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Preface

Science and technology have given man powers which could not be conceived of a few decades ago. If those powers are used for the good of mankind, they can banish want and misery from the whole world and enrich the life of every person on earth — materially and culturally. But those powers are used by a small minority, especially a few transnationals based in imperialist countries, among which the U.S.A. is pre-eminent, for their own profit, for exploiting the resources of the entire world, for dominating other countries, especially the countries of the third world and for plundering them. Those who possess vast economic power also wield immense political power. The state machinery is used to promote their interests. Prime ministers, ministers and ambassadors render willing service. The ruling classes of the third world countries serve as their henchmen in the hope of receiving some share of the spoils.

Multilateral world organizations like the United Nations, the World Bank, the IMF and the World Trade Organization, which control the different aspects of the lives of the world's peoples, are in reality controlled by a few imperialist powers, chief among which is the U.S.A.

Science and technology have been harnessed to the imperialist chariot. Like other branches of science and technology, biochemistry and genetic engineering are made to serve the imperialists. Never before have so few exploited and oppressed so many — billions of people. Perhaps this may be described as the highest stage of imperialism.

Even the toiling people of the centres of capitalism are not spared. With new discoveries of science and technology — computers, automation, robotics, etc., — human labour is becoming redundant under this system. Joblessness, recession, crisis are inseparable from it. Today, capitalism is torn by inevitable contradictions which can be resolved only with its extinction.

But the monster which is laying waste the lives of at least 75 per cent of the world's population and forcing the rest to live degraded lives will not die of itself. Only the politically conscious people of the world can, if they take their destiny in their own hands, send it to the grave and build a new life and a new world for themselves.

It may be useful for us to know the tentacles of world imperialism. This monograph is about one such tentacle.

A section 'Agrarian Relations' has been added. The views expressed in it are suggestions which may help readers to think for themselves, investigate and arrive at correct conclusions.

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Contents

Abbreviations

AIE	*Aspects of India's Economy* (ed. by Rajani X Desai, Bombay)
BS	*Business Standard*
CBD	Convention on Biological Diversity
CGIAR	Consultative Group on International Agricultural Research
CRRI	Central Rice Research Institute
CWG	*Collected Works of Mahatma Gandhi*
CYMMYT	International Maize and Wheat Improvement Centre
EEC	European Economic Community
EPW	*Economic and Political Weekly*
ET	*Economic Times*
FAO	Food and Agriculture Organization
GATT	General Agreement on Tariffs and Trade
GoI	Government of India
HYV	High-Yielding Variety
IADP	Intensive Agricultural Development Programme
IBPGR	International Board for Plant Genetic Resources
ICAR	Indian Council of Agricultural Research
IMF	International Monetary Fund
IPR	Intellectual Property Rights
IRRI	International Rice Research Institute
PBR	Plant Breeders' Rights
PGR	Plant Genetic Resources
PHDCCI	Punjab, Haryana and Delhi Chamber of Commerce and Industry
SIDP	Seed Improvement and Development Programme
STN	*The Statesman*
SWN	*Selected Works of Jawaharlal Nehru*
TNC	Transnational Corporation
TOP	*Constitutional Relations between Britain and India : The Transfer of Power 1942-7*
TRIPS	Trade-Related Intellectual Property Rights
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
UPOV	Union for the Protection of New Varieties of Plants
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WHO	World Health Organization
WTO	World Trade Organization

1. Colonial Legacy

In 1948-49, agriculture (including stock-breeding and auxiliary activities, forestry and fisheries) accounted for 49.1 per cent of the total national income. Not only had the 'cultivators' and agricultural workers increased vastly in absolute numbers in 1951 but their percentage also in the country's work force had risen to 73.7 from 69.4 in 1901, while the percentage of persons engaged in manufacturing (factory industry as well as small-scale and cottage industries) had declined to 8.7 in 1951 from 10.1 in 1901. In 1950-51 less than two per cent of the total working population was employed in the factory industry and its share in the national income was a mere 5.8 per cent. India was no doubt predominantly agricultural. Yet India did not grow enough food to feed her people. Chronic hunger was the lot of a vast section of the people. Famines sometimes swept many of them away. The chronic food shortage was accentuated during World War II and after. No shortage of arable land nor any inherent poverty of the soil nor any supposed inferiority of the peasant but the colonial rule and the agrarian systems it had introduced were to blame for the abysmal poverty and destitution of the people.

British rule raised a new semi-feudal structure that would serve the interests of the British bourgeoisie in place of the old one that was mostly dismantled. On the one hand, the peasant's traditional right of occupancy to the land was abolished and it became a commodity. Second, a new legal system based on concepts of private property and contract was introduced. Third, India was drawn into the world capitalist market and there was greater commercialization of agriculture and greater penetration of commodity-money relations than before.

On the other hand, the mode of appropriation of the agricultural surplus was feudal. The extraction of the maximum surplus from the peasant's produce, even a part of the necessary product, by extra-economic coercion became the basis of the early colonial system of plunder. In 1763, the year before the East India Company became the *dewan* of Bengal (i.e., undertook to collect revenue), the amount of land revenue actually collected in Bengal was Rs 6.5 million; in 1793, the revenue fixed by the Company under the Permanent Settlement amounted to Rs 26.8 million.[2] In the meantime several revenue experiments, quite ruinous to Bengal and her peasantry, were made by the Company in pursuit of the policy of maximization of land revenue. On coming to India in 1789 as governor-general, Lord Cornwallis noted how devastating their effect was : "I may safely assert that one-third of the Company's territory in Hindustan is now a jungle inhabited only by wild beasts."[3] The object was to wring a surplus from the revenue to finance the purchase of goods exported from here. "...the whole exported produce of the country, so far as the company is concerned", stated a committee of the House of Commons, "is not exchanged in the course of barter, but it is taken away without any return or payment whatever."[4]

In the first few decades of the 19th century, India was converted into a raw material appendage of Britain and a market for her growing factory industry. Profits from *unequal* trade were added to the rent-revenue as another main source of colonial plunder. For the realization of the maximum rent-revenue, which remained till 1850 "the basic pillar of British colonialism,"[5] and of profits from unequal exchange, the colonialists re-established feudal landlordism on a new basis and nurtured the growth of comprador trade and usury. Neither the loss of the peasant's right of occupancy to the land nor the development of commodity-money relations helped to promote the growth of capitalism in agriculture or lay down the material premises for its development. The three different land revenue systems, *zamindari*, *ryotwari* and *mahalwari*, the British introduced in separate regions of India, tended towards one direction — the development of feudal production relations in agriculture on a new basis.

Briefly, the following were among the main features of the land revenue systems. First, the rent or revenue that the actual producers paid to the landlords or directly to the colonial state was not capitalist land-rent representing an excess over profit but the most ruthless and savage feudal land-rent. The land-tax and rent appropriated by the British colonialists and the landlords included not only the entire amount of the surplus labour but also a considerable part of the necessary labour of the peasant. The peasant was not only ground down to the barest minimum of means of subsistence but even that minimum often eluded him. As the agricultural productivity was low, the amount of surplus labour was small, but there was a very high degree of exploitation of the peasant. Second, force or the threat of force was used by the colonial state apparatus or landlords to extract the land-tax or rent and *abwabs* (exactions not sanctioned by law) from the peasants. Harassment, oppression, torture of the peasant were quite common. Extra-economic coercion was even more intensified than before.

In the new climate created by colonial rule usury had a phenomenal growth. To pay the exorbitant land-tax or rent by the due dates, even when his harvest had failed, and also for his subsistence, the peasant was forced to depend on the usurer. The usurer made it comparatively easy for the colonialists to realize the land-tax from the *ryots* as well as from the landlords, who also took loans to meet the revenue demand by due dates. While servicing the mechanism of tribute-extraction by the colonial power, usury caused disintegration of the small peasant economy and ruined the peasants and the handicraftsmen who could not escape its meshes. The Bengal Provincial Banking Enquiry Committee 1929-30 observed in its report:

"In any case, the conditions of borrowing are such that a big share of the income of agriculturists is eaten up by interest and other charges, making repayment of loans very difficult. Debts are often repaid by further loans. As has been well said, 'the cultivator is born in debt, increases his debt throughout his life and dies more hopelessly in debt than ever.'[5a]

This was true not only of Bengal but also of other parts of India. Because of the overcrowding of agriculture due to the destruction of

the "union between agriculture and manufacturing industry" and because of the pauperization of the mass of peasants and artisans, the parasitical growth of usury led to wide prevalence of debt bondage.

Besides bonded labour, a new kind of serfdom arose. With the penetration of commodity-money relations into the countryside, the ownership of land was increasingly being transferred from peasants to a new breed of usurer-cum-traders. When the peasants were forced to sell their holdings or lost them to the mortgagees, they were not driven off the land but were bound to it again by the new owners and tilled it on a crop-sharing basis. The usurers blossomed out as landlords and these usurer-landlords seized most of the products — the surplus product as well as much of the necessary product — of the peasants' labour without making any investment. Large sections of peasants became virtually serfs or bond-slaves.

Parasitic landlordism flourished throughout India. By refusing to invest for making any improvement of the soil or of the tools of cultivation and by depriving the peasants of the ability and incentive to do the same, it proved a stumbling-block to the development of productive forces; rather, it caused the soil to deteriorate more and more and its yield to get poorer and poorer with the passing of years.

The exorbitant revenue demand and payment of it in money forced peasants to grow commercial crops like cotton and jute to provide raw materials for British industry. The peasants, especially in cash-crop growing areas, became victims not only of feudal oppression but also of colonial oppression as appendages to the speculator's market controlled by compradors and British agency houses and exchange banks. The fabulous amounts of commercial profit earned by the British bourgeoisie and their Indian compradors were not the normal capitalist commercial profit but speculation profit of a colonial and semi-feudal character obtained by coercion and swindling.

The agrarian systems introduced by the British, observes Barrington Moore, Jr., "formed the basis of a political and economic system in which the foreigner, the landlord, and the moneylender took the economic surplus away from the peasantry, failed to invest it in industrial growth and thus ruled out the possibility of repeating Japan's way of entering the modern era. ...*The Indian peasant was*

suffering many of the pains of primitive capitalist accumulation, while Indian society reaped none of the benefits."[6]

Charles Bettelheim noted the following characteristics of the prevailing agrarian system in India, which he described as "the declining feudal system to be called semi-feudal": "the absence of a labour-market in a large part of the rural sector; the personal subservience of the immediate producer to the landowner; the excessive importance of land rent; the underdeveloped marketing system resulting in little social division of labour, a low rate of accumulation, and the use of produce mainly to satisfy immediate needs."[7]

At the same time there was differentiation, but not quite sharp, among the agricultural population. The Census of India 1931 gave the following picture of the division of classes in Indian agriculture :[8]

Non-cultivating landlords ..... 4.1 millions

Cultivators (owners or tenants) ..... 65.5 millions

Agricultural labourers ..... 33.5 millions

The non-cultivating landlords comprised big landlords and other intermediaries including those who lived on rent by sub-letting their land. It appears that agricultural labourers constituted nearly one half of those deriving their income from land. A comparison with the 1921 Census figures shows that while the numbers of non-cultivating landlords and agricultural labourers rose in 1931, the number of owner and tenant cultivators went down.[9] This group actually comprised several strata — rich, middle and poor peasants as well as sharecroppers. The rich peasant had more than sufficient land; he worked on it himself as well as hired farm workers to cultivate his land. Sometimes he leased out part of the land to sharecroppers and derived a portion of his income from rent. Often he practised usury : what he lent was more often in kind — rice or other food — than in cash. The middle peasant had enough land which could feed himself and his family members. He depended mainly on his own labour and the labour of his family members but might hire some labour during the heavy seasons. The poor peasant had insufficient land and had to serve as a sharecropper or agricultural labourer, besides tilling his own patch of land. Many

agricultural labourers had tiny plots of land allotted to them by landowners to be assured of their labour when the latter needed it. Most agricultural workers had work only for a few months in the year. A section of them who were employed throughout the year were virtually slaves working both at the homes of the employers and in their fields.

The Bengal Land Revenue Commission (the Floud Commission of 1938-40) held that the minimum area required by an average peasant family to meet its expenses was 5 acres of land and found that about three-fourths of the peasant families in Bengal had less than the minimum required.[10] No doubt, the economic holdings, owned or tenanted by rich as well as middle peasants, constituted a small minority of the total number of holdings. Destitution, semi-starvation, occasional starvation, disease, premature death, ignorance, filth and lack of all human rights were the lot of the bulk of the peasantry. The director of health, Bengal government, observed in his report for 1927-28 that "the present peasantry of Bengal are in a very large proportion taking to a dietary on which even rats could not live for more than five weeks", and that "their vitality is now so undermined by inadequate diet that they cannot stand the infection of foul diseases".[10a] This was no less true of the bulk of the peasantry in other regions of India. The Majority Report of the Central Banking Enquiry Committee estimated that the average income per year of an Indian agriculturist was no higher than Rs 42.[11] Many others estimated it at less than half of the amount.

The situation deteriorated considerably as World War II progressed. Land continued to be concentrated in the hands of substantial landowners and usurers while the numbers of poor peasants wilh uneconomic holdings and of landless agricultural workers increased considerably.

The overwhelming majority of the peasantry groaned under the four-fold burden of oppression and exploitation — by the colonial state; by the domestic landlords; by money-lenders; and by various trader middlemen, many of whom acted as agents of the British or Indian big bourgeoisie. The question is : how did they survive? The fact is, millions did not survive long. They died prematurely —

many in their infancy or childhood. Lenin's words, in this context, may be worth remembering. "Small peasants", he observed, are "masters of the art of maintaining their hold by reducing consumption to an unbelievable minimum."

This system of exploitation was buttressed by the hereditary caste system, a unique Indian social institution, a feature not only of the Hindu but also of the Muslim and Christian societies in India.[12] Those who owned most of the land and other property and enjoyed social privileges belonged usually to the upper castes. A section of them led a parasitical existence and many pursued different professions or served under the government or in different private firms. The actual producers of wealth were generally members of so-called backward castes, outcastes (treated as untouchables) and tribal people. The 'untouchables', besides pursuing their traditional occupations like scavenging and leather-work, had to fulfil certain social obligations to upper caste people and worked as agricultural labourers during the heavy seasons. Usually landless, they lived a degraded existence.

The colonial rulers were very much interested in preserving the caste system. It was an integral feature of Indian feudal or semi-feudal society and the British colonialists exploited it instead of seeking to demolish it. To quote Ramkrishna Mukherjee, "the relation between the caste hierarchy and the new economic structure [which the British raised] is fundamental to the existence of the caste system in the British period of Bengal's [read India's] history (and to an extent even today as the legacy of the immediate past)..."[13]

In his presidential address to the all-India Depressed Classes Congress in August 1930, B.R.Ambedkar said :

'I am afraid that the British chose to advertise our unfortunate conditions not with the object of removing them, but only because such a course serves well as an excuse for retarding the political progress of India.... So far as you are concerned, the British Government has accepted the arrangements as it found them and has preserved them faithfully in the manner of the Chinese tailor who, when given an old coat as a pattern, produced with pride an exact replica, rent, patches and all. Your wrongs have remained as open sores and they have not been righted..."[14]

This semi-feudal system generated decadence and destitution and hindered the growth of productive forces. In this semi-feudal society the Indian big bourgeoisie, nurtured by imperialist capital and closely linked to feudal princes and landlords, were great defenders of the caste system. G.D.Birla, their outstanding leader, held that "caste is what holds this country together. Abolish caste and India is in trouble".[15]

One of their greatest champions, Gandhi, for all his professed love for the 'untouchables', declared himself "a Sanatanist Hindu" (a Hindu fundamentalist) because, among other things.

"I believe in the *Varnashrama dharma* in a sense in my opinion strictly Vedic but not in the present popular and crude sense." "*Varnashrama*" he wrote, "is, in my opinion, inherent in human nature, and Hinduism has simply reduced it to a science. *It does attach to birth. A man cannot change his* varna *by choice*.... All are born to serve God's creation, a Brahmin with his knowledge, a Kshatriya with his power of protection, a Vaisya with his commercial ability and a Sudra with his bodily labour."[16] It is worth noting that the beliefs in *avatars*, rebirth, *karma* and *varnashrama*, which Gandhi upheld, have formed for ages the ideological superstructure of Indian feudalism and made it more resistant to change than European feudalism.

2. *Land Reforms*

Beset with various contradictions, the British imperialists thought it prudent to transfer power in 1947 to "friendly and reliable hands", who would preserve their economic, strategic and political interests. The Indian big bourgeoisie, comprador in nature, and the big landlords, mainly feudal in character, became the new ruling classes of India, pledged to keep India within the British commonwealth.[17] In this alliance the former class was the major partner.

At about the time of transfer of power native states were merged into the Indian Union and their princes retained vast lands and other personal possesssions, were rewarded with princely 'privy purses' for many years and a number of them were elevated to high official positions as governors, ministers, ambassadors, etc.

But India's ruling classes could hardly ignore the severe agrarian crisis with which India was faced. Food shortage was very acute and famine conditions prevailed in India before and after 1947. The Telangana struggle which had started before 1947, like many other struggles, waged by peasants, soon developed into a peasant struggle for both land and state power. To contain widespread peasant discontent Congress leaders adopted some radical resolutions like the one passed by the AICC in November 1947, which said :

"The land with its resources and all the means of production as well as the means of distribution and of exchange should belong to the community and be administered in its own interest."[18]

In their many rhetorical exercises before and after 1947, Congress leaders like Nehru talked of 'land to the tiller'. All these were sops to the restive peasantry against the background of their militant struggles.

