

GLOBALISATION: A WAR AGAINST NATURE AND PEOPLE OF THE SOUTH²

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Globalisation is often projected as a natural, inevitable, evolutionary process, which is bringing prosperity and growth, embracing us all and knitting us into a Global Village. Those who value equality and solidarity in the North support globalisation because it will allow the people of the South to join this Global Village. It is even assumed that only by participating in global markets do the Third World people get access to jobs and livelihoods.

However, globalisation does not create jobs, it destroys livelihoods and hijacks the resources of the poor. Globalisation is not a natural process of inclusion. It is a planned project of exclusion. It draws the resources and economies of the poor of the South into the global market place and global corporate ownership by displacing people from their life-support systems, livelihoods and lifestyles. It pulls resources and markets into the global economy while pushing the poor out of livelihoods both at the local and global level. The destruction of local economies and livelihoods is never counted. In fact the destruction of people's lives, livelihoods and cultures is defined as growth in the global economy. Growth through globalisation is based on the theft of people's resources, knowledge and economies. Global trade rules, as enshrined in the W.T.O. Agreement on Agriculture and in the Trade Related Intellectual Property Rights (TRIPs) Agreement are primarily rules of economic hijack, camouflaged by arithmetic and legalise. In this economic hijack, the corporations gain, and people and nature loose.

Rules of Market Competition: This war of corporations against people and nature is symbolised in the metaphors and logic of "market competition". The W.T.O. rules of market competition serve two functions. Firstly, they transform all aspects of life into markets. Culture, biodiversity, food, water, livelihoods needs, rights are all transformed and reduced to markets. Secondly, the destruction of the nature, culture livelihoods and ethics is then justified on the basis of the rules of competition. Violence and warfare is thus neutralised and rationalised.

All ethical and ecological rules, which sustain and maintain life are reduced to trade barriers. The obligation to protect the weak and vulnerable, the duty to give and share, the need to keep certain domains beyond commerce and commodification are all being dismantled as "protectionism". Co-operation and mutuality which is the very basis of ecological survival are rendered "illegal" by the W.T.O. rules of competition. Protection of people and nature is being replaced by corporate protectionism.

The global reach of corporations to take over the resources of the poor of the Third World is made possible not just by reduction and removal of tariffs. It is also made possible by removal of ethical and ecological limits on what can be owned as private property and what can be traded.

² Excerpts from written speech sent for AIFO National Conference, November 1999

Globalisation is completing the **project of colonisation**, which led to the conquest and ownership of land and territory. Now biodiversity and water, the very basis of life's processes, which have so far been held in common by local communities for equal rights to biological sustenance and economic livelihoods are being colonised, privatised and commoditized.

Agriculture, which is still the primary livelihood for three quarters of humanity, and which is as much a cultural activity as an economic one, is also threatened through the "trade liberalisation" of agriculture, driven both by structural adjustment programmes of the World Bank and IMF, and the Agreement on Agriculture of the W.T.O. Globalisation of food and agriculture systems in effect means the corporate take over of the food chain, the erosion of food rights, the destruction of cultural diversity of food and the biological diversity of crops, and the displacement of millions from land based, rural livelihoods. The impact of a few years of globalisation illustrates the destruction in store for the planets and people if globalisation is not stopped and reversed.

Global free trade in food and agriculture is the biggest refugee creation programme of the world, which reduces Kosovo to insignificance. It is equivalent to ethnic cleansing of the poor, the peasantry and small farmers of the Third World.

I. Global Growth, Local Destruction.

(a) Seeds of Suicide

The epidemic of farmers' suicides in India is the most dramatic impact of trade liberalisation in agriculture. India is the home of cotton. The spinning wheel was transformed into the symbol of Indian's freedom from British colonialism by Gandhi. But under conditions of globalisation, cotton cultivation is pushing Indian farmers to suicide, and cotton has become a symbol of new slavery and new bondage. Globalisation led to increased exports. Increased cotton exports, led to increased cotton cultivation, including expansion into semi-arid areas such as Warangal in Andhra Pradesh where farmers earlier grew food crops for subsistence.

Warangal has not traditionally been an area for cotton cultivation. In this predominantly food crop area, cotton is a relatively new crop introduced under trade liberalisation. Under corporate push, farmers of Warangal switched over from their traditional paddy, pulses, millets, oilseeds and vegetable crops, which had sustained them to the sowing of cotton. Seed companies used video vans to show advertising films to sell hybrid cotton seed by promising that it would make them millionaires. Hybrid seed was sold as "White Gold". However, instead of becoming millionaires, the poor peasants were driven into a debt bondage from which they could be freed only through suicides.

Under the pressures of globalisation, not only did cultivation shift from food to export crops, and from mixed and diverse farming to monocultures, liberalisation had also led to a shift in seed supply from the farmers' seed and public sector seed to seed from private corporations. The new atmosphere of market liberalisation implied a withdrawal of regulatory systems in the seed sector. Companies could sell what they want and claim what they want without any system of social and

public accountability. Untested and untried seeds were sold at high costs to gullible and innocent peasants who have no experience with dealing with corporate vultures and whose local knowledge has been displaced by corporate advertising. Under corporate push unleashed by privatisation and globalisation, seeds also changed from open pollinated indigenous varieties which can be saved by farmers and are locally adapted to hybrids which need to be purchased every year at high cost and are ecologically vulnerable. Hybrids mean more profits for corporating, but higher costs for peasants and the environment.

Since monocultures and hybrids are very vulnerable to pest attacks, pesticide use also increased. Pesticide use in the district went up from \$ 2.5 million in 1980s to \$50m in 1997, a 2000% increase over a decade. Pesticides are war chemicals, which have unleashed a war against nature on our farms and fields. Beneficial species have been wiped out, increasing pest problems (2), since without predators, pests flourish. The more the pests increase through this war against nature, the more the peasants spray poisons. For poor peasants, this cost can only be borne through debts.

