly because during these activities I had the chance to observe and talk with the farm's staff and Navdanya's trainers on an amplitude of issues among which was seed saving and its importance but also more generally about the significance of organic agriculture from their perspective.

In addition, on four different occasions I participated in meetings with groups of peasants who were coming in Bija Vidyapeeth for trainings. In the course of those meetings the peasants, other interns and I had the opportunity to create a platform of bidirectional flow of information. We facilitated these meetings in order to ask each other questions, which were related to topics that were interesting to us (i.e. the peasants and the interns). Furthermore on the 13th of January I conducted one informal interview with a farmer-member of Navdanya while I joined the farm's staff in organic rice procurement in the nearby area around Ramgarh village. Finally I conducted another informal interview on the 24th of January with Lataji Sharma and Reethaji Balsavar, directors of Navdanya's office and organic shop in Mumbai. All informants knew about my inquiry and did not sign consent forms since the setting was informal. In the following subchapters I will move on to describe more analytically each methodological tool that I employed while doing fieldwork.

4.2 Participant observation – living in a conservation farm 24/7

Like I aforesaid I utilized my time in Bija Vidyapeeth to participate and engage in various activities. By doing this I aimed to use all my senses in understanding how the farm staff (farmers, trainers, seed keepers and administrational staff) realized the significance of seed saving and the importance of organic agriculture and food sovereignty. I tried to be open anything that could prove useful to my inquiry or increase my understanding of the issues that I was interested in but I was focusing mostly on discourse, training techniques and the reasoning behind the practice of seed saving and organic agriculture. The amplitude of topics of conversation with farmers, trainers and seed savers provided me with a greater perception of the social and cultural background of my informants.

I chose to follow the approach of a 'sympathetic insider' instead of being a 'detached outsider' (Goldenberg 1992, in Stein 2006:69). The 'sympathetic insider' identifies meaning as a central element of the inquiry and aims to come as 'close' as possible to data through observations of social phenomena where they take place (ibid:70). I focused on this approach because I was trying to find out what was the context of seed saving as a technology of resistance. At the same time though, I kept in mind that spending so much time in this particular place with these particular people could pose an ethical threat since literally this place was my home so the danger of becoming "native" was apparent. I tried to overcome this by concentrating on the organization of my data and further reading in an effort to maintain the role of the observer (ibid:72). I need to mention here that most of the times I was unable to keep notes in situ since it was impossible to keep notes while working in the field. Therefore I was doing that whenever I found time during the course of the day.

4.3 Group Meetings – getting together with the peasants

These meetings with peasants took place on four different occasions. More specifically the corresponding dates when each meeting occurred are the following: 18th, 22nd, 27th of December 2012 and 18th of January 2013. These meetings transpired within the premises of trainings focusing on organic agriculture methods and communication of Anna Swaraj that famers attended in Bija Vidyapeeth. The meetings and the attendance of the farmers were sponsored by the Uttarakhand State Department of Biotechnology (Ministry of Science & Technology and Biotechnology). Farmers who were already members of Navdanya motivated other farmers from their communities to come and join the training. Each training lasted three days. All groups were coming from the Garwahl division, which covers the northeast part of the state of Uttarakhand. All of them live and farm in hilly areas. Apart from one group that consisted only of males the rest were consisting mostly of females.

After the arrival of the first group I proposed to the intern coordinator Aditi Punj, to help facilitate a meeting with the peasants so that interns and peasants would have some time to exchange information on issues that were interesting for each group. The fact that the farm's staff knew about my thesis project and wanted to aid me in my efforts was important for me. I also need to clarify here that only farmers who

were interested in those meetings participated in them. In addition they were also informed that some of the interns were conducting research for their respective studies. This is something that I also emphasized in the course of the meetings before I entered in the conversation. The interviews were semi-structured and questions were open-ended. Thus instead of listing all the questions that were asked I will present certain categories that questions were focusing on. These were questions relating to:

- a) Background/livelihood
- b) Farming practices (organic or not)
- c) Seed saving understanding/practice
- d) Understanding of Swaraj
- e) Opinions regarding the Seed Bill of 2004
- f) Problems that peasant experience access to seeds, support from government, farming related issues

After the first meeting was conducted it became a model for the next ones. I use the word model to illustrate the fact that based on this example more meetings were conducted. The reasoning was that this assisted in building bridges of egalitarian communication and bidirectional flow of information between the peasants and the interns. This way an effort was drawn to challenge the dominant paradigm of research that is based on relationships of unequal power between the researcher and the informants (Ben-Ari & Enosh 2012:422). Instead of assuming the researcher as the authority who exercises power over the participants the focus shifted on the creation of a reciprocal relationship. Reciprocity in this sense is understood as the context within which both sides are contributing to: a) the creation of knowledge and b) better grasping not only of a particular research topic but of a broader topic of interest (ibid:423-426). Despite this reciprocal relationship that identifies knowledge production as a bilateral process between the participants and the researcher one bitter truth remains: that it is the researcher who adds the final words in her inquiry (Haritaworn 2008:4).

The meetings took place in the lecture hall of Bija Vidyapeeth in the end of the second day of visiting of each group. The setting was very simple both groups formed a circle and all participants sat on the floor. In most cases the two groups were sitting separately but as time was progressing people changed positions in the room and

mingled. Each meeting lasted approximately two and a half hours. Like aforementioned the communication between peasants and the interns was facilitated through the help of Indian interns or members of the staff of Navdanya (i.e. intern coordinator, trainers). Peasants were usually reluctant to start asking questions so each time interns initiated the questions. It is important to mention here that perhaps this setting of communication might not have been familiar for the peasants. By this I mean that trying to have a conversation in which people would not speak at the same time was quite often a bit hard to achieve, especially when the topic of conversation seemed to be interesting for the participants. I could relate to this cultural phenomenon since I come from Greece where people in conversations tend to talk simultaneously and have rather energetic and serendipitous behavior when talking.

I kept handwritten notes of the parts of the discussion that were relevant to my inquiry interests. I was focusing mostly on specific quotes or information that the peasants provided instead of trying to replicate the exact Q&A pattern. Shortly after each session I further elaborated and expanded the notes. However due to the fact that I was not speaking Garwahli all my notes are defined by two parameters: first I was not able to capture the original words of the peasants but the words that the translators used; and second the words I used in the transcription are in a sense mine since I kept handwritten notes. The former point has an impact to the material that I have collected since it means that meanings, ideas and words themselves could change during the translation and the interpretation processes. Nevertheless I somewhat agree with Dodge and Geis when they state that "language is not a clean logical tool like mathematics that we can use with precision." (2006:83)

In order to give a clearer picture of the whole setting in which my inquiry was conducted during those meetings I need to mention one more point that affected my research significantly. Interacting with the groups gave me the opportunity listen to different people talking about their experiences and their thoughts at the same time. In a sense it broadened my pool of informants. However this breadth unfortunately due to given circumstances undermined the depth that I was able to reach during those meetings. To illustrate better: I was not the only one posing questions to the peasants and in addition due to the bidirectional character of the meetings peasants were asking questions too. Consequently I was unable to ask as many questions as I would like to since I did not want to monopolize the discussion and exercise power over my

colleagues or the farmers. Such a problem would have been avoided if more time was available for follow-up meetings where I could try to clarify some points that seemed unclear to me.

Finally a very important point needs to be raised regarding how the setting of the meeting might have affected the informants' responses. I clarify here that my empirical material does not allow me to be sure about what farmers think of seed saving as a technology of resistance. This has to do with a variety of reasons. Initially I do not know if farmers are actually saving seeds – I know that they claim to do so. To verify their statements I would have to spend significant time in their villages and observe whether the action actually takes place or not. This point is not an effort to disrespect peasants' claims or doubt their validity but to highlight that attention is paid in the difference between witnessing an action and listening to an account of it. Furthermore the meetings took place within Bija Vidyapeeth and during farmers' trainings. Therefore it is very possible that peasants' responses were influenced by Navdanya's discourse or by a degree of social desirability.

