

INDONESIA

AN AGROECOLOGY MOBILIZATION



Introduction

Indonesia is a country with complex dynamics, rich in diversity, both in biological and sociocultural terms, which is paying the price of an ill fated myopia involving the subjugation to the dogma of 'productivity' and 'progress'. Like every other myopia, this one also sprouts from ignorance. Ignorance about the damage caused by this dogma of 'productivity' to the environment and to all the living beings inhabiting that environment.

Indonesia's civil society, however, is beginning to realize the dangers on the horizon of a production model that enriches only the few, leaving the local population with little economic benefits and major problems especially related to the pollution of water and soil.

[Water pollution](#) (only China throws more plastic waste into the sea in the world) affects health and the environment alongside soil pollution. On the extensive palm plantations (Indonesia is the largest palm oil producer in the world along with Malaysia) [large amounts of pesticides](#) are constantly sprayed including, according to some NGO reports, paraquat, a herbicide banned in most of the world because of its proven toxicity. The rhetoric of the authorities with respect to complaints of civil society is based on unfounded claims such as, for instance, the risk of [economic losses for the country](#) in the case of non-use of chemicals in farming. But beyond the [propaganda](#) of governments and agribusiness, [the reality is quite different](#) and civil society movements, some 40 million farmers and 250 million Indonesian consumers have begun to question the sustainability of a production model which does not lead to an enhanced wellbeing and instead takes one down the path of greater social exclusion, poverty and pollution.

This report is called 'Indonesia: an agroecology mobilization' and it is worth noting that the root of the word 'mobilization' comes from a French word (mobiliser) which means 'to render capable of movement'. This report also strives to reflect a movement: a movement from the story of Indonesia's colonial past and how it destroyed its food sovereignty towards a story of reclaiming that freedom of the seed, of the soil and our bodies.

The story of Indonesia's past has been shaped by the hegemonic struggles of power and control by the Europeans beginning since the 1630s all the way through the 1800s when the colonial state was officially established by the Dutch. The Dutch rule later gave way to the idea of an independent Indonesia in the late 1900s and the "new order" was created during Soeharto's era. The agriculture of the country was accordingly carved by these transitions in its history. The colonial policy based on the exploitation of natural resources and cheap labor represented the first attack on the food sovereignty of Indonesian communities.

The colonialist past of the nation, its policies and the paradigm they represented laid the foundations for what came to be known as the Green Revolution with its accompanying violence on the land and its people. Implemented in the late '60, its policies failed to recognize the social, historical and cultural context of agriculture in the country. This was especially evident in Bali where the mechanistic-reductionist system of agriculture completely disregarded the traditional water temples system called the 'Subak'. The extent of violence used by the government to impose the diktat of the Green Revolution consequently led to turmoil and protests by the peasants. With the turn of the century, the failure of the Green Revolution was

finally evident with movements organizing on the ground to reclaim food sovereignty and new ways of production which are respectful of environment, human health and local culture. This history contextualizes how one views the Indonesian agriculture scenario of today and so the first half of the report deals with it in a little more detail.

Keeping with the idea of ‘the movement’ from the story of the past to the story of the present, the latter half of the report delves more deeply into how a new story is gradually brewing around a more holistic and life enhancing food production model. It talks about the [agro-ecological mobilization](#) launched by Navdanya and Jaga Indonesia on the occasion of World Food Day in October 2017 which witnessed hundreds of farmers, university students, organizations, activists and ordinary citizens taking part in the events organized in Jember, Jogjakarta and Bali. Dr. Vandana Shiva’s [first trip to Indonesia](#) in August 2014, along with the experiences of eleven Indonesian activists and farmers attending [the A-Z on agro- ecology course](#) at Navdanya Earth University in India, gave a decisive boost to the mobilization. The mobilization was an occasion to hear, take note and reflect on a crucial collective voice: that of many Indonesian farmers. It also lent itself as a platform to hold an important conversation around the global agricultural situation. The discussions, mediated by [Ruchi Shroff](#) and [Neha Raj Singh](#), Navdanya representatives, also touched on the international campaigns for seed saving, campaigns against agrotoxics and the activities of Navdanya with Indian farmers. Furthermore, [Darwan Singh Negi](#), farmers’ training coordinator at Navdanya Earth University, held workshops in all the locations of the agro-ecological mobilization tour on how to produce organic fertilizers and pesticides using local resources, symbolically sealing this ‘chapter’ of the new story by giving the farmers practical tools to truly reclaim the sovereignty of their food and their land.



