

# **Peoples Tribunal on Agrochemical Transnational Companies - Final Report**

## **Submitted by**

Law and Society Trust

Movement for Land and Agriculture Reforms

National Movement against Poisons

Agrochemicals, also known as agricultural chemicals, are big business. The global agrochemicals industry is expected to reach an estimated value of \$261.9 billion by 2019. In terms of geography, the market is segmented into several regions, namely North America, Europe, Asia Pacific and LAMEA. The Asia-Pacific region holds the largest market share, and expected to retain its position, due to the substantial and growing demand for food and crops.

By the time we gained independence in 1948, Sri Lanka had a wide range of traditional seed varieties, paddy and other vegetable crops. In addition environment-friendly traditional methods were used in pest and disease control. However as the green revolution introduced, new chemical fertilizers, synthetic herbicides, pesticides and high-yield hybrid crops, which required the earlier mentioned agrochemicals, Sri Lankan farmers abandoned the traditional varieties and techniques. Thus the use of agro chemicals, which was virtually unknown in the early 1960 accelerated and it is revealed that on average 400 kilos of agrochemicals are used in hectare of farm land. In 2014 it was revealed that over 15,000 tons of agrochemicals are imported annually, however there is no way to calculate the volume of locally produced and used agrochemicals.

Along with the rise of the use/overuse of agrochemicals, so have been the prominence of adverse effects, environmental, ecological and human health, caused by them. Environmental exposure of humans to agrichemicals is common and results in acute and chronic health effects, including acute and chronic neurotoxicity (insecticides, fungicides, fumigants), lung damage (paraquat), chemical burns (anhydrous ammonia), and infant methemoglobinemia (nitrate in groundwater). A variety of cancers also have been linked to exposure to various pesticides, particularly hematopoietic cancers. Immunologic abnormalities and adverse reproductive and developmental effects due to pesticides also have been reported. In the case of Sri Lanka agrochemicals is often linked with chronic kidney disease of unknown etiology.

The burden of addressing these issues has befallen on the government, which carries out a number of resource intensive programs to address the issues caused by the excessive use of agrochemicals. However, transnational agrochemical companies who should hold the primary responsibility have not accepted any of the blame or have attempted to ameliorate the situation through assistance of better practices.

Realizing that a public discourse should be created on the adverse effects of the activities of transnational agrochemical companies and the need for a paradigm shift in farming, The National Movement Against Poison held a People's Tribunal, on transnational agrochemical companies,

at the Lakshman Kadirgamar Institute, on September 22 which saw the participation of a large number of representatives from Farmers' Associations. The Indictments were brought by representatives of farmers unions, independent researchers, environmentalists and former officials, who had been physically, economically, socially and politically harmed or work with the victims of activities of multinational agrochemical companies. Executive Director of Centre for Environmental Justice Hemantha Vithanage, Human Rights Lawyer Lakshan Dias and the President of the Nutrition Society of Sri Lanka, VisakhaThilakaratne acted as the panel of judges.

Making the inaugural speech, ChintakaRajapakse, moderator of the Movement for National Land and Agricultural Reform (MONLAR) introduced the audience to the purpose of the gathering.

“Almost five years ago a debate on whether to ban glyphosate began; we started a movement assisting the government to implement such a ban. When glyphosate was banned in March 2015, we began to strengthen the case for such a ban by promoting the theory behind it and by creating a movement that stood with that decision,” he said.

He added that the People's Tribunal is held for two main reasons.

1. While there is recognition that the use of agrochemicals has had an adverse effect on Sri Lanka, economically, environmentally, socially and regarding food security and agricultural policy, those impacts have not been gathered or studied. Tribunal would bring a number of people together that can shed light on these diverse aspects.
2. The transnational agrochemical companies have not taken responsibility for their actions. But it is the government, with the people's tax rupees, that has to address these issues. Each year, a significant amount of funds are being channelled for initiatives like assisting CKDU patients, water filtration, etc. from the budget. The transnational agrochemical companies deny any responsibility. The tribunal gives us the chance to assess the damage done and to hold transnational agrochemical companies accountable.