Since trade liberalisation has also led to budget cutbacks on extension services closing down of cooperatives and public sector banks, which provided rural credit at low interest, the peasants had to take high interest credit from the same companies which were selling hybrid seeds and pesticides. The corporations thus became money lenders, extension agents, seed suppliers and pesticide salesman rolled into one. The peasants were soon buried under the weight of unpayable debt. In 1998, more than 500 farmers committed suicides in Warangal district alone. The suicides have continued in 1999. Across India, more than 2000 peasants have committed suicides. Liberalisation of exports combined with liberalisation of the seed sector and liberalisation of credit has been responsible for the killing of peasants in India, the destruction of biodiversity and the poisoning of agro-ecosystems. Globalisation has removed all protection from farmers and nature. The epidemic of farmers' suicides in India is a symptom of the destruction inherent in globalising chemical and capital intensive corporate controlled agriculture.

In the regions where high costs of hybrid seeds and industrial agriculture introduced through globalisation are already pushing farmers to suicides, Monsanto has unleashed another war by introducing its genetically engineered cotton seeds. Most of the big Indian seed companies such as MAHYCO, Parry, Rallis have already been bought up by Monsanto.

While the argument used to promote genetically engineered crops in the Third World is that they will increase yields and decrease pesticides, the trials showed a decrease in yields and an increase in the use of pesticides.(3) If India had to adopt the Monsanto model, more farmers would be forced to commit suicides, more species would disappear, and more super pests would emerge. That is why on 9th Aug 1998, the day Gandhi told the British to "Quit India", we started the "Monsanto, Quit India" Movement. Farmers in Andhra Pradesh and Karnataka uprooted the genetically engineered cotton in protest, and we have filed a case in the Supreme Court to stop the introduction of genetically engineered crops in Indian Agriculture.(4)

The Third World does not need genetic engineering in agriculture. Genetic engineering introduces new ecological risks and new economic costs which the Third World peasants cannot afford to take.5 Genetic engineering takes the war against nature and people to higher levels. While

Monsanto was put out ads in Europe stating “more Biotechnology plants mean less industrial ones”, it was building a new Round-up factory in India to sell its broad spectrum herbicide Round-up which in Monsanto’s own words “kills everything green”.

On the small farms of India where women use up to 150 - 200 species for food, fodder and medicine, the promotion of the use of Round-up is an ecocidal war against Biodiversity and a war against the biodiversity capital of the poor which is their only source of survival. In usual Monsanto speak, this threat to survival is sold as freedom and liberation. Monsanto’s Round-up ads tell the rural women of India whose survival base is destroyed by Round-up, “Your hands are tied by weeds. Let Round-up set you free”.

Chemical, pharmaceutical, biotechnology and seed companies have merged to create what are called “Life Sciences” corporations but are in reality “Death Sciences” Corporations. They are putting out seeds genetically engineered to be herbicide tolerant so that farmers are locked into dependence, biodiversity is destroyed, and agriculture is rendered more vulnerable. These corporations have also genetically engineered sterile seed, through what is called Terminator Technology so that farmers cannot save seed and are forced to buy seed every year.(6)

Monsanto controls large parts of the soybean and cotton seed supply through patents and through having acquired seed companies across the world, including Cargill, Dekalb, Agracetus, Asgrow, Calgene, Holden, Delta and Pine Land, MAHYCO, Rallis. The control over seed, the first link in the food chain is control over the food system. And it is control through the instruments of war that bring death and destruction to diverse species and poor people everywhere.

(b) From “Food First” to “Export First” Policies:

The Factor Ten Destruction: Trade liberalisation of agriculture implies the deregulation of trade in agricultural products. For the Third World this implies growing luxury crops for exports and importing food. Export oriented agriculture is creating an agricultural apartheid, with the Third World being asked to stop growing food and instead grow luxury products for the rich North. Production of food staples is concentrating in the U.S., and in hands of a few multinational seed companies and grain trading companies.

The shift from the “food first” to “export first” policy is justified on grounds of “competitiveness” and food security. Export earnings are supposed to pay for food imports. However, this never works. The displaced peasants cannot afford to buy imported food, and countries do not have adequate foreign exchange to import food. The hunger in Indonesia caused after the financial collapse is not linked to lack of food in Indonesia but lack of purchasing power of Indonesians. Since exporting luxury products to the west and importing staples destroys peasant livelihoods, the globalisation of agricultural trade creates massive food insecurity.(7)

Exports do not ensure food security because export oriented agriculture means changes in production systems from small scale sustainable production to large scale non-sustainable industrial production. It also implies changes in ownership over natural resources and means of production,

from small autonomous producer owners to large corporate and commercial interests. With export oriented agriculture peasants are displaced from farming and industrial and commercial interests take over land for production of export commodities such as shrimp, flowers, vegetables and meat. Displaced peasants are hungry people since they have lost their livelihoods and food entitlements.

Export oriented agriculture usually involves large scale industrial production. This has major environmental impacts, which leads to secondary displacement of small peasants. The luxury products being promoted for exports in all Third World countries are shrimps, meat and flowers. As a result, the rich get cheap shrimps and flowers and poor starve. While small scale, indigenous shrimp farming has been practised and has been sustainable over centuries, shrimp exports require the establishment of industrial, factory farms for shrimp production. Shrimp industry destroys coastal ecosystems and uproots coastal communities.

Each acre of a shrimp farm needs 200 shadow acres for absorbing the ecological costs of factory farming of shrimp. "Shadow acres" are the ecological unit which assesses how much area would be needed to supply resources and absorb the waste from a particular economic activity. Traditional fishing communities and coastal farming communities lose their resources and livelihoods to shrimp exports. Coastal fisheries are destroyed because mangroves are destroyed and pollution from shrimp factories is poured into the sea. Fifteen times more fish needs to be caught at sea and fed to shrimp than is produced in industrial aquaculture. Most of the feed is converted to waste and creates pollution. Coastal farming is destroyed because shrimp factories require the pumping of sea water into the large ponds for shrimp production. This causes salinization of ground water leading to a drinking water famine and destruction of trees and crops near shrimp factories. Women have to walk 10-20 kms in search of drinking water.