4.4 Interviews

Here I am referring to the interview that I conducted while I joined the farm's staff for the procurement of organic rice and to the interview that I conducted in Mumbai with the directors of Navdanya. In both cases interviews were not structured, but openended instead. I had noted down a structure of the issues I wanted to investigate but my approach was to let the conversation flow because often by focusing too much on one particular issue one can miss the larger picture. Furthermore in both cases the interviews took place in the home of the interviewees. I believe this context provided a sense of familiarity of space for the informants in order to feel a little bit more at ease and off-guard and thus be more open to my questions. Each interview lasted approximately thirty minutes. In the first case Anandji Kumar a regional coordinator of Navdanya facilitated communication with the farmers. In the second case both directors were speaking English fluently thus translators were not needed. In the interview during the rice procurement the same set of questions that was asked for the meetings was used.

I chose to speak with the directors because I wanted to add a perspective on my enquiry that would come from a more administrative viewpoint if possible. Having

talked with the staff (farmers, seed savers, trainers, coordinators) in Bija Vidyapeeth and with the visiting groups I thought that exploring the opportunity to see the perspective of people involved in more administrative roles would provide me with further insights. In particular I wanted to see if the directors identified any political grounding in relation to seed saving and the training that farmers-members of Navdanya received. Did they understand the role of Navdanya as an actor who paves the way for a politicization/ radicalization of farmers-members of Navdanya? This could prove helpful to my inquiry regarding the action of politicization of seed saving — did it originate from peasants themselves or did Navdanya politicize it? Once more notes were kept manually and then further expanded and elaborated directly after the interviews.

4.5 Outlining the factors that affected the inquiry

There were a number of factors that determined the course I followed in respect with the methodological tools I chose for the collection of my primary data. Initially I needed to tackle the linguistic barrier for I was not able to speak Hindi or Garhwali, which was the dialect spoken in the farm and in general in that part of Uttarakhand (Garhwal). Thankfully some of the farm's staff were speaking English and this facilitated our communication. When some staff members were unable to speak English our communication was facilitated through the help of both Indian interns and other English-speaking staff but mainly through the help of the interns' coordinator Aditi Punj.

When I was formulating the topic of my research interest in my mind, I thought that I could explore it within the premises of Bija Vidyapeeth. A number of reasons guided me in this decision. Navdanya is an NGO that is working on the in situ conservation of traditional crop varieties since 1997 when Bija Vidyapeeth was found. Being there provided me with the opportunity to speak with farmers that are members of the staff of Bija Vidyapeeth. Furthermore, I had the chance to speak with four different groups of peasants that visited the farm (on four different occasions respectively) and spent three days each in order to participate in trainings focused on organic

¹¹ Bhatt V. Lecture on the History, Aspects, Policies and Goals of Navdanya, December 31, 2012

agriculture and Anna Swaraj. ¹² Thus I had the opportunity to be in a place where the discourse ¹³ on seed saving, food sovereignty and their significance were among the core subjects of discussion. I am aware that this particular choice led to certain biases but I need to stress out that my findings concern Bija Vidyapeeth and the group of peasants that I interviewed. I am not arguing that my findings represent the farmers of India – not even the members of Navdanya for that matter since their total number surpasses half a million. ¹⁴ Besides sample biases is a situation that field researchers will ultimately have to confront (Browner & Preloran 2006:94).

Initially I was thinking to conduct interviews with individual farmers located around the farm. Nevertheless I dropped this strategy because I would have to hire a translator. Since I travelled to India without any scholarship my financial means were limited and hiring a translator was beyond my budget. In addition planning to visit a particular farmer in a particular day with the translator would not guarantee that the meeting would actually take place. Living in rural India since August 2012 I came to realise that plans often change simply because life in this context is full of parameters that cannot be controlled.

Another reason for choosing not to conduct interviews in nearby farms based on a random sample had to do with the fact that I wanted to establish some sense of basic familiarity with the interviewees. I needed to make the informants feel at ease with me asking questions, to make them feel that they could in a sense trust me. Hence I chose to conduct interviews with the groups of peasants that were scheduled to come in Bija Vidyapeeth knowing that there would be plenty of occasions where we would spend time together before the actual interview. For instance I was present in the dining hall facilitating their meals and we also ate together. Furthermore, I followed most of the lectures they attended even though they were held in Garhwali. I was able

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¹² Anna Swaraj is a campaign initiated by Navdanya in order to promote Food Sovereignty and the democratization of food system.

¹³ Discourse throughout the text is used as an understanding of a context that can be shared by a small or larger group of people on different geographical scales. These people are active agents (though in varying extent) in the formulation of meanings within this discourse. (Svarstad 2005:242-243). Furthermore as Foucault argued in his latest work, discourse is not "divided between the dominant discourse and the dominated one; but [exists] as a multiplicity of discursive elements that can come into play in various strategies." (1978:100, in Nahaboo 2012:598) If one understands human beings as merely outcomes of discursive elements, as beings who simply abide with given, dominant norms then it would be rather problematic for her to explain how and why people flourish, suffer or *resist* (Olson & Sayer 2009:187, emphasis added).

¹⁴ Bhat V. Lecture on the History, Aspects, Policies and Goals of Navdanya, December 31, 2012

to follow to a small degree these lectures thanks to an Indian intern who translated the words of the lecturer and the questions of the participants for me.

In general I would argue that instead of following one particular methodology I adapted to the circumstances and this led to a selection of a variety of methodological tools for primary data collection. This choice led a to relative methodological pluralism that fostered reflexivity regarding the methods themselves but also in respect with my role as a researcher (Chamberlain K. et al. 2011:153).

5. Some reflexive notes – where do I situate myself and how that matters?

During my internship in Bija Vidyapeeth and in the course of the meetings I kept in mind that the findings of my inquiry will be always filtered through my own standpoint; that is one of a white middle class man born and raised in the capital of Greece. Should another student had conducted the same research, it is not at all granted that she/he would have been able to make the same observations or derive to the same interpretations. My personal background of my involvement in anarchist groups and political struggles in Greece and my negative disposition towards neoliberalism and capitalism as well, affected my research. Thus I need to stress that my subjectivity has influenced to a degree my inquiry (England K.V.L. 1994:84-85). I also need to clarify here that my subjectivity was founded within the aforementioned social, political and geographical locales; still it's not a monolithic construction. Quite the contrary I would rather describe it as ever-changing and "dialogical, free-floating, unfixed" (Zamorano Llena 2004:94).

Moreover, I realized that 'situated solidarities' were created that would facilitate the rearrangement of the areas of my academic and personal focus with those within the informants find themselves in (Nagar & Geiger 2007:273). These 'situated solidarities' recognize the fact that our capacity of connecting the global with the local and of forming alliances across geographical or social borders is circumscribed by our social and geographical standpoint (ibid:273).

In general informants seemed really eager to participate in the production of knowledge and share their opinions. I imagine that to a certain extent being a white man granted me some kind of power in respect with the social context. I tried to be aware of that as much as possible. Throughout my six-month stay in India I noticed

the stark differences between the way non-Indian women and non-Indian men are treated in various social occasions. These situations of course cannot be broadly generalized since the parameters can change vastly (i.e. non-Indian woman/man – Indian woman/man, public or private locations etc). Nevertheless I tried to be as simple as possible in terms of appearance in order not to differentiate myself any further apart from my origins, class etc. I was wearing daily simple farm-work clothes that were either bought from the local market or got tailor-made in the nearby village. My simple dress code and the fact that my clothes were fit to the sociocultural context led to positive remarks coming from both the farm's staff but also from the visiting farmers.

Throughout the whole process of my inquiry I struggled to find ways to understand if there was any political meaning ascribed to seed saving from the peasants themselves. In other words I tried to listen to their words to find out what their voices say. However my own conception of the issue, my own subjectivity and even the selection of my research topic were inevitably situating me within a particular place that could affect the way I interpret the voices of the participants (Nagar & Geiger 2007:271). I kept this in mind constantly. Furthermore, during the development of the thesis I aimed not to speak on behalf of the participants but with them (ibid:270). I believe that in my effort to be inclusive I did not render the participants voiceless, thus reproducing power inequalities that emerge while doing academic inquiries (England 1994:81). There are many pitfalls when conducting qualitative inquiry and as Kee Beng (2009:49) put it, one needs to have increased empathy skills, work hard and be modest if she wishes to grasp phenomena as they are. After having explained my methodological approach I will now move on to the next chapter of the thesis where I will present my empirical material along with its analysis while discussing the focal points of the inquiry.