Quoting the chapter on sustainable agriculture in President Maithripala Sirisena's election manifesto, 'the background will be prepared for the formulation of a policy on sustainable agriculture based on indigenous resources and compatible with nature in order to liberate the country from dependent agriculture,' Rajapakse said that the time has come to make a paradigm shift on agriculture in the country.

**Testimony 1: Ms KP Somalatha, Uva Wellasa Women's Rights Association, Wellawaya, Moneragala**

Ms. Somalatha lives in an area in which three large agro companies, that use massive amounts of agrochemicals, operate. These organizations are NelnaAgri Development's mango plantation (2000 acres), Dole Lanka's Cavendish cultivation (6000 acres) and Lanka Sugar Company Ltd, Buttala. Somalatha described how women, who comprise the majority of the workforce in these institutions, are the most affected, from failing health to degradation of families, by the activities of the companies.

"70 - 75% of those who work in these companies are women and they are paid a very low salary. Despite the inadequate salaries they are compelled to work in these institutions because there are no alternative livelihoods, as these corporate giants have slowly engulfed the natural resources of Moneragala, once one of Sri Lanka's biggest agricultural hubs. They have taken the water from us, they have cheated us off our lands, people have no option but to work in the companies now," she said.

Ms Somalatha added that Dole Lanka uses agrochemicals that can't be found in the local market and are extremely toxic. The workforce is exposed to these chemicals throughout the day and as a result most of the female workforce suffers from a number of serious health issues, which included chronic pain in the back and knees, liver issues, anaemia, miscarriages and children with birth defects. "Our parents used to work for a long time because they were not using toxic agrochemicals like these. Now the women who work in these farms retire when they hit 55, they can't work anymore. If you look at women who work in these farms you will see that their skin is flaky, their finger nails are black, the hair is brownish. They say they have to handle chemicals every day and that they are exposed to them when they spray these toxins on to banana trees. There are so many children born with defects, its heart breaking," she said. Somalatha adds that when the workers fall sick, the management of the farms ensure that they are treated at hospitals run by the company. Thus there is no opportunity for an independent medical professional to determine the nature of the illness or to determine causes, which in turn provides a loophole for the corporates to deny responsibility. The symptoms shown by these women are startlingly similar to symptoms shown by those who were exposed to Nemagon, a nematicide, used in Costa Rica by Dole. Nemagon is directly tied to sterility in men, miscarriages, stillbirths, birth defects, various types of cancer, depression, impotence, etc.

Research conducted by Dr. Jayasumana in Padawiya no 3 settlement has found that 30 people have died from diseases related to overexposure of agrochemicals and 60 are suffering from chronic illnesses, out of a village of 220 families. While the people understand that their lives are at risk due to the continuous exposure to agrochemicals, they have no alternative livelihoods. "Moneragala is a dry area. Rainwater is only adequate for a few months of agriculture. Earlier people could depend on Kirindi Oya and Menik River but Dole now uses most of the water from these water sources, which also feed Lunugamwehera and Weheragala reservoirs. Water in

Kirindi Oya is being used for the banana cultivation along the Kuda Oya while, water in Menik Ganga is used for the cultivation lands in Wandama and Wekada. People have no option to work in these farms and when they fall sick it is the government that has to support them. Companies take no responsibility,” she said.

Responding to the panel of judges who inquired about how the three agro companies obtained the land they use to farm, Somalatha said that most of the land was given by the *KataragamaDevalaya* (shrine), which is one of Sri Lanka’s most popular places of worship. “Part of the Sugar Company land was given by the *Devalaya* and the other part they took from the people, who were cheated out of their land. Nelna’s mango plantation is 2000 acres big. That land was given by the Devalaya too. Dole of course cleared 6000 acres of forest land, during the previous government. Another important thing is that 100 small tanks were filled up by the sugar company to plant sugar cane; these tanks were earlier used by farmers.”

## **Testimony 2: Mr Samantha Gunasekara**

Mr Gunasekara is the former head of Biodiversity, Cultural and National Heritage Protection (BCNP) Branch of Sri Lanka Customs. BCNP was earlier known as Biodiversity Protection Unit (BPU). BCNP won the received President's Environmental Award - 2004 for the outstanding contribution in the environmental sector and plays an important role in protecting Sri Lanka's bio diversity. It is the BCNP, under Gunasekara's leadership, that first commenced the holding and processing of agrochemical shipments to determine whether they contain arsenic.