The agrarian problem in India caused much worry to the U.S. imperialists, too, who had grown sadder and wiser after being driven out of China in 1949. To quote Chester Bowles, U.S. ambassador to India in the early fifties (and again in the sixties), they felt that "In the coldest terms of stopping communism... the democratic world simply must carry out these [land] reforms before Communists can use the lack of them as an excuse to overthrow democracy."[19] In 1952 he brought to India the foremost American experts in land policy, Wolf Ladejinsky and Professor Kenneth Parsons of the University of Wisconsin. He tried to impress on Nehru the urgent need for land reforms, the inadequacy in which Bowles regarded as "one of the most important weaknesses in the Nehru government". After making intensive studies of several states "Ladejinsky reported that the bitter complaints of the peasants reminded him of similar complaints he heard in pre- Communist China in 1946. The land inequalities, he said, were as bad or even worse than he had seen anywhere in Asia."[20]

The political and economic conditions urged the ruling classes to undertake some agrarian legislations. The different constituent states of the Indian Union enacted legislations like zamindary abolition and land ceiling acts. By the zamindary abolition acts the government acquired the interests of '*the topmost layer of a hierarchy of intermediaries*' by paying compensation to them. The burden of it mostly fell on the peasants themselves. The zamindars were allowed to retain *khas* land and resume more in the name of cultivating it themselves. As a class the intermediaries between the state and the actual tillers of the soil were not removed. The land ceiling legislations after making liberal concessions to the large landowners, religious institutions, orchards, plantations, sugar-cane firms owned by sugar factories and so on, left such loopholes which allowed owners of large landed property to retain their possessions. Before the enactment of the legislations they were permitted sufficient time to divide their landed property and hold it in their own, their relatives' as well as under fictitious names.

The land reforms legislations hardly benefited the bulk of the peasantry, the actual tillers of the soil.

All talk of taking over the land in excess of ceilings (which were fixed quite high) and distributing the surplus land among the poor

and landless peasants proved in practice to be mere rhetoric. According to a study undertaken by the statistical division of the Reserve Bank of India, the share of the lowest 25 per cent of rural households in the assests of all the rural households in the country was only 1.3 per cent.[20a]

Eighth Five Year Plan 1992-97 states :

"After the imposition of ceilings, 7.23 million acres of land [out of a total operated area of about 407 million acres] had been distributed by the end of the Seventh Plan",[21] that is by 1990. It may be noted that much of the land distributed was hardly cultivable.

Draft Five Year Plan 1978-83 conceded that "the land reform measures have had no visible impact on the distribution of rural property."[22]

Since then, due to indebtedness and other factors, especially under the impact of the 'green revolution' strategy, more poor peasants have lost their holdings and there has been greater concentration of land in the hands of landlords and rich peasants. An article in *Aspects of India's Economy* correctly stated :

"A 1937 study of pre-liberation China estimated that the poorest 57.1 per cent of rural Chinese households held 23.5 per cent of the crop land, while the richest 2.6 per cent owned 28.7 per cent. But India's picture is worse: according to the 1981 Census, 74.5 per cent of the operational holdings make up 26.3 per cent of the cultivable land, while the largest 2.4 per cent of the agricultural holdings make up 22.8 per cent. Since three decades of land reform were already behind this Indian record, the bigger landlords had already had a chance to divide their holdings in *benami* lots. The 1981 Census description, therefore, if anything, disguises the extent of inequality."[23]

More than 70 per cent of those who depend on agriculture as their main means of livelihood are poor peasants with very small plots of land and landless agricultural workers.

In fact, the land 'reform' legislations were not intended by the ruling classes, notwithstanding their loud rhetoric, to bring about any significant changes in the ownership of land. In one of his speeches at the Nagpur session of the Congress held towards the end of the fifties, Nehru, the 'architect of modern India', said that "*though the*

imposition of ceilings would affect only an infinitesimal minority of landlords, and though its actual practical gains would not be much, the sentimental gains would be tremendous."[24]

Agrarian legislations actually strengthened the positions of the landlords and the upper strata of the peasantry.[25] Only the 'tenants-in-chief', who already held stable rights and who formed part of the upper strata of the peasantry, gained as a result of the 'reforms'. There was some redistribution of landed property among 10 to 15 per cent of the rich landowners. While there was some reduction of very large holdings, the holdings of the upper strata of the peasantry generally tended to increase.

The right of the landlords to resume land for 'personal' cultivation, that is, cultivation with the help of agricultural workers or others, was used by them to evict millions of peasants from the lands they had been cultivating for generations. Landlords also had such lands recorded as their *khas* or *benami* lands and drove underground informal crop-sharing arrangements. They did not fail to take advantage of the enormous pressure of population on agriculture in the absence of alternative avenues of employment and the helplessness of numerous landless peasants. Never before had India witnessed such mass eviction of peasants. M.L.Dantwala stated that in the decade after the transfer of power more peasants had been evicted from their lands than during the last hundred years of direct British rule.[26]

It may be noted that even the meagre distribution of land remained often on paper. Though *pattas* (ownership documents) were distributed among the listed beneficiaries, the land actually remained in many cases under the possession of the old landowners. The "village oligarchs", as Daniel Thorner wrote, "have made a mockery of this [the land reform] legislation, devising 1001 ways of blocking or getting around the law. Their relations and friends in the State legislatures have eased their task by putting numerous loopholes in the laws or adding crippling amendments."[27]

Ladejinsky was invited by India's Planning Commission to carry out field studies in 1963 on the tenurial conditions in the five package districts, where the Intensive Agricultural Development Programme (IADP) was initiated in 1960 under Ford Foundation inspiration. These studies revealed that in four of these districts — Thanjavur in

Tamilnadu, West Godavari in Andhra Pradesh, Ludhiana in Punjab, and Shahabad (now split into Arrah, Rohtas and Bhojpur districts) in Bihar— land ownership was highly skewed and "50 per cent or more of farmers cultivate wholly or partially leased lands, mostly on oral leases", paid extortionate rent and enjoyed no security of tenure. Land ceiling acts had become mere "paper propositions".[28] These conclusions were confirmed by the detailed studies which Francine Frankel undertook at the end of the sixties and the beginning of the seventies in the above districts as well as some other districts including Burdwan (Bardhaman) in West Bengal, to which the IADP had been extended. She observed:

"The majority of farmers — probably as many as 75% to 80% in the rice belt— have experienced a relative decline in their economic positions. Some proportion, representing unprotected tenants cultivating under oral lease, has suffered an absolute deterioration in living standards."[29]

The Fourth Five Year Plan acknowledged that even the legislations enacted to fix ceilings had not been "pursued and implemented effectively".[30] Referring to the "extreme maldistribution of land, with nearly a quarter of the households owning no land at all and another one-fifth owning less than one acre each", Wolf Ladejinsky observed that ceiling levels as fixed in the different states "were in themselves a deterrent to the programme's success. This was compounded by legal and illegal land transfers both in anticipation and after the enactment of the ceiling laws, and on the top of that were the numerous exceptions... Summing it up for India as a whole, by the end of 1970 the 'declared surplus' was only 2.4 million acres and 'area distributed' just half of that, or 0.3 of one per cent of the total cultivated land of India." Ladejinsky warned that even these figures were probably inflated, "that the quality of some of that land is so poor as not to be worthy of distribution, that an undetermined acreage of the distributed land could fall into the category of wasteland, and that a portion of that land was vested in the states rather than acquired from owners under the ceiling programmes.... Looking back, the entire ceiling episode was one of evasions by commission and omission."[31]

Noting that the land 'reforms' in India had proved ineffective, the World Bank in its working paper entitled "Land Reforms", distributed in its annual session in 1974, stated :

"Security of tenure appears in general to have worsened, however. Actual rents have not come down. In some States they have been increased. ...*Unreported casual tenancy and share agreements have multiplied.*"

It suggested :

"it will be better to legalize some forms of tenancy which exist on a large scale and to promote more efficient types of tenancy contracts. *All kinds of tenants should also be registered.*"[32]

It is this suggestion of the World Bank that the CPI (M)-led government in West Bengal recently implemented, though not fully, for which many have applauded it.

The basic problem — the problem of ownership of land was not solved by the agrarian legislations: there was no fundamental change in the property structure of the rural society. It was not the purpose of the land legislations to solve the land problem, to liquidate semi-feudalism, the colonial legacy, but to curb its grosser manifestations and develop capitalism in agriculture to some extent, convert gradually a section of landlords and rich peasants into capitalist farmers and increase agricultural production.

The land reforms were intended to serve another purpose, no less important : this was to sow illusions among the peasantry, make "sentimental gains", as Nehru said, and draw the bulk of the peasantry away from revolutionary struggles. In this task the ruling classes found an ally in the Communist Party of India, which was steeped in opportunism.

The kind of agrarian reforms undertaken by India's ruling classes, as Paul Baran correctly pointed out, fails to break the feudal grip on the state. "They tend therefore", he observed, "to accentuate all the negative repercussions of agrarian reforms without leading the way to industrial development and to the reorganization and rationalization of the agricultural economy resulting therefrom."[33]

The land 'reforms' failed to solve India's problems. 'Reformed' agriculture could contribute not much surplus for investment in industry. Nor could it create a sufficiently large market for industrial goods. Without an agrarian revolution there could be no industrial regeneration.

3. *Community Development Programme*

The Community Development Programme, which formed an integral part of India's early five year plans, and the ostensible aim of which was the rebuilding of India's villages and village-life, was undertaken under U.S. inspiration and with U.S. help. "The programme", to quote Selig Harrison, "has a special significance for Americans because it was the American architect and town-planner, Albert Mayer, who developed the experimental project, at Etawah...". Chester Bowles brought U.S. technical assistance funds and American rural sociologist, Douglas Ensminger, who skilfully directed Ford Foundation-supported training of the Indian personnel for the new 'Community projects'.[34] Albert Mayer who had served in India with the U.S. army and who enjoyed Nehru's confidence and friendship, developed in 1948 a pilot project covering 64 villages in Etawah in Uttar Pradesh with official support. As George Rosen writes, "the appeal of the Etawah project and of Mayer rested on more factors than Mayer's own personality and his rapport with Nehru : it also reflected the *political* need of the Congress to do something to improve conditions in the rural areas." Nehru expected it to serve "*as a model for meeting the revolutionary threats from left-wing and communist peasant movements demanding basic social reforms in agriculture.*"[35] With U.S. financial and technical assistance it soon became the model for an all-India programme. It was claimed that the Community Development Programme would bring about an all-round development of the villages of India through mutual co-operation and self-help of the villagers themselves. The aims of the programme were quite lofty ones : not only intensive agricultural development — land reclamation, irrigation, farm management, crop protection, application of

scientific methods of cultivation like the use of improved seeds, fertilizers, pesticides and better implements — but also improvement of health and education, social welfare, road-building, formation of co-operative societies and so on. The whole of rural India was expected to be covered by the programme by stages. While the "Community Projects budgeted only one-third of the costs of land reclamation, drainage, irrigation and road-building schemes", they depended for the rest on "village contributions in labour and money". The programme proposed formation of co-operative societies — credit co-operative societies in the beginning and co-operative farming afterwards – and panchayats, which would be entrusted with the task of framing plans of all-embracing village development and implementing them. And thus the entire face of rural India was expected to be transformed — peacefully, *without any change in the property structure and avoiding all class conflict.* Nehru discovered "*a sense of almost family kinship*" among the inhabitants of a village — between the landlords and their tenants, the usurers and their victims, the upper castes and the serving castes who are banished because of their 'polluting influence' to the fringe of the village. The masses of the peasantry, cruelly oppressed and exploited for centuries, were expected not to attack the property structure and change it but to be enthused enough to contribute voluntary free labour and donations to build irrigation works, roads, etc., which would serve most the interests of those who owned most land and traded in the produce of the land and of the rural industries.

Nehru was eloquent about the "peaceful revolution" that was unfolding. Inaugurating the first community projects in October 1952, he declared that "the work we are starting today" was the beginning of a great social revolution. He proclaimed : "*we are now talking in terms of a big revolution, a peaceful revolution, not of turmoil and the breaking of heads.* It is in this manner that we shall transform our country. Peacefully, we shall remove the evils of our country and promote a better order."[36] In fact, Nehru sought to use the programme to create an illusion among the oppressed peasantry that it was possible to reconcile the irreconcilables — the interests of the landlords and usurers with those of their victims. He expected through such device and his rhetoric to inspire the latter with the ideals which were changing the face of rural China.

Both the Nehrus and the U.S. imperialists felt that the conditions in rural India were quite serious. They were afraid that if something was not done India might go the China way.

Chester Bowles saw to it that the community development programme was assured of U.S. financial and technical assistance. As noted before, he brought in 1952 Wolf Ladejinsky and Professor Kenneth Parsons, American experts in land policy. After making intensive studies of several states Ladejinsky reported that the land inequalities in parts of India were as bad or even worse than he had seen in pre-liberation China or anywhere else in Asia.[37]

Before the inauguration of the community projects by Nehru in October, an "Operational Agreement", setting out in detail the whole organization of Community development, was signed on 31 May 1952 by the governments of the U.S.A. and India. Another such agreement was signed by the two governments in November of that year.[38]

The Ford and Rockefeller Foundations lent their support to the programme. US Aid for International Development (USAID) and the Ford Foundation worked together on the Community Development Programme. For the implementation of the programme funds were provided by the Ford Foundation, the USAID and the US Department of Agriculture among others. The Indian government invited the Ford Foundation to train the Indian personnel for the community projects and about 50,000 extension workers were trained under the Ford programmes. "The Ford Foundation's grants in support of Community Development and the National Extension Service", says Rosen, "were important in the Indian government's programmes to develop new village institutions and to use village labour for investment in kind in the villages."[39] The US land-grant universities and the Rockefeller Foundation were invited to help in setting up Indian agricultural universities and agricultural research institutions. Tarlok Singh, the Planning Commission secretary, urged the Ford Foundation "to build up centres of applied economic research throughout the country to serve as a check on government policy and to supply data and ideas for policy-making by the Planning Commission". And institutes like the Indian Statistical Institute, the National Council of Applied

Economic Research (NCAER), the Delhi School of Economics and the Gokhale Institute in Pune worked in collaboration with the Massachusetts Institute of Technology and were provided with funds by the Ford Foundation.[40] "Certainly", said Chester Bowles, "one fruit of the programme is that it is bringing America and India closer together."[41]

The programme, no doubt, yielded this fruit. But what happened to Nehru's "big revolution", "peaceful revolution"?

Besides "bringing some Americans and some Indians together", it consolidated the interests of the landlords and moneylenders, who alone were able to take advantage of the 'community projects'—the government funds that were invested in them and institutions created by the government like the credit co-operative societies and panchayats.

Jayaprakash Narayan was not wrong when he said :

"You take the village as it is and you give it the right of electing the panchayat and carrying on certain functions and duties. What will happen in such a village? ...the dominant castes or a few leading families or the bullies will capture the panchayats and run them for their own use."[42]

And John P. Lewis of USAID said :

"The result, typically and plainly, has been to lodge the village co-operative in the hands of the same privileged village cliques that have been doing most of the traditional village money lending and trading. By insisting on the pretence of indigenous origin, the forces of reform have surrendered the co-operative instrument to management by the very groups, most inclined to resist massive rural reconstruction. In the process, the primary co-operative society has tended to become simply another device for reinforcing the pattern of rural privilege — with the comfortable new feature of a direct line of credit on the Reserve Bank of India".[43]

Between December 1958 and June 1959 Daniel Thorner travelled 10,000 miles by jeep to make field studies of 117 co-operatives scattered throughout India except Assam and West Bengal. After seeing "the best of the best" co-operatives of various types, he observed :

"Control of the co-operatives tends to rest in the hands of a few of these landholding families. Often they do some informal moneylending, and sometimes they carry on trading as well.... The membership of the State legislatures and the State ministries is drawn largely from their ranks." It is the dominant families "who, according to report after report of the Planning Commission's Programme Evaluation Organisation, have been securing for themselves the main benefits of the Community Projects.... Firmly lodged in the chief positions of village power today, the dominant families stand ready to seize the lion's share of the vast programme of co-operative development.... co-operatives are only one of several means by which the more powerful families exercise influence and authority over the mass of smaller holders and labourers."

Thorner found that there was a type of co-operative farms which were "useful in evading land reform, the so-called co-operative which is really a single family enterprise. Once a group of relatives convert themselves into an agricultural co-operative, they are eligible for such benefits as loans, subsidies or outright grants from Government; priorities in securing good seeds and scarce fertilizers; and the free services for several years of a trained secretary."

Before concluding, Thorner stated :

"the success of the rural co-operatives presupposes a modicum of social equality, political democracy and economic stability among the villagers. These pre-conditions have not been present in village India and are still not present today."[44]

But neither the 'land reforms' nor the 'community development' programmes were intended to change the basic social and economic structure and provide what Thorner called "a modicum of social equality, political democracy and economic stability among the villagers". The following key passage in the resolution on co-operative farming adopted at the Nagpur session of the Congress in January 1959 offers a glimpse of 'socialist' Nehru's co-operative farming in India :

"The future agrarian pattern should be that of co-operative joint farming, in which the land will be pooled for joint cultivation, *the*

"I have heard ... that people may become dependent on us for food. I know that was not supposed to be good news. To me that was good news, because before people can do anything they have got to eat. And *if you are looking for a way to get people to lean on you and to be dependent on you, in terms of their co-operation with you, it seemed to me that food dependence would be terrific.*"[49]

Burbach and Flynne add : "Other policy-makers agreed with Humphrey."[50] Among the weapons used by U.S. imperialism to establish its domination over other countries, food 'aid' has been an important one. Burbach and Flynne have quoted one U.S. Senate aide as observing :

"PL 480 recipients have not been in a position to complain about the grain and food they receive. The stuff they get is probably shit."[51]

New York Times reported :

"A large part of this nation's [the U.S.A.'s] wheat crops contains the smut (a plant disease). Most millers remove the diseased grain with special processing machinery. But the worst affected wheat is usually sold to foreign buyers that are too hungry or don't have any sizable wheat crops that could be infected."[52]

India signed the PL 480 agreement with the U.S.A. in August 1956. The total value of the commodities received by India till 30 September 1984 under PL 480, Title I, was $ 4745.5, of which $ 4,076.8 was repayable in rupees and the rest in dollars.[53] The complex manner of repayment for the imports of surplus agricultural produce provided the U.S. government with the lever to exert control over the Indian currency, to promote the interests of the subsidiaries of U.S. transnationals and the interests of Indian compradors by granting them loans from the Cooley Fund (named after U.S. congressman H.D. Cooley) and to influence all other spheres of life including Indian politics and politicians.