Local seeds in Jember, Indonesia

Colonial policy and neoliberal politics: from food sovereignty to exploitation

The modern history of Indonesia has been shaped by the various struggles for hegemony fought by the Europeans beginning since the 1630s all the way till the 1800s when the colonial state was officially established by the Dutch which later gave way to the idea of an independent Indonesia in the late 1900s and the “new order” being created during Soeharto’s era.¹ Agriculture in the country has been accordingly carved and shaped by these transitions in history. This brief context to the Indonesian agriculture looks into some crucial elements in that history starting with the era of the Dutch, the remnants of which can still be felt in the Indonesian agriculture scenario of today.

In the colonial era, the Java war was one of the most significant wars fought on the Indonesian land which completely wrecked the financial resources for the Dutch who then desperately started searching for ways to recoup the economic situation back in Netherlands and so when in 1829 Johanness Van den Bosch came up with a proposal of the *cultuurstelsel* or the cultivation system, it was swiftly accepted and put through for implementation.² This system involved the Javanese villages to pay a land tax to the government which was often pegged at 40 percent of the main crop (mostly rice).³ Each village therefore had to put aside a portion of its land to grow crops for export (usually coffee, sugar, indigo) which would be sold to the government at a fixed price which would then be shipped to Europe by NHM (Nederlandsche Handelmaatschappij or Netherlands Trading Company).⁴ The central principle of the system was a tradeoff to be made between land tax and export crop sale.

¹ See Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan.

² Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p. 156

³ *Ibid.*

⁴ *Ibid.*

Though the amount of land that got committed to the sole purpose of producing these government crops was small the labour investment was massive during the 1840s, with figures ranging from 57 percent of the population being involved in this system to almost 92 percent.⁵



While the elites of the system benefitted: the village heads, non-indigenous entrepreneurs (mostly Chinese and some Arabs) and officials from Europe, the burden of the system was felt most heavily by the landless labourers and the locals of the region.⁶ One such impact was that the compulsory cultivation aggressively pushed for sugar and indigo which diverted resources from the cultivation of rice which was so crucial for the local people.⁷

By the 1840s the simmering tension due to *cultuurstelsel* started to be felt more acutely by the Javanese and the Sundanese people: the tussle for water between sugar fields and rice fields, difficulty in crop rotation due to different natural cycles of the two crops, the depletion of nutrients in the soil due to indigo which led to bad rice harvests, the resulting rice shortages and famines breaking out in Java etc. all contributed to the growing opposition to this policy.⁸

In 1860 came a disruptive novel, heavily shaping the discourse about Indonesia in Netherlands and its policies, known as *Max Havelaar* written by Eduard Douwes Dekker.⁹ It exposed the dark underpinnings of corruption and oppression in the policy of *cultuurstelsel* and became a formidable power in opposing the colonial regime in Java to be used by the liberals to push for a

⁵ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p. 156

⁶ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p. 159

⁷ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p. 159

⁸ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p. 160.

⁹ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p. 161

reduction in government's twin role in the economy and the agriculture and ending forced labour of the Javanese and Sundanese.¹⁰

As a consequence of this debate, Netherlands decided to dismantle the *cultuurstelsel* in a piecemeal manner (this involved stopping the compulsory cultivation) starting with crops that were least profitable like Pepper and then gradually stopping clove, nutmeg, indigo, tea, cinnamon, tobacco, coffee and sugar.¹¹



The time from 1870s to 1900 was known as the 'liberal' period in the history of the country where Java's agricultural resources were exploited in subtle but intense ways: the liberals wanted both the locals and the government back in Netherlands to benefit from the agricultural surplus.¹² Also, though the compulsory cultivation was abolished the land tax still subsisted and so there was little relief for the farmers.¹³ Furthermore, the lands freed from cultivation of coffee could not be used for other crops.¹⁴

The period from 1800 to 1910 also marked an important time for the shaping of the Outer Islands of Indonesia where the involvement of the Dutch increased exponentially partly because of economic motivations, partly because of a sense of protecting these areas from the claims of other European countries and partly to suppress any resistance movements there.¹⁵

¹⁰ *Ibid.*

¹¹ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p 161.