Shrimp exports are promoted as a major source of economic growth. However, for each dollar earned by corporations through exports of shrimp to consumers in U.S., Europe and Japan, \$10 worth of livelihoods and natural resources are destroyed in the local economy. This includes the destruction of mangroves, water, agriculture and fisheries.⁸ Shrimp exports lead to a factor ten destruction for local ecosystems and local economies. Each time western consumers eat cheap shrimp, they are consuming the lives and resources of Third World coastal communities.

The inequalities aggravated or generated by export oriented agriculture also leads to violation of human rights and subversion of law and order. Trade can only be increased by taking resources away from people's subsistence and survival. When people fight to defend their human right to work and live, commercial interests who gain from exports mobilise private armies and the state apparatus to crush people's movements.

Exports of agricultural commodities are therefore often based on denying rural producers their right to life and livelihood. A few corporate and commercial interests, often linked to global corporate interests gain from exports. Most people lose what little they have. In most extreme cases they pay for exports in terms of their lives. The social and ecological costs of globalisation are borne by invisible people and are hence rendered invisible.

Flowers, meat and vegetable exports, like shrimp exports, also do not allow countries to make up for food deficits through imports. As in the case of shrimp exports, meat exports have a shadow cost ten times more than export earnings in terms of the ecological functions livestock play in small scale agriculture. Meat exports are being promoted even in India, the land of the Sacred Cow. In fact, trade specialists have viewed the Sacred Cow as a “trade barrier”. However, livestock are not just meat on legs. Livestock are the primary source of fertiliser in the form of organic manure and energy for farm operations, such as ploughing and agro-processing such as edible oil extraction from animal driven “ghanis”. Livestock in India produce \$17m worth of milk, \$1.5b worth of food grain, \$1 worth of organic manure and \$17m worth of energy.¹⁰ Farm animals are the ecological alternative to fertiliser factories, tractors and large dams. Killing them for meat exports destroys more in the local economy than it creates in the global economy.

To export flowers, countries must import plant material, pesticides, Greenhouse equipment and pay for consultancy. India spent Rs. 13.7b in foreign exchange to import inputs for floriculture and earned only Rs. 0.3b from flower sales, thus having a net drain of Rs. 10b on scarce foreign exchange.¹² Floriculture is based on intensive use of water and pesticides. If the resources used for floriculture had been given for food production, India would have produced four times more food than it could buy on global markets against flower sales. In terms of national food security, export oriented agriculture therefore destroys more than it creates.

Under the pressure of so called “liberalisation” policies, food prices have doubled and the poor have halved their consumption. Prices have increased because food has been exported, thus creating domestic scarcity. Land has been diverted from food crops to luxury crops for exports such as flowers and vegetable, and food subsidies, which used to keep food prices low have been withdrawn. As a housewife in Bombay stated “we are eating half of what we used to after food prices doubled in the last year. Even dal (pulses) is a luxury now. After milk prices increased, I stopped buying milk as well.”⁽¹³⁾

As countries are forced to destroy their agricultural systems to grow and export commodities, both cultural diversity and biological diversity disappear. Diverse cereals, oilseeds, legumes are displaced by soybeans from the U.S. While exports destroy local food systems by diverting resources and changing ownership patterns, imports also destroy food systems by hijacking markets. In August 1999, after a very artificial case of mustard oil adulteration which was restricted to Delhi, but had affected all local brands of oil, mustard oil, the main cooking oil in North India was banned and all restrictions on edible oil imports were removed.⁽¹⁴⁾ Soya bean and soya oil imports were liberalised or deregulated. Within one growing season millions of oilseed producing farmers growing mustard, ground nut, sesame, niger, had lost the market for their diverse oil seed crops. Liberalised imports of soybean have destroyed the entire edible oil production and processing in India. Millions of small mills have closed down. Prices of oilseeds have collapsed and farmers cannot even recover what they have spent on cultivation. Sesame, linseed, mustard have started to disappear from the fields as cheap, subsidised imports of soybean are dumped on the Indian market through “free-imports”.

U.S. soybean is cheap, not because it is produced cheaply but because it is subsidised. The price of soybean is \$155 a tonne, and this low price is possible because the U.S. government pays \$193 a tonne to U.S. soya farmers, who would not be able to stay in production given the low commodity prices without government support. This government support is not really a farmer subsidy, it is an indirect corporate subsidy, since it subsidises corporate controlled agriculture. As the domestic market has flooded with soybean, which has been heavily subsidised with environmental and corporate subsidies, prices crashed to less than a third, local oil processing industry, from the small scale “ghanis” to larger mills started to close down. Farmers protesting against the collapse of their markets were shot at and killed. Due to trade liberalisation imports increased to 3 million tonnes in one year, a 60% rise compared to earlier years. Nearly \$1 billion was spent on imports. Domestic oilseed production declined, and domestic edible oil prices crashed. Ground nut prices went down by 3% from Rs. 48 per kg. To Rs. 37 per kg. Liberalised imports of edible oil have meant the destruction of livelihoods of farmers, destruction of the local edible oil industry, destruction of biological diversity of crops and cultural diversity of food. It has also increased the foreign exchange expenditure, and worsened the balance of payments situation of the country.(15)

II. Hijack of Wheat - Both Bread and Freedom

Cargill is the largest of the giant grain trading corporations in the world. It is an international marketer, processor and distributor of agricultural, food, financial, and industrial products with approximately 80,600 employees in more than 1,000 locations in 65 countries and business activities in 130 more. Cargill controls over 70% of the world's trade in cereals. Together with other corporations, it controls 85% of the U.S. wheat exports and 95% of its corn, 90% of Canada's barley exports, 180% of Argentina's wheat exports and 90% of Australia's sorghum exports. Cargill is U.S.'s no.1 grain exporter, no.1 egg producer, no.1 soy bean crusher, no.1 oilseed processor, no.3 wheat packer, no. 3 corn miller and no.4 wheat miller.(16)