6. Discussion – a venture into the empirical material and theoretical analysis of the issues at stake

It is necessary to elaborate first on the concept of resistance and how that relates to the practice of seed saving. I will also explain my understanding of Gandhi's theory of Swaraj that Navdanya is embracing. I will try to make a connection between Swaraj and emancipation politics because I believe that they are inextricably connected. Then I will move on to talk about the role of Navdanya as an NGO that is training farmers, promotes their rights and fosters seed saving. Finally I will also explore how seed saving relates to cultural aspects as a technology of resistance. I will recapitulate my research questions before I start discussing the aforesaid issues. My research questions were the following ones: Can seed saving be interpreted as a technology of resistance employed by farmers affiliated with Navdanya? Stemming from this point more questions emerge. If yes, who is politicizing this activity? Is it Navdanya? Or do farmers politicize this activity on their own accord? Is it possible to distinguish between the two former questions or in the process things get blurry?

6.1 What about resistance?

I am using the term technology of resistance in my key question. Birkenholtz (2009:212) explained how the objects of what Foucault would call subjects-making process, use technologies of resistance to oppose "neoliberal technologies of environmental governance (i.e. devolution, self-regulation and market-based approaches, including privatization/ enclosure), state violence" etc. In that sense I understand the word technologies as tools and methods that the oppressed and the oppressors have within their disposal; or new ones that they can conceive in order to protect their interests. Scott (1990:20) used the term technology and practice of resistance in juxtaposition with what Foucault termed as technology of domination.

What about *resistance* though? Scholars have spilled a lot of ink writing about resistance. On top of that 'radical' movements always use this word as the spearhead of their propaganda. However what is the meaning ascribed to the word and how do different actors understand it? Despite the temptation to talk broadly about the concept of resistance I will narrow my focus on the area pertaining my thesis and that is peasant resistance. Scott (1985) in his seminal book *Weapons of the Weak* dealt thoroughly with peasant resistance. He claimed that such resistance:

Includes *any* act(s) by member(s) of a subordinate class that is or are *intended* either to mitigate or deny claims (for example, rents, taxes, prestige) made on that class by superordinate classes (for example, landlords, large farmers, the state) or to advance its own claims (for example, work, land, charity, respect) vis-à-vis those superordinate classes. (ibid:290)

Two important points stand out from this definition. Resistance does not necessarily have to be a product of collective action and members of subordinate classes act upon

intention. Another important point according to Kee Beng (2009:55) is the potentiality of peasant resistance to take place in the realm of symbols and ideas. That is particularly important when one talks about hegemony and what can its actual effect be over peasants or the oppressed in general. I will elaborate about this ideological resistance on the part that focuses on the cultural aspects of it.

Furthermore Scott (1985:xvi) talked about the significance of mundane forms of resistance (foot dragging, dissimulation, false compliance, arson, sabotage – to name a few) that have been neglected from historians since most of them focus on large-scale events of explicit opposition to the status quo. He explained how despite the fact that these "everyday forms of resistance make no headlines" (ibid:xvii) they are still important precisely because they fit the characteristics of the societal organization of peasants. He emphasized how resistance in general can be identified as formal-informal, individual-collective, public-anonymous, aiming to challenge the dominant paradigm as such or aiming to challenge some marginal aspects of it (ibid:299).

In addition even though some might think of low-class resistance as a collective action, Scott (ibid:295) argued that quite often it is a product of self-interest. He explained further why peasant resistance can be self-centered, stating that:

To require of lower-class resistance that it somehow be 'principled' or 'self-less' is not only utopian and a slander on the moral status of fundamental material needs; it is, more fundamentally, a misconstruction of the basis of class struggle, which is, first and foremost, a struggle over the appropriation of work, production, property, and taxes. (ibid:297)

Scott (1985:xvi) spoke about forms of resistance of subordinate classes that are disguised as and within mundane activities. In his later work, *Domination and the Arts of Resistance* he used the term *infrapolitics* to explain political actions that were ignored in the past because they were not identified as political (1990:198). He also cleared out that infrapolitics is true politics yet different because any claims made are not explicitly stated in the public sphere (ibid:199). He mentioned:

So long as we confine our conception of the *political* to activity that is openly declared we are driven to conclude that subordinate groups essentially lack a political life or that what political life they do have is restricted to those exceptional moments of popular explosion. To do so is to miss the immense political terrain that lies between quiescence and revolt and that, for better or worse, is the political environment of subject classes. (ibid:199)

It is thus understood that political actions do not have to be vehement and explicit to be considered as such. I further argue that politics is embedded in our daily lives; interwoven in our routine choices – our consumption choices for instance, or the way we think of the Other, or how we treat our co-workers, or how do we relate with our class and the class above us or even if we find ourselves within this concept or not and so on. I understand that these are strong statements but I use them merely to illustrate how embedded politics is in our lives should we choose to think in a political way. Despite the fact that most of us might not think of our actions as political, the truth is that they do have political consequences sometimes even across the globe. Following Lalu, Neocosmos (2012:541-542) claimed that a post-colonial perception of politics would have to be essentially subjective and that "politics does not have to be located within a state domain of 'the political' (or 'political society') for it to be so qualified." Essentially he defined politics as "the expression of human agency" (ibid:531). However politics is disconnected from most people's minds because they have been conditioned to be subjects and not citizens (Scott 1990:199).

Another very crucial point that one needs to keep in mind when talking about resistance is what its actual outcomes could be. In this sense I mean that the actual realized outcomes of resistance can on the one hand be emancipation and liberation from oppressive schemes but on the other hand they can also be extremely violent repression (Olson & Sayer 2009:188). That is another reason to highlight the importance of prosaic technologies of resistance. Any outspoken act of resistance performed by the subordinated will face immediate and ruthless retaliation by the political and economical establishment (Scott 1985:33).

It is thus understood that resistance of the subordinated can take up many forms – it can be more 'passive' or proactive, it can be violent or non-violent, it can be explicit or 'hidden'. Depending on the form it will take the response from the oppressors will be different. After this more general discussion on resistance I will now move on to the particular case of seed saving and explore whether I understand it as a technology of resistance.

6.2 Exploring the political aspect of seed saving

Seed saving as an action holds a peculiar position in respect with technologies of resistance. Before I examine if it is understood as a technology and practice of

resistance I have to acknowledge that it is foremost a subsistence activity practiced by small-scale farmers all over the world. Indeed when I asked Bijadidi Devi, the Seed Expert of Bija Vidyapeeth why she saves seeds, she told me: "If I want to eat and feed my family I need to save seeds." Similar answers were given by individual farmers in the group meetings and from the two farmers I interviewed during the rice procurement.

By saving seeds they secure the means to support themselves. It is thus an activity connected to the everyday livelihood practices of peasants as an effort to support themselves and their families. (notes from my field diary)

The importance of seed saving though is not limited only to the interests of people. Such an understanding would be too anthropocentric. By saving seeds of traditional varieties of crops farmers while cater to their subsistence needs they also preserve biodiversity maintaining thus the resilience of local ecosystems (Mugabe 1999:4). Keeping in mind however the main research question whether seed saving can be seen as a technology of resistance. It is concluded from the previous point made that the action remains the same – it is the *meaning* and the *intention* behind the action that changes within a particular social, economical and legislative context that can thus render it as political. Quite reasonably one could ask: Meaning for whom? I clarify here that I refer to the meaning farmers attribute to seed saving. Whether the political foundation of that meaning is laid by them or not has to do with my second question. Of course the problem of who interprets the action as a technology of resistance remains though i.e. me or the farmers? The analysis of farmers' responses is my interpretation of their understanding. I will try to shed some light in the aforementioned questions by presenting and analyzing some of the farmers' voices presented here as quotes.

Apart from the subsistence-related reasons that farmers gave regarding seed saving they also gave answers that I identify as politically grounded. In the interview during the rice procurement and in the group meetings some farmers claimed that:

I have always been saving seeds – I don't want to buy them on the market. If I don't have enough my neighbors will lend me.