¹² Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p 162.

¹³ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p 162.

¹⁴ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 12, p 163.

¹⁵ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 13, p. 171.

Despite being subsumed under the Dutch rule, the distinction between the Outer Islands and Java only became more accentuated later on and played a crucial role in the government policies of the twentieth century with its ripple effects even in the twenty first century.



Local Seeds in Jogjakarta, Indonesia

With the commencement of the twentieth century, the Dutch colonialism acquired both the inner and the outer islands and one witnessed a significant change of direction in the justification for the Dutch rule: the discourse around exploitation of Indonesian resources became substituted by the notion of welfare for the Indonesian people, popularly known as the 'Ethical Policy'.¹⁶ However, just like the Liberal era, this too was driven by the hypocrisy of striving for humanitarianism as well as economic advantage.¹⁷ This Ethical policy revolved around three pillars of education, emigration and irrigation. In this backdrop, the agricultural patterns changed with the changing economic environment brought about by the inflow of private enterprises. The production of sugar, tobacco, pepper, copra, tin and coffee expanded and became largely cultivated in the outer islands.¹⁸ Oil and rubber soon became two more predominantly outer island crops that played crucial role in pegging Indonesia as a country of world economic interest.¹⁹

The initial experiments with a native rubber tree called *Ficus elastica* soon gave way to much more successful government experimentation with the imported *Hevea Brasiliensis* as a consequence of which rubber began to be exported by the year 1912. And by the 1930s (before the Depression) the country experienced a rubber boom with almost 44 percent of the acreage allotted to the major plantation crops in the country was planted with this crop.²⁰

¹⁶ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 193.

¹⁷ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 193.

¹⁸ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 194.

¹⁹ *Ibid.*

²⁰ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 195.

In most of the agricultural activities taken up in this century the outer islands surpassed Java in terms of investment as well as exports of coffee, cassava and tobacco.²¹ This shift in the economic epicentre created complications for the government: while the outer islands bubbled with inflow of money the welfare issues of the people remained centred in Java as that is where the majority of the population resided.²²



Agroecology Workshop with Darwan Singh Negi, Navdanya

The disparity could have been offset by taxing the Outer islands to finance the welfare programmes in Java but the government imposed cruel measures where the Javanese people were forcefully demanded of their money and their labour in order to carry the burden for the welfare programmes.²³ Another factor was the increasing overpopulation of Java and the vastly underpopulated Outer islands with almost 70 percent of the total population of the country living in the inner lands of Java and Madura which only constituted 7 percent of the total land mass.²⁴ As an answer to the increasing woes of overpopulation and the food deficits the Dutch came up with the policy of ‘transmigration’ which involved people emigrating from Java to the Outer islands.²⁵

²¹ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 195.

²² Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 196.

²³ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 196.

²⁴ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 197.

²⁵ Ricklefs, M. C. (2008). *A History of Modern Indonesia since c. 1200*. Palgrave Macmillan. Chapter 14, p. 197.

Subak: resilience of traditional water system



The Green revolution of the 1970s was a failure in Bali as it never recognised the socio-historical-cultural context of agriculture in that region.²⁶ The three main reasons were: the intricate relationship of religious rituals and agriculture remained unrecognised, the revolution propagated methods which had roots in the bureaucratic methods of farming dating back to the Dutch colonisation of the region and this mechanistic-reductionist system completely disregarded the natural water temples system called 'Subak'.²⁷

The network of temples controlled everything in the Balinese society from the irrigation system to the dynamics of caste. Lansing writes that "Every temple represents a social unit; it is a permanent institution, and only those directly involved in the life of that institution need to pay attention to it. A second consequence is that people must belong to more than one temple...Temples, then, are more than places of worship and more than symbols of social units. In an important sense, they are the institutional framework of Balinese society."²⁸

All the people participated in the rituals, including the blessing of the holy water, distributing that water in the Subak system and being grateful for the new cycle of harvest.²⁹

²⁶ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemplesJonathanSepe.htm>

²⁷ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemplesJonathanSepe.htm>

²⁸ Lansing, J. S. (1983). *The three worlds of Bali*. Praeger Publishers.

²⁹ Lansing, J. S. (1983). *The three worlds of Bali*. Praeger Publishers.