5. *Imperialist Restructuring of India's Agricultural System*

'GREEN REVOLUTION' : WHO PROMOTED IT AND WHY?

U.S. imperialism had still other plans. Its object was to cast India's agricultural strategy into a mould that would serve the interests of U.S. transnationals. The aim was to decide for India what to produce and how to produce and to make Indian agriculture an appendage of imperialist capital.

In 1958, prime minister Nehru and the Planning Commission accepted the suggestion of Douglas Ensminger, the Ford Foundation chief in India, that a group of foreign experts might be set up to work with an Indian group to make recommendations about Indian agriculture. He was asked by them to recruit such a foreign group; and advised by Ellsworth Bunker, then U.S. ambassador to India, and officials of the U.S. Agency for International Development (USAID), Ensminger formed a team headed by Sherman Johnson, then chief economist of the U.S. department of agriculture's research service. It is this team which produced in 1959 the Ford Foundation's *Report on India's Food Crisis and Steps to Meet It.*[54] *This report by a Ford team,* as we shall see, *prepared the way for the 'Green Revolution' in India and for the penetration and control of Indian agriculture by U.S. and other transnationals.* It "implicitly criticized the entire approach of institutional change [that is, change in the property structure] as the key-stone of the agricultural strategy" and recommended "a technocratic approach based on price incentives to individual farmers for higher investment in modern inputs, especially chemical fertilizers. Simultaneously, the report recommended the formula, abandoned in 1952 on the grounds of

social equity, of an intensive and *selective* development strategy, involving the concentration of a combination of modern practices — improved seeds, chemical fertilizers, and pesticides — *in irrigated areas of the country*" — in about 25 districts of Punjab (which then included Haryana), and parts of U.P., M.P., and Bihar.[55] At this time giant agrichemical corporations of the U.S.A. were seeking expanded markets for fertilizers, pesticides, etc., especially fertilizers, of which there was a glut in Western markets. The report put the major exphasis on the use of chemical fertilizers. It said :

"If food goals are to be reached, fertilizers must have greater emphasis and *a top priority in both agricultural planning and allocations of foreign exchange*, both for fertilizer materials and for any machines needed for constructing new plants to produce high-analysis fertilizers in India."[56]

The policy was to ensure imports of chemical fertilizers from the metropolitan countries as well as imports of capital goods and technology for building chemical fertilizer plants in India. These were to be set up by transnational corporations, either by themselves alone or in collaboration with their Indian compradors. They wanted to use Indian agriculture as a captive market for several agricultural inputs manufactured by them — fertilizers, pesticides, farm machinery and so on.

As noted before, as an experimental measure, under the sponsorship of and with generous financial assistance from the Ford Foundation, the Intensive Agricultural Development Programme (IADP) — also called the "package programme" — was extended to several districts. It concentrated on the rich farmers in irrigated areas and supplied them with subsidized inputs, generous credit, price incentives, technical advice and marketing facilities.

The World Bank was not far behind the U.S. imperialists in decrying institutional changes, in insisting on a technocratic approach and in emphasizing the role of imperialist capital in raising agricultural production in underdeveloped countries. The World Bank mission, headed by Bernard R. Bell, which came to India in late 1964, derided the objective of institutional change and recommended "a reorientation of overall investment priorities toward agriculture; incentive prices at levels high enough to

guarantee profitability to individual farmers" using the new technology — the concentration of modern inputs, especially hybrid seeds (bred at the research centres set up by imperialist agencies), fertilizers, pesticides, power and farm machinery in irrigated areas. The Bell mission "combined its recommendations on agriculture with renewed emphasis on the necessity of greater efforts by government to attract higher levels of domestic and *foreign investment* in industry. The package of policies recommended included proposals for relaxation of controls on industrial licensing, and an import liberalization programme to stimulate investment in private industries. As part of the strategy for strengthening price incentives in the promotion of export-oriented industries, moreover, the mission made its first recommendation for the devaluation of the rupee." The World Bank presented to the Indian government its package of economic reforms as a *condition* of substantial flows of 'aid'.[57]

The strategy that the U.S. imperialists and the World Bank sought to thrust on India was aimed at tightening the grip of imperialist capital on Indian agriculture. India could adopt either of the two strategies. One was to carry out radical land reforms, rouse the initiative and enthusiasm of the peasants — the creativity and genius that is in them — and apply science to improve upon the indigenous seeds and traditional methods and practices, as contemporary China was doing. Such a strategy would not discriminate against vast agricultural regions which, during the colonial period, were more neglected than certain other regions, but distribute as far as possible irrigation and credit facilities throughout India and rely on a balanced use of locally available manure and chemical fertilizers and on crop protection by indigenous methods. An article in *Economic Times* stated :

"China uses one-third of the fertilizer inputs that India does, but still manages to produce about twice as much per unit of land as India does. The reason for China's success is its optimal mix of manufactured and natural fertilizers. At one level this helps lower costs per unit of output. At another, it helps retain soil fertility by replenishing the soil."[58]

The other strategy was to import the Western model, which had

developed in conditions entirely different from ours. It sought to reject all that was positive in our farming system, which no doubt had deteriorated under very adverse circumstances during colonial rule and needed improvement. But the total rejection of the indigenous system based on the experience of our peasants over thousands of years meant throwing the baby out with the bath-water. The new technology that would displace the old one was wholly out of place in Indian conditions — the socio-economic, ecological and other conditions. It was a technology that was not based on the union between the old and the new, between tradition and science, but was wholly exotic in Indian conditions. It was a technology that, though loudly advertised as an instrument of combating hunger, was really intended to ensure large profits for TNCs based in imperialist countries. While it would intensify India's dependence on imperialist capital, it would be a disaster for the country and the people. The U.S. imperialists were keen on exporting this model to India and other underdeveloped countries.

As we have noted above, the new strategy was to push the 'package programme' in irrigated areas like Punjab, Haryana and Western U.P. — the use of 'high-yielding' varieties of seeds (HYVs), chemical fertilizers, pesticides etc., for which foreign-based transnationals were keen to obtain a market in India. For instance, the Rockefeller Foundation, which worked together with the Ford Foundation to enforce the new strategy, had vast interests in ESSO fertilizer and oil companies. And as noted before, there was a glut of fertilizers in the West and an insistent demand for new markets. The big oil companies of the U.S.A. were eager to develop and capture the Indian market in fertilizers and insecticides. The Indian programme for the 'green revolution' was described by John D. Mellor, then chief economist for the USAID as "primarily a fertilizer scheme".[59] Pat Roy Mooney observes: "Certainly fertilizer companies and their foundations have long been active in promoting the revolution."[60]

As Mooney says, the major family foundations — Rockefeller, Ford, Kellogg — have played an active role in exporting the 'green revolution' to India and other underdeveloped countries. The pivot of this revolution was the HYV seed. It was at the initiative of and

with the financial assistance of the Rockefeller Foundation that the International Maize and Wheat Improvement Centre (CIMMYT), the world's premier wheat and maize research institution, got under way in Mexico in 1943. "By 1964", as Frankel writes, "there were also reports of a breakthrough in wheat pioneered by the Rockefeller Foundation in Mexico."[61] 'Miracle' rice seeds also were bred in the International Rice Research Institute (IRRI), which had been set up in the early sixties by the Rockefeller and Ford Foundations in the Philippines. (They were subsequently joined by the Kellogg Foundation). Other crop research centres like the International Potato Centre (CIP) in Lima, Peru; the International Centre for Tropical Agriculture (CIAT) in Palmira, Colombia; and the International Crops Research Institute for the Semi-Arid Tropics in Hyderabad, India, were established under imperialist auspices. They were financed by a consortium of U.N. agencies, national governments and foundations — Ford, Rockefeller, Kellogg. The work of these research centres, strategically located in underdeveloped countries, is co-ordinated by the International Board for Plant Genetic Resources (IBPGR), which is based in Rome. Western imperialist powers have an overwhelming representation on its board; and on its key advisory committees are represented U.S. transnationals.[62] The IBPGR and the network of international agricultural research centres work under the control of the Consultative Group on International Agricultural Research (CGIAR), which was set up when Robert McNamara, a former member of the Ford Foundation and U.S. war secretary, who achieved notoriety by intensifying U.S. aggression on Vietnam, was president of the World Bank. CGIAR, which was sponsored by the World Bank, FAO and United Nations Development Programme, is dominated by imperialist powers of the West; and the Rockefeller and Ford Foundations played an active role in its establishment.[63] "While maintaining considerable influence within the CGIAR", the foundations shifted the financial burden of the IBPGR to governments of the advanced capitalist countries and of the countries of the Third World. As regards the influence of the 'foundations', Mooney added: "For example, all but one of the international crop research station directors have come up through the 'foundations'."[64]

Hybrid seeds of wheat, rice, maize, potato, etc., were bred in the international research centres controlled by the U.S. imperialists by crossing the seed genes of plants with which Nature has endowed several underdeveloped countries in Asia, Africa and Latin America. These countries, the Vavilov Centres, are the original homes of an infinite variety of plants while the gene-poor industrialized countries of the North depend on them for the genetic material. Many of the seed genes have been plundered by the imperialists and stored in gene banks and laboratories under their control like the National Seed Storage Laboratory at Fort Collins, Colorado — "the world's storehouse for many major crops".[65] As Mooney says, "almost 90% of all genetic material in long-term storage is located in Europe and North America."[66] It has been said that "any person or group, *who could successfully achieve private control over a variety of these genetic resources, whether they reside in a centralized cold storage facility or in preserved environment, would indeed possess almost infinite political and economic power.*"[67]

Giant transnationals — mainly oil, fertilizer and pharmaceutical corporations of North America and Western Europe — have been attracted to the seed business, for it is the most profitable industry today. Many of them have incorporated the germ plasms stored in the international research institutes into their own genetic programmes and are known to have substantial genetic collections. They claim monopoly over the HYVs they breed in their laboratories. In the West, especially the U.S.A., small seed companies have been gobbled up by a few giant agribusiness and agrichemical corporations like Cargill, Monsanto and Pioneer Hi-bred International of the U.S.A., Royal Dutch Shell of the U.K. and the Netherlands, Ciba-Geigy and Sandoz of Switzerland (these two TNCs have recently merged to form Novartis A.G.). What was the precious gift of Nature to Third World countries has been appropriated by devious means by western TNCs[68], and the former are dependent on the latter for access to what were originally their own resources. These very resources have become in the hands of a handful of TNCs the means of controlling the agricultural development (rather maldevelopment) of India and other countries

of the Third World. To quote Pat Mooney, "If you control the seed, you are a long way to controlling the entire food system : what crops will be grown; what inputs will be used; and, where the products will be sold."[69] To quote Mooney again, "International agribusiness began controlling the 'seed end' of the Green Revolution fairly early in its history."[70] With their control over the 'seed end', a few transnationals based in the West have acquired enormous economic and political power over the Third World.

We shall not be able to understand the purpose behind the 'green revolution' if we do not know its connection with agrichemical transnationals. *A few high-yielding varieties of seeds that they sell to the peasants are not so much high-yielding as high responsive seeds*. They respond only to large amounts of chemical fertilizers and pesticides, besides adequate water. In the absence of required inputs, there may be extensive crop failures.[71] A FAO publication *Seed Industry Development* stated :

"The seed industry cannot develop alone. The users of good seeds must also have inputs such as fertilizers, pesticides, machinery and water.... The marketing of seeds is frequently handled through the same channels used for other inputs."[72] Most of the transnationals which breed HYV seeds and dominate the seed business, also dominate fertilizer and pesticide industries, besides oil, pharmaceuticals or other chemicals. They look to profits from several sectors and breed seeds which would boost the sales of fertilizers, pesticides, etc., and serve their chemical interests — not the interests of peasants or consumers. Their seeds require increasing amounts of their chemical products which cause ecological degradation of the soil and do other harms. Their only object is to "seek the development of plant varieties best able to stimulate chemical sales" and enable them to maximize their profits.

"Over the years", write Burbach and Flynn, "they [the transnationals] have foisted agricultural technologies on the third world that have had devastating consequences. In the 1960s the fertilizer companies numbered among the main propagators of the myth that the hunger and malnutrition problems of the third world could be solved by applying the technologies of the green

revolution. The corporations' motives for pushing this approach were not based on a concern for world hunger, but on the need to get rid of the supplies of excess fertilizer that were depressing world market prices. Questions of adverse social and economic effects were not even considered as the fertilizer companies pressured the [U.S] Agency for International Development, the World Bank, and other agencies to finance the use of green revolution technologies throughout the third world."[73]

The new offensive of U.S. imperialism found the economic and political conditions prevailing in India in the mid-sixties quite opportune. Due to drought, crops failed in several parts of India in two successive years — 1965-66 and 1966-67. The production of foodgrains fell steeply from 89 million tons in 1964-65 to an annual average of only 73 million tons in the next two years. Taking advantage of famine conditions in several parts of India, U.S. imperialism used food as a weapon to force its policies on India. To quote Felix Greene,

"At about this time several American oil companies were negotiating to establish fertilizer plants in India. The Indian Government wished to keep the distribution and the selling of the fertilizer in its own hands. This did not at all suit the oil companies.... While countless Indians were starving, food shipments were ordered to be held up to force the Indian Government to capitulate to the demands of the oil companies."[74]

The U.S. government "refused to sign a fresh long-term agreement with India under PL-480 when the existing agreement expired in August 1965."[75] Instead, the U.S. government doled out meagre amounts of food and insisted on India's adoption of the 'green revolution' strategy. *New York Times* reported on 15 May 1966 :

"The United States government and the International Bank for Reconstruction and Development [the World Bank] have insisted that India provide easier terms for foreign private investment in fertilizer plants as one condition of resumed economic aid."[76]

They also asked the Indian government to curb population growth and devalue the rupee. In November 1965 the union food minister Subramaniam went on a pilgrimage to Washington and

"submitted his ministry's program for comment to the U.S. Department of Agriculture, came away with assurances that the new agricultural strategy would satisfy the basic conditions for a resumption of American food shipments. In December, in another meeting in Rome between Subramaniam and U.S. Secretary of Agriculture Orville Freeman, *the specific policy proposals were reviewed item by item, including the plans for incentives to foreign private investment, especially the fertilizer*".[77] W.W. Rostow, who was then in the White House as special assistant for national security affairs, wrote that U.S. president Johnson "personally guided the negotiation of each tranche of food aid as well as the Indian performance in re-allocating its own resources to agriculture and population control".[78] According to George Rosen, "Johnson insisted that Subrahmaniam put those proposals in a written agreement with the American secretary of agriculture, Orville Freeman."[79] Needless to add, the Indian government signed on the dotted line. "Almost at the same time", writes Frankel, "the central government announced a new policy of concessions to foreign private companies willing to invest in the fertilizer industry in India."[80] Foreign companies signing contracts before 31 March 1967 were free to set their own prices and establish their own distribution apparatuses for a period of seven years.[81] And as directed by the U.S. imperialists and the World Bank, the devaluation of the rupee by as much as 36.5 per cent was carried out in 1966. On 28 April 1966, the *New York Times* gleefully wrote :

"Much of what is happening now is the result of steady pressure from the United States and the International Bank for Reconstruction and Development, which for the last year have been urging a substantial freeing of the Indian economy and a greater scope for private enterprise....

"Call them 'strings', call them 'conditions' or whatever one likes, India has little choice now but to agree to many of the terms that the United States, through the World Bank, is putting on its aid. For India simply has nowhere else to turn."[82]

But the amount of 'aid' the U.S. Imperialists had promised was not forthcoming.

WELCOME TO 'GREEN REVOLUTION'

Prodded by the U.S. imperialists and their agencies, the Ford Foundation, USAID, World Bank, etc., the Indian ruling classes adopted the agricultural policy that had been initiated with the Ford Foundation-directed IADP in certain selected districts. They found merits in it : it would help in mitigating the immediate food crisis to some extent without bringing about radical changes in agrarian relations. The big landowning class and its representatives in the highest positions of power welcomed the technocratic approach : it would lay the spectre of radical changes in landownership and redistribution of land among the poor and landless peasants. This class of big landowners looked forward to thriving with subsidized inputs like fertilizers (imported or manufactured domestically in collaboration with imperialist capital), liberal credit and price incentives, just as the big bourgeoisie hoped to expand and wax fat in collaboration with imperialist capital and by swindling state funds. The interests of the U.S. and other imperialists and of India's ruling classes converged. In its *Agricultural Production in the Fourth Five Year Plan : Strategy and Programme* (published in 1965), the ministry of Food and Agriculture gave an outline of "the new approach of the Government of India". "*The new policies*", to quote Frankel, "*were mainly an amalgam of the dominant strains in foreign expert advice represented by the World Bank, the USAID, and the Ford Foundation* then enjoying maximum influence on the thinking of the agriculture minister [C. Subramaniam]."[83]

Thus, the 'green revolution' was initiated in certain chosen regions of India — Punjab, Haryana and western Uttar Pradesh, which have enjoyed irrigation facilities since colonial days more than any other region of India. And the 'new agricultural strategy' was based on the rich landowners. Here the top 10 to 15 per cent — the landlords and rich peasants — were offered a package of subsidized inputs — exotic HYV seeds, fertilizers and pesticides — and cheap credit and subsidies to instal tubewells and pumps and buy farm machinery. For instance, during the implementation of the IADP in Ludhiana (in Punjab) in 1960, which was the precursor of the 'green revolution', and later, farmers were given loans on easy terms : "Rs. 6,500 for a tubewell, repayable over nine years, with only repayment of interest during the first year."[84]

Irrigation water rates and electricity to run the tubewells for rapid exploitation of ground water were also heavily subsidized.