Cargill is the world's largest grain trader, which has bought up the second largest grain trading corporation, Continental Grain. Cargill seeds has in turn been bought up by Monsanto, which controls a major share of the seed market. Market openings through the Agreement on Agriculture are therefore market openings for the Cargills and Monsantos. In 1998, Cargill became the biggest exporter of protein meal from India - having exported 300,000 tonnes. It also exported 10,000 tonnes of non-basmati rice. During 1999, it has procured 10,000 tonnes of wheat. It has entered into an agreement with the Punjab Government to procure wheat and rice, develop grain handling and storage facilities, and enter into contract farming of wheat. It already has its own jetty in Jamnagar.

Corporations like Cargill can make billions through trade without contributing to production. For example, an editorial in a leading business daily in India had the title “Freeing wheat”. Wheat does need to be freed from chemicals. However, it was neither wheat nor wheat farmers who were being freed from chemical addiction. The freedom being referred to was the freedom of Cargill to trade. In 1996, Cargill bought 2 million tonnes of wheat in India at \$60 per tonne and sold it in international markets at \$240 per tonne, making a net profit of \$360m.(17) A few months later, India had to import 2 million tonnes of wheat at international rates with scarce foreign exchange due

to domestic scarcity and rising food prices. India was poorer because it lost foreign exchange, for wheat it could have provided for itself, Indian farmers lost markets, and consumers had to pay more. Everyone lost, except Cargill. No extra wheat was produced but the export of 2m tonnes of wheat from India and the import of 2m tonnes of wheat to India appeared as 4m tonnes of extra wheat traded globally, which translated into more than \$500m profits for Cargill.

Global agribusiness is now attempting to take over food processing by making fresh locally produced food appear backward, and stale food clothed in aluminium and plastic as “modern”. Industrial processing and packaging was first applied to edible oils, destroying the livelihood of millions of oil mill operators and small farmers because of imported soybean. An attempt is now being made to take over the wheat economy. Wheat is called “Kanak” or gold in North India. The Indian wheat economy is based on decentralised small scale local production, processing and distribution systems. Wheat and flour (atta) provide livelihoods and nutrition to millions of farmers, traders (artis) and processors (Chakki Wallas - local flour mills).

In addition, flour is also produced by millions of women working at the household level. Women contribute significantly to the food economy through food processing. It is often said that only 2 per cent food is processed in India, because 98 per cent of the processing that women do at the household level is not counted because of the patriarchal bias in measuring economic value, economic growth and economic productivity. The rolling pin (belan) used for making “rotis” has always been a symbol of women’s power.

The decentralised, small scale, household based economy of food production and processing is huge in aggregate. It generates millions of livelihoods while ensuring that fresh and wholesome food at accessible prices is available to people, and food production and processing has in negative environmental externality. Millions of Indian farmers grow 6050 million tons of wheat every year.⁽¹⁸⁾ Most of this is bought as wheat by consumers from the local corner store (Kirana shop) and taken to the local “Chakki Walla”. A chain of “artis” or traders bring the wheat from the farm to the local shops. It is estimated that more than 3.5 million family run Kirana shops supply wheat to Indian consumers. More than 2 million small neighbourhood mills produce fresh flour. While 40 million tonnes of wheat is traded, only 15 million tonnes is purchased directly as “atta” because Indians love freshness and quality in food. Less than 1 per cent of the consumed “atta” is branded because Indian consumers trust their own supervision of quality at the local chakki better than a brand name attached to stale, packaged flour.

This decentralised, small scale, economy based on millions of producers, processors and traders works with very little capital and very little infrastructure. People are the substitute for capital and infrastructure. Such a people centred economy is however a block to large scale profits for large scale agribusiness. They are therefore eyeing the Indian wheat economy to transform it into a source of profits. In an industry report entitled “FAIDA” (profit) the hijack of the wheat and atta supply by global agribusiness is described as the “wheat opportunity in India”. The hijack plan is based on making farmers directly dependent on agribusiness corporations for purchase of inputs such as seeds destroying local seed supply and displacing the local “artis” or traders and destroying the local “Chakki Walla’s”.

The destruction of the livelihoods of millions the destruction of the local decentralised economy based on small scale production, processing and distribution, the destruction of people's access to fresh and cheap "atta" is described as "modernisation of the food chain". Eating packaged food is described as the food culture of the rich. However, the rich eat fresh food in industrialised countries. It is the poor who are forced to eat heavily processed and packaged food. Packaging is not "modernisation", it is an obsolete concept that is merely an aspect of a non-sustainable economy that uses packaging and branding as a way to displace the more efficient and cheaper system through which people can get food processed locally in front of their eyes and hence ensure quality and freshness.

India's wheat and "atta" economy is complex and highly developed. Global agribusiness defines it as underdeveloped because the big players like Cargill and Archer Daniel Midlands (ADM) do not control it. As the FAIDA report states, "The Indian wheat sector is currently at a nascent stage of development". "Despite its importance, the industry is at a very early stage of improvement". The main criteria used to declare India's wheat economy underdeveloped is that the global corporations are missing from the scene. Underdevelopment is seen as absence of corporate control. "Development" is then defined as equivalent to corporate hijack of the economy. Decentralisation, local control, and small scale is defined as "nascent" and "underdeveloped", and monopolised food systems are defined as "developed". The hijack of the food system is thus made to appear as the "natural evolution" from small to big. Freshness and wholesomeness is defined as "low technology". Impure stale flour produced through "branding" is defined as "high quality". As the FAIDA report states, as a result of the inadequate technology used by the millers the shelf life of flour in India is typically 15 to 20 days. This is very short when compared to the six months to a year achieved in the U.S. Given the huge distances between the factory and the markets and the lengthy distribution system, the branded player has to ensure a much longer shelf life.