A sense of community has been strongly established by this close connection between agriculture and rituals.³⁰

The Subak cycle not only ensures “cyclical agricultural method” but also embodied “artificial ecology” wherein the water flow is alternated creating a wet phase and a dry phase which in turn ensures a steady circulation of minerals and nutrients.³¹

There is a duality in the nature of the Subak system where irrigational water nourishes the farming while the holy water nourishes the socio-cultural fabric.³² This crucial duality of the ‘symbolic’ and the ‘instrumental’ role played by it was beyond the contemplation of the colonisers and the propagators of the green revolution and therein lay its failure.³³



Rice cultivation

³⁰ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemples/jonathanSepe.htm>

³¹ Lansing, J. S. (1983). *The three worlds of Bali*. Praeger Publishers.

³² Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemples/jonathanSepe.htm>

³³ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemples/jonathanSepe.htm>

Despite the annihilation of all visible signs of Balinese culture due to Dutch colonialism the temple system resiliently endured and continued shaping the Balinese culture.³⁴ The Dutch, as noted by Lansing, never understood the workings of the decentralised irrigation and so gave up all intervention in the management of the water.³⁵ Despite this cluelessness the Dutch did install a bureaucracy, levied taxes, conducted land surveys and built irrigation projects.³⁶ And these two parallel systems continued to coexist without any technical problems for irrigation.³⁷

After gaining independence, Indonesia continued to remain trapped in the bureaucratic system and did not completely revert back to the old decentralised ways.³⁸ Later on, this centralised capitalistic framework only facilitated the Green Revolution.³⁹



Rice cultivation

³⁴ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinese watertemples/jonathansepe.htm>

³⁵ See Lansing, J. S. (1983). *The three worlds of Bali*. Praeger Publishers.

³⁶ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinese watertemples/jonathansepe.htm>

³⁷ Lansing, J. S. (1983). *The three worlds of Bali*. Praeger Publishers.

³⁸ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinese watertemples/jonathansepe.htm>

³⁹ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinese watertemples/jonathansepe.htm>

The green revolution

The green revolution was initiated at the International Rice Research Institute located in the Philippines and was implemented in the year 1967 with self sufficiency in rice envisioned as the primary national goal of the country.⁴⁰ Government policies played an active role in reshaping the agriculture towards this singular vision. The most popular was the Massive Guidance program (also known as Bimas Gotong Rojong Program) which subsidised fertilizer and pesticide use along with providing rural credit.⁴¹



Farmers at Navdanya and Jaga Indonesia conference at Subak Museum in Bali

This was pegged as the solution to the twin problems of population explosion and food scarcity and was pushed forward with a strong undertone of nationalism to achieve self sufficiency in the country.⁴² In reality, this march towards “progress” and “national development” ended up being an assault on the holistic traditional agriculture being practiced in most of the country till then.⁴³ This program worked on three pillars: bringing “modern” farming to the country, provision of “standard” packages of inputs (seeds, fertilisers and pesticides) to the farmers and constant guidance and regulation by the government.⁴⁴

⁴⁰ See Lansing, J. Stephen. (1991). *Priests and Programmers*. Princeton: Princeton University Press; Hansen, G. (1971). *Episodes in Rural Modernization: Problems in the Bimas Program*. *Indonesia*, (11), 63-81.

⁴¹ Frederick, W. H., & Worden, R. L. (Eds.). (2011). *Indonesia: A country study*. Government Printing Office. p. 199

⁴² Rieffel, A. (1969). The BIMAS program for self-sufficiency in rice production. *Indonesia*, (8), 103-133.

⁴³ Rieffel, A. (1969). The BIMAS program for self-sufficiency in rice production. *Indonesia*, (8), 103-133.

⁴⁴ Rieffel, A. (1969). The BIMAS program for self-sufficiency in rice production. *Indonesia*, (8), 103-133.