By saving and exchanging seeds we don't rely on anyone else but ourselves our community and neighbors. We can also save money and achieve sovereignty.

Organic farming and seed saving can be a solution for farmers who are indebted and this way avoid suicide or being dependent on the market for seeds fertilizers and pesticides.¹⁵

One might argue that these quotes merely represent the economical incentives that farmers have when they save seeds. My counter-argument is that I cannot grasp how one can disentangle the economical from the political. I further understand these statements as illustrations of the efforts of peasants to be sovereign and self-sufficient especially when the government fails to cater to their needs. According to my field notes: "Farmers ask for further support from the government to provide organic seeds and fertilizers in the government stores on time for planting."

It also highlights their skepticism regarding the market of seeds and fertilizers. In order to access it by buying hybrid or GM seeds they will have to issue loans since these seeds are very expensive. Of course these seeds by default are heavily dependent on external inputs such as fertilizers and pesticides that are 'coincidentally' produced by the same companies that produce the seeds (Scrinis 2007:114). This leads to a concentration of power through an establishment of an oligopoly ran by the agroindustrial corporations (ibid:114). Should a crop fail these farmers will be deeply indebt and unable to pay back. This led so many farmers in India to commit suicide, as aforesaid. By saving and exchanging seeds farmers are securing a safe access to them while relying on each other. They are also avoiding issuing loans and their entrapment in this vicious circle of debt and dependency on agroindustry and banks. This way they can protect themselves from the oligopoly control of the agroindustry, which controls the global seed market (ETC 2013).

In addition when I asked them about the Seed Bill of 2004 and what would they do in case it passed some men replied in a very bold manner:

We are not going to do what the government tells us. If they (the government) pass a bill that criminalizes seed saving I will still continue to save seeds even if it costs my life. Laws like these are immoral and one shouldn't obey them.

Foundation for Science, Technology and Ecology, Dehra Dun.

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¹⁵ From 1995 to 2011 290,000 farmers have taken their lives in India for reasons related to poverty and debt that changed their economic status. http://www.indianexpress.com/news/2.90-lakh-farmers-committed-suicide-during-19952011-govt/995981, (accessed April 17, 2013). If the reader wants to read more on farmers' suicides in India she can refer to: Shiva V., Jafri. A. H., Emani A. and Pande M. 2000. Seeds of Suicide The Ecological and Human Costs of Globalisation of Agriculture., Research

I will save seeds even if they (the government) threaten to hang me. We won't respect unjust laws.

We oppose the government because it limits our freedom to practice agriculture the way we know and want to.

I read these words as if they convey an explicit statement of resistance against the Seed Bill should it pass in the future. Their intention is to protect their right of saving and exchanging seeds even if they have to oppose state laws or risk their lives. They further call their colleagues to not abide in laws that are against their interests. Ergo these statements are political; they represent a certain type of farmers' agency, which situates them against the state when it comes to this particular topic. I specify that they pit themselves against the state in this particular issue and not in general because as it was aforementioned they also ask support and assistance from the state to provide them with organic inputs for farming on time. Therefore their approach is not an antiauthoritarian one – rather they try to protect their interests when threatened by challenging certain laws.

While analyzing my material I noticed that even though some people made some statements regarding their own position against the bill quite often they also spoke on behalf of their colleagues. That might has to do with the fact that during the farmers' meetings certain farmers – who had received training from Navdanya in the past – were repeatedly speaking more than others. This could be either because they were familiar with the topic that was discussed or maybe they had 'better' communication skills than the rest when being in groups. Nevertheless, the rest of the farmers were nodding or murmured 'acchacha' 16. I identified that as an indication of agreement but I still keep in mind that when people are in groups their opinions tend to align or those who have a different opinion than the group rarely express it in fear of sticking out. Furthermore I want to clarify at this point that even though I refer to these farmers as groups, I take into account that they do not consist of a totally homogeneous formation of people despite the fact that they share some similarities (subsistence farmers, origins from the same geographical area, use of common dialect). Thus I do not know if I can argue safely that these opinions reflect the ideas of each farmer. To do so I would have needed to spend significantly more time in the field while being

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¹⁶ The word acchacha in Hindi is used often in discussions to express agreement with what is said and it means good, ok, yes.

involved in the daily lives of the farmers. More importantly people often say one thing but actually do another. Much as I admire the courage of these people I do not definitely know how they would actually behave if the bill is passed.

Coming to this point it is understood that seed saving if seen through a certain perspective and if placed in a certain social and legislative context is identified by the majority of farmers working with Navdanya as a technology of resistance. As I specified before, the action is enriched with more intentions other than subsistence. In this sense it is not a direct response to the legislative measures that the Indian government wants to pass, because it has been practiced in the past since it is a cultural practice to save seeds from one agricultural cycle to another. The motivation to continue to do so changes though – since now farmers seem to acknowledge that they have a right to save seeds and practice agriculture in a manner that they find appropriate for themselves and their particular circumstances. However not every farmer from the group can fit to the explanation provided. That is because:

Some of the farmers from the meetings were not always practicing organic agriculture and seed saving. They chose to convert to organic after they were convinced to do so by other farmers who were already members of Navdanya's network. They provided different reasons for this such as: increased cost, danger for their health and their family, poor performance of hybrid seeds – yield was large the first year but then very bad, poor taste of chemically grown crops, [...] animals didn't like chemically grown fodder. (notes from my field diary)

What is different for those farmers? Farmers who were relying on the market to buy seeds, fertilizers and pesticides found themselves facing increased costs, poor performance of hybrid seeds and danger for their health due to the toxicity of agrochemicals. It was this confrontation with these problems that paved the ground for them to change their practices and start seed saving again. I think that the motivation for seed saving for these farmers when compared to the rest is a little bit different. They have embodied the negative outcomes of relying on hybrid seeds and agriculture based on chemical inputs. Their shift was a response to the problems they faced – a response that was backed by an ideological foundation that resisted the dominant paradigm of so called 'conventional' agriculture. This paradigm as has

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¹⁷ I use the word conventional in single quotes to raise a short discussion about the controversy around the use of this word. The word conventional when used next to agriculture is associated with fossil fuel-based farming practices that involve the use of chemical fertilizers and pesticides, tractors etc. In a lecture during the course on Gandhi, Globalization and Earth Democracy Vandana Shiva raised the

been explained in previous chapters has been promoted in the past by diverse international and national agencies under the name of the Green Revolution. The current Green Revolution has manipulation and control of seeds as its central goal and is being supported by the Bretton Woods Institutions and the Bill and Melinda Gates Foundation (Holt-Gimenez 2009:153-154). These behemoths have facilitated the efforts of the agroindustry to dominate the global food market and destroy the lives of peasants (ibid:153-154, Scrinis 2007:116). Even worse they have gained the consent of society and the governments to do so based on mystified claims ¹⁸ about insufficiency of global food supplies (ibid:153-154).

It is thus realized that when these farmers abandon chemical-based agriculture by shifting to organic and start saving seeds they manifest a struggle to go against the capital-driven agroindustry. These are their own technologies of resistance to oppose privatization/ enclosure of seeds and indigenous crops varieties imposed by the agroindustry through the TRIPS agreement. This agreement is devised to secure the interests of the agroindustry, which holds technical expertise (Shiva 2001:6). Shiva further argued that this agreement illustrates a pattern of thought that is directed to "mass-produced goods, as against goods produced by the masses" (ibid:6). These companies are patenting living material and consider these patents as their achievement even though they are based on products of nature (ibid:15). An important issue for my inquiry is the fact that the agroindustry ignores the contribution of the informal sector (peasants, small-scale farmers) in the production of knowledge on seeds and crops varieties (ibid:15). Therefore these prosaic activities of subsistence suddenly attain another meaning - a political and a cultural one since peasants' contribution to knowledge is disregarded and they are forbidden to use patented seeds of varieties that they have been using in the past.