All positive aspects of food - freshness, local supply, low cost, low environmental impact, high nutrition are destroyed and substituted by negative characteristics - staleness, long distance supply, higher cost, high environmental impact due to long distance transport, packaging, and energy intensive milling, low nutrition due to over processing. The highest level of Orwellian doublespeak is being used to accomplish the hijack of wheat from Indian farmers and processors. Decentralisation is defined as "fragmentation" and centralisation is defined as integration, even though decentralised, locally controlled systems are highly integrated and centrally controlled systems are based on disintegration of ecosystems and local economic communities.

Agribusiness has already started to try and get Indian consumers to doubt their own quality control systems and trust the brand names. They see a corporate controlled market emerge which would generate RS. 3,000 crore or RS. 10 billion of profits through sale of packaged and branded at. But this profit will be based on the theft of livelihoods from millions of farmers, traders, and processors. According to the industry, the "Chakki Walla" will be a thing of the past". But it will not be just be Chakki Walla's but also peasant farmers, local "artis", and local "Kirana" shop keepers.

The corporate agenda for India is to introduce U.S. style corporate monopolies in wheat such as those of Cargill and ADM and in seed such as those of Monsanto, Novartis, Dupont and Zeneca. These seed corporations demand monopolistic intellectual property rights to seed, forcing farmers to pay royalties for seed each while also controlling other inputs. This corporate dependence on seed and agrochemical inputs is already pushing thousands of farmers to suicide. The corporate control of agriculture is a 2 per cent model. It only allows 2 per cent people on land to be tractor drivers and pesticide sprayers. All other functions of farmers as maintainers of biodiversity, conservers of soil and water and seed breeders are destroyed.

Global corporations would like to see the decentralised small scale food systems of India replaced by large scale corporations like Cargill and ADM controlling the entire food chain from seed to procurement, processing and distributed. In the U.S., ADM works with “Growmark” - a cooperative of 175,000 farmers to provide credit, extension and markets. ADM owns 200 grain elevators, 1900 barges, 800 trucks, 130,000 railcars which move wheat around without any significant employment generation by using pneumatic blowers to load and unload grain. Investment in infrastructure is used to displace people, decentralised economic arrangements are replaced by centralised control over the food chain. The “FAIDA” report claims that 5 million jobs will be “created” by the take over of the food chain by MNCs. However, if one takes into account the 20-30 million farmers, 5 million Chakki Walla’s, 5 million “artis”, 3.5 million “Kirana” shops, and the households dependent on them, at least 100 million people’s livelihoods and sustenance will be destroyed by the industrialisation of the wheat economy alone.

Globalisation of agriculture is in effect the coproratization of food systems. In the name of “free trade”, both bread and freedom are being hijacked from the Third World by the Cargills and Monsantos. That is why during “Freedom Week”, 1999, we protested at the Cargill Head Offices in India. While India was celebrating victory at Kargil, we talked of the hidden Cargill war - the war of global corporations against our culture, our health, and our livelihoods. An alliance of women’s groups, environmental groups, farmers groups launched a movement for the protection of our bread and our freedom -“Hamari Roti, Hamari Azadi”. Women made ‘Rotis’ at Cargills doorsteps, and with rolling pins as their symbol of food rights and food freedoms, they committed themselves to defending their diverse and decentralised food systems.

The food rights movement “Hamara Roti, Hamara Azadi” (Our Bread our Freedom) brings together environmental movements, women’s movements, farmers’ movements, workers movements, and student movements. The movement is mobilising awareness on corporations such as Monsanto and Cargill which are trying to control Indian agriculture and are destroying millions of livelihoods in food production and food processing, destroying the rich biological and cultural diversity of our agricultural and food systems, destroying the ecologically sustainable consumption patterns.

III. TRIPs and Biopiracy

One of the most perverse aspects of the W.T.O. is the Trade Related Intellectual Property Rights (TRIPs) agreement which is forcing countries to reorganise their production and consumption patterns, to allow monopolies of a handful of so called “Life Sciences” corporations which are in

reality peddlers of death. Genes, cells, seeds, plants and animals can now be patented and “owned” as intellectual property through the intellectual property rights agreement (TRIPs) of the World Trade Organisation (W.T.O)(23)

While the IPR systems are justified on grounds of creativity, the western Intellectual Property Rights or Patent Systems were not evolved as stimulants of creativity. They were instruments of conquests. Patents derives from “letters patent” - the open letters granted by European sovereigns to conquer foreign lands or to obtain import monopolies. Christopher Columbus derived his right to the conquest of the Americas through the letter patent granted to him by Queen Isabel and King Ferdinand.(24)

Patents were originally not granted for new inventions, but for bringing useful and known arts from other regions. Monopolies were granted for such technology transfer. The technologies did not have to be new for grant of patents. For example, monopolies were granted under Connecticut law for “bringing in the supply of goods from foreign parts that is not as yet of use among us”. The non-recognition of prior art and prior use while granting patents has continued in the U.S. in spite of patents now being associated with novelty and creativity. The U.S. statute which was designed to make U.S. an independent industrial power was thus deliberately designed to deny prior art and hence treat ignorance of prior innovation as the ground of invention. Paradoxically, a legal system aimed at preventing “intellectual piracy” is itself based on legitimising piracy.

Originally, the U.S. laws were a patchwork of state laws, which did not offer protection for the patentee outside of the state in which it had been granted. The national statute was institutionalised in 1787 and became para 8, Section 8, Art. I of the Constitution of the U.S. The introduction of patents into the Constitution was triggered by steamboat monopolies, which had to be applied for in different states. On March 28, 1787, an entrepreneur was granted a patent in Pennsylvania which gave him the “sole and exclusive right and privilege of constructing, making, using, employing and navigating all and every species or kinds of boats or water craft which may be urged or impelled through the water by the force of fire or steam, in all creeks, rivers, bays and waters whatsoever, within the territory and jurisdiction of this state, for and during the full end and term of fourteen years”. Members of the constitutional convention, which was sitting in Philadelphia, were taken on board a steamboat during their deliberations. The politicians were convinced that a “single federal patent law would serve the fledgling nation and its inventors for more effectively than the existing patchwork of state patents.