The program as being symbolic for the coming of “modernity” and “prosperity” can be gauged by the then agriculture minister, Soedarsano Hadispoetro’s statement in 1967: “BIMAS is a system of agricultural extension, planned and on a mass scale, that aims to raise agricultural production, and at the same time to increase the prosperity of farmers (specifically) and of society (in general)--all in the context of building a just and prosperous society based on Pantjasila, by the will of God.”⁴⁵

The Intensified land use and the high yield seed varieties beginning in the 1960s led to a massive increase in output of food crops with the country achieving self sufficiency in the production of rice by the year 1985 and the output of rice surpassing 50 million tons per year by 2000 with the output of cassava and corn together touching more than 25 million tons per year.⁴⁶



Subak Museum in Bali

Irrigation also saw a huge investment by the government since the 1970s where between the periods of 1970 to 1990 irrigation expanded to 1.2 million more hectares of land.⁴⁷

During this period the composition of exports also changed with palm oil from the country increasingly dominating the world market and sugar switching from being an export crop to an import crop.⁴⁸ Other crops like coffee, cocoa, coconut and tea are also export crops but contribute a miniscule percentage to overall revenue in the economy.⁴⁹

⁴⁵ Rieffel, A. (1969). The BIMAS program for self-sufficiency in rice production. *Indonesia*, (8), 103-133.

⁴⁶ Frederick, W. H., & Worden, R. L. (Eds.). (2011). *Indonesia: A country study*. Government Printing Office. p. 198

⁴⁷ Frederick, W. H., & Worden, R. L. (Eds.). (2011). *Indonesia: A country study*. Government Printing Office. p. 199

⁴⁸ Frederick, W. H., & Worden, R. L. (Eds.). (2011). *Indonesia: A country study*. Government Printing Office. p. 200

⁴⁹ Frederick, W. H., & Worden, R. L. (Eds.). (2011). *Indonesia: A country study*. Government Printing Office. p. 201.

Later in 1979 the Asian Development Bank launched the Bali Irrigation Project to increase the efficiency of the irrigation systems in the region and this policy stood in direct contravention of the natural principles embodied in the water temple system: while the approach of the Green revolution signified a totalising reductionism of agriculture into a mere technical process, the approach of the water temples was to perceive the interconnectedness of all the cropping systems and to ensure that enough water for irrigation existed for everyone.⁵⁰

However, because of the rigid bureaucratic outlook in delivering a standard package of these fertilisers etc. and a lack of space for the peasants and farmers to inculcate variations based on their knowledge of the land the program failed and the farmer kept incurring more debts with the yields not living up to their promise.⁵¹ The primary layer of violence inherent in this project in the form of chemicals being injected into the soil, water and the bodies of the people⁵² was manifested in the secondary layer of actual physical violence when the government used force to make the peasants adhere to this program as a result of which the peasant rebellion kept brewing and finally broke out in 1970.⁵³

Therefore, as observed in most of the systems of industrial farming the initial years of the Massive Guidance Program brought great harvest but later the ecological collapse of the system was evident because of the distortion in the natural planting cycles, crop rotation, chemicals and pesticides becoming resistant to the brown planthopper which was one of the major pests killing acres of rice crop etc.⁵⁴

A second wave hit the country when in the 1980s and the 1990s the government implemented new policies to counteract the problems created by the previous Massive Guidance Programme. They went back to decentralisation; Integrated Pest Management etc.⁵⁵ But it became obvious by the early 2000s that the green revolution had failed.⁵⁶

⁵⁰ Lansing, J. Stephen. (1991). *Priests and Programmers*. Princeton: Princeton University Press.

⁵¹ See Hansen, G. (1971). Episodes in Rural Modernization: Problems in the Bimas Program. *Indonesia*, (11), 63-81.

⁵² See Shiva, V. (1991). *The Violence of the Green Revolution: Ecological Degredation and Political Conflict*. Zed.

⁵³ See Hansen, G. (1971). Episodes in Rural Modernization: Problems in the Bimas Program. *Indonesia*, (11), 63-81.

⁵⁴ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. *Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemplesjonathanSepe.htm>*

⁵⁵ Sepe, J. (2000). The Impact of the Green Revolution and Capitalized Farming on the Balinese Water Temple System. *Found at URL: <http://eclectic.ss.uci.edu/~drwhite/Anthro129/balinesewatertemplesjonathanSepe.htm>*

⁵⁶ Frederick, W. H., & Worden, R. L. (Eds.). (2011). *Indonesia: A country study*. Government Printing Office. p. 199

Celebrating Seed Freedom and Agroecology



Indonesia mobilization tour 2014 (Photo: Kartikey Shiva)

The success of the [agro-ecological mobilization](#) launched by Navdanya and Jaga Indonesia on the occasion of World Food Day in October 2017, indicates how awareness is growing among citizens, consumers and farmers, who are interested in exploring new models of production which take into account the needs of real people and the environment. Hundreds of farmers, university students, organizations, activists and ordinary citizens took part in the events organized in Jember, Jogjakarta and Bali. The gathering represented an important opportunity to strengthen ties between the associations dealing with agroecology in the territory and the international network to which Navdanya belongs, the organization founded and directed by the Indian scientist Vandana Shiva.