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issue and asked: "How can a model of agriculture that doesn't even have a history of one hundred years be regarded as conventional when people have been farming for thousands of years in a totally different way?" (November 28th 2012) The reader hopefully by now understands why using the word conventional is peculiar and controversial. The way this word has been hijacked is explained if we realize that the imagination of people and policy makers of how farming is done has been colonized by the agroindustrial paradigm. "The only way to farm is through heavy fossil fuel-based inputs" is the mantra repeated by the agroindustry and the Bretton Woods Institutions. Starting to use the word conventional when referring to low input, small-scale agriculture is the first step to *reclaim* the word and the meaning it carries with it.

¹⁸ I present here some illuminating facts found in the article of Holt-Gimenez (2009:144). In 2007 global grain harvests were record-high. In 2008 when the food crisis broke FAO reported that there was enough food to feed everyone – at least 1,5 present demand. Ergo food was available – people could not afford it due to their extremely low income in conjunction with high food prices.

After illustrating my interpretation of seed saving as a technology of resistance I will move on to explain the concept of Swaraj and then illustrate how Navdanya and farmers-members affiliated with it apply this concept in seed saving and organic agriculture.

6.3 Swaraj and sociopolitical emancipation

Some might interpret Swaraj as Home Rule but it is a much more complicated concept. In his book Hind Swaraj Gandhi (1938:56) wrote:

[...] Those alone who have been affected by Western civilization have become enslaved. We measure the universe by our own miserable foot-rule. When we are slaves, we think that the whole universe is enslaved. Because we are in an abject condition, we think that the whole of India is in that condition. As a matter of fact, it is not so, yet it is as well to impute our slavery to the whole of India. But if we bear in mind the above fact, we can see that if we become free, India is free. And in this thought you have a definition of Swaraj. It is Swaraj when we learn to rule ourselves. It is, therefore, in the palm of our hands. Do not consider this Swaraj to be like a dream. There is no idea of sitting still. The Swaraj that I wish to picture is such that, after we have once realized it, we shall endeavor to the end of our life-time to persuade others to do likewise. But such Swaraj has to be experienced, by each one for himself. One drowning man will never save another. Slaves ourselves, it would be a mere pretension to think of freeing others.

By reading these words one realizes why for Gandhi the quest for Swaraj was not limited in acquiring independence from the British. The British merely constituted an obstacle in achieving what he called Self-Rule and this is why Indians had to break free of them (Veeravalli 2011:67). The goal of Swaraj was transcending the overthrow of the British rule – in a sense it was something much beyond that. Instead it pushed the boundary to question the notion of sovereignty (ibid:65). But how did Gandhi understand sovereignty? Before expanding on his understanding it is necessary to also provide an illustration of sovereignty based on the work of postenlightenment theorists. I agree with Veeravali (ibid:66) who argued that:

Post-enlightenment theories of sovereignty are more or less agreed on its definition as that which has "supreme authority within a territory". Thus supreme/exclusive authority and territory are the two constitutive principles of sovereignty in the modern nation state.

She further pinpointed certain assumptions of post-enlightenment theories on society, state and the individual. For instance Rousseau, Hobbes and Lock each coming from a

different point assumed that: a) society is constructed in the domain of the social construct, b) the existence of the state is essential and compulsory and c) civil society and the state are two sides of the same coin (ibid:66). Veeravali concluded that the failure to distinguish between civil society and the state prevents the former from expressing the opinion of neither the individual nor of the collective (ibid:66). It is precisely here where Gandhi's perception of sovereignty and Swaraj comes into play dismantling the assumptions on the modern state and its statutory enactments (ibid:67).

His notion of sovereignty transcends the problematic postulate of the identification of state and civil society as one entity. He is actually situating the people against the institution of the state (ibid:67). Based on this elaboration his conception of Swaraj could be summed up in the following three points, which are:

[...] Fundamentally different from the accepted definitions of sovereignty in the modern nation state: (1) it presupposed the necessary differentiation and separation of civil society from the state, in their origin and constitution. (2) The possibility of self-reform, rather than control over, or freedom from the other was seen as a necessary condition of sovereignty. (3) It disposed of territory as a definitional condition of sovereignty; rather sovereignty defined the relation/frontier (not boundaries) between territories of different nations, and of self and other. Territory was neither an object of control, nor of acquisition or exploitation. The good of the self, or one's country rested in the good of the neighbour. (ibid:67)

I identify this segregation of state and civil society and the importance in self-reform as an essential part of an emancipation process. This process is necessary if members of civil society want to liberate themselves from the influence of the state. Besides Ranciere (in Neocosmos 2012:547) argued that states all over the world are not real democracies but oligarchies instead since only a small number of people is actually ruling. The word democracy is wrongly associated to a state formation and a popular practice (ibid:547). When peasants and small-scale farmers choose to save seeds and practice agriculture in the ways that are fitting to their circumstances they are actually exercising this practice – this is *direct democracy*.

I attempt to present my understanding of Swaraj as an emancipatory procedure and link it to politics of resistance. Gandhi called for a transcendence of the focus of sovereignty beyond the distinction of state-civil society in order to reach emancipation. However to achieve this, one will need to overcome the limitations of

state subjectivities (ibid:531). To do so one needs to challenge the oppression imposed by the state mechanisms. In the case of Indian small-scale farmers oppression is expressed through the implementation of trade agreements driven by economies of scale that promote industrialized agriculture and the efforts to implement the Seed Bill of 2004 that will eventually prohibit peasants and small-scale farmers from being able to sell and exchange seeds.

In addition Neocosmos (ibid:541) argued that contestation with the state begins by challenging and resisting one's objective social location. This venture continues by moving from the challenging of these locations to dismantling or transforming institutions that restrict one from seizing real freedom (Aryal 2010:v). Both aforesaid arguments are beautifully bound in the following words:

When the oppressed refuse and resist oppression, they place themselves beyond the place of oppression both subjectively and politically and often even physically. By so doing they make that oppression visible and force a rethinking of conceptual categories. (Neocosmos 2012:531)

I argue that the process of Gandhian self-reform could also be applied in this challenging of social locations. I elaborate more on this argument in the following chapter. In addition, Gandhi pushed for such an actualization of reforming one's self that understands sovereignty not as power of the self over another but instead as a dialectical process between the two (Veeravali 2011:67-68). Gandhi however clarifies that this is a process that starts from within. Only once a person realizes true freedom will she/he be able to act upon this realization and assist others to do so too. Moreover this process is ongoing as ongoing is the process of shaping subjects. Nevertheless, the shaping of subjectivities might not necessarily demonstrate only a restrictive and oppressive character; it can also be constructive and creative (Agrawal 2005 220-234). According to my interpretation this is Navdanya's role with respect to the political training of farmers. It was aforementioned that Navdanya is not only focusing on training that pertains to best organic agriculture and seed saving practices but also includes training on political organization.

6.4 Navdanya's role

Scott (1985:xv) argued that methodical political activity is usually the privilege of the middle class and the intelligentsia and concludes that peasants cannot organize in a similar manner unless influenced from the outside. I believe that this also applies in

the case of Navdanya in the sense that this NGO comes from the 'outside' to lay the foundations of the political organization of its farmers-members. Scott's former statement did not deny any political agency to peasants since as he explained in his work they develop their own ways of resisting and practice infrapolitics or the 'hidden' politics of the subordinated (1990:183-184). However in my opinion the politics practiced by the farmers-members of Navdanya¹⁹ do not fall into that category. I will try to illustrate why.

As aforementioned seed saving as a practice, does not change – what changes is the meaning attached to it and its political grounding. To my understanding, the training that Navdanya offers to its members focuses not only on disseminating best organic agriculture practices (including seed saving, preparing organic pesticides and fertilizers among others) but also on politicizing issues that are relevant to farmers. According to Vinodji Bhatt (director of Navdanya's program and researcher):

Political education is part of Navdanya's training to farmers. We are trying to inform them about their rights. [...] Navdanya is also organizing Yatras – these are Awareness campaigns. We organize marches throughout the country where information and seeds are distributed freely.²⁰ (notes from my field diary)

Campaigns such as the Anna Swaraj that include public advocacy for the right of farmers to save seeds, marches across the country to raise awareness on seed saving, a petition against the Seed Bill of 2004 that was signed by 150,000 citizens constitute organized public political action. (notes from my field diary)

These activities can be seen as parts of the inventory of technologies of resistance that Navdanya and its farmers-members employ to defend their rights. More importantly they take place in public and this renders them beyond Scott's category of 'hidden'; thus they do not consist of infrapolitics but they are still real politics of the subordinated.