Mr Gunasekara offered a brief history of Sri Lanka Customs attempts to prevent extremely toxic agrochemicals from coming into Sri Lanka, the pressure exerted by the transnational agrochemical companies through politicians and senior state officials to thwart their investigations and the need to amend the existing laws regarding agrochemicals in Sri Lanka.

“In 2011 there was a discussion on whether arsenic is linked to CKDU, after a team of researchers from the University of Kelaniya stated that they found a strong link between the two. But no action was taken by anyone to conduct further studies or to at least determine whether there are excess arsenic present in agrochemicals coming into Sri Lanka. So we decided to hold all agrochemical shipments in the port and to carry out tests and this was immediately met with resistance from transnational agrochemical companies. They attempted to scare the public saying this will lead to a shortage of food and they used their power to influence senior state officials. Former Permanent Secretary of the Ministry of Finance & Treasury, P. B. Jayasundera did not allow us to investigate the matter independently, which is a right given to us by the Customs Ordinance, and asked us to send all the samples to an institution he recommended,” he said.

Mr Gunasekara added that the institution recommended by Jayasundera did not have the necessary equipment to detect arsenic in agrochemicals and that the ‘scientists’ at the institute manipulated the test results. “There is a big difference in what this institute found in the samples and what the water Board and the University of Kelaniya found in these samples. It has been

almost six years now but nothing has changed. The laws have not been changed and these transnational agrochemical companies have a hold of most of our research institutes. The Registrar of Pesticides issues letters of approval based on information provided by these transnational agrochemical companies and then Customs have no option but to release these shipments. Let's forget glyphosate, we can only stop products that has arsenic and mercury as active ingredients. But there are six types of pesticides in which it is allowed (within limits) as an impurity. We are taking this very lightly, although the increase of cancer, chronic kidney disease, diabetes mellitus, heart diseases suppression of the immune system, sterility among males and females, neurological and behavioral disorders, especially among children, have been attributed to chronic arsenic poisoning," he said.

Sri Lankan agrochemical market is controlled by six companies and the power exerted by transnational agrochemical companies is such that they still openly advertise agrochemical products that contain glyphosate outside Colombo. A number of scientists, science writers and academics are publishing research papers and writing newspaper articles to convince people that glyphosate is harmless and that the banning of the substance will lead to the destruction of the tea plantations of the country.

"A researcher, a plantation superintendent, has conducted a study to show that this is false and that banning of glyphosate will not lead to the collapse of the tea industry. He has been prosecuted by the plantation companies and transnational agrochemical companies. We must unite to extricate our research institutions from the clasp of these corporations," he said.

**Testimony 3: Renuka Badrakanthi, Women Development Federation, Ratnapura**

Ms Badrakanthi explained the impact of the control of seeds by transnational agrochemical companies and how it has allowed corporates to control the livelihood of farmers and the food security of the entire nation.

"A farmer needs seeds to sow; it is the beginning of plant life. In the past we used to save seeds from one harvest and use them for farming in the next season. But now we can't do that. The companies have put a toxic gene into the plant cells that stops reproduction. A farmer's common resource became the "intellectual property" of transnational agrochemical companies. A renewable resource became a non-renewable, patented commodity," she said.

She added that the seeds that the farmers are compelled to purchase require a significant amount of agrochemicals and this 'necessary' overuse of these toxins have caused a number of farmers to contract chronic diseases.

"You can't use organic fertilizer with these seeds. We have to use artificial agrochemicals produced by the same companies that want to monopolize the seeds. These companies are stealing our food sovereignty," she said.

Ms. Badrakanthi added that Sri Lankan farmers and the general public were compelled to shift towards the use of genetically modified seeds and artificial agrochemicals after the Green Revolution. The transnational agrochemical companies were able to convince the people that Sri Lanka can only be self-sufficient in food only if we adopt these techniques.