Indeed, Dr. Shiva's [first trip to Indonesia](#) in August 2014 gave a decisive boost to the mobilization of the Indonesian civil society, taking inspiration from the many international campaigns of Navdanya. Its work on biodiversity conservation through the protection of traditional seeds brought eleven Indonesian activists and farmers to [attend the A-Z on agro-ecology](#) course at Navdanya Earth University in India. It is no coincidence that some of those who attended the course, held in September 2015, are among the organizers of agroecological mobilization of 2017. This tour throughout the country saw the Navdanya team experts meet with students and farmers to inform and explain global agribusiness industrial policies, and to illustrate, in the field, the most advanced organic farming techniques.



A-Z of Agroecology and Organic Food Systems at Navdanya Farm (Photos: The Hummingbird Project)

The University of Jember was the first leg of the trip. A conference entitled "Local Food Sovereignty based on Farmers' Self-Reliance", organized in collaboration with the organization [Benih Lokal Berdaulat](#), was well attended by students, representatives of the academic community and farmers groups.

Ruchi Shroff, director of Navdanya International, addressed the audience on how industrial agriculture and the dominant food system are generating new crises rather than solving environmental, nutritional, health and social problems: "The industrial agriculture model - stressed Shroff - based on large scale monocultures, hybrid or transgenic seeds and very high chemical inputs, pollutes the soil, the air and the water, erodes biodiversity, kills pollinators insect, increases greenhouse gases emissions, provides nutritionally empty food, pushing farmers off their land and disrupting the social fabric of local communities." The alternatives to a system based on the mere production of cheap and low-quality commodities are therefore to be found in agroecology practices which put people, farmers and consumers, back at the centre of a different production process, which is based on biodiversity enhancement, on care for the soil, on the production of nutritious food, free of agrichemicals.

The industrial agriculture model imposed through the [Green Revolution](#) is thus the main culprit of the huge biodiversity loss we have been facing in the last decades. This was the main theme of the second conference, entitled "Seed: Threats, Challenges and Hopes" and organized by [Ekoliterasi Jogja](#) in Jogjakarta. Representing the local group affiliated to Jaga Indonesia, activist [Satriya Wibowo of Ekoliterasi](#) presented a workshop on the loss of biodiversity in Java following the green revolution. As part of the effort of building networks to share knowledge on the importance of local seeds, the group based their survey and research on asking old farmers

from the villages of the rural area of Java about how their farming methods and the varieties of plants they used had been developing and changing from the 1960s' onwards.

It resulted that, for example, in 1960 they used to have 43 carbohydrate sources which have now been reduced to 9, among which only 2 are local varieties and seven are new varieties. In the same year the number of vegetable sources was up to 29, which now have been reduced to 16, mostly hybrid varieties marketed by local companies together with fertilizers and chemical pesticides in the same package system. Also, the 10 varieties of legumes present in 1960 have now been reduced to only 4.7



Ruchi Shroff, Navdanya - 2017 Mobilization Tour. Jember

The violence of the Green Revolution in Indonesia was well depicted by [Saya Bani](#), a 52 years old farmer and activist. Saya cultivates his land "just like any other farmer", but also grows anything that his family could eat, such as legumes and vegetables, and cattle. Satya continues "In 1970 at the start of the Green Revolution, Indonesia had fallen into serious debt and began to build good relationships with donor countries like the USA and other countries. Restoring Indonesia economy became Soeharto's obsession. At that time Soeharto held great power, especially in the military and government apparatus. And so he instituted his "five-year program of the Green Revolution" mobilizing all his resources for its success. The need for quick results soon led to violence and resistance from farmers: "Tension was growing higher and higher and violence started erupting, especially when they started building big dams and evicting local communities, some of which without any compensation. So, at the farmers level, and community level, there was resistance, although it was never reported by the media at that time.