During my internship in Bija Vidyapeeth I had the opportunity to observe the

¹⁹ I am aware that in this particular statement I am shifting from analyzing only the primary data that were produced through interacting with informants. I am not aiming to generalize even though I refer to farmers-members of Navdanya. However I am trying to elaborate on a broader scale based on information that I collected by talking with people who have a more administrational role in Navdanya and could act as pools of knowledge regarding Navdanya's activities and its members perceptions on certain issues. These talks were not interviews but were products of daily interactions in the field throughout the course of my internship.

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discourse that was prevalent among the staff of Navdanya (farmers, trainers, administration personnel) in regards with the political grounding of seed saving and organic agriculture in general. More importantly Navdanya embraces a Gandian approach regarding the way of living, activism, and political organization. This means that living should be based not on greed but need, coexistence with all beings should be based on non-violence and all efforts of individuals should be channeled to realize Swaraj. According to my field notes:

Navdanya's trainers are promoting the Gandhian discourse on Swaraj and encourage farmers to resist industrialized agriculture and land grabbing by practicing organic farming that is labor intensive and thus the whole community organizes around it, while it is also fosters the protection of the environment. [...] They also illustrate how important it is to save seeds, to found seed banks and to help each other in the community level.

I believe that Navdanya is trying to provide the theoretical and practical foundations that will allow peasants to organize and achieve Swaraj in their community level. It will be useful to illustrate how Gandhi (1997:306) understood the concept of Swaraj on the village level:

[...] It is a complete republic, independent of its neighbours for its vital wants and yet interdependent for many others in which dependency is a necessity... In a structure composed of innumerable villages... life will not be a pyramid with the apex sustained by the bottom, but it will be an oceanic cycle whose centre will be the individual... The outmost circumsphere will not wield power to crush the inner circle but will give strength to all within and derive its own strength from it.

Reading that quote I understand that Gandhi conceptualized village communities that will be as self-sufficient as possible and decisions will be taken collectively. He also imagined a network of villages that will support each other and their operating force will be the individual. The first key to achieve self-sufficiency is to secure livelihood, to secure the means to produce food. This is why seeds hold such significance for peasants and small-scale farmers. Seeds are an essential component in order to achieve food sovereignty but without access to land and water seeds are useless. This is why the concept of food sovereignty is linked with seed saving since this concept argues for the right of small-scale producers to control their means of production (Food Sovereignty Org 2007). The definition of food sovereignty has already been provided but it is very interesting to see how this definition relates to the concept of

Swaraj on the village level. The food sovereignty concept/movement relies on the right to food but expands in economic and social human rights (Rosset 2011:22). Food sovereignty places the needs of producers of food at the core of food systems and calls for an appropriate orientation of the policies to meet this demand instead of facilitating the agri-food industry. As it has been already explained the current global trade and agricultural policies grant access to markets on account of marker power (ibid:22). Low and subsidized prices that are achieved through industrial agriculture drive local small-scale farmers/producers out of their own markets since they cannot compete with these prices (ibid:22).

Furthermore food sovereignty calls for the promotion of the rights of peasants and small-scale farmers/producers to have control over their land, seeds, livestock, water etc. It fosters sustainable methods of food production that as it has already been described do not identify with the agroindustrial paradigm. The aforementioned UN report conducted by IAASTD in 2009 also stressed the urge to shift the agricultural paradigm to small-scale organic agriculture – a way of agriculture that protects the environment since it is not based on high inputs of agrochemicals, preserves biodiversity since is not depended on monocultures and also secures the livelihoods of millions of people. Navdanya is working towards this direction in an effort to provide peasants and small-scale farmers with the theoretical and practical foundations that will allow them to work towards the realization of Swaraj that in my opinion relates with food sovereignty.

In this point I think it is significant to also depict how the founder of Navdanya, Vandana Shiva identified sovereignty. She argued that the bottom line of the concept of sovereignty is "being able to take independent decisions about things that affect your everyday life" (Shiva 2001:15). This concept when applied to seed saving and organic agriculture translates as the right of peasants and small-scale farmers – the holders of TEK – to be able to save, exchange, sell seeds and practice agriculture in the ways the deem appropriate to their own particular circumstances. It is clear that the concept of village Swaraj, Gandhian notion of sovereignty and food sovereignty are focusing on the same aspects. Navdanya is combining these concepts into its discourse and its programs.

During a lecture on the history, aspects, policies and goals of Navdanya by Vinodji

Bhatt I had the chance to gather information on these topics. According to my field notes:

Based on this understanding of village Swaraj, Navdanya is training its farmers-members on organic farming, seed saving and Gandhian principles. Farmers-members then go back to their villages to disseminate the knowledge and start founding and organizing seed banks that are run by the community. Seed banks are self-organized but Navdanya will provide know-how, money or seeds if needed. [...] Navdanya is buying their (farmers-members) production surplus giving them a ten per cent premium price. It also encourages farmers to set prices themselves in order to empower them and help them feel proud about their labor. When each community reaches Swaraj – that is being able to depend on themselves for seed access, food production and market access to sell their produce Navdanya exits. This usually takes up five to six years.

It is thus clear that Navdanya is politicizing not only seed saving but organic small-scale farming as well. Its discourse is being adopted by the farmers who joined the meetings as has already been illustrated with their quotes that draw from Gandhi's understanding of the distinction between civil society and the state, living based on need and not on greed, right of an individual to take decisions that will affect her/his life and so on. Through Navdanya's discourse farmers are more cognizant of their exploitation and of the technologies of resistance that they can use. However I cannot argue that I have a clear image of what the extent of the politicization of seed saving stemming by farmers themselves. As I have already explained, the fact that the empirical collection took place within Bija Vidyapeeth and during these trainings has most probably affected the answers of the farmers.

Before I move on to explain in general the cultural oppression of peasants and small-scale farmers through the hegemonic agroindustrial paradigm I will briefly refer to some personal observations regarding the understanding of Navdanya's role through the opinions of administrative stuff. I believe this is important because it highlights that Navdanya is not a homogeneous structure but something diverse and dynamic. A very interesting point emerged on the attachment of political meaning to seed saving during one of the talks I had with Darwan Singh Negiji, the National Program Coordinator of Navdanya. Here is an excerpt of our talk:

Me: So why should farmers save seeds?

Negiji: Seed saving helps farmers to achieve food sovereignty. Achieving food sovereignty, being self-sufficient for your food and be able to choose how you farm, how you live – this is

freedom.

Me: You refer to freedom, self-sufficiency and food sovereignty. So do you think seed saving has also a political significance?

Negiji: No, seed saving is not political.

Me: How do you understand the word political though Negiji?

Negiji: Political is corrupted; it has to do with politicians who are corrupted. Farmers are not corrupted.

It is interesting to see how the understanding of what is political changes between different individuals and different societies. To my understanding and as I have already explained seed saving is a political activity, a technology of resistance. Even though Negiji during farmers' trainings called farmers to resist against the oppression that is imposed by the agroindustry and government's policies he does not relate this to politics of resistance. That is because he relates politics in general with corrupted politicians. I understand his opinion since there are numerous cases of political corruption in India.²¹ In addition his opinion reflects the fact the political realm has been taken over by professional politicians and political parties. We tend to consider 'political' only what has to do with politicians and political parties; yet as I explained before the way we relate to each other is actually political.

Another significant point about the capacity of Navdanya to promote change in agricultural policies in India and about the strength of the agroindustry that can shape these policies was raised during the interview that I conducted with Lataji Sharma and Reethaji Balsavar, directors of Navdanya's office and organic shop in Mumbai. Here is another excerpt of our talk:

Me: You know I was thinking about food sovereignty in respect with Navdanya's goals. I was thinking that by promoting food sovereignty and seed saving another form of revolution could be achieved. One that will not be based on violence but on reclaiming the food production system from the agroindustry and rendering available to the hands of the people – the ones who actually produce the food. Like people reclaiming the means of production and be able to have greater control over their lives and their livelihoods. What do you think?