“People didn’t think they will lose the seeds. But slowly and steadily transnational agrochemical companies ensured that these ‘traditional seeds’, which could be used from one farming season to another, disappeared. We used to have a lot of diversity when it came to plants. It was common to see 10 -15 varieties of any crop, with varying characteristics. But now there are only one or two varieties, where have the others gone?” Ms. Badrakanthi asked.

Transnational agrochemical companies have also introduced hitherto unknown varieties of diseases and pests through their seeds; she stated pointing at the outbreak of Mealybug, a virulent pest which is attacking many species of fruit and foliage plants. Some transnational agrochemical companies even set up ‘help desks’ to assist farmers affected by the Mealybug, the same way it did when cotton farmers of Punjab were affected by this pest.

“At the end they can sell more agrochemicals. They want to destroy our plant diversity. The government speaks about diversification but from what I have seen they are going to make one village plant one crop only,” she said.

#### **Testimony 4: Mr. Sajeewa Chamikara, Director Environmental Conservation Trust (ECT)**

Mr. Chamikara is a well-known environmental activist who has risen to prominence by highlighting the threat to environment by activities carried by those in power. Mr. Chamikara presented the degradation of bio diversity and the environment of Sri Lanka caused by agrochemicals.

Not only does the use of agrochemicals have an adverse effect on human health, they are also a major factor affecting biological diversity, along with habitat loss and climate change. Agrochemicals affects bio diversity in the short term by directly exposing organisms to toxicity, in the long-term agrochemicals affects bio diversity by changing habitats and the food chain. A look at the IUCN reports on Sri Lanka, especially the species that enter its red list, indicates that Sri Lanka, which is a bio diversity hotspot, is quickly losing its unique eco systems and species because of the use of agrochemicals.

"This is especially evident when we look at the populations of insects and aquatic species, who are directly affected by the use of agrochemicals. There are 118 species of dragon flies in Sri

Lanka, out of which 28 species are under severe threat of extinction, 18 are under threat of extinction and 32 species nearing the threshold of extinction. Dragon flies are species that are directly affected by agrochemicals because they spend one half of their live in the water and the other half on land. It is because they are exposed to agrochemicals on both land and water, that they are among the most affected species. Another example are bees. There are 132 species in Sri Lanka, out of which 48 species are under severe threat of extinction and 38 are under threat of extinction. There are 245 species of butterflies in Sri Lanka, out of which 20 species are under severe threat of extinction. This is a serious issue," he said.

The other group of animals that are most affected by the use of agrochemicals are aquatic species as agrochemicals are carried to the sea through freshwater systems. As the concentration of agrochemicals in freshwater increases, the survival of aquatic species comes under threat.

"According to the 2012 IUCN red list shows that a number of aquatic species are under serious threat. There are 51 species of freshwater crabs reported from Sri Lanka, they live close to paddy fields and farm lands. In the past they were a common sight but increasingly they are facing extinction because of the high use of agrochemicals in paddy fields and farm lands. Out of the 51 species 50 can only be seen in Sri Lanka. Out of the 51 species 34 are facing a severe threat of extinction and 12 are faced with the treat of extinction. If we look at land snails, there are 253 species reported from Sri Lanka, 20 have become extinct in the last 50 years. 74 are facing a severe threat of extinction. If we look at freshwater fish, there are 91 species and around 50 are endemic to Sri Lanka. 20 are facing a severe threat of extinction. We have conducted extensive studies on how these fish have been affected by the use of agro chemicals. If we look at water sources in forests and those that can be found in areas that agrochemicals are used, from farm land to tea plantations, the diversity that can be seen in the latter are 60 -70% lesser than the former. This shows the direct impact of agrochemicals on aquatic species," he said.

Mr. Chamikara stated that the effects of agrochemicals are not limited to farm lands and freshwater sources. The agrochemicals that mix with freshwater sources end in lagoons and estuaries. These concentrations, especially in lagoons, have an adverse effect on lagoon eco systems and the population of aquatic species that live in them. Since lagoons often are the breeding grounds of species that live in shallow seas, the populations of those species are also threatened.