I once witnessed the removal of dozens of hectares of cassava belonging to farmers. The Army, the local government staff, scouts and the Indonesia Red Cross came and removed cassava so that the land could be used to grow rice”.



The amount of violence and the prevalence of business interests over people’s wellbeing left a sense of frustration in Saya: “If you ask me about my hope in terms of farmers sovereignty, I have to say I don’t have any hope. Now I am not thinking anymore about farmers’ movements, about resistance, because when Indonesia becomes more democratic the main enemy of farmers are themselves, not only corporations. Now I am more interested in the environmental issue and its relation with food. So my friends and I are now developing what we call ‘food environmentalism’ and we have a term for it: “Dining Table Story’ is about how in every step of production we need to take the impact on the environment into account. Because I see the environment issue as an issue of justice. Not only justice for the earth but also justice for human beings. When we eat something we need to be connected with the earth and with people”.

But the struggle for food sovereignty and development of local communities is working its way in Indonesia, as confirmed by [Diah Widuretno](#), 39 years old, representing the Sekolah Pagesangan (Pagesangan School) community: “Sekolah Pagesangan was started because there are so many problems in the village, especially the high number of migrations, as nowadays many young people do not want to work in the village anymore, they don’t consider farming as an important job and they prefer the city.



Saya Baning, farmer and activist

So, we want to fight that stereotype by inviting them to look back at the potential in the village and how they can develop it as their way of life. In the beginning it will not be easy, because it seems that getting a job in the city is the fastest and easier solution for them, but we can survive in the village also through farming, the work that has been carried out by our ancestors in this Wintaos village, Panggang district. Panggang district is one of the oldest district in Jogjakarta, maybe since 1700. Since the beginning, even before Indonesia existed, they could survive in that area because of farming. So, even though this district is often defined 'critical' because it's not a productive land, people in this district have proven that they can survive. They have food mapping systems, they have diverse food, they have genetic diversity, they have so many food sources. The process of convincing them is not going to be easy, but we keep working on it so that they will learn that there are alternative ways to respond to their economic needs. So, learning how to be a farmer and practicing farming can actually support them and generate something for their life as well as becoming ecologically responsible at the same time. This event organised by Navdanya and Jaga Indonesia, which we have attended, will of course strengthen our project in the village. For example, we have done genetic diversity identification in the village, and we are doing that as part of awareness and learning process. We've also identified seeds that have become extinct and we have found out why. In this way we can learn, and plan the next step. So this is not just an event but has already become part of our movement in the village”.



Diah Widuretno, Sekolah Pagesangan (Pagesangan School) community

The young generation can now rely on the knowledge of farmers who are more expert and have directly experienced the loss of food sovereignty and traditional culture. [Lasio Saefuddin](#), 72 years old farmer from Ponggok Sidumulyo Bantul: “From what I have observed, we became dependent on commercial seeds because in the beginning we were persuaded. They told us: “use this and you will get more results in shorter time”. This event you have organised is really beneficial, because it can unify farmers who know how to use organic pesticides, biological agents or organic fertilizer as well as local plants, and we have the opportunity to share insights

about nature conservation. Besides being cheap and easy to get, the materials we need we can also make them ourselves. So we are not dependent on other parties who give us subsidies in the form of pesticides and other chemical products”. Lasio looks with hope at the new generation wishing to support them in not committing the same errors of the past: “We need to do promotion by donating local seeds for trial. If necessary we could support them as well with organic pesticide and liquid compost so that they can grow and cultivate local seeds even though it takes them a bit longer to grow. Local plants belong to our ancestors and if they go extinct we are the ones who will lose”.



Group of activists and farmers who participated in the workshops in Jogjakarta

Save the seeds, save local food production system



Subak Museum, Bali: Navdanya and Jaga Indonesia with Balinese speakers, academics, policy makers, activists and farmers' groups representatives.