The broad steam-boat patents to make, use, navigate “all and every species” of steamboats were granted in the U.S. in spite of the steam engine having been invented and patented by James Watt in Scotland 15 years before. Prior art and prior use in other countries was therefore systematically ignored in U.S. Patent Laws. The same assumption of ignorance as invention is enshrined in the U.S. Patent Act of 1952. Section 102 of the Act treats as a prior art use in the U.S. and publications in foreign countries. Use in foreign countries is not recognised as prior art. Section 102 of the U.S. law, which defines prior art reads as follows:-

35 USC 102: Conditions of patentability: Novelty and loss of right to patent. A person shall be entitled to a patent unless: A. The invention was known or used by others in this country or patented or described in a publication in this or a foreign country before the invention thereof by the applicant for patent. Or B. The invention was patented or described in a trade publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of the application for patent in the United States.

Use in a foreign country therefore does not constitute prior art in U.S. patent law. Since patents are granted for new inventions, denial or non-recognition of prior art elsewhere allows patents to be granted for existing knowledge and use in other countries. This is the basis of Biopiracy or knowledge of Indian knowledge systems, and indigenous uses of biological resources being patented. As Peter J. Thana has stated, the statute talks about things that are publicly known and publicly used in this country before the date of invention. You should not be able to claim as your invention, something that was on the shelf, out there, before you invented it.

Prior art excludes devices in use elsewhere in the world. If, for example, somebody in Europe were operating a machine and you independently and without knowledge of the existence in good faith developed your own invention that was essentially the same machine, that fact would not prevent you from obtaining a patent in the U.S. The European invention would not be considered prior art in the statute.(25)

The U.S., therefore, depended on borrowed knowledge for its own development on industrial power. However, a century later, the U.S. wanted such transfer of knowledge and technology to be blocked. Instead of changing its laws to reflect the prior innovation and indigenous knowledge of other countries and cultures, the U.S. created unilateral instruments such as clause Special 301 in its Trade Act to force other countries to follow its Patent laws. In addition, the U.S. globalised its flawed Patent laws by bringing intellectual property rights into trade laws in GATT.

Intellectual property rights, or rights to “products of the mind” were introduced into the trade regime during the Uruguay Round of GATT. Not only were IPR laws made global geographically, in the sense that all countries were brought under TRIPs laws, TRIPs also removed ethical boundaries by including life forms and biodiversity into patentable subject matter. Living organisms and life forms, which are not inventions but make themselves were thus redefined as machines and artefacts, made and invented by the patentee. Intellectual Property Rights and patents then give the patent holder a monopolistic right to prevent others from making, using, and selling seeds. Seed saving by farmers has now been redefined from a sacred duty to a criminal offence of stealing “property” from corporations. Article 27.3 (b) of the TRIPs agreement, which relates to patents on living resources was basically pushed by the Life Sciences Companies to establish themselves as Lords of Life.

The U.S. Corporations like Monsanto have admitted that they drafted TRIPs and pushed it into international law. As a Monsanto spokesman said, The industries and traders of world commerce have played simultaneously the role of patients, the diagnosticians and prescribing physicians.

There are three perversions inherent in patents on living material. The first is the ethical perversion, intrinsic to the claim that seeds, plants, sheep, cows, human cell lines are nothing but “products of the mind” “created” by Monsanto, Novartis, Ian Wilmut or PPL. Living organisms have their intrinsic self - organisation, they make themselves, and hence cannot be reduced to the status of “inventions” and “creations” of patent holders. They cannot be “owned” as private property because they are our ecological kin, not just “genetic mines”.

The second perversion intrinsic to patents on life is that it converts the most important duty in agriculture - to save seed and share seed - into a crime. The recognition of corporations as “owners” of seed through intellectual property rights converts farmers into “thieves” when they save seed or share it with neighbours. Monsanto hires detectives to chase farmers who might be engaging in such “theft”.

The third perversion in the global IPR system is that while it is supposed to prevent “piracy”, it actually encourages it in the form of “Biopiracy”, the theft of biodiversity and indigenous knowledge through patents.

Biopiracy deprives the South in three ways:

1. It creates a false claim to novelty and invention, even though the knowledge has evolved since ancient times. Thus, biopiracy is intellectual theft, which robs Third World people of their creativity and their intellectual theft.
2. It diverts scarce biological resources to monopoly control of corporations thus depriving local communities and indigenous practitioners. Thus, biopiracy is resource theft from the poorest two third of humanity who depend on biodiversity for their livelihoods and basic needs.
3. It creates market monopolies and excludes the original innovators from their rightful share to local, national and international markets. Thus, biopiracy is economic theft.

Instead of preventing this organised theft of the resources and knowledge of the poor by powerful corporations, W.T.O. rules protect the powerful and punish the victims. In a dispute initiated by the U.S. against India, W.T.O. forced India to change its patent laws and grant exclusive marketing rights to foreign corporations on the basis of foreign patents. Since many of these patents are based on Biopiracy, W.T.O. is in fact promoting piracy through patents. Overtime, the consequences of TRIPs for the South’s biodiversity and southern people’s rights to their diversity will be severe.

These consequences include:

- a. No one will be able to produce/reproduce patented agriculture/medicinal/animal products freely, thus eroding livelihoods of small producers and preventing the poor from using their own resources and knowledge to meet their basic needs of health and nutrition.
- b. Royalties for their use will have to be paid to the patentees and unauthorised production will be penalised, thus increasing the debt burden, which is already crushing the Third World.
- c. Indian farmers, traditional practitioners and traders will lose their market share in local, national and global markets.