On the other hand, during 1967-69, the government's procurement prices of wheat "approached the inflationary wholesale prices prevailing in the open market during the period of extreme shortage in the preceding drought years. The increase in 1968 procurement prices over 1965 levels reached more than 81 per cent in Haryana.... Indeed, in 1968 and again in 1969, the official procurement price for [the] Mexican [variety of] wheat at Rs 76 per quintal was actually above the open-market price by about 18 per cent to 26 per cent."[85] By raising the issue prices of wheat sold through fair price shops, the government transferred the burden of higher procurement prices to consumers. In Haryana the prices were raised as high as 88 per cent in 1968 over 1965 prices.[86]

A statement giving the conclusions of the third All India Conference of the Indian School of Social Sciences held in Mumbai between November 16 and 19, 1974, said :

"The strategy for intensive agricultural development involving massive investment for providing infrastructural facilities like irrigation, power and roads as also agricultural inputs such as hybrid seeds, fertilizers, insecticides and credits have largely helped this small number of landowners. Control over marketable surplus has enabled the landlords and rich peasants to secure a price far higher than the cost of production. For instance, the current procurement prices recommended by the Agricultural Prices Commission (APC) provided for a profit margin of 70 to 80 per cent to the producers. The actual prices offered by the government were much higher than what was recommended by the APC. In fact, the big farmers have extracted still higher prices by withholding marketable surplus. This phenomenon resulted in transferring resources from deficit to the surplus areas in the form of highly favourable terms of trade thereby aggravating inter-regional imbalances in income distribution."

The statement added :

"By linking their interests with those of the traders, the landlords are able to hold the rest of the population to ransom."[87]

These conclusions, though more than twenty years old, are no less valid even today. A report, rather recent, stated :

"Thanks to the demands of the rich and middle peasants, the administered purchase price (procurement price) has been higher than the weighted average cost of production which also includes imputed value of family labour. The recent changes (during the tenure of the Janata Dal government) in the method of arriving at procurement prices / minimum support prices for agricultural produce were due to the demands of these farmers and show their growing political clout and sophistication. As a result of these changes, the procurement prices of foodgrains increased significantly."[88] The vast majority of the rural population who are net buyers of food, the industrial workers and the urban petty bourgeoisie are thus fleeced by the rich landowners and foreign agribusiness. The spiral of food prices mounts higher and higher even in years when the harvest is rich. The above report says that, according to one study, there were 323 farmers' representatives in the previous Lok Sabha and the sons of farmers became chief ministers in many states. And 70 per cent of the new entrants in the Union Cabinet in April 1990 were from the rural areas.[89] Recently, an "humble farmer" from Karnataka — Deve Gowda — was India's prime minister.

GAINS AND LOSSES

The 'green revolution' has succeeded in raising considerably the production of cereals in Punjab, Haryana and western U.P. It was at first targeted at the wheat belt in the north. But many areas of the much vaster rice belt did not remain unaffected. Wherever possible, landlords and rich peasants have made use of subsidized inputs to improve yields of their land.

The new strategy has accentuated the inequalities between class and class, between region and region. As noted before, it is the landlords and rich peasants who have mainly taken advantage of the large investments made by the state, 'loan-melas', etc., and reaped the benefits of the 'revolution' to the detriment of the interests of the poor and landless peasants. The benefit from subsidies — open as well as hidden—on account of inputs hardly trickles down to the bulk of the peasantry. The landlords and the rich peasants make large investments in land with the generous assistance of the state and

have surplus stocks of cereals to sell. The poor and the landless peasants, even lower-middle peasants — the overwhelming majority of the peasantry — have achieved few gains : rather, their conditions have worsened. They are net buyers of food at ever – increasing prices; they are also deprived of access to co-operative credit societies and banks for loans for their inability to furnish collaterals. They have to seek consumption and other loans from village moneylenders at high interest. Many poor, even lower middle peasants, have been dispossessed of their lands . As S. S. Gill noted, "Many small and marginal holdings [in Punjab] have become unviable.... Between 1970-71 and 1980-81 a large number of such holdings have disappeared." He points out that in Punjab 69.9 per cent of the total marginal holdings (below one hectare) and 23.3 per cent of the total small holdings (1-2 hectares) ceased to exist during these ten years.[90] The impact of the 'green revolution' on the lower middle and poor peasants and landless labourers has been almost devastating. This is more or less true of other regions.

Like the land 'reforms' and the 'community development' projects, the new agricultural strategy has contributed to the growth of capitalist relations in agriculture in some parts of the country. These has been over the years a marked increase in the use of exotic HYVs, fertilizers, pesticides and farm machinery and in the installation of tubewells and pumps and in the harnessing of electricity to operate them. The new strategy has a limited applicability in regions other than Punjab, Haryana, western U.P. and some other scattered areas. Among other reasons, in those regions holdings have not been consolidated, plots are usually small and there is a high incidence of tenancy.

According to one report, the share of Punjab, Haryana and U.P. in the total amount of wheat procured in the whole of India by the central government agency in 1990-91 (upto 3 March 1991) was 99 per cent. Their shares in the rice procurement and in the total wheat and rice procurement in the same period were respectively 62 and 80 per cent.[91]

How green has been India during the 'green revolution' period ? Initially, for some years after the application of the costly 'green revolution' technique there was an almost spectacular rise in the

production of the cereals, especially wheat. The growth soon tapered off and then began the decline. The following table shows the annual growth rates in production before and during the 'green revolution' period (until 1985) as calculated on the basis of official statistics by C.H. Hanumantha Rao, S.K.Ray and K. Subbarao after adjustment for annual fluctuations.[92]

Table

	Wheat	Rice	All Cereals	Pulses	All Foodgrains	All Crops
1950-65	4.0	3.3	3.2	1.2	2.9	3.0
1968-85	5.5	2.4	2.9	0.7	2.6	2.6

A lengthy note entitled "Agricultural Price Policy in India", released by the Punjab, Haryana and Delhi Chamber of Commerce and Industry (PHDCCI) in December 1988, stated :

"In the post-Green Revolution period and from the period when price support schemes have been active, there has been a significant fall in production growth rate. For all commodities, production growth rate has declined from 3.2% per annum during the period 1951-52/1964-65 to 2.3% per annum during 1964-65/1987-88. This is true even for foodgrains where considerable emphasis has been laid since the mid-1960s. The growth rate came down from 3.1% to 2.5% per annum [which hardly kept pace with the growth of population]. Decline in index of per capita production has been even more significant."[93]

Between 1984 and 1994 the growth rate of foodgrains in Punjab, the showcase of the 'green revolution', was 3.8 per cent and the average all India growth was 2.5 per cent per annum.[94]

In 1990-91 the production of foodgrains in India rose to 176.39 million tonnes, fell to 167.06 million tonnes in 1991-92, again rose to 181.2 million in 1992-93 and declined by 0.5 per cent in the next year. (According to the government's pre-budget *Economic Survey* for 1993-94, the overall agricultural production declined by 0.9 per cent in that year). India reaped its record harvest — 191.1 million tonnes—in 1994-95. In the next year there was a fall in output by 3.2 per cent — from 191.1 million to 185.0 million tonnes in 1995-96.[95]

Interestingly, according to the *Statistical Outline of India 1995-96*, the rise in foodgrain production projected for the year was 2 per cent. The update on the *Economic Survey* for 1995-96, issued in July 1996 stated that the growth rate was 0.9 per cent.[96] In September 1996 the estimate was revised downward again and it was announced that, instead of a rise, however small, there would be a significant fall of 3.2 per cent in output. *Business Standard* editorially commented :

"The sharp 3.2% fall in food output in 1995-96 as a result of the downward revision of the foodgrain estimate" raises the question : "If the agriculture ministry is to revise its estimates so drastically a full 6 months after a year is over, what of the credibility of any current statistics that it dishes out in the future ?"[97] The fact is, even when there is no deliberate jugglery with statistics, the offici statistical data are usually highly misleading — often too optimi and inflated, meant for window-dressing the ugly reality.

As noted before, according to the official data, India's foodgrain production was the highest ever in 1994-95 — 191.1 million tonnes. The per capita output was about 209 kg. If the seeds and losses are taken into account, the per capita availability of foodgrains would be far below the nutritional requirement of 300 kg. per person per year. Y. P. Gupta, a former principal scientist, Indian Agricultural Research Institute, writes :

"the food availability per capita per annum (169.5 kg) is quite low in comparison with other countries. It is 300 kg in China.... We have often been proclaiming self-sufficiency in food, yet we have been importing foodgrain year after year. Only the year 1995-96 did not witness any food import. The country has been spending crores of rupees on import of edible oils and pulses every year.... Based on established nutrition norms, we need 270 million tonnes of foodgrain for the present estimated population of 896.6 million."[98]

About pulses, the poor man's protein, Gupta says : "Owing to shortage, the per capita availability of pulses has gradually declined over the years from 70 gm. in 1956 to 37.0 gm. in 1995 against the norm of 80 gm. recommended by the WHO FAO."[99]

The much-trumpeted self-sufficiency in food, achieved as a result of the 'green revolution', is a myth. The fact is, about 40 per cent of the people or more go to bed or to the untimely grave semi-starved. About 65 per cent of our children, who are not victims of infant mortality, are malnourished and underweight.

According to the Planning Commission's Ninth Plan (1998-2003) Approach Paper, which has adopted the Lakdawala Committee's criteria for calculating the number of people below the poverty line, 37 per cent of the total population is under the poverty line,[99a] that is, does not get the minimum food required. And this official figure is in all probability an underestimate.

While estimating the growth of or decline in food production under the impact of the 'green revolution', one should take into account not only certain cereals but also other food — pulses, fruit, fish and so on. We have seen that it had an adverse effect on the growth rate of pulses, the main protein of the poor in India. The fish which, in the past, grew abundant in the rice-fields during the monsoon months and in the tanks and streams — a very valuable food for the people in many regions of India — is killed by the pesticides, used for the protection of imported plant varieties. It is doubtful if the total food resources increased at any time as a result of the application of the 'green revolution' technique.

That the 'green revolution' technique had failed to produce the desired yield was acknowledged even by *The Wall Street Journal*, the mouthpiece of U.S. monopoly capital, as early as 1978. It stated on the front page of one of its issues : "There isn't anything left in the Green Revolution's bag of tricks. The Revolution, in fact, has turned against itself."[100]

The FAO was candid enough to admit in 1978 that "little or no progress has been made toward the basic goal of the eradication of hunger and malnutrition."[101] Crop failures due to attacks of pests and diseases have been quite common. Instead of eradicating hunger and malnutrition, the 'green revolution' strategy has intensified them throughout the Third World, where it has been adopted under imperialist guidance. The experts and activists from Bangladesh, India, Nepal, Pakistan and Sri Lanka, who attended a meeting in New Delhi from 13 to 16 October 1984, preparatory to the World

Food Assembly scheduled for November 1984, held that *hunger and poverty had intensified in South Asian countries and that modern agricultural development strategies, instead of improving the nutritional levels of the majority of the people, had created greater impoverishment and dependency.* It was the view of the experts that *more people probably died from hunger-related causes and more were deprived of their access to food than at any previous time in human history.* In India the percentage of population not being able to eat two minimally nutritious meals a day remained almost unchanged at around 40 per cent of the population. That implied that the absolute number of malnourished people was expanding at the rate of 6.4 million people annually.[102]

The greatest loss to India and mankind is the loss of genetic diversity caused by the 'green revolution'. Infinite is the variety which every crop possesses. For instance, the number of rice cultivars was till recently more than one hundred thousand. When Dr. R. H. Richharia, an eminent rice scientist, was director of the Madhya Pradesh Rice Research Institute at Raipur in the seventies, over 17,000 rice cultivars were collected from one region of Madhya Pradesh — Chattisgarh — under his guidance.[103] How this precious collection of rice cultivars was taken away to the International Rice Research Institute in Manila and how his great work was abruptly ended under the pressure of the World Bank, will be told later. But the 'green revolution' has caused narrow genetic uniformity as a few 'high-yielding' dwarf varieties -- IR8, Padma, Jaya, Pankaj and a few more — have widely spread, eliminating the rich genetic diversity. In Bengal, many varieties of rice were grown, some of them of the scented type. Today they have almost disappeared, yielding place to much inferior exotic varieties — inferior as regards nutritional quality, taste, etc.

Agro-climatic conditions differ from region to region. Even within the same district the conditions of the soil are not the same in different areas. The rice variety that suits one area may not suit another. Till recently, peasants with their intimate knowledge of the soil conditions of their fields and careful selection of seeds, knowledge of which had been handed down from generation to generation, planted the varieties of rice most suitable to their fields.

As Mooney writes,

"Subsistent farmers in the Third World have been cultivating today's major food crops for over ten thousand years. By observing the natural process of mutation and by careful seed selection over the centuries, these farmers have developed an astonishing range of crop variability. This diversity has been necessary for survival. No one wheat or rice variety can provide adequate protection against monsoon failures, pests, rusts or blights."[104] With the wide propagation of a very few exotic HYVs, irrespective of agro-climatic conditions, this wonderful genetic diversity, a gift of Nature, is being destroyed and genetic uniformity takes its place. In 1978 the U.S. National Academy of Sciences observed : "The process represents a paradox in social and economic development in that the product of technology (breeding for yield and uniformity) displaces the resource upon which the technology is based."[105]

"The genetic uniformity of a crop", writes Mooney, "amounts to an invitation for an epidemic to destroy that crop." Mooney also says: "As the old varieties disappear and as genetic uniformity spreads in the Third World, we will hear more and more about sudden, devastating crop disasters."[107] The Central Rice Research Institute (CRRI) warned :

"The narrow genetic base [as a result of the adoption of exotic HYVs] has created alarming uniformity, causing vulnerability to diseases and pests. Most of the released varieties are not suitable for typical uplands and lowlands which together constitute about 75 per cent of the total rice area of the country.

"The narrow genetic base of the new varieties, the disease and pest susceptibility of some of the parent varieties and the existence of monoculture — all these have exposed the HYVs to attacks by pests and diseases, leading to heavy use of chemical pesticides.

"Diffusion of new package has been mainly restricted to irrigated areas as is evidenced by the story of wheat. Such is the case for maize and pearl millet. Susceptibility of many of the high yielding varieties to pests and diseases is a serious constraint in their diffusion."[108]

A PTI report of June 1988 states that, according to Dr M. V. Rao,

then special director-general of the Indian Council of Agricultural Research (ICAR), India loses an estimated Rs 6,000 crore worth of agricultural crops annually either owing to the growing number of pest attacks or in the storage. Dr Rao said that recent changes in cropping practices and intensification of modern agriculture had all accentuated or modified the insect, fungal, weed and nematode problems, thus causing deficiencies in micro-nutrients like sulphur, zinc, etc. According to him, several parasitic species, which were at one time unimportant, had begun to cause economic losses while certain others, especially the polyphagous pests, had created problems of serious national concern. He listed a number of pests which included insects, fungi, bacteria, viruses, mycoplasma, nematodes and weeds and held that their attacks had increased because of the new and intensified agricultural practices.[109]

It is worth noting that the pesticides kill not only harmful pests but also worms and insects that are good for the soil. Harry Cleaver, Jr. points out that "dictated by capitalist competition, agrichemical corporations try to minimize research costs while developing new pesticides in their laboratories and that their products are both undertested and designed to kill a broad spectrum of pests". The results are often catastrophic.[110]

Mooney quoted Richard Felger of the U.S.A. as commenting : "With all the new pesticides, there are no fewer pests."[111] When old pests are successfully fought, new pests take their place. At the end of the seventies, according to the United Nations Environment Programme, "over 300 insect species have mutated and are not controlled by traditional chemicals".[112]

Not only the Third World but also the advanced capitalist countries face a grave danger; with the disappearance of many thousands of varieties of plants and their wild cultivars required to fight diseases and pests and with the world-wide diffusion of a few HYVs in their place, the world—both north and south—is threatened with disastrous crop failures as diseases and pests cannot be prevented. If the 'green revolution' strategy is not successfully combated and if the trend towards patenting seeds by the TNCs is allowed, the prospect before mankind is quite bleak. More of that later.

The dependence on a few exotic HYVs which require heavy chemical fertilizers and pesticides also leads to the degradation of the soil. The fertility of the soil is eroded through the application of increasing doses of chemicals. The indigenous method of replenishing the fertility of the soil relied on the use of available organic fertilizers at almost no cost and rotation of crops. This method has been discarded. Because of the application of heavy doses of chemicals, without which the exotic HYV seeds refuse to respond, the soil conditions have deteriorated considerably in many regions. Recently, K. B. Sahay, who teaches at the Indian Institute of Technology, Delhi, wrote :

"Punjab and Haryana, which have had the best record in foodgrain production, are now facing serious soil health problems and the productivity of the soil has now started to decline after reaching a plateau. The underground water level in most parts of the country has gone down significantly causing irrigational and other ecological problems affecting adversely the foodgrain production."[113]

It is estimated that over the last twenty years, more than five per cent of arable land in India has become unsuitable for cultivation. The annual loss of cultivable land is one million acres.[113a]

Joseph Collins and Francis Moore Lappe were not wrong when they said : "In its lust to harvest new riches, agribusiness is treating the soil carelessly all over the world." They refer to the devastation it has caused to the Zamora Valley in Mexico and the Amazon river basin in Brazil, as instances.[114]

The harm that is caused to health and environments by the 'green revolution' technology is immense. In India peasants are exposed to hazards which are associated with chemical fertilizers and pesticides.