"In a country like Sri Lanka, because of the nature of the ebb and the flow, agrochemicals concentrated in lagoons hardly moves to the sea. You can ask fishermen operating in these areas and they will tell you that the population of species have reduced drastically, which in turn affects their livelihoods. Ultimately the balance in the ecosystems collapse. Some species will become extinct while others will grow often harmful species. The increase of dengue mosquitos is one such example," he said.

## **Testimony 5: Mr. K Premaratne, Mahiyanganaya**

Chronic Kidney Disease of unknown etiology (*CKDu*) has been widely acknowledged as one of the biggest health hazards faced by Sri Lanka currently. Since the early 1990s, there has been a rapid rise in CKDu cases in some regions of the country. CKDu cases in Sri Lanka are concentrated in the North Central, North of Uva, North Eastern part of Central and North Western. These four provinces have a resident population of over 2.5 million people and by the end of 2013, there have been close to 25,000 cases reported in these provinces.

Mr. Premaratne works who works with the CKDu patients in Mahiyanganaya presented a harrowing account of the impact of the disease on farmers of the area. Mahiyanganaya contains several of the poorest areas in Sri Lanka and it is those living in these marginalized communities that have been affected most.

“In 16 gramani divisions (village units) in Mahiyanganaya divisional secretariat area, there are 2123 CKDu patients. From January 2016 to September 97, from those gramani divisions, have died from CKDu. There are 427 persons receiving dialysis. If you go to Ridimaliyedda, the second poorest divisional secretariat areas in the country, there are 397 patients, 37 died in the first nine months of this year,” he said.

Dole Lanka has 600 acre cultivation in Mahiyanganaya, which uses the water from Ulhitiya Oya which feeds the Ulhitiyawa Reservoir. Not only has the excessive use of fertilizer has polluted the water of the tank, the tank has seen a boom in algal toxins due to high levels of soluble phosphorus from fertilizers like triple super phosphate.

“Dole uses bowsers to spray the banana trees with agrochemicals. They do this at night. The women who work in this farm often suffer from miscarriages and men show signs of impotence. We are trying to do what we can, but it has been extremely difficult,” he said.

## **Testimony 6: Terence Gamini, farmer and member of Kidney Protection Society, Anuradhapura district**

Mr. Gamini has been campaigning to promote organic fertilizer in the Anuradhapura District and to educate the farmers on how agrochemicals can lead to CKDu. He told the tribunal that the farmers who use agrochemicals are aware that the toxins they use have an adverse effect on their health and that of those who consume the food. However the current agricultural paradigm compels them to stick to the agrochemical intensive brand of agriculture.

“We go to villages and educate the farmers on the dangers of agrochemicals and the importance of switching to organic fertilizer. The thing is there is no need to tell them. They already know that agrochemicals are bad. They know that these toxins harm them. They know that those who will consume these foods will get sick. But if they don't abuse agrochemicals their yield will

be low because the seeds that they buy don't respond well to organic fertilizer. These farmers already suffer from economic difficulties and most of them suffer from chronic malnutrition," he said.

Mr. Gamini was also critical of academics, scientists and science writers who have spoken against the ban of glyphosate. Although these individuals claim that glyphosate is not a reason for health issues of farmers, those who work in the field know instinctively that glyphosate is a dangerous chemical. Even if it had nothing to do with CKDu, glyphosate has caused the disappearance of plants farmers used as food, which in turn has contributed to chronic malnutrition.

"Once you use glyphosate all the plants we used to eat like gotu kola ((Centellaasiatica), mukunuwenna/dwarf copper leaf (Alternantherasessilis) and water spinach (Ipomoea aquatica) disappear. These plants used to be a part of our diet. Eating lots of Kangkung can reduce cholesterol levels, prevent cancer and improve eye health. Mukunuwenna has diuretic, cooling, tonic and laxative properties and gotu kola is good for the overall health. These are very nutritious and now they are gone, this partly explains why our farmers are so undernourished," he said.

### **Testimony 7: Mr. MK Jayatissa, President, Progressive Farmers Association, Polonnaruwa**

Progressive Farmers Association has been fighting for farmers rights for over a decade and has been working extensively on assisting CKDu patients and raising public awareness of the issue. Its President Mr. MK Jayatissa presented evidence of how CKDu emerged with the spread of overuse of agrochemicals and why farmers are compelled to abuse these toxins.