The patents on the anti-diabetic properties of *karela*, *jamun*, *brinjal* once again highlight the problem of Biopiracy - the patenting of indigenous biodiversity related knowledge. U.S. Patent No. 5,900,240 was granted recently to Cromak Research Inc. based in New Jersey. The use of karela, jamun and brinjal for control of diabetes is everyday knowledge and practise in India. Their use in the treatment of diabetes is documented in authoritative treatises like the “Wealth of India”, the “Compendium of Indian Medicinal Plants” and the “Treatise on Indian Medicinal Plants”.

This indigenous knowledge and use consists of “prior art”. No patent should be given where prior art exists since patents are supposed to be granted only for new inventions on the basis of novelty and non-obviousness. These criteria establish inventiveness, and patents are exclusive rights granted for inventions. The claim to the use of karela or jamun for anti-diabetic treatment as an invention is false since such use has been known and documented widely in India.

Biopiracy and patenting of indigenous knowledge is a double theft because first it allows theft of creativity and innovation, and secondly, the exclusive rights established by patents on stolen knowledge steal economic options of everyday survival on the basis of our indigenous biodiversity and indigenous knowledge. Overtime, the patents can be used to create monopolies and make everyday products highly priced.

If there were only one or two cases of such false claims to invention on the basis of Biopiracy, they could be called an error. However, Biopiracy is an epidemic. Neem, haldi, pepper, harar, bahera, amla, mustard, basmati, ginger, castor, jaramla, amaltas and new karela and jamun..... Ricetec, a U.S. corporation has a patent on India’s famous basmati rice. W.R. Grace, a chemical company that killed children in Massachusetts by toxic pollution, has many patents on products derived from the Indian Neem tree, *Azadirachta Indica*.

The problem is not, as was made out to be in the case of turmeric, an error made by a patent clerk. The problem is deep and systemic. And it calls for a systemic change, not a case by case challenge. If a patent system which is supposed to reward inventiveness and creativity systematically rewards piracy, if a patent system fails to honestly apply criteria of novelty and non-obviousness in the granting of patents related to indigenous knowledge then the system is flawed, and it needs to change. It cannot be the basis of granting patents or establishing exclusive marketing rights.

The problem of Biopiracy is a result of western style IPR systems, not the absence of such IPR systems in India. Therefore, the implementation of TRIPs, which is based on the U.S. style patent regimes, should be immediately stopped and its review started. Since patents are granted for new inventions, denial or non-recognition of prior art elsewhere allows patents to be granted for existing knowledge and use in other countries. This is the basis of Biopiracy or knowledge of Indian knowledge systems, and indigenous uses of biological resources being patented.

U.S. style patent laws can only pirate indigenous knowledge. They cannot recognise or protect it. The survival of an anachronistic Art. 102 thus enables the U.S. to pirate knowledge freely from other countries, patent it, and then fiercely protect this stolen knowledge as “intellectual property”.

Knowledge flows freely into the U.S. but is prevented from flowing freely out of the U.S. If Biopiracy has to stop, then the U.S. Patent laws must change, and Article 102 must be redrafted to recognise prior art of other countries. This is especially important given that U.S. patent laws have been globalised through the TRIPs agreement of the W.T.O. In 1999, article 27.3 (b) of the TRIPs agreement is supposed to come up for review. This is the article that most directly impacts indigenous knowledge since it relates to living resources and biodiversity. In 2000 A.D. countries can also call for an amendment of TRIPs as a whole.

Since TRIPs is based on the assumption that U.S. style IPR systems are “strong” and should be implemented world-wide, and since in reality the U.S. system is inherently flawed in dealing with indigenous knowledge and is “weak” in the context of Biopiracy, the review and amendment of TRIPs should begin with an examination of the deficiencies and weakness of western style intellectual property rights systems. A globalised IPR regime which denies the knowledge and innovations of the Third World, which allows such innovations to be treated as inventions in the U.S., which legalises monopolistic exclusive rights by granting of patents based on everyday, common place indigenous knowledge is a regime which needs overhaul and amendment.

Instead of being pressurised, as India has been, to implement a perverse IPR system, through TRIPs, India should lead a campaign in W.T.O. for review and amendment of the system. Meantime, India and other Third World countries should freeze the implementation of TRIPs. While TRIPs implementation is frozen for starting a process of review, we should make domestic laws, which protect our indigenous knowledge as the common property of the people of India, and as a national heritage. The implementation of the Convention on Biological Diversity enables us to do this. Since CBD is also an international treaty, protecting indigenous knowledge via a Biodiversity Act does not violate our international obligations. In fact removing the inconsistencies between TRIPs and CBD should be an important part of the international campaign for the review and amendment of TRIPs.

Amending TRIPs and U.S. Patent laws is the challenge we must take up. The problem is not our IPR systems but the western style IPR regimes, which systematically enable piracy of indigenous knowledge and practices through patents. The review of TRIPs should be used to start amending these deficient systems. Some commentators have suggested that Biopiracy happens because our knowledge is not documented. That is far from true. Indigenous knowledge in India has been systematically documented, and this in fact has made piracy easier. And even the folk knowledge orally held by local communities deserves to be recognised as collective, cumulative innovation. The ignorance of such knowledge in the U.S. should not be allowed to treat piracy as invention.

Piracy of indigenous knowledge will continue till patent laws directly address this issue, exclude patents on indigenous knowledge and trivial modifications of it, and create sui generis systems for the protection of collective, cumulative innovation embodied in indigenous knowledge. The protection of diverse knowledge systems requires a diversity of IPR systems, including systems, which do not reduce knowledge and innovation to private property for monopolistic profits. Systems of common property in knowledge need to be evolved for preserving the integrity of

indigenous knowledge systems on the basis of which our every day survival is based and through which the biodiversity of the world has been protected and conserved.