Besides, the food that grows with the help of large amounts of chemical inputs contains very harmful residues of them. As B. D. Nag Chaudhuri, a reputed scientist, said, "excessive use of fertilizers and pesticides contributes substantially to ecological disturbances... Excessive use of nitrogen fertilizers, for example, can lead to leaching of these excess fertilizers into water bodies. These can be transformed by micro-organisms into nitrites and carcinogens...

which can find their way back to men and animals through the food chain.... Similarly, pesticides, besides killing unwanted pests, insects and birds or small animals, can enter the human system."[115]

Hazardous chemicals like DDT, which have been banned by the imperialists in their own countries, are dumped in India and other Third World countries. *Far from banning exports of dangerous chemicals, including medicinal drugs, the sale of which has been prohibited in their own countries, the governments of the countries of the West encourage the exports of many of them to Third World countries.* Burbach and Flynn write :

"Transnational corporations also export agricultural technologies that have a devastating impact on the environment and human life. Such U.S. firms as Dow Chemical, Eli Lilly, Dupont, Monsanto and Chevron manufacture an array of pesticides that are known to be carcinogenic. Some of these pesticides are banned in the United States, but this does not prevent the companies from exporting and manufacturing them abroad. Indeed, it encourages this practice, since otherwise there would be no markets. DDT, for example, is sold in Latin America today, even though its use in the United States has been illegal since 1972."[116]

Pat Roy Mooney observed, "with the help of the U.S. government, companies were 'dumping' dangerous goods on an unsuspecting market — the poor."[117]

According to a report of the Centre for Science and Environment, entitled "Homicide by Pesticides", the World Bank estimates that water pollution in India caused by hazardous chemicals results in the highest health toll and economic costs of Rs 20,000 crore. The report states that pesticides have contaminated everything from milk, human blood, eggs, goat meat and processed ghee to fruits, vegetables, drinking water and foodgrains. It says that more than a dozen pesticides banned internationally continue to be used in India.[117a]

Environmentalists fear that genetically modified plants are not risk-free. Rather, such crops are likely to spread dangerous strains of bacteria and cause other mischiefs. The governments of Italy, Austria and Luxembourg have banned the cultivation of genetically engineered maize. More than one million Austrians signed a petition

demanding a ban on all genetically modified foods.[117b]

People are learning from their bitter experience how ruinous, how environmentally destructive, the 'green revolution' strategy is. Recently reports of many cases of arsenic poisoning and pictures of innocent victims afflicted with this dreadful disease have been appearing in the press. According to scientists and government officials, the water in eight districts of West Bengal is contaminated with arsenic and about 200,000 people in West Bengal have already exhibited the tell-tale lesions. The other day the *Chicago Tribune* quoted a New Delhi-based WHO official who had stated that nearly 15 million people of Bangladesh and 30 million people of West Bengal, including Calcutta, are exposed to the risk of arsenic poisoning. The survey conducted so far by the School of Environmental Studies, Jadavpur University, reveals that the situation in Bangladesh is much more grim. The groundwater of 34 out of 64 districts of Bangladesh is felt to be arsenic-contaminated and more than 50 million people are at risk. The affected districts of West Bengal and Bangladesh are contiguous and have similar topographical features. The representatives of the WHO, UNICEF, Bangladesh and NIPSOM (Dhaka), besides others, met at a conference at the Jadavpur University in February 1995 and feared the possibility of a terrible disaster in the near future. It is the 'green revolution' that has given rise to this situation. This 'revolution' has required numerous tubewells to be dug up. The over-exploitation of underground water has led to the dropping of the water level and has brought up the embedded arsenic. The governments of West Bengal and Bangladesh, though warned by scientists, kept secret what the *Washington Post* of 4 January 1997 described as a "scourge which experts say has no equal in medical history". As yet they have taken few steps to combat it. Willard Chappel, an environmental expert at the University of Colorado, who recently visited the affected areas in West Bengal as the director of an international task force on arsenic poisoning, commented :

"It is by far the biggest mass poisoning case in the world."[118]

Who are the main beneficiaries of the 'green revolution' technology, which the U. S. imperialists have pushed throughout the Third World — the "most deadly technology" as Harry Cleaver, Jr.,

calls it ? While hunger and starvation have been more widespread and keener throughout the Third World, the main beneficiaries of the 'revolution' are, beyond doubt, the transnationals (and their native compradors) who produce exotic HYV seeds, manufacture fertilizers, pesticides, herbicides and pump sets, and farm machinery like tractors and hervesters. An important imperialist mouthpiece, *U.S. News and World Report* stated : "One of the most important changes was an increased demand for U. S. farm tools, fertilizers, pesticides, irrigation pumps and other agricultural equipment." Quoting the above Mooney observed :

"The Green Revolution has been undeniably profitable for agribusiness. By the sixties, agricultural enterprises were in need of a new market to maintain their growth. *Bilateral and multilateral aid programmes made expansion into the Third World financially possible.* Twenty years later, major agrichemical firms have achieved a world-wide distribution system able to market successfully in Asia, Africa and Latin America. *The Green Revolution was the vehicle that made all this possible.*"[119]

He again said :

"The groundwork for the global seed industry was laid by the Green Revolution, and the multilateral and bilateral aid programmes which supported it. For example, *HYV chemical requirements allowed agrichemical firms to establish a global sales infrastructure heavily subsidized by governments.*"[120]

There was a "renaissance" in international agribusiness, as Nicholas Philip, executive director of a transnational agribusiness consortium, reported.[121]

In the sixties the World Bank extended loans for chemical pesticides, pump-sets, etc. Besides, the Seed Improvement and Development Programme, a FAO programme, writes Mooney, "has been at the forefront in terms of encouraging Third World governments to susidize agricultural inputs and basic seed prices. At one point in the Green Revolution, Michael Perelman noted : *'The World Bank estimates that about half of all purchases in the Third World were financed through government aid programmes'* [that is, official subsidies]."[122]

The role of the state in creating this huge market for foreign

agrichemical corporations has been crucial. We may quote the following :

"The magnitude and lucrativeness of the market that green revolution peasants represent have been amply documented elsewhere. What deserve to be underlined here, however, are : *firstly, the role played by the state in insuring the rapid development of this market through the provision of credit, extension services and infrastructure; secondly, the fact that this internal market is essentially controlled by foreign interests.... The green revolution peasants constitute a typical captive market.*"[123]

The ever-rising prices of the HYVs, chemical inputs and farm machinery are subsidized by the Indian government, that is, the Indian people, the victims of "the most deadly technology". It is the rising costs of inputs and other manufactures for which India depends mostly on imperialist capital and its Indian compradors that raise the costs (at constant prices) per unit of output. During about thirty years since the advent of the 'green revolution' in the mid-sixties, the prices of different items of food, as every Indian knows, have skyrocketed. Between June 1990 and February 1994 alone, the subsidized issue prices of common rice and wheat sold by the government through the public distribution system were raised by 100 per cent and 75 per cent respectively.

It is the toiling people of India who have to bear the very costly burden of implementing the 'green revolution' strategy. They are forced to pay ever-soaring prices of food and are taxed heavily for the massive subsidies which go into its production. A news item datelined 7 March 1996 in *Economic Times* reported that the central government's subsidy on imported urea, the price of which had gone up by more than three times in four years, amounted to Rs 1650 crore in 1995-96.[124] In that year the total subsidy on urea alone was Rs 6735 crore. The budget for 1996-97 allotted Rs 8372 crore as subsidy on fertilizers — urea, phosphatic and potassium-based fertilizers.

There are various other subsidies to make the 'green revolution' strategy work. Electricity tariff for irrigation pumpsets (IPS), for instance, is highly subsidized. An article in *Economic and Political Weekly* stated that in 1995 alone the users of irrigation pumpsets

received a subsidy of over Rs 10,000 crore.[125] It states that in Maharashtra, "(i) about four-fifths of the farmers do not have pumps and do not benefit from the IPS subsidy, [and] (ii) even among the beneficiaries one quarter of beneficiaries get negligible subsidy."[126]

It is argued by many that by raising production and restricting price-rise the subsidies have been of benefit to the poor. We have seen to what extent the 'green revolution' has increased production and to what extent the rise of food prices has been contained. If the toiling people have received any benefit from the huge subsidies provided by the state by squeezing them, it must have been minimal. *But so long as the 'green revolution' strategy operates, these may be a necessary evil.* We shall soon return to this issue.

Recently, the imperialists and their international agencies like the World Bank and the GATT (now the WTO) have been insisting on the phasing out by India and other Third World countries the fertilizer and other subsidies, which, as noted before, they had previously helped to promote with their bilateral and multilateral 'aid'. This change of policy on the part of the imperialists and their Indian hangers-on will also be discussed later.

6. *Superior Indigenous Technology Suppressed*

Was there no other agricultural strategy that could truly serve the needs of the people? When the 'green revolution' strategy was being thrust on India, Dr R. H. Richharia, India's foremost rice scientist, and his assistants were developing a self-reliant strategy which would raise production of foodgrains to a sufficiently high level independently of all foreign help. But, at the instance of their foreign masters, the Indian ruling classes killed the possibility of independent development of a technology which would lay the spectre of hunger and liberate Indian agriculture from the octopus-like grip of the imperialists. The issue is not merely technical and economic but political.

Bharat Dogra is right when he says :

"With the recent advances in genetic engineering and the great business opportunities opened up by the control over seeds, a new urgency and a big thrust has been imparted to these efforts as big companies in agrichemicals and other lines have become anxious to gain control, even exclusive control, over seeds, to reap commercial profits. Suddenly seeds have become a big business. A further dimension has been added by the political significance of control over seeds — how this can be used to pressurize a dependent government into submission of various kinds."[127]

When Dr R. H. Richharia was director of the Central Rice Research Institute (CRRI) at Cuttack, one of the leading rice research centres of the world, he and his team were on the threshold of developing an indigenous technology full of revolutionary potentiality. It would increase rice yield and solve India's problem of

hunger by depending on the local seeds, making a careful selection of the HYVs among them, exploiting their hybrid vigours and improving upon them through genetic upgrading. As director of the CRRI he warned the government of the activities of the Manila-based International Rice Research Institute, which was then bringing in disease– and pest-infested exotic rice seeds into India and trying to thrust on the CRRI their own programme and suppress the indigenous technology that was developing. Dr Richharia held that the HYVs of the IRRI were not at all suitable for the environmental conditions in India and were far from resistant to pests and diseases. He was sure that it would be a calamity if the exotic technology, costly and hazardous, was imported and foisted upon the peasants, ignoring the ecological conditions in different areas in India. He was developing a technology which would combine the age-old experiences of Indian farmers with modern science and bring about a true, not sham, revolution in Indian agriculture. Later, Dr Richharia recounted his experience at a seminar on the "Crisis of Modern Science" held in Malaysia in November 1986 :

"The possibility of exploitation of hybrid vigour by the application of clonal propagation in rice in later generations was demonstrated at CRRI and the results were published in a British journal *Nature* in 1962 entitled 'Clonal Propagation as a Practical Means of Exploiting Hybrid Vigour in Rice'. The technique was also explained by me at a seminar held at IRRI in 1963. We were systematically proceeding with the work at eleven different centres in India with success. We had just reached the stage to revolutionize rice production, but all the centres were closed down and instead HYV programme of IRRI with dwarfing genes was launched suppressing the CRRI work."[128]

For opposing the imperialist designs, Dr Richharia was retired prematurely from his post of director of the CRRI in 1967. But his honour was redeemed when the Orissa High Court ordered his reinstatement.[129]

In 1971 he was appointed director of the Madhya Pradesh Rice Research Institute (MPRRI) at Raipur and agricultural adviser to the government of Madhya Pradesh. Here, under his able guidance, very valuable work was done. More than 17,000 types and sub-types of

rice varieties were collected from the Chattisgarh region and classified. It was found that 8 to 9 per cent of them were of high-yielding varieties. The yield of some of them was more than *7,000 kg. of paddy per hectare and even as high as 9,746 kg.* No plant protection, that is, pesticide, was necessary for them : they were drought-resistant, too. They responded quite well to small doses of fertilizers. Richharia strongly held that the dwarf varieties which were being pushed by the IRRI and transnationals were not suited to Indian conditions. Recently, an agricultural scientist, Arvind Swaminathan, with rich experience in this country and in the West, rejected the tall claims of the dwarf varieties like IR8 and pointed out that several indigenous varieties like Safri-17 of Chattisgarh were superior not only in yield but in other respects, too — taste, nutritional quality, etc. Many field trials under official auspices proved the superiority of Safri-17 ; yet this was rejected in favour of inferior dwart varieties by the Indian government.[129a]

Richharia prepared a concrete action plan for increasing production of rice in India when he was requested to do so by the Indian prime minister's office in 1983. As Dogra writes, his plan had three basic components :

"(1) rice development to be based on the rich indigenous germplasm which has to be explored further and preserved;

(2) a highly decentralized extension approach; and

(3) large-scale adoption of clonal propagation technique to spread improved varieties and exploit hybrid vigour."[130]

In "A Specific Plan of Action for Increase in Production of Rice", which he sent to the prime minister's office at its request, he observed :

"Self-generating economy and building up of local resources alone offer a permanent solution in rice.... Local resources would also include forestry and animal husbandry (for farm power and soil fertility) to restore imbalance being created in the environmental ecosystem in the typical rice areas. Organic and ecological farming, with which the farmers are familiar and which they prefer, finds little place in our research and planning process after 1965. Location-specific approach alone can help us in increasing productivity, tract-wise, village-wise and individual field-wise."[131]

Richharia pleaded for location-wise approach because of variability, a characteristic of the rice types. The soil conditions of a particular area or a cluster of villages are favourable to the growth of a particular variety of rice — scented, superfine, fine or coarse, with yields low or high. Each area has its specific ecological conditions. And the peasants know it from their experience. He was strongly opposed to genetic uniformity which was introduced from abroad in the interest of imperialist capital and which ignores local ecological conditions. He wanted "a direct approach to the rice farmers", who, according to him, "are the real masters of the subject and insisted that "their experience and practical knowledge of their own material to produce more" should be utilized. He advised the setting up of "location-specific breeding research" centres and the adoption of "a simple programme of genetic upgrading of the indigenous cultivars" in harmony with the local ecological conditions. He had great respect for the wisdom of our peasants, especially tribal peasants, and sought modern science to be wedded to their wisdom and thus bring about a genuine revolution in India's agricultural system. He held that

"India is gifted with rice climate and is capable of feeding millions in Asia, yet unborn, provided we apply our originality to take advantage of Nature's gift and of gifted rice researchers of the country, allowing them absolute freedom of work, uninterrupted and uninterfered [with]."[132]

Richharia was for launching "a sort of movement for increased rice production" and, to attain this end, he advised agricultural scientists to go to fields and farms and have intimate knowledge of the conditions there. He wanted knowledge from books and laboratories to be enriched by learning from farms and farmers to build an improved, superior agricultural system, which, instead of being destructive of the ecology of the regions, would be in harmony with it.

Richharia's plan reminds one of the agricultural strategy evolved by Mao Tsetung in China — a strategy much more comprehensive and far-seeing. There were certain elements common to both — faith in the wisdom and creativity of the people, insistence on scientific workers going to the fields and farms to learn from the peasants and on close cooperation between scientists and peasants for making

new innovations. But China had a political system radically different from India's. That is why, while Richharia's plan was foiled, Mao Tsetung's strategy achieved wonders. In those days China grew "30 to 40 per cent more food per capita for 50 per cent more people on about 14 per cent less [arable] land. Not only is there more food, but it is shared more equitably."[133] In China of those days the peasants and workers performed miracles of production, for they knew that they were not working for their exploiters and oppressors — domestic and foreign (who had been overthrown after years of struggle)—but for themselves and for others like themselves and were inspired with the ideal of building a New China which would assure not only freedom from want and hunger but also freedom from slavery and exploitation.

No doubt, the essential condition for acquisition of new scientific knowledge in all spheres, including agriculture, demands "the combination of the detailed, intimate, local and particular understanding that people have of their own circumstances with the more general, theoretical but abstract knowledge that science acquires only by distancing itself from the particular.... Mass participation in innovation is especially feasible in agriculture, where the experience in one place supplements rather than competes with knowledge created elsewhere, and where the objects of interest are usually on the scale of objects of everyday life.... In agriculture, the adoption of gentle, ecologically rational technology must be highly site-specific and requires the joint development of knowledge by research stations and farmers."[134]

But Richharia's plan, which sought to advance the frontiers of agricultural knowledge in India, to remove India's agricultural inefficiency — a legacy of direct colonial rule — and to solve India's food problem, was frustrated by the imperialists in collusion with their Indian agents 'dressed in brief authority'. Conniving with the enemy within and with the help of the World Bank, they were even successful in taking away from the control of Richharia and Indian scientists the genetic wealth of more than 17,000 rice cultivars painstakingly collected by him and his team of workers and in removing them to the IRRI in Manila.[135] How this great scientist became a victim of an international conspiracy and how his work of

immense significance was frustrated has been told by Claude Alvares in his article "The Great Gene Robbery" and in his report of an interview with Richharia, "Crushed but not Defeated".[136]

This is not the only instance when a new technology, full of great promises for the Indian people, innovated by some rare Indian scientists, was suppressed by the Indian ruling classes in the interest of imperialist capital.

We shall refer to another instance only—an instance which is related to agricultural technology. Dedicated Indian scientists took up the challenge in the fifties and sixties to make India self-reliant in all aspects of fertilizer science and technology and became successful. How the imperialists and the enemy within frustrated their efforts and tied the country to the chariot-wheels of foreign giant agrichemical corporations has been well documented by Sailendranath Ghosh in his article "Fertilizer Technology : Fractured Profile of Self-Reliance".[137]

It needs to be pointed out that what Richharia attempted to do for rice cultivation could be accomplished by other Indian scientists for the cultivation of wheat and other crops, if India's ruling classes were serious about promoting the interests of the Indian people and achieving self-reliance.