Lataji: You are very romantic. This is beyond the capacity of Navdanya. Navdanya aims to

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²¹ Approximately thirty-five per cent of the members of the Indian parliament that have been elected in the last elections face criminal charges. (BBC 2012), http://www.bbc.co.uk/news/world-asia-india-17336094, (accessed May 2, 2013).

make a difference in the lives of small-scale farmers. To help improve their incomes, their diets, strengthen their communities and their families; to preserve traditional knowledge and biodiversity through the active engagement of farmers with organic farming and seed saving. Because everything is connected.

Me: I think you have point Lataji; I am indeed romantic. I can't disconnect the seed saving and organic farming from its political implications since the whole agroindustrial paradigm results on the oppression of small-scale farmers. Organic farming and seed saving challenge this paradigm; this is why I think of it as potentially revolutionary.

Reethaji: The truth is that it is very hard to overturn this paradigm. Navdanya, other NGOs and civil groups all over the world are trying really hard to make a difference. This paradigm however caters for the interests of the agroindustry; after all they (agroindustry) have designed it. They have enough power and money to influence decision-making processes so much that they shape them according to their agenda. Their huge impact is not limited only India but all over the world.

The two aforementioned quotes represent an understanding of the politics related to seed saving and organic agriculture on two different scales – the personal/individual and the national/international. I also think that the previous two excerpts illustrate how different can the understanding of the activities of Navdanya be. They illustrate the different perspectives of what Navdanya is trying to do and they also demonstrate how different is my understanding as a researcher who got involved with Navdanya for four months. Lataji and Reethaji do not seem to relate Navdanya's efforts to a more radical form of politics. After all it is primarily about giving the right tools and knowledge to peasants and small-scale farmers to secure their livelihoods and defend their right to save, sell and exchange seeds freely.

Another critical conclusion has to do with the role of the Indian state. Some readers might argue that in my thesis I have 'demonized' the state. Even though I have explained my political background before, I clarify here that I understand that the Indian state is not a monolithic structure with a homogeneous response and understanding of the issues at stake. Simply put there are people in the central and state governments that actually care and sympathize with the struggles of the peasants and want to cater to their needs. This is proved by the fact that the farmers' trainings were funded by the Uttarakhand State Department of Biotechnology (Ministry of Science & Technology and Biotechnology). More examples of the diverse relationship between the state and peasants and small-scale farmers struggles can be

seen in the statement of Rajasthan's Chief Minister, Vasundhara Raje on the 2004 incident of the murder of six farmers by police forces during protests about their lack of access to adequate irrigation water (Birkenholtz 2009:208). She stated:

The government cannot do everything. It has to be a people's movement. I don't want to give scope for any anti-Government movement on this count. In the past we had gone out of the way in providing everything they asked for and we were taken by surprise, then I realized that it was absolutely important to be in touch with the people. The future is going to be terrible unless this aspect is taken care of. (ibid:214)

I believe that this statement shows how conflicts between civil society and the state can be resolved. Governments not only in India but also globally will have to abandon neoliberal policies that have allowed for the domain of public to be manipulated and ruled by the corporate sector (Ratuva 2009:156). Instead they will have to channel their efforts to ensure the protection of the rights and the wellbeing of their people who elect them. After having demonstrated how diverse the understanding of seed saving can be, I move on to the final part of the discussion where I elaborate on how seed saving is linked with TEK that is appropriated through the TRIPS agreement. I also demonstrate how resistance can be manifested in the domain of culture.

6.5 The cultural/ideological extensions of seed saving as a technology of resistance

As has been aforesaid resistance of the oppressed can manifest itself in the domain of the symbols and ideas as well (Kee Beng 2009:55). I would further argue that in the case of seed saving and organic agriculture practices, such an inclusion is absolutely necessary in order to challenge the dominant paradigm of industrialised agriculture. I have already illustrated an example of how the aforesaid paradigm is hegemonic by talking about the 'hijacking' of the word conventional in respect with agriculture. The word conventional should be associated with organic and not industrial agriculture since the latter has not been practiced as long as the former – not even for a century. Industrialised agriculture however is still considered the most appropriate solution to meet rising global food demands – despite the fact that this belief is a fallacy, as I discuss later.

This fallacy remains largely hidden precisely because this model is hegemonic. The agroindustry through extensive lobbying and advertising, but mostly with

privatization of science has managed to colonize the imagination in respect with agricultural practices (Ayres & Bosia 2011:48-50, Ratuva 2009:155). The latter point is of high significance. Academics in both natural and social sciences are hired by the agroindustry to conduct research for it causing the displacement of individual researchers (Ratuva 2009:155). True to its neoliberal spirit this process has been implemented by a nexus of enterprise subcontracts and has led to the commodification of information and data and the undermining of the independence of universities and research institutes (ibid:155). These researchers will often prove the claims of the agroindustry enhancing its hegemonic characteristics. Nonetheless there is scientific riposte to these bought off, corporatized findings.

There have been increasing scientific data, which suggest that industrial agriculture does not outperform organic. A very good example is the thirty years field study comparing organically and chemically fertilized agricultural systems conducted by the Rodale Institute (2011)²² proving that:

- a) Organic yields match conventional yields
- b) Organic outperforms conventional in years of drought
- c) Organic farming systems build rather than deplete soil organic matter, making it a more sustainable system
- d) Organic farming uses 45% less energy and is more efficient
- e) Conventional systems produce 40% more greenhouse gases
- f) Organic farming systems are more profitable than conventional

Their findings challenge the claims of the agroindustry but I need to clarify here that I disagree with the use of the word conventional as I have already explained why. In addition the aforementioned UN report of 2009 conducted by the IAASTD also calls for an immediate shift of the agricultural paradigm in order to meet environmental and socioeconomic challenges. Yet as it has been already shown decisions and policies globally are favoring industrialized agriculture despite the fact that it is not sustainable since it is based on high external inputs, destroys the environment, destroys livelihoods and traditional ways of living.

The agroindustry is propagandizing chemical-based agriculture as the only

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The report is available here: http://www.permaculturenews.org/files/rodale_30-year-farming_systems_trial.pdf, (accessed May 3, 2013).

appropriate way of farming. While travelling in rural India (states of Punjab, Uttarakhand, Maharashtra, Himachal Pradesh), I could witness this propaganda in murals that were advertizing chemical fertilizers, pesticides and herbicides. This extensive advertisement has an impact on the decisions of farmers – it is influencing their opinions. Indeed, according to Reethaji:

Small-scale farmers who practice chemical-based agriculture are afraid of converting to organic because the media favor the former. Posters and murals in the villages encourage farmers to use pesticides and fertilizers to improve their yields.

Furthermore during one of the farmers' trainings one of the lecturers claimed that:

Corporations are shaping the governmental agenda through the donation of money needed for electoral campaigns. This agenda is pushing for Green Revolution practices – that is increased use of pesticides, herbicides, fertilizers and hybrid seeds.

It is thus clear to understand some of the reasons why it is so hard for Indian farmers to convert to organic agriculture. In addition during the first years of conversion yields can be small and farmers might be unable to find markets for their organic produce. According to Vinodji Bhatt Navdanya is trying to facilitate the access of farmers to the organic market by promoting the organization of farmers' co-ops that sell their produce to Navdanya, which gives them ten per cent premium price. Then Navdanya is selling the organic produce to urban centers in India and the abroad.

The former quotes also illustrate the impact of the hegemonic agricultural paradigm in the imagination of what method of farming is possible or appropriate. In this context of ideological oppression though I interpret the choice of practicing organic agriculture as a technology of cultural resistance. This identification relates to Scott's (1985:290) theory because it is prosaic, the subordinate class practices it and it can challenge claims of the superordinate class on the rights of the former. This form of resistance is established on the cultural foundations of TEK, which relies on the interconnections between the social and the ecological (Shiva 2007:310). In the particular case of India this is quite explicit since Indian culture regards nature as common goods while from a religious point of view rivers, trees and animals are the materialization of God (Marden in DeGeer 2003:197).