"It's in 1996 that we first began to realize that CKDu is linked to the use of agrochemicals. In Polonnaruwa we farm 162 000 acres during the maha season. In yala 132 000 acres are farmed. Everyone is now using 6 agrochemicals, 3 weedicides, 2 pesticides and 1 fungicide. Farmers are not able to break away from using these toxins because everyone, from media to agricultural officers, insist that farmers use these for farming. They also advised us to change when we farm, this also created issues," he said.

He added that if farmers don't plant seeds before May for yala season, there is a high probability that they will face threats from insects. If the department of irrigation does not provide water for maha season before November, the same issue arises.

"In 1996 our elders started showing symptoms of a chronic disease. We didn't know what it was. Their legs, stomach and face swelled. Doctors couldn't understand what's going on. It is only after some studies that scientists realized that these are the symptoms of a damaged kidney. In

2004 Public Health Director's Office in Polonnaruwa called us for a meeting with government officials where we discussed the budding disease. The health officials asked us whether they can conduct clinics in our villages and we agreed. During these clinics they found many patients. We then started educating farmers associations of other agricultural hubs. We also sought the assistance of environmental organizations and MONLAR. We began to suspect that the use of agrochemicals might be a cause and it was during that time a book by Rachel Carson called Silent Spring, on the harmful effects of pesticides on the environment, and is widely credited with helping launch the environmental movement, was translated. It was then that everything was illuminated for us. We realized 99% of agrochemicals we use are toxic but we had no option but to continue," he said

Mr. Jayatissa said that In 2005 A Doctor from Polonnaruwa Hospital asked the Registrar of Pesticides to come to Polonnaryuwa and explained the gravity of the situation.

"He said two pesticides do not answer to Atropine Sulfate, used to treat certain types of nerve agent and pesticide poisonings, and asked the registrar of Pesticides to ban the two chemicals. the registrar banned the two agrochemicals in Polonnaruwa, how ridiculous was that? Farmers just travelled to other districts to get the chemicals. We realized that the government that we voted is not looking after us. In 2012 WHO issued a report and 15% of people between 15 and 70 in Anuradhapura, Badulla and Polonnarwa suffer from kidney diseases. At that time there were 855562 lived in Anuradhapura, out of which 128 334 had kidney issues. Polonnaruwa had a population of 403859 out of which 60578 had kidney issues. InBadulla the population was 811225, 121 683 had kidney diseases. Can you see the gravity of this? He asked.

## **Testimony 8: Ms. Chandra Hewagalle**

Ms. Hewagalle has conducted a series of researches on the use of agrochemicals and the impact on women's health.

"From 1994 we have been looking into the impact of agrochemicals on human health and environment. In 1994 we did a research with 500 women on the impacts of agrochemical use. We found a number of women, whose health has been adversely affected by the use of agrochemicals. In 2006 we did research with 206 women and farmers on the external symptoms of known diseases attributed to agrochemical use. And we were able to find almost all symptoms. In 2006 we did another research on how agrochemicals are used in Sri Lanka with 200 farmers," she said.

Ms. Hewagalle stated that a number of previous speakers/witnesses hinted at the correlation between the use of agrochemicals and reproductive issues. Her research has conclusively shown that there is also causation.

"There are so many women, who are exposed to agrochemicals, that had suffered miscarriages, their children had birth defects, etc. If you look at our farming families, almost all of them

overuse agrochemicals and some people ask why they are overusing. The truth is that they have to overuse to get a good yield, the recommended dose is not sufficient because our soil has been destroyed by continuous use of these toxins. This is an epidemic and like in any other crisis, it is women who are affected the most," Ms. Hewagallesaid.

### **Testimony 9: Buddhi Jayasuriya, independent researcher**

Mr. Jaysuriya, who has been in the plantation sector for several decades has seen the impact of agrochemical use in the tea growing areas and has also attempted to understand how transnational agrochemical companies originated, operates and influence the world economies. Mr. Jaysuriya presented the international milieu in which transnational agrochemical companies operate and the need for a paradigm shift in agriculture to achieve food safety and foodsovereignty.