The huge agrichemical corporations based in the imperialist West are using the Third World as their global farm. It is they who seek to decide what to produce and how to produce. "Glorifying it as 'food independence'," said Collins and Lappe, "*multinational agribusiness corporations right now are creating a single world agricultural system in which they will control all stages of food production....*"[138]

Mooney rightly observed :

"Within the space of two decades the varied agricultural systems of the Third World and their surrounding social structures have been uprooted, overthrown and replaced by a new western model. Both the crops and economies of Asia, Africa and Latin America have been hauled into the Western market economy under the pretext of feeding the hungry. The Third World is being brought into a food system which has not worked well in the First World, and which is in

imminent danger of destroying alternative options for poor nations. *This particular road to hell has been paved with more than good intentions.*"[139]

It appears that recently some international agencies are having second thoughts. The FAO's regional office for Asia and the Pacific based in Bangkok has added its voice to the growing criticism of the 'green revolution'. In an interview Obaidullah Khan, the FAO's assistant director-general and regional head for Asia and the Pacific, said: "There is need to review the Green Revolution model as a whole, and we have to move away from this model, although we may not yet have all the answers as to how to do this." He held that this method which relied on intensive use of chemical inputs causing increasing soil infertility was sustainable, neither ecologically nor economically, owing to rising costs and falling yields. According to him, recent studies showed that there was a yield decline of 1 to 3 per cent per year on some fields using the 'green revolution' technique, a situation that was described as a 'recipe for disaster within one generation' by the FAO's officer for integrated pest control, Peter Kenmore. He asserted that no sustainable agriculture could be achieved without carrying out land tenurial reform. Earlier, inaugurating a FAO expert consultation on sustainable agriculture and rural development in Asia, Khan had observed that "sustainability should not be limited to the physical and the material aspects of ecological integrity. It must incorporate political empowerment, social justice and equity and the richness of cultural diversity. It must recognize human dignity, human potential and solidarity."[140]

But imperialism means denial of all these values. And the 'green revolution' model is a model devised and imposed by imperialism on the underdeveloped countries to serve imperialist interests. Human dignity, human potential and solidarity, political empowerment of the common man, social justice and equity can be achieved only when the capitalist-imperialist system is overthrown.

7. *Elite Training*

One marvels at the thoroughness with which the U.S. imperialists proceeded to restructure the entire agricultural system of India and other countries of the Third World.

Harry Cleaver, Jr., said :

"The role of statewide elite training... has long been an important part of U.S. foreign policy and deserves more attention from radicals. 'The question is', wrote John Gardener, 'whether we can help the vigorous elements in these societies to discover how they can bring about needed social changes [which would suit the needs of U.S. imperialism] without resorting to Communism'...."[141]

It has been the policy of the U.S. imperialists to remould the mind and outlook of India's "vigorous elements" — her administrative, managerial and intellectual elite —, train them in institutions set up under their auspices in India as well as in U.S. universities and offer them tempting material incentives so that they may serve imperialist interests. Their object is to guide India's 'development' along the imperial channel, to train planners, administrators, engineers, academicians, scientists, research scholars and so on, who would be perfect tools in the hands of the imperialists, advance the 'development' strategy dictated by them and plan and execute policies which would further the interests of the imperialists and their domestic hangers-on to the detriment of the interests of the country and the people. That is, they would imbibe decadent values of the capitalist West and be thoroughly anti-national in thought and practice. Their role would be the role of the enemy within. Here we shall confine ourselves to a very brief discussion of the penetration of U.S. imperialism's tentacles into the sphere of India's agricultural education and research.

John D. Rockefeller, an old Asian hand, who directed the United China Relief from 1941 to 1946 and visited China in 1947, set up the Agricultural Development Council (ADC) in 1953. As already noted, the International Maize and Wheat Improvement Centre (CIMMYT) had been set up in Mexico with the financial support of the Rockefeller Foundation. The goal of the ADC, to quote Cleaver, Jr., "was to complement the CIMMYT technicians with higher-level technocrats, who would be trained largely at U.S. universities or by ADC-financed professors from the United States. The hope was that these students would take over agricultural policy-formulations in their home countries..."[142] It was Dr F. W. Parker, the chief agriculturist in the Technical Co-operative Mission of the U.S.A., who arranged "for a number of soil scientists to study the fertility status of soils and to guide development of soil testing methods. This step was instrumental in changing the decisions on kinds and quantities of fertilizers needed in India, and laid the basis for the establishment of a chain of soil testing laboratories aided by USAID which subsequently paved the way for the introduction of chemical fertilizers in India."[143]

Again, on the initiative of Parker, a joint Indo-American team to review the Indian system of agricultural education and research was set up by the Indian government. Its recommendations laid the basis "for subsequent collaboration in which *the Rockefeller Foundation, and the U.S. land grant universities assisted the Indian universities and research institutions to revamp their curricula and facilities to reorient them to meet the challenge of introducing HYVs in India."*[144]

The USAID and the Rockefeller Foundation provided financial assistance to the Indian government to remodel India's colleges of agriculture and veterinary science and build new ones under the guidance of personnel from U.S. land grant universities. It was Dr Ralph W. Cummings, who, as director of Rockefeller's Indian agricultural research programme, "influenced in a very big way the building of Indian agricultural universities — the main channel for the transfer of HYV technology."[145] In 1962, the Agricultural Universities Committee was set up by the Indian government with Cummings as chairman "to lay down the guidelines for the

establishment and development of agricultural universities". Abrol writes : "These guidelines were to form the basis on which every Indian agricultural university was subsequently established."[146] The government of India would provide support only to those universities which met the criteria suggested by the Cummings Committee. Arrangements were made for the visits of personnel from U.S. universities to Indian agricultural institutions and for training of Indians in U.S. universities.

We have already noted that the Ford Foundation played a key role in initiating community development projects, the IADP programme and then the 'green revolution' in India. On its initiative and with its financial help were set up certain research institutions. As already noted, the Ford Foundation arranged for the training of 50,000 extension workers who served as links between the policy-makers and the peasants.

"Throughout the last two decades [the sixties and the seventies]," writes Abrol, "the U.S. universities and other agencies have participated directly in the formulation of the priorities, research and extension network for agriculture."[147] All the research undertaken in Indian research institutions has been adaptive research, not fundamental research, which was the prerogative of international agricultural research centres financed and controlled by the U.S.A. As the National Commission on Agriculture observed, the agricultural research in India "is but a variation of a similar study done elsewhere having little or no relevance to our conditions".[148]

The entire purpose has been to push the 'green revolution' package programme. The Indian researchers would start with the exotic varieties and could only modify the original characteristics to a minimum. The men at the top had their training from U.S. universities and the U.S. State Department. The research in Indian research institutions has not been directed to developing seeds that would be suitable to the ecological conditions of different regions, would be pest– and drought-resistant and would require no plant protection. Research has also been neglected "in a number of other fields, e.g., on the pulses and oilseeds, on the non-irrigated areas and dry farming practices, on the soil and water conservation practices suited to the conditions prevailing in the tropics, on the biological

means of disease prevention as opposed to chemical pesticides, on the suitable cropping patterns dealing in alternate cropping with nitrogen plants that could reduce dependency on chemical fertilizers, etc."[149]

Whatever has been done in the name of research in Indian agricultural research centres has been, barring a few exceptions like that of Dr Richharia and his team, in the interest of huge agrichemical corporations of the West. For instance, the Rockefellers who took great interest in promoting agricultural research in India have "a major stake in Esso fertilizer and oil companies controlling the production of feedstocks for fertilizers and pesticides".[150]

8. *'Green Revolution' : Phase 2*

Today, the world has been entering upon the second phase of the 'green revolution'. And in this phase the control by a handful of western transnationals on the world's agricultural system is being further intensified. About two decades ago, Pat Mooney warned : "*Control of the world seed industry would be the second phase of the Green Revolution.*" And he added : "With the encouragement of the SIDP [Seed Improvement and Development Programme of the FAO], 'phase II' of the Green Revolution is being turned over to agribusiness."[151] In the early sixties a well-organized campaign for 'protecting plant breeders' rights' (PBR), that is, for patenting seeds, started and the Union for the Protection of New Varieties of Plants (UPOV) was set up as a semi-official organization affiliated to the U.N. An agribusiness consortium called the Industry Co-operative Programme, which had been exiled from the FAO and rejected afterwards by the UNDP, was resurrected as the Industry Council for Development (ICD) in New York. It set up the Commercial Seed Industry Development Project (CSIDP) to act "as a co-ordinating body for a consortium of seed multinationals interested in establishing 'partnership' programmes in the Third World".[152]

There was resistance among farmers all over the world against the patenting of seeds in the name of protecting PBR. But in some countries like the U.S.A., legislations have been passed for grant of patents to seeds.

Transnational corporations or their subsidiaries — Hindustan Lever, ITC (U.K.), Cargyll (U.S.A.), Hoechst (Germany), Pioneer Hi-bred International (U.S.A.), Seedtech International (U.S.A.), Sandoz (now merged with Ciba Geigy, both of Switzerland) and so on — have entered India's seed business in a big way, either directly

or in collaboration with local partners. Seeds are sold usually as part of a 'package'—together with fertilizers and pesticides which many of the transnationals themselves manufacture.

With India's signing of the treaty under the General Agreement on Tariffs and Trade (GATT) in 1994, the second phase of the 'green revolution', which Mooney and others had anticipated, began.

The GATT was conceived as a member of the 'Holy Trinity', the tools of world imperialism led by the U.S.A., at the Bretton Woods Conference in 1944, the other two being the World Bank and the IMF. While the World Bank and the IMF emerged out of the conference in 1944 as permanent organizations, the GATT was signed by 23 countries, including India, in 1947, and its object was to ensure the domination of world trade by advanced capitalist countries by breaking down tariff and other external trade barriers in the name of free trade. What does free trade between advanced industrialized countries and industrially backward countries mean? It means the perpetual backwardness of the latter and the permanence of the old international division of labour. It means unequal exchange, transfer of economic surplus from the latter to the former, ruthless exploitation of the people of the latter countries and their immiserisation. Unlike the World Bank and the IMF, the GATT functioned intermittently : instead of being a continuous forum, it held rounds of negotiations from time to time. It is the policies of the leading imperialist countries, agreed to between themselves in special conclaves, which are imposed upon the other member-countries as GATT decisions. GATT and its present successor, the World Trade Organization (WTO), ensure the domination and plunder of the weak by the strong.

Reporting on the constitutional implications of the Final Act embodying the results of the Uruguay Round of multilateral trade negotiations under the GATT auspices, adopted in mid-December 1993, the People's Commission on GATT observed :

"What once required wars has now been accomplished with words.... The locus of economic decision-making has been transferred from national governments to transnational corporations of the rich nations of North America, Europe and Far East Asia backed by the authority of a new World Trade Organization."[153] (It

may be noted that the commission had as its members Justices V. R. Krishna Iyer, O. Chinappa Reddy and D. A. Desai, retired judges of the Supreme Court; and Justice Rajinder Sachar, retired Chief Justice of the Delhi High Court).

As we have seen, decisions vitally affecting the lives of the people are actually made in imperialist metropolises and the native elite put on airs of making them — a device convenient for both parties. The last half-century since the end of Britain's direct rule in India may be divided into two periods — one of *comparative* relaxation of control and the other of its intensification by the imperialist powers. Certain factors — national and international — put some restraints on the U.S.A., which led the imperialist pack, and gave some room to the native political elite to manoeuvre for some crumbs of power and pelf. First, the epic struggle of Socialist China of Mao Tsetung's days against two superpowers — the U.S.A. and the erstwhile U.S.S.R. — and the growing resistance armed as well as non-armed — against imperialism all over the world, including the heartlands of capitalism like France and the U.S.A. itself, was one such factor — the principal one. Second, while there was collaboration between the two superpowers in their fight against Socialist China and the national liberation struggles in different countries, there was conflict as well between the U.S.A. and the U.S.S.R., both striving to extend their domination over other countries. That too restrained the hands of the U.S. imperialists. Thirdly, the fifties and the sixties were 'the golden years of capitalism' — particularly for the U.S.A.

During the first two decades and a half after World War II, when there were few to challenge the hegemony of the U.S.A. over the capitalist world and when the U.S. imperialists were mainly busy in suppressing national liberation struggles in several countries of Asia, Latin America and Africa and in trying to annex them to their *informal* empire, they could afford to be or were forced to be somewhat 'reasonable' to their own working class and to the client states. But from the end of the sixties problems began to fester. As Harry Magdoff said, "The change from the wave of vigorous growth during the early, postwar decades to prolonged stagnation since the end of the 1960s was a major development."[154] Economic recession

and the growing scourge of unemployment hit most of the capitalist countries, especially the leader of the pack. The economic crisis in the U.S.A., signalled by the end of dollar convertibility into gold in 1971 — its abandonment of the privileged position it had enjoyed in the world monetary system since the end of World War II —, the loss of its hegemony in trade and finance, the growing economic challenge from other imperialist countries, especially Germany and Japan, made the U.S. ruling class desperately eager to tighten their hold over the underdeveloped world, to shift the burden of their crisis over to its peoples and to enslave and plunder them even more ruthlessly than before. The counter-revolution in China which began at the end of the seventies, the receding of the waves of anti-imperialist struggle in different countries, the acute economic and political problems that beset the other superpower and its ultimate collapse removed whatever constraints there had been on the U.S.A.'s offensive against the peoples of the underdeveloped countries. Moreover, from about the seventies, the external debts of these countries began to mount rapidly. India's fast-growing indebtedness, especially her recourse to the IMF in 1981, placed her at the mercy of the IMF and the World Bank. The national and international situations were such that India's ruling classes had little room to manoeuvre. Far from seeking to resist the imperialist offensive, they warmly welcomed it and were eager to wear the new chains of slavery. They only hoped for a share of the imperialist spoils by squeezing the people even more in the name of 'liberalization', 'globalization', etc.

Even before the Uruguay Round of negotiations, which culminated in the GATT agreement of 1993, was launched in 1986, more than 200 US TNCs had set up the Multilateral Trade Negotiations Coalition to advise the obliging U.S. government during the negotiations. European TNCs lent their support to the Multilateral Trade Negotiations Coalition. Several giant agri-chemical corporations like Monsanto, Pfizer and Du Pont established the Intellectual Property Coalition to press the U.S. government to see to it that a global patenting system under the GATT was brought into existence and enforced in the underdeveloped countries. Cargill, privately-owned U.S. agri-

business corporation, "the world's largest in the grain trade", took the responsibility of preparing the U.S. negotiating papers aimed at fulfilling two objectives — reducing food import restrictions in the developed and underdeveloped countries and withdrawal of price-support subsidies to food.[155]

The GATT 1993 and the emergence of the World Trade Organization to replace it and function as a permanent forum of negotiations complemented the work of the IMF and the World Bank — the work of strengthening the imperialist hold on the underdeveloped countries and bleeding their peoples white.

The "Final Act" of GATT 1993 goes far beyond GATT's jurisdiction and spells ruin of the people of India and of those of other underdeveloped countries. Among other things, the GATT agreement, in conformity with the demands of the agrichemical TNCs, requires that 'intellectual property right' (IPR) be protected and product patents, not merely process patents, be granted to new innovations including drugs, chemicals and plant varieties. The life of a patent must be extended to 20 years instead of 7 years as now under the Indian Patent Law of 1970; contrary to this law, the patented product must be given protection even if it is only imported and not manufactured in India. Here we shall not discuss the disastrous impact of the new patent protection as contrived by the imperialists on the indigenous pharmaceutical industry and on the health of the people but would only point out how this is intended to enchain Indian agriculture to the chariot-wheels of a few TNCs and to do away with India's food security.

The "Final Act" which, as we have noted, will have a far-reaching impact on the lives of the Indian people, was signed by the government of the 'Sovereign Socialist Secular Democratic Republic' of India on 15 April 1994 without any reference to the people, without even consulting the Indian parliament and the constituent states of India, though agriculture is a state subject under the Indian constitution and even though the chief ministers of Tamil Nadu, Orissa, Rajasthan and West Bengal had asked for such consultation. The "Final Act" ensures the all-pervasive domination of Indian agriculture, like that of other sectors of Indian economy, by TNCs and their legalized loot.

In their *Report* the People's Commission on GATT observed :

"the final Act intrudes extensively in every aspect of the domestic economy.... There is virtually no sector of economic life which remains untouched by the final Act....

"In short, the Union Parliament and the state legislatures have been ousted of their legislative sovereignty over an extraordinary range of matters. Even domestic agriculture, under the purview of the state governments, has been transferred wholesale to the WTO. The unavoidable conclusion is a loss of legislative and executive sovereignty and the increasing irrelevance of the Union Parliament as an instrument of governance. [It may be noted that the post-colonial Indian state has hardly enjoyed any sovereignty in the real sense since its emergence]. Worse still, all this has been accomplished without even the knowledge or consent of Parliament under circumstances in which the Prime Minister expressly stated that he would not wait for a parliamentary debate pending negotiations. Negotiations were conducted in a clandestine and covert fashion and the only information ever provided to the people, that too at the end of the day, were statistics furnished by the OECD [Organization for Economic Co-operation and Development — a bloc of rich countries]."[156]

It may be pointed out that secret negotiations have always been the rule with India's ruling classes. It was in the same fashion that the post-colonial state was brought into existence on the basis of dominion status, partition of India on a religious basis, and dismemberment of Punjab and Bengal.

As we have said, the Final Act stipulates that patents should be granted to new varieties of plants, bred by researchers to protect intellectual property (IPR), reward them for their innovations and encourage such research. In actual practice it is the TNCs which employ them in their laboratories and which manufacture and market the new seeds globally, enjoy sole monopoly rights over them. The global market in seeds (and in the chemicals required by the seeds) becomes their captive market. The question is, whose is the intellectual property that deserves protection? Is the intellectual contribution of a researcher who, using the existing genetic wealth, makes some modification, to be regarded as all-important, and

should the TNC, whose employee he is, enjoy the sole ownership of the modified variety and of the genes that have gone into the making of it? The GATT-conceived IPR refuses to recognize the rights of farmers who have nurtured, carefully selected, refined and preserved through the ages the wonderfully rich genetic wealth. That wealth was not the private property of any individual or profiteering corporate firm but the property of communities within a nation, freely exchanged among farmers. Imperialist countries, especially the U.S.A., plundered a large part of this wealth from the gene-rich countries of the South like India, and the TNCs used the plundered germplasms to breed new seeds. What was taken away freely from the countries of the South claiming that it was the common heritage of mankind has become the private property of some TNCs and is returning to the South as commodities. Vandana Shiva writes : "The conflict over PGR [plant genetic resources] legislation is a conflict between farmers and the seed industry and between the public domain and private profits, between an agriculture that produces and reproduces diversity and one that consumes diversity and produces uniformity."[157]

Mooney also says :

"The emerging network of gene banks takes national genetic treasures from the Third World to be stored abroad. In effect, these national resources cross a technological frontier, robbing the world's original plant breeders — subsistent farmers — of their rightful heritage, and leaving Third World governments dependent upon the First World for access to their own germplasm."[158]

Under the Indian Patents Act 1970, no patent is granted in India to life-forms. But the GATT agreement insists that this Act must be scrapped and new varieties of seeds must be patented. That implies that the entire seed industry will be the monopoly of a few TNCs; for, it is the TNCs with their vast financial muscles that have secured and will secure patents of new varieties of plants. Today, according to some estimates, two-thirds or more of the Indian market in seeds is accounted for by inter-farmer sales.[159] Under the GATT agreement, farmer to farmer exchange or sale of patented 'high-yielding' varieties of seeds would not be allowed; Indian peasants would not also be allowed to sow seeds gathered from the crop

harvested — the seeds over which TNCs claim intellectual property protection. So new seeds have to be purchased for every crop. During the past years, traditional varieties of seeds have been mostly replaced by the new 'high-yielding' varieties which have become the monopoly of TNCs.[160] To quote from *Gattastrophe*,

"The inimical consequences for the farmer can be better appreciated when one remembers that all major seed companies in the world today are MNCs who trade not only in patented seeds but also in patented chemicals that would have to be used to obtain best results."[161]

A handful of TNCs would have the powers of life and death over the Indian people.