The fact that farmers have lost control of their local seeds to the benefit of those marketed by multinational companies is the global issue on which Navdanya's [workshop](#) was focused: [Ruchi Shroff](#) presented the campaign [Seed Freedom](#), the international network, which has been active for years and unites thousands of communities around the world committed to defend local seeds and to reclaim food our food sovereignty. Navdanya has been fighting for farmers' rights to save, exchange and breed their seed for the last 30 years, as pointed out by [Neha Raj Singh](#) to an audience of farmers, academics and university students who gathered at Subak Museum in Bali to attend the last of the agro-ecological mobilization events, organized in cooperation with Slow Food Bali, Yayasan Emas Hitam, Bali Jaladara, IDEP Foundation, Ancut Garden Agroecology, Five Pillar Foundation, Subak Adian Madya Kabupaten Gianyar, Dinas Lingkungan Hidup Kabupaten Gianyar, Kopernik and Bhuwana Ubud: "In India - said Singh - the network of over 122 community seed banks created by Navdanya has been able to save more than 6000 varieties of climate-resistant seeds, salt-resistant and drought-resistant, also used to meet the needs of the areas affected by extreme floods and / or drought".

Government officials attended the event, including [Nyoman Tri Budi Hartanto](#), head of the department of Subak, the traditional Balinese irrigation system. He talked about the growing interest of local communities for ecological practices in front of the evidence of growing water contamination: "We are aware of these chemical residues in the subak system - said the government official - but production stability is the priority of the central government; therefore, at first thing we start using chemical fertilizer; but slowly we intend to return to organic fertilizer

in order to reduce dependency on the use of chemical fertilizers; our hope is that the use of chemical fertilizers is reduced by 50% in ten years”.

Many farmers are already working their way towards reducing the use of chemicals. This is the case of [Yulian Sandiyasa](#), 62 years old, member of the assembly of Subak in Bali: “I am participating in this event – stated Sandiyasa - because using organic methods means that nothing is killed, which is a very good thing. In this way, in the environment all things support each other. I am really against chemicals especially because they kill everything. I have been looking for this kind of knowledge, I've been looking for this pest management system—for so long. So, now I can reduce the use of chemical pesticides.”

The evidence that fertilizers and pesticides are more for the benefit of multinationals rather than to the wellbeing of farmers and consumers is now an accepted fact. In order to give a practical demonstration of how adopting organic farming practices is more convenient to farmers, both economically and environmentally, Darwan Singh Negi, farmers’ training coordinator at Navdanya Earth University, held practical [workshops](#) in all three locations of the agro-ecological mobilization tour. Hundreds of farmers and university students attended Mr. Negi’s lectures and learned the best techniques for seed treatment and storage, as well as showed how to produce organic fertilizers and pesticides using local resources. The very basis of Mr. Negi’s lessons is indeed to teach a working system rather than the reproduction of a recipe: ingredients must necessarily be local, so that farmers can be independent from the agrochemicals market.



Seed saving and organic pest management workshop with Darwan Singh Negi, Navdanya

From his experience with farmers in India Mr. Negi took the opportunity to warn Indonesian farmers about the empty promises of making them rich, perpetrated by corporate agriculture propaganda: "In India they started with subsidies for hybrid seeds together with a kit of chemical fertilizers and pesticides - explained Mr. Negi of Navdanya – but as they saw that the peasants had exhausted their own independent resources for production, they could increase prices exponentially, causing poverty and debt to thousands of small producers; the pattern is therefore always the same, making farmers dependent on external inputs such as hybrid seeds, chemical fertilizers and pesticides, with the ultimate aim of exploiting them to the point that they give up their land. We must not believe the propaganda of multinationals and governments promises because we do not need poisonous chemicals to kill pests and weeds, we have enough knowledge to control them."

Mr. Negi's workshops were particularly successful among farmers, as stated by [Alex, a 25 year old farmer, coming from Tenggara](#) province, who attended all mobilization events: "In the past I have used chemicals manufactured by companies - said Alex - but now I realize that the use of chemical fertilizers can destroy the environment and our health. Thanks to this workshop I have learned how to produce a natural fertilizer and a plant-based pesticide but I also have understood that we must respect nature, by using what it provides; by understanding nature we can work with it and not against it. " All events organized as part of the mobilization have also helped strengthen the network of local farmers, as pointed out by [Kadek Suardika](#), one of the local organizers.



Ruchi Shroff, Navdanya International



Neha Raj Singh, Navdanya Trust



Darwan Singh Negi, Navdanya's Farmers' Training Coordinator

INDONESIA: AN AGROECOLOGY MOBILIZATION

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