"I think now we have a good understanding of the impacts of agrochemical use on human health and environment. But to find a way to extricate ourselves from this mess we have to understand how we got here. We all agree that the green revolution in the 1960s was the starting point of this all. Then we were exposed to the gene revolution and food processing revolution of the 1970s and 1980s. Now we are flooded with terminator seeds. We have become victims and when we struggle against these, we have to realize that the struggle is global in scope. One person who is famous for his involvement in the Green Revolution is the scientist Norman Borlaug. In the 1940s, Norman Borlaug developed a strain of wheat that could resist diseases, was short, which reduced damage by wind, and could produce large seed heads and high yields. A number of institutions were also created to promote these technologies IRRI (International Rice Research Institute), Consultative Group on International Agricultural Research(CGIAR), etc.," he said.

The spread of Green Revolution agriculture affected both agricultural biodiversity (or agro-diversity) and wild biodiversity and even those who support the green revolution agree that the Green Revolution has reduced agricultural biodiversity, as it relied on just a few high-yield varieties of each crop.

"One of the problems with this loss of diversity, out of many, is that the food supply is susceptible to pathogens that cannot be controlled by agrochemicals, as well as the permanent loss of many valuable genetic traits bred into traditional varieties over thousands of years. To address these concerns, massive seed banks such as Consultative Group on International Agricultural Research's (CGIAR) International Plant Genetic Resources Institute (now Biodiversity International) have been established but we have seen that the transnational agrochemical companies have destroyed traditional seed varieties in many countries. They also work closely with the US military. For many of us the name Abu Ghraib is associated with a prison renowned for torture, but to the farmers of Iraq, Abu Ghraib was known for the national

seed gene bank, started in the early 70s. Iraq's most well-known wheat variety is known as 'Abu Ghraib'. Modern Iraq is part of the 'fertile crescent' of Mesopotamia where man first domesticated wheat between 8,000 and 13,000 years ago, and home to several thousand varieties of local wheat. As soon as the US took over Iraq, it became clear its interests were not limited to oil. In 2004, Paul Bremer, the then military head of the Provisional Authority imposed as many as a hundred laws which made short work of Iraq's sovereignty. In a decade US wiped out Iraq's traditional, sustainable agriculture and replaced it with oil-chemical-genetically-modified-seed-based industrial agriculture," he said.

Mr. Jaysuriya states that 10 companies, Bayer (Germany), Syngenta (Switzerland), BASF (Germany), Dow AgroSciences (USA), Monsanto (USA), DuPont (USA), MakhteshimAgan (Israel), Nufarm (Australia), Sumitomo Chemical (Japan) and ArystaLifescience (Japan) control 89% of global agrochemical market. Often these transnational giants hold a monopoly of seed as well. "I will just take Monsanto as an example. Monsanto is a market leader in the proprietary seed market. Their seeds include herbicide-tolerant crops like Roundup Ready maize or corn and soy. With the availability of Roundup Ready crops, glyphosate use went up. Monsanto and its subsidiaries also developed insect-killing Bt varieties of maize or corn, cotton and brinjal (eggplant). Bt toxins from Bt crops has been linked to impaired immune systems, gatro-intestinal problems among others. If you look at our neighbour India, its farmers rely more on agrochemical inputs, using more pesticides to control increased pest incidence. The high costs of seeds and agrochemical use undermine farmer income and livelihood. So they produce seeds, which require high use of agrochemicals and then they also sell pesticides that are essential. It's a racket, a very powerful racket," he said.

Mr. Jaysuriya stated that the time has come to change the way Sri Lankans farm and that there is a pressing need to return to the days of agricultural biodiversity. "What we do is try to limit the use of agrochemicals or ban what we consider the most harmful. This is not enough. A lot of witnesses before me say that our farmers are starving. The government talks about increasing agricultural exports. But what needs is to ensure that Sri Lankans have affordable and healthy food. It has been revealed that mixed cropping can produce almost the same volume of food, we need to look at alternatives and we need to end the concentration of power by a few companies," he said.