Moreover, the patenting of seeds bred by TNCs will do incalculable harm to research and development by the Indian scientists who may seek to breed new seeds suitable for ecological conditions which differ from area to area — seeds which will preserve bio-diversity instead of destroying it, will be pest-resistant and drought-resistant, and will need the least amount of fertilizers to produce high yields. When TNCs have obtained patents on seeds, no Indian or other scientist will be allowed without a licence from the patent-holder TNC to improve upon the patented seed and develop better ones. Suman Sahai, a former professor of Genetics at Heidelberg, Germany, the most renowned centre of genetic research, wrote : "If, for example, Ciba Geigy developed a high-yielding potato variety in Switzerland and a scientist in the Central Potato Research Institute in Kufri wants to cross it with an Indian disease-resistant strain to improve its yield, he cannot do so without paying hefty patent fees. Even then, the new variety, which is bred by incorporating both desirable traits, will automatically become the property of Ciba Geigy because the company's protected high-yielding gene has been used in it."[162]

Today, genetic research in India is made to help TNCs in pirating India's genetic wealth. In addition to various agreements concluded with the U.S.A. in the past, the Indian government signed on 27 January 1996 a fresh agreement with it on agricultural research. According to the agreement, an agricultural linkage programme is to be established to increase collaboration

among agricultural scientists and institutions of agricultural research, development and higher learning of India and the U.S.A. The U.S. agriculture secretary, D. Glickman, who signed the agreement on behalf of the U.S.A., said that *collection, evaluation and exchange of germplasm would be the selected priority areas for collaboration.* Other areas like agro-forestry and agribusiness would be included in the sphere of their collaboration. The Indian minister of state for agriculture, overflowing with gratitude, said that India had been a beneficiary of a prestigious project on plant genetic resources in operation since 1988. The then U.S. ambassador to India, Frank Wisner, was optimistic that there would be 'focus on mutual economic benefits the two countries could reap in the light of *the opening up of the Indian market* as part of the economic reforms'. Welcoming the U.S. agriculture secretary, the director-general of the Indian Council of Agricultural Research, R. S. Paroda, asserted that the agreement would help "usher in the second Green Revolution".[163] As noted before, agricultural research in Indian research institutions set up under U.S. guidance and partly funded by USDA., USAID and so on is not of a fundamental character which would ensure India's independence in this field but has been intended to push the 'green revolution' package in India in the interest of Western TNCs. The collection and unequal exchange of germplasms are meant to serve the same purpose.

Dr Norman Borlaug, whose scientific work pioneered the 'green revolution' and who was awarded the Nobel Peace Prize in 1970, was alive to the danger of the control of plant genetic resources and seeds passing into the hands of TNCs and other private companies. At a press conference at the Indian Agricultural Research Institute, New Delhi, on 8 February 1996, he said :

"We battled against patenting. I and late Glen Anderson (of International Wheat and Maize Research Institute) went on record in India as well as other fora against patenting and always stood for free exchange of germplasm." Recognition of 'intellectual property rights' in plant genetic resources was to him a prescription for famine. Referring to the U.S. demand for patenting plant varieties, he warned : "God help us if that were to happen, we would all starve."[164]

The never-to-be-satisfied urge for expansion and for profits that is driving the TNCs to dominate the seed market and bring under their sway the entire agricultural systems of underdeveloped countries as well as the countries in which they are based threatens the food security of them all including the latter. It is feared by scientists that in the near future most of the genetic wealth will be lost to the world and only a few HYVs, highly vulnerable to diseases and pests, will survive. The "massive, wholesale eradication of irreplaceable breeding material" is a cause for concern for the whole of mankind. A distinguished biologist, George M. Woodwell, expressing his alarm at this genetic erosion, observed : "One of the great issues of our time...right up there with nuclear proliferation...the ultimate resource is the biota — there is no other. And we are destroying it."[165]

And Sir Joseph Hutchinson said : "...We have in recent years, particularly in Western Europe and in North America, done serious damage to our prospects of maintaining that diversity. In the interest of economic advance [?] we have established varietal rights legislation, and in the EEC [European Economic Community] we are engaged in making sure that none but the most advanced varieties are allowed to be sold in the area, thereby very greatly restricting the diversity that is available to us. We are in fact selling our birthright for a mess of pottage."[166]

The Indian ruling classes, which are no better than henchmen of the imperialist powers, have been seeking to change the Indian Patents Act of 1970 in order to comply with the GATT agreement. They have already taken certain measures towards this end. On 31 December 1994, they issued an Ordinance amending the 1970 Indian Patents Act. They have already pushed through the Lok Sabha a bill amending this Act.[167] Though it has not yet become law, the government has been pursuing its policy of total surrender to the imperialist powers, whatever that may cost the people.

Among other GATT stipulations concerning agriculture are :

First, subsidies on food and agricultural inputs like fertilizers have to be slashed. The government must not provide price support to the farmers : it can procure food from them at ruling market prices. Unlike in the countries of the West, where heavy subsidies

are provided for food exports and, as in the U.S.A., farmers are also paid to restrict production, in India subsidies on food and agricultural inputs are intended to provide the minimum of food security to the people, a large section of whom is chronically hungry. The GATT agreement is a serious threat to it.[168]

The irony is that it was with the advent of the 'green revolution' that food and inputs which went into the production of it came to be subsidized. Subsidies were offered to make the 'green revolution' model attractive to the farmers. These were essential for the building of an infrastructure for the sale of seeds, chemical inputs, farm machinery, etc., by TNCs.

The subsidy scheme became a part of the 'green revolution' strategy. Previous to its adoption, no subsidies on food were offered and there would be no need for them if land reforms were undertaken and Dr Richharia's agricultural technique was adopted. It was because land reforms were shelved and because the U.S. imperialists, taking advantage of the weakness of India's ruling classes, foisted this agricultural technique on this country that caused subsidies to become an in-built feature of India's agricultural system and led to maldevelopment.

Jaime Quizon writes :

"Prior to 1965, the government followed a basic policy of pooling fertilizer supplies and regulating their distribution.... A Central Fertilizer Pool (CFP) procured all domestic and imported fertilizers.... The CFP disbursed fertilizers to the states who in turn distributed it to cultivators, plantations and industrial users. A uniform retail fertilizer price, set on a no-profit and no-loss basis, was established by pooling indigenous and imported fertilizer prices. There was very little use of a fertilizer subsidy then that the CFP even made a profit in 18 out of 20 years between 1944-45 and 1963-64.... After 1965, the government...gradually abolished domestic procurement by the CFP, allowing manufacturers to fully market their own products [see page 31 above]. In 1974-75, however, the increase in the fertilizer retail price was significantly larger than the increase in the domestic cost of fertilizer production but much lower than the increase in the fertilizer import prices. A Fertilizer Pool Equalization Charge (FPEC) was introduced in 1974

whereby domestic manufacturers were required to pay a charge per ton into the FPEC to help subsidize the high cost of imported fertilizers. However, this charge was not sufficient to cover the government subsidy on imported fertilizers. *This was the start of the fertilizer subsidies in Indian agriculture which, in 1973-74 to 1975-76, were basically import subsidies.*"[169]

With the withdrawal of subsidies many fertilizer factories in India will have to close down. Most of them were set up by Western transnationals as turnkey projects. As referred to before, fertilizer technology developed by Indian scientists was suppressed and Western transnationals imparted their technical know-how at high prices. They were also appointed prime contractors ignoring the just claims of a public sector firm like the Project and Development India Ltd. As prime contractors Western transnationals supplied the machinery and equipment at inflated prices while public sector undertakings like BHEL were starved of orders. The capital investment in them was too high to make some of them viable, if there was open competition, though labour is cheap. Now such factories built at enormous cost squeezing the people and draining away much wealth from the country are to shut down throwing tens of thousands of workers out of work to facilitate greater imports of fertilizers from imperialist countries.

Subsidies on food and agricultural inputs have been an integral part of the 'green revolution' strategy. These no doubt breed inequality and corruption, yet so long as this strategy is followed, the withdrawal or reduction of subsidies on agriculture means a disaster to tens of millions of people.

An article in *The Statesman* referred to the very steep rise in prices of most fertilizers in the previous two years and stated :

"The gradual withdrawal of state subsidies, and the rising irrigation costs, are making farming unaffordable for West Bengal's small and marginal farmers. They form 76 per cent of the agricultural population.... As a result, small and marginal farmers are either forced to lease out their land on seasonal basis or sell it.... Already several multinational companies engaged in food-processing industries have begun making bids to buy vast tracts of good farm land in the districts."[170] In the concluding part of the

article, the writer quotes a senior Burdwan University professor as saying : "Even the loans that the poor farmers used to get from banks at a differential rate of interest at 4 per cent have been stopped.... The co-operatives serve the interest of mostly the middle and rich peasantry and many are dens of corruption." The writer adds : "The 'depeasantization' of small and marginal farmers has already swollen the ranks of the agricultural proletariat."[171]

Such a development is not peculiar to certain districts of West Bengal but is a feature more or less of many parts of India.

Responding to the anti-subsidy lobby among the economic reformers, the International Labour Organization observed in its 1995 report on world employment : "withdrawal of state support is unlikely to be justified on efficiency grounds since, with adequate support services, the small farm sector can be competitive; experience has shown that investment there yields high economic and social returns."[172]

Another GATT stipulation is that food aid is to be extended only to the very needy. It is on the basis of the nutritional norms, approved by the GATT forum, that the very needy are to be identified. The Indian state would have no right to decide who deserve food aid and to whom it should be provided.[173]

Besides, the GATT agreement stipulates that India must have to import a certain percentage of the domestic consumption of primary agricultural commodities, even if such imports are not needed. This forces open an enormous market in India and other underdeveloped countries for the huge surplus food that the countries of the West, especially the U.S.A., seek to dispose of. India and other underdeveloped countries must serve as markets for powerful Western agribusiness after removing all tariff and non-tariff barriers. The outrageous provision for compulsory food imports would never allow them to achieve self-sufficiency in food, would accentuate dependence on imperialist countries for it, place them at the mercy of a few TNCs who control the world's food market and make the food situation chaotic. The People's Commission on GATT observed :

"Compliance with market access requirements will devastate domestic food production and India will become wholly dependent

on foreign foodgrains. As a result, Indian citizens will be deprived of their fundamental right to food."[174]

In 1986 when the Uruguay round of GATT negotiations began, the European Community was considering destruction of its surplus 20 million tonnes of beef, butter and grain though hundreds of millions of people went hungry; and the U.S.A., with its silos overflowing with food, spent in that year $6 billion as subsidy to export just $2 billion worth of corn.[175]

According to a recent decision of the WTO, which has replaced GATT, all quantitave restrictions on the import of agricultural produce have to be dismantled. Addressing the economic editors' conference in September 1997, the then union agriculture minister hinted that, though India would appeal against this decision, little redress could be expected from the appellate authority.[175a]

At the end of the Uruguay round of negotiations, GATT dictated that India and other underdeveloped countries must give free access to food imports (amounting to a certain percentage of their domestic consumption, irrespective of their needs). Though agriculture had always been outside the purview of GATT, the object of which was to deal largely with trade in manufactured goods, it as well a few other sectors of economy was brought within its purview only to serve the interests of the imperialist West during its years of crisis. It may be noted that the Indian ruling classes have already adopted certain measures to comply with the dictates of GATT. We have seen that they have been changing gradually the Patent Act of 1970. Whatever difficulty they are facing in implementing GATT dictates, is due to no lack of will on their part but to the growing resistance of the people.

The WTO is not only a permanent forum for negotiations between the countries but also serves, as the People's Commission on GATT said, as "an international legislative body with a vast subsisting domain and with a built-in provision for continuing expansion of this domain", making a mockery of the decision-making powers of the governments of the underdeveloped countries.[176]

S. P. Shukla, former finance secretary to the Indian government, writes :

"... the continuing erosion of the authority and jurisdiction of nation-states will work largely and decisively against the interest of the large, silent, deprived majorities in the polities of developing [rather under-developing] countries.... The minority elites who constitute the ruling establishments in the Third World are the ones who are extending a warm welcome to WTO in the name of globalisation and integration with the world economy. *For them even a secondary or tertiary role in the new world order symbolised by WTO is a welcome prospect.*"[177]

Indeed, India's ruling classes are not and have never been worried about attaining or losing India's sovereignty as a state : they have always been content with "a secondary or tertiary role" in the capitalist-imperialist system in return for some share in imperialism's spoils. Though not completely free from all misgivings, they hope to prosper under "the new world order" symbolized by the IMF, the World Bank and the WTO, whatever cost the people may have to bear.

During the GATT negotiations, the other two members of the triad—the World Bank and the IMF—stepped in to strengthen GATT's efforts. It was a three-pronged offensive. In April 1991, in its document *India : Country Economic Memorandum*, Vol II — *Agriculture : Challenges and Opportunities*, the World Bank issued dictates to India, similar to those of the GATT. It too insisted on eliminating subsidies and urged India to phase out budgetary subsidies for fertilizers in four years. The policy is one of forcing India to shut down "inefficient" fertilizer plants and intensifying India's dependence on imports of fertilizers. Besides, it exhorted India to open even much wider than before the Indian market for food and allow free imports of it. It enjoined India to concentrate on the production of certain crops in which she has a 'comparative advantage' and allow free exports of them while discontinuing production of certain other crops like oilseeds and depending for them entirely on imports. The World Bank also advised the Indian government to depend on private trade to procure food from farmers for the Food Corporation of India. It strongly recommended that,

instead of maintaining buffer stocks, India should import the needed food in times of crisis.[178] The imperialists have been putting pressure on India from even the eighties to rely on food imports. For instance, accepting a report of the International Food Policy Research Institute, the World Bank, in its global development report for 1986, insisted that India should do away with buffer stocks of food and rely more on international trade.[178a]

The Structural Adjustment Programme, which the Indian government has been implementing since the early nineties at the IMF and World Bank dictates, demands the withdrawal of all budgetary subsidies including those on food and fertilizers and urges trade 'liberalization' including trade in agricultural commodities. It insists on doing away with all tariff and non-tariff barriers against imports and exports of food. "The central theme of the new policy package in India", says Sukhpal Singh, "is to move towards freer export and import of agricultural commodities so that the level and structure of product prices can be brought in line with international prices."[179] It is worth noting that when domestic prices of food, the barest means of survival, are sought to be raised to the international level, the average income of an Indian is eighty times lower than that of a person in the West.[179a]

The Indian ruling classes have enthusiastically responded to the policy prescriptions of the GATT, the World Bank and the IMF. The *Economic Survey 1995-96* stated :

"*Rice and wheat are emerging as major export products.* "Quantitative ceiling and Minimum Export Price in respect of rice have been abolished."[180] It may be recalled that it was in 1995-96 that there was in India a sharp fall in foodgrain production. As we have seen before, the production declined by 3.19 per cent—from 191.1 million tonnes in the previous year to 185.0 million tonnes in 1995-96. Among other foodgrains, the production of rice fell by 2.09 per cent and wheat by 4.35 per cent.[181] And in 1995-96 the Indian government authorized export of 2.5 million tonnes of wheat and 3 million tonnes of rice. India won the dubious distinction of being the second biggest exporter of rice in the world. In the same year India exported fruits and vegetables worth over Rs 1,715 crore, accounting for about 16 per cent of agricultural exports. When 63

per cent of Indian children, apart from others, suffer from malnutrition, all efforts are being made to promote food exports including most of what is nutritious. The other day, India's commerce minister B. B. Ramaiah said that a special credit package for boosting agricultural exports was in the offing and he oozed confidence that agro-exports would increase by 150 per cent to Rs 50,000 crore by 2,000 AD. During April to October 1996, the exports of processed foods were up by 80 per cent in dollar terms. On the whole, the export of agricultural and allied products as a group increased by 41 per cent in dollar terms during the period. The minister said that facilities like ware-housing, processing, etc, needed development and that India was seeking specialization in these areas from other countries.[182]

JM writes : "...Special NSS tabulations prepared for the Expert Group on Estimation of Proportion and Number of Poor show that more than 60 per cent of Indians consumed less calories than the RDA [Recommended Daily Allowances prescribed by the Indian Council of Medical Research as average requirement] norms in 1983 and 1987-88, a proportion which is double the official estimate of the incidence of poverty."[182a] The problem of hunger is as acut today as it was during direct colonial rule. As a *Statesman* editorial said, "more Indians than the total population of America go hungry." In total disregard of the interests of the people, the new export and import [Exim] policy, which was announced on 31 March 1997 and would be effective from 1 April 1997, puts emphasis on giving a boost to agricultural exports and states that "double weightage would be given for such exports in calculating the eligibility for export house and trading house status". And "one per cent SIL (additional import licence) on total value of exports would be given for exports of fruits, vegetables, floriculture and horticulture products if such exports constitute 10 per cent of total exports."[183]

An article in *Economic and Political Weekly* analysed India's experience of tea trade and said :

"The results reported above regarding cointegration of tea prices in domestic and international markets also suggest that by allowing free exports of agricultural commodities we are likely to raise the domestic prices of foodgrains to equal their international prices,

which are higher mainly due to devaluation of the domestic currency."[184]

As a result of the implementation of the policies of the IMF, the World Bank and the GATT, food prices have soared so high that many essential items of food are already beyond the reach of many more millions than before. And the prices will invariably rise much higher as the Indian government's new Exim policy becomes effective.