Since neither TRIPs, nor the U.S. Patent law have scope for recognising knowledge as a “commons”, or recognising the collective, cumulative innovation embodied in indigenous knowledge systems, if indigenous knowledge has to be protected, then TRIPs and U.S. Patent laws must change. Nothing less than an overhaul of western style IPR systems with their intrinsic weaknesses will stop the epidemic of Biopiracy. And if Biopiracy is not stopped, the every day survival of ordinary Indians will be threatened, as overtime our indigenous knowledge and resources will be used to make patented commodities for global trade. Global corporate profits will grow at the cost of the food rights, health rights and knowledge rights of one billion Indians, two thirds of whom are too poor to meet their needs through the global market place. India should loose no time in starting the movement for amendment of TRIPs and U.S. Patent laws. Our survival itself is at stake.

Instead of removing perversions of U.S. patent law that allows existing knowledge to be treated as ‘novel’ and patented, the Trade Related Intellectual Property Rights (TRIPs) Agreement of GATT/W.T.O. has universalised the U.S. patent perversions of patenting life and protecting biopiracy. The potential costs of Biopiracy to the Third World poor are very high since two thirds of the people in the South depend on free access to biodiversity for their livelihoods and needs. 70 per cent seed in India is farmers’ seed. 70 per cent healing in India is based on indigenous medicine using local plants.

Patents on indigenous knowledge and uses of plants is an “enclosure” of the intellectual and biological commons on which the poor depend. Robbed of their rights and entitlements to freely use nature’s capital because that is the only capital they have access to, the poor in the Third World will be pushed to extinction. Like the diverse species on which they depend, they too are threatened species. Integrity and intrinsic worth of all species, and the right to life of all, rich and poor alike, calls for an exclusion of life forms from TRIPs. The review of Art. 27.3 (b) in 1999 and the review of the entire TRIPs agreement beginning in 2000, should be used to initiate the exclusion of life forms from patentability so that we can begin the ecological and ethical rehabilitation of including humans in the democracy of life with the limits and obligations that being a member of the earth-family entails.

“No patents on life” Movements and Movements against Biopiracy are already strong in the North and South. These citizens’ initiatives need to be the basis of the TRIPs to exclude life from patents and IPR monopolies. In India, Navdanya (the movement for conservation of native seeds) has catalysed broad based alliances for food freedom and seed freedom with farmers’ groups, women’s groups, environmental groups. The Bija Satyagraha or Seed Satyagraha is the non-cooperation movement against patents on life, genetic engineering of crops and corporate monopolies in agriculture.

The “Jaiv Panchayat” Movement or the Living Democracy Movement is the movement for the protection of all species and for local democratic control on biodiversity and indigenous knowledge.

During Freedom Week, 9th-15th August 1999, through the Living Democracy Movement, more than 500 village communities sent notices to Biopirates such as W.R. Grace for its biopiracy of Neem as pesticide, Monsanto, whose subsidiary Calgene, has patents on Mustard and Castor, and RiceTec which has a patent on Basmati. Notices have also been sent to W.T.O. for overstepping its jurisdiction since under traditional legal systems and under the Indian Constitution, the local community (Gram Sabha) is the highest competent authority on matters related to biodiversity.

The rules of W.T.O. reduce life's diversity to a commodity, and force all cultures to be ruled by giant corporations. The living democracy movement celebrates the diversity and intrinsic worth of all life forms, and strengthens decentralised democratic structures for the defence of life and livelihoods. W.T.O. has forced India to change its patent laws, hand over our seeds to Monsanto and bread to Cargill, remove Quantitative Restrictions on agricultural imports and allow MNCs to take over our food production and food processing from our small farmers and small-scale processing at the level of households and cottage industries. We are calling on W.T.O. to quit India's food and biodiversity.

We want W.T.O. to Quit India so that our farmers, our biodiversity and our people can live. We want agriculture to be out of the W.T.O. on grounds of our food security. This will be the basis of our campaign for the review of Agreement on Agriculture in the W.T.O. Food production should stay in the hands of the small farmers and food security should stay in the hands of the women.

The TRIPs agreement of W.T.O. has an impact on biodiversity and thus subverts our democratic rights to our biodiversity and indigenous knowledge. Biodiversity should stay in the hands of the local communities. This is a right recognised in our traditions and enshrined in our Constitution. W.T.O. is destroying our democratic decision-making structures by forcing the government to implement TRIPs and undo the rights of the people to govern themselves through decentralised democratic structures guaranteed under the Panchayati Raj System.

The Gram Sabha or local community as the competent authority for the defence of biodiversity and the protection of indigenous knowledge as collective and cumulative innovation will be the basis of our campaign for the review of the TRIPs agreement. The real millennium round for the W.T.O. is the beginning of a new democratic debate about the future of the earth and the future of people. The centralised, undemocratic rules and structures of the W.T.O. which are establishing global corporate rule based on monopolies and monocultures need to give way to an earth democracy supported by decentralisation and diversity - in which the rights of all species and the rights of all peoples come before rights of corporations to make limitless profits through limitless destruction.

Free trade is not leading to freedom. It is leading to slavery. Diverse life forms are being enslaved through patents on life, farmers are being enslaved into high-tech slavery, countries are being enslaved into debt and dependence and destruction of their domestic economies. We want a new millennium based on economic democracy, not economic totalitarianism. The future is possible for humans and other species only if the principles of competition, organised greed, commodification of all life, monocultures and monopolies and centralised global corporate control of our daily lives enshrined in the W.T.O. are replaced by principles of protection of people and nature, the obligation

of giving and sharing diversity, decentralisation and self-organisation enshrined in our diverse cultures and national Constitutions.

The W.T.O. rules are violative of principles of human rights and ecological survival. They are violative of rules of justice and sustainability. They are rules of warfare against people and planet. Changing these rules is the most important democratic and human rights struggle of our times. It is a matter of survival.

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