## **The verdict**

After listening to the witnesses before the tribunal, the judges, Executive Director of Centre for Environmental Justice Hemantha Vithanage, Human Rights Lawyer Lakshan Dias and the President of the Nutrition Society of Sri Lanka, VisakhaThilakaratneissued, each made a number of observations prior to issuing the verdict.

## **Mr. Hemantha Vithanage**

1. It is clear that transnational agrochemical companies are popularizing the use of agrochemicals in Sri Lanka by creating the fear that, unless their way is not followed Sri Lanka will face serious threats to food security. This is how they are popularizing their products to make a profit.
2. From the 1960s transnational agrochemical companies have been promoting the overuse of agrochemicals. While some compounds like DDT have been taken off our markets, a number of chemicals are being used in various fields, not only agrochemicals but in pest control, for example. For the most part they are extremely toxic. We have been told the numerous social, health and environmental issues caused by the use of these chemicals.
3. It is also clear that a handful of companies have a monopoly in agrochemicals.
4. If there are safe ways of using these chemicals, such methods have not been popularized among the users of the agrochemicals.
5. A number of experts and intellectuals have come under the influence of agrochemical companies and these individuals have been used to counter the evidence against the dangers of agrochemical use.
6. There is a public discussion on the Right to Information but it does not seem to apply to the transnational companies. Public has no access to information regarding these toxins.
7. Institutions, in place to ensure that agrochemicals are monitored, are being influenced by transnational agrochemical companies.
8. When people die or become ill from using agrochemicals, these transnational agrochemical companies do not take any responsibility and no compensation is paid.
9. There is no political will to address these issues and when policies are made concerns of the people on agrochemicals are not taken into account. Transnational agrochemical companies use international agreements to continue their monopoly and influence governments of sovereign states.
10. The existing laws regarding agrochemicals are not adequate. However even the existing ones are not properly implemented.
11. Transnational agrochemical companies influence the implementation of the law and formulation of policies.
12. Transnational agrochemical companies are trying to take away the ability of farmers to use seeds from one season to the next. This is sometimes done through laws and policies.

## **Mr. Lakshan Dias –**

1. There is a link between the politicians and transnational agrochemical companies. They have been able to influence the formulation of laws. We need to recognize this and we need to keep discussing this.

2 . The commodification of food is a concern. We produce a large quantity of corn in Sri Lanka to feed chicken and when we eat these chickens, contaminated by various toxins, we fall sick. I have seen religion been used to justify this practice, i have seen academics we respect being used to justify this [practice by transnational agrochemical companies.

## **Ms. VisakhaThilakaratne**

It's very clear that the use of agrochemicals are having a serious impact on food and nutrition. I must say that there was a time that even our organization was influenced by transnational agrochemical companies. But we have addressed that issue. We have 500 scientists working with us, we have escaped from the clutches of transnational agrochemical companies, so I know how powerful and persuasive these institutions are.

Agribusiness is not only limited to agrochemicals, it was made very clear by our witnesses. Transnational agrochemical companies control all aspects of food production. We need to address this.

Just as the agricultural diversity has been destroyed, our healthy food habits have been dismantled.

The biggest problem is we all know that the agrochemicals are bad but we have not yet found a way to rid ourselves of these powers.

I saw at least four presentations that havemade strong links between agrochemical use and diseases, including CKDu. But we need to report and store this information systematically. We must create a data bank. That is the only way to make transnational agrochemical companies at least a bit accountable by taking them to courts.

## **Verdict**

The government, when it was contesting the election, promised to formulate policies to ensure that there are agriculturalpractices without using chemicals. However it is clear that this promise is nowhere near being fulfilled. Civil Society Organizations need to continue to pressurize the government to fulfilltheir promises.

The judges decided that transnational agrochemical companies are responsible for popularizing toxic chemicals, without proper information, in the country and for pressurizing the government

when policies are formulated. They are also responsible for attempting to take away the farmers' rights over seeds and for attempting to destroy the diversity in agriculture.

The judges stated that the organizations must carry the struggle through courts of law, create a robust social dialogue on the use of agrochemicals, create a data bank on how agrochemicals have caused various chronic illnesses and also they must immediately take steps to spread alternative and environmental agricultural practices in Sri Lanka.