Furthermore TEK is based on a completely different cultural grounding regarding the ownership of knowledge when compared to the TRIPS agreement. Through this

agreement knowledge and innovation is based on privatization, commodification and enclosure via corporate interests while TEK is collective and is based on community and sharing of practices that date thousand years back (Shiva 2007:308, Ratuva 2009:154, Brush 2007:1501). By continuing to practice seed saving of traditional local varieties of crops and organic agriculture peasants and small-scale farmers are holding on to their cultural heritage. Therefore by resisting the conversion to chemical-based agriculture and high-yielding varieties that are promoted to them by rendering loans and related services more accessible (Infochangeindia Org. 2010) they preserve their cultural and ideological autonomy. Indeed, during the meetings two farmers stated:

The way you practice farming shows how you want to live in this world. Industrial farming is based on greed. It's about making money and stealing from the soil and nature. Organic farming means caring about nature and your community. It's based on coexistence.

Another way of living and thinking is needed. This will change what we want form our lives and our farming activities. Life should be based on need not on greed.

I interpret the former point as a contention that is not restricted in the domain of agricultural practice but also expands in the realm of the ideas about it. These two quotes also illustrate the Gandhian discourse of Navdanya, which is advocating simple lifestyles based on coexistence and codependence of nature and people. More importantly farmers' dedication to continue practicing their culture as usual in respect with agriculture fosters their cultural autonomy and sovereignty. In this argument I demonstrate how the political is linked with the cultural and the ecological as well.

Being able to practice agriculture in the ways that are appropriate for your own particular circumstances is a right of all food producers as was mentioned in the food sovereignty definition. This right encompasses the three aforementioned domains – politics, culture and ecology. The political issue with the appropriation of TEK through biopiracy is not only limited in the domain of privatization, enclosure and commodification. Instead there is another power game that was established in the era of colonialism and still goes on today in the era of neoliberal neocolonialism. I am referring to the 'western culture of supremacy' (Bessis 2003, in Ratuva 2009:153) that identifies western science as pioneering and TEK as crude and unsophisticated. However it is thanks to peasants and indigenous people from all over the world and

their will to *share* their knowledge that biotechnology corporations can make new discoveries (for them not for the holders of TEK) or "increase the success ratio in trials for useful substances from one in ten thousand to one in two" (Roht-Arriaza in DeGeer 2003:189).

The colonization of knowledge is explicit in cases when a corporation 'discovers' a plant or components of a plant with particular properties through the help of holders of TEK. Based on the TRIPS agreement the corporation becomes the inventor and has patent claims on this genetic material while the contribution of holders of TEK is disregarded as insignificant (ibid:191). Western science is considered the 'right' way to make claims on knowledge while TEK not (ibid:191). Ratuva (2009:153) argued that this is a power game on epistemology between indigenous culture and western epistemological discourse. As a result the choice of peasants and small-scale farmers to continue practicing agriculture based in their own distinctive practices is a form of cultural resistance. I interpret this as an opposition to the hegemony of western culture that stretches from agricultural practices, ways of knowing, knowledge ownership and ways of being in this world. Once more we come full circle to realize the interconnections between politics, culture, ecology and economy.

During the farmers' trainings and the group meetings Navdanya's lecturers mentioned how important the TEK that peasants hold is. According to my field notes:

A woman claimed that she is uneducated. Trainers and other farmers reminded her of all the knowledge that farmers possess regarding the soil, the plants, the climate, the seeds which is very practical and of high significance not only for their livelihoods but for the environment as well.

One woman during the group meeting described how she is working in her community to promote the self-appreciation of peasants since their idea about themselves is poor. She explains how she talks to them about the importance and the value/ethic of hard work, the significance of their organic agriculture practice in respect with the preservation of biodiversity, the protection of the environment and their culture as well.

By analyzing my empirical material I recognize efforts stemming from Navdanya and its members that aim to strengthen the self-appreciation of the labor of peasants. Someone could argue that this push for self-appreciation comes to contest the hegemonic view of corporations on the significance of TEK and organic agricultural practices such as seed saving. That might be true but to come to valid conclusions

about this further research should be conducted. After elaborating on the various levels of oppression and its respective technologies of resistance that are employed by the peasants and Navdanya I move on to the final chapter of my thesis where I present some concluding remarks.

7. Concluding remarks

I have demonstrated how the dominant agroindustrial paradigm operates and how it results in oppressing small-scale producers and peasants globally. This oppression is manifested in the political, cultural, ideological and economical domains. I have also shown that seed saving can be interpreted as a technology of resistance and I have clarified why this technology of resistance needs to be contextualized within the concept of food sovereignty in order for small-scale producers to be able to control the means of production (land, seeds, water etc).

Navdanya is actually politicizing seed saving and organic farming in general. Its discourse embraces food sovereignty, village Swaraj, emancipatory politics and direct democracy at the grassroots level. Through the organization of farmers' trainings and awareness campaigns, Navdanya is trying to systematize political struggles and lay the foundation for the political organization of small-scale farmers that will foster their efforts to reach village Swaraj. I have interpreted these struggles as a contention that covers different levels: politics, culture, ways of knowing, access to knowledge, endangered livelihoods and so on. I argue that small-scale farmers and peasants are preserving their cultural heritage when practicing organic farming and seed saving. This way they try to prevent their knowledge from being colonized and appropriated through biopiracy and the TRIPS agreement. Seed saving and organic farming are manifestations of a cultural resistance that strives to promote small-scale farmers and peasants cultural and ideological autonomy.

However I have the impression that in practice the understanding of the two aforementioned actions by peasants and small-scale farmers affiliated with Navdanya is not so radical as I had imagined. I believe that peasants and small-scale farmers are not aiming to situate themselves against institutions that dominate them such as the Indian government. They are still addressing calls towards the Indian government to make provisions in order to supply them with organic fertilizers, organic pesticides and organic seeds on time as it has been already mentioned. This means that not only

they are still dependent on the state but also that they are acknowledging this dependency; as if in a sense they are not willing to challenge it. This is understandable since their views towards the state are not antiauthoritarian while local villages are still fall under the jurisdiction of state governments. Instead their stance towards the state seems to verify Hobsbawm (1973, in Scott 1985:301) who claimed that the aim of peasants is "working the system to their minimum disadvantage."

This also explains why peasants and small-scale farmers cannot identify (yet?) seed saving as a technology of resistance that is part of a process that will lead to their total emancipation from oppressive institutions. As already stated, in order to achieve emancipation one needs to start by challenging her social location (Neocosmos 2012:541). In the course of my inquiry I could not identify any signs that could pinpoint such a challenge stemming either from the discourse of Navdanya or the words of my informants.

In addition it has been concluded that Navdanya is a multifaceted and complex NGO and people who work for it might have different understanding of its activities especially in respect with politics. The same degree of differentiation applies for the Indian government; like it was aforementioned it is not a homogeneous institution and thus within its various agencies, ministries and departments a diverse set of actors operates. Some support the interests of the agroindustry and push for a shift in agricultural and international trade policies that will cater to the neoliberal agenda while others try to serve the people and protect the rights of small-scale farmers.

This thesis has been a theoretical exploration on the political significance of seed saving and its relation to emancipatory politics, village Swaraj and food sovereignty. It seems that the informants of my inquiry are willing to challenge certain laws or policies that are undermining their interests but they do not seem willing to challenge the institution of the state as such or their social location in order to reach emancipation. However small-scale farmers and peasants are organizing in the grassroots level to protect their rights to exchange, sell and save seeds, grow healthy and nutritious food in the ways that they identify as culturally appropriate. These efforts are backed up ideologically by the concepts of food sovereignty, Swaraj and direct democracy. I consider these concepts very radical even though they seem to proclaim the obvious – that people should have the freedom and the responsibility to

take decisions that affect their daily lives. Perhaps this can happen within a certain sociopolitical context where according to Graeber is based on: "[...] Fundamentally anarchist principles: direct action, direct democracy, a rejection of existing political institutions and attempt to create alternative ones" (The Guardian 2011) may right now seem like utopia. This Utopia as Sir Thomas More had envisioned it in 1516 (Oxford Dictionaries 2013) might indeed be a non-place, something that can exist only in the realm of the ideal. Efforts to reach it though, can only help humanity to move forth in order to create a global society that will be based on social justice, freedom, responsibility, prioritization of life over profits and the acknowledgment of our codependence to nature and to each other.

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