Today, in this age of monopolies and oligopolies, free trade or free competition is a myth. The world trade in agricultural commodities is under the control of a few transnationals carrying on agribusiness, like Cargyll of the U.S.A. For instance, according to the World Bank's *Global Economic Prospects and the Developing Countries* (1994), 85 to 90 per cent of global exports of wheat were marketed in the mid-eighties by three to six TNCs. Almost similar is the case with other agricultural exports.[185] It is easy for them to control the market and reap a harvest of profits by raising or depressing prices. It is the experience of underdeveloped countries that the greater the volume of the exported produce, the lower is the price they realize. As Harry Magdoff writes, "in reality... international trade is one of the main mechanisms for perpetuating the gap between the core and the periphery. Moreover, the globalization process has resulted in even greater dominance of foreign trade by the giant multinationals. The dominance takes various forms, ranging from the crudest type of exploitation to the 'normal' operations of the free market's invisible hand."[186]

Discontinuing the production of certain crops and concentration on some others in the name of 'comparative advantage' and consequent total dependence for those essential items of food would be inviting a disaster for the people. It would amount to placing the country and the people at the mercy of a handful of TNCs, who can easily manipulate the prices. Krishna Kumar and Ashok Mittal were right when they said : "Dependence on imports of essential agricultural commodities, particularly from major developed countries, will make the country vulnerable for political and economic exploitation."[187] In the world market controlled by the TNCs, India's exports are usually cheap and imports dear. Regarding political 'exploitation', we have had enough experience before.

Burbach and Flynn observe :

"Essentially, the U.S. negotiating position [which is upheld by the 'triad'] amounted to an attack on policies of other countries aimed at food self-sufficiency—a position top officials at the U.S. Department of Agriculture argue explicitly. [The authors refer to *Foreign Agriculture*, 4 Dec. 1978]. This attack, of course, is not formulated in terms of national self-interest. Instead, the United States invokes the principles of 'free trade' and comparative advantage—both ideas developed to their fullest by apologists of the British empire to justify Britain's drive for industrial supremacy in the nineteenth century."[188]

In fact, imports and exports of food, even foodgrains, have never ceased. Now they have received a greater impetus. In obedience to the 'triad', the Indian market is being further opened to foreign agribusiness, even under dubious circumstances. Here we shall cite only one recent instance. Throwing all procedural norms to the wind, the government recently ordered the State Trading Corporation to import 2 million tonnes of wheat from Canada and Australia. The hasty decision was sought to be justified on the ground that the import would prevent price rise in the domestic market. The plea was false, for the imported wheat could not reach the shores of India before March 1997, and a record harvest had been forecast by the Agriculture ministry for the period following it. The import of wheat, far from bringing down the price, raised the government's procurement price substantially. The landed cost of Canadian wheat was even much higher and the government decided to increase the price of wheat sold by the Food Corporation of India by 40 per cent in some states outside the northern belt. To cap it all, tests conducted by the Food ministry on samples sent by the Canadian Wheat Board failed the Prevention of Food Adulteration Act (PFDA) requirements and "showed the presence of aflatoxin in excess of 30 PPB"—the international tolerance limit. Aflatoxin, a toxic compound, can cause tissue damage and cancer and caused havoc with the wheat crop in Punjab in the late eighties. The usual pre-shipment inspection was waived in this case. And the Commerce and Food ministries sought from the Health ministry a one-time waiver of quarantine restrictions under the PFDA for the wheat

import from Canada, which the Health ministry refused to grant and expressed its grave concern. The State Trading Corporation forced the Canadian Wheat Board to overcome its earlier reluctance and to issue a general certificate to the effect that the wheat met international tolerances. The government was satisfied with the certificate and waived pre-shipment inspection, the norm for food imports.[189] The health of the people is of little concern to the ruling classes. While bread is so dear, life in India is dirt-cheap.

The decision to import wheat at a high price when it is not necessary has thrown the wheat market into a turmoil. The Punjab and Haryana farmers and the Punjab government have been demanding a much higher price than the minimum support price plus a bonus that the central government has offered after increasing it considerably very recently. The farmers have refused to sell their wheat to the government agency, Food Corporation of India, which as *Economic Times* reported, is yet to open its account for wheat procurement this season.[190] Wheat has almost disappeared from ration shops in West Bengal and the West Bengal government has decided to raise the price of wheat from Rs 4.55 to Rs 7.30 a kg., that it would sell through the public distribution system.[191] This will invariably raise open market prices. One gets a foretaste of what is coming.

In recent years a significant move has been initiated by several state governments — Karnataka, West Bengal, Maharashtra, Gujarat, Punjab, etc. — to amend the land ceiling acts and raise the ceiling of land-holdings that one may legally own. It is the policy of the ruling classes to encourage TNCs and Indian companies to set up food-processing units, help TNCs to acquire large plots of land for this purpose, develop horticulture and floriculture for export of their products. Handing over peasant land to capitalists for conversion into plantations (as in some northern districts of West Bengal) or for other purposes is part of the policy.

Large investments are being made in India's food-processing industry by TNCs. Since 'liberalization', the government has offered this industry fiscal incentives like reduced duty on import of capital goods. Many food products have been exempted from excise duty. Industries like rice-milling, poultry, biscuits, and ice-creams have

been dereserved, inviting transnationals and big Indian houses to enter them. Automatic approval of foreign stake upto 51 per cent has been granted.[192]

Two powerful organizations — USAID and ICICI (the financial institution which is based in India but controlled by foreign capital, mainly U.S. capital) — have joined hands to implement a programme entitled "Agricultural Commercialization and Enterprise". Its purpose is to improve the investment environment for private agribusiness in the processing of horticulture produce, in converting the products into juices, syrups, jams, jellies, fruit bars, chips, pre-cooked items and so on for those who can afford them.[192a]

Among the TNCs approved are Coca Cola, Cargyll Asia Pacific, Cadbury Schweppes, Philip Morris Pacific. As costs of cultivation have risen high, poor peasants have been selling or leasing out their lands to big agribusiness corporations or to big mechanized capitalist farms, as in Punjab. Instead of cultivating the land directly, TNCs prefer contract farming : through the contract system TNCs like Pepsi seek to ensure quality and quantity of agricultural products at the appropriate time. TNCs also prefer to enter into contracts with big farmers instead of too many small ones. Close ties are forged between them.

Sukhpal Singh correctly states : "Even the promise of employment generation is an empty one, as the employment generated in the processing factories is nowhere near the number of jobs lost in the crop sector due to changes in [the] cropping pattern. A recent study shows that agro-industrial development led to significant fall in agricultural employment and generated only a small number of jobs, that too only for women as they are available at low cost."[193]

As food processing industries develop and horticulture, floriculture and acquaculture grow, there are changes in the cropping pattern, and the production of cereals, the basic food of the masses, declines. These policies plus the all-out effort to export agricultural commodities, including wheat and rice, are policies of starving vast masses of the people to benefit TNCs, big capitalist farmers, the upper strata of the middle class as well as the big industrialists who need foreign exchange to manufacture their products with high

import intensity. Today, the food security of tens of millions of Indians is being endangered as food is made the play-thing of the powerful speculative forces represented by TNCs based in imperialist metropolises.

Added to the above woes, there is another problem. To maintain the present status quo as regards food availability (which is far from enviable or desirable), a minimum of 50 million tonnes more of foodgrains will be needed by the end of this decade with the population rising to one billion. But, as part of the policy to accentuate hunger and not to alleviate it, the public sector investment in agriculture has been declining instead of increasing. At constant (1980-81) prices, it fell from Rs 1,796 crore in 1980-81 to Rs 1,560 crore in 1990-91 and to Rs 1,065 crore in 1992-93.[193a] In its Approach Paper to the Ninth Plan (1997-2002) the Planning Commission observed : "Investments in the agricultural sector, particularly towards creation of irrigation potential, has fallen short of targets. The strain on the agricultural economy is now beginning to show.... the percentage of shortfall in irrigation capacity expansion during the Eighth Plan will be one of the highest during any Five Year Plan."[193b] The target for creation of irrigation potential during the Eighth plan was 15.8 million hectares, but the irrigation potential created by the end of the fourth year of the plan was only 8.34 million hectares. "The share of irrigation and flood control has fallen since the Sixth Plan (1980-85), when it was 10 per cent to roughly half that level by the mid-90s."[193c]

The imperialist grip on India's agriculture, as on other sectors of the economy, is tightening. Falling yields of foodgrains and their soaring prices, the ever-rising costs of production, the ecological and environmental damage, the erosion of genetic wealth, the making of food a play-thing in the speculative international market, the pauperization of large masses of peasants, the stark reality of more hunger and more malnutrition — all these and more are the prices the people are paying for the policies which India's ruling classes are pursuing to serve imperialist masters and to serve themselves.

The fault is not in our stars but in ourselves. So long as we, the people, allow this man-killing system to prevail, there is no escape from slavery, hunger and misery.

9. Agrarian Relations

According to the *Eighth Five Year Plan 1992-97*, the share of agriculture in India's GDP stabilized at about 33 per cent while that of manufacturing (including powerlooms, handicrafts etc.) was as low as 20 per cent in the years between 1985-86 and 1989-90. About two-thirds of the total workforce are still dependent on agriculture and allied activities;[194] on the other hand only 11.13 per cent of the workforce was employed in manufacturing (including powerlooms and handicrafts) in 1987-88.[195] The total number of workers in the factory sector (a factory is defined as an industrial unit which operates with the help of electricity and employs 10 or more persons or which does not use electricity but employs 20 or more persons) was only 8,574,000 at the end of June 1993 — less than one per cent of the population.

Over the last five decades and more the percentage of people dependent on agriculture has changed little, but in absolute terms there has been an enormous increase—nearly three times. Lack of opportunity for non-agricultural work has intensified the terrible overcrowding of agriculture and the problem of unemployment and underemployment of the large majority of the agricultural population. A section of it escapes to towns and cities in search of some means of livelihood and swells the ranks of slum-dwellers.

As we have noted before, the so-called 'land reforms', the 'community development' projects and the 'green revolution' were all intended to foster capitalism in agriculture. These attempts from above have succeeded in curbing feudal relations of production in many parts of India, especially in Punjab, Haryana and western U.P.

The prevalence of wage-labour on a much larger scale than before, the increasing proletarization of poor peasants, the large

investments — both public and private, especially private — in agriculture, the use of machinery and various inputs, increased commercialization of agriculture — all these testify to the growth of capitalism in agriculture. The gross capital formation (both public and private) in Indian agriculture at 1980-81 prices rose from Rs 1,773 crore in 1960-61 to Rs 2,884 crore in 1970-71 to Rs 5,228 crore in 1993-94.[196] The net irrigated area as per cent of net sown area increased from 17.6 in 1950-51 to 18.5 in 1960-61 to 22.2 in 1970-71 and to 34.5 in 1991-92. The net area irrigated through private investment exceeded that through government investment in 1991-92.[197] According to one estimate, the number of tubewells has doubled from 5.7 million in 1984-85 to 11.4 million in 1996.[198] It is estimated that electricity consumption in agriculture was about 29 per cent of total electricity sales in India.[199] There has also been a marked increase in the use of modern farm machinery like tractors, oil engines, etc. For instance, while the number of tractors sold in 1986-87 was 80,300, it rose to 191,200 in 1995-96.[200] The consumption of chemical fertilizers increased from 2,94,000 tonnes in 1960-61 to 135,20,000 tonnes in 1994-95.[201]

But, despite the role played by imperialist capital and the Indian state, vestiges of semi-feudalism have not been liquidated even in those parts of the country where capitalist development is most pronounced. For instance, bonded labour still exists in Punjab. Manjit Singh writes :

"We found that the cancer of bonded labour to capitalist agriculture of Punjab had not been cured.... Not only certain tenures such as *siri* or local attached labour has vanished from the scene, their reconstituted forms are progressively being filled up by the alien migrant labour [migrants from Bihar]..."[202]

The mediaeval type of exploitation and oppression of bonded labourers is not uncommon in Punjab.[203] Today, in this era of imperialism and proletarian revolution, a thorough-going agrarian revolution can be carried out not from above but from below — by the poor and landless peasants themselves.

In many parts of India, semi-feudalism is more marked. In a semi-feudal society feudal relations of production prevail though capitalist relations have made their inroads.

What do we mean by semi-feudalism? We mean by semi-feudalism a primarily agrarian society marked by the co-existence of natural economy and commodity economy and a low and stagnant condition of technique. The relationship between the two major classes of the society — the landlords and the subordinated peasants — is one of exploitatibn buttressed by various methods of extra-economic coercion. The rent, whether in kind or in cash, which the peasant pays to the landlord is different in character from capitalist rent, and he is not often free to sell his product on labour power, bound as he is to his landlord whose land he cultivates, quite often on oral lease, and who advances to him consumption and other loans in lean seasons at exorbitant interest. Vast sections of the peasantry, including tribals, are no better than semi-serfs; and landlords and rich peasants enjoy "a highly *personalized* form of economic power over the tenants often by combining their roles as landowners with those of usurers and traders".[204] Speaking of Bihar, Pradhan H Prasad wrote :

"The chronic 'deficit' nature of the households results in a situation where the full payment of principal and interest, even in the long run, is not possible. This leads to a system of *informal bondage* which confers on the big landowning class enormous economic benefits, such as cheap and assured labour, better terms for leasing-out land, benefits obtained through what is known as 'distress sale' and acquiring peasant lands for almost nothing, among others."[205]

That "the high indebtedness of the agricultural labour households inevitably leads to debt bondage"[206] is true not only of Bihar but of many other regions of India, including parts of West Bengal. Bondage, as Prasad writes, is also enforced by leasing out land, mostly on an oral basis and from year to year. A large number of holdings in many states is leased-in land. "If being bonded by various obligations to a particular employer and thereby, not being the owner of free selling labour power is a characteristic feature of feudalism, then such feudalistic features continue to exist in various forms both in farms cultivated by tenants and farms cultivated by hired labourers."[207]

Another characteristic of semi-feudalism is the existence of a non-monetized sector of Indian economy. In the fifties, the third

round of the National Sample Survey disclosed that "About 43 per cent of the total consumption in rural areas was obtained in kind and 57 per cent purchased in cash."[208] In an interview to the *Far Eastern Economic Review* in 1975, T. A. Pai, then India's minister of Industries, stated :

"The market for industrial goods, apart from textiles, hardly exceeds 50 to 60 million people, or hardly 10 per cent of the population."[209]

Today, the extent of the non-monetized sector may not be as considerable as two decades ago, but, without doubt, it does still co-exist with commodity economy.

In *The Economic Structure of Backward Agriculture*, Amit Bhaduri analyses the chief characteristics of backward or pre-capitalistic structure. He refers to the existence of an inadequately formed labour market in which most of the peasant households with small operational holdings are "*partial participants*" and the large-scale penetration of merchant and moneylending capital into the agrarian economy. This gives rise to a major mode of surplus extraction in addition to the forms of extraction — rent and revenue. Backward agriculture leaves most peasant households perpetually in debt, especially for fulfilling consumption needs. Caught in the meshes of debt to the moneylender, who is often also the local merchant, the bulk of the peasant masses, who are lower middle and poor peasants, are forced into exchange relations which are wholly unequal. Immediately after the harvest, the peasant is forced to make 'distress sale' of a large portion of his output. Later, he is again forced to take consumption loans either in foodgrains or in cash at a usurious rate of interest. As Bhaduri writes, "the consequences of such accumulating debt arising from persistent deficit in cash– or kind-account of a small peasant" are far from "confined only to the market for agricultural produce...but tend to affect their involuntary positions in all other markets. These result in forcible transactions of labour, land and other means of livelihood of small peasants used as collaterals against loans."[210] The surplus is extracted through the machanism of debt not only in the market for foodgrains but also in all other markets. The poor peasant cannot offer securities as collaterals to banks or other financial institutions to obtain loans at

moderate interest. It is because of the personal power over the borrower that the local moneylender accepts as collaterals "standing crops, promise to render future labour services, already encumbered land, revision of tenurial arrangements in case of default", etc., which are not marketable as collaterals elsewhere. The moneylender invariably undervalues them. Gradually, the peasant-debtor is expropriated from the land he has owned. In the West, the process of primitive accumulation, that is, expropriation of the peasant from the land, was carried out through coercion by the state machinery. Here, it takes place slowly through the economic mechanism of debt. In the West, primitive accumulation, while freeing the peasant from his ties to the land and from all feudal obligations, created conditions for his absorption as a wage-labourer in industry. In an industrially backward, underdeveloped country like India, the peasant, expropriated from his land, has no such alternative prospect, cannot escape from many of his feudal obligations and sinks deeper into the abyss of poverty and destitution, and the debt bondage grows heavier.

To quote Bhaduri,

"Translated into the language of day-to-day politics of India, *our characterization of the ruling agrarian structure corresponds to a complex co-existence of 'feudal remnants' (or 'semi-feudalism') sustained largely by a nexus of forced commercial relations and 'capitalist tendencies' expressing themselves in the form of expansion in agricultural production through 'progressive' farming.*"[211]

The agrarian relations have been changing. "Capitalist tendencies" are, no doubt, gaining ground. Under the impact of the latest offensive of the 'triad' — the IMF, World Bank and WTO — this trend is being accelerated.

But the capitalism as it developed in the West and the capitalism which has been developing in India, whether in industry or in agriculture, are not of the same character. In the West, capitalism as a mode of production emerged as a result of the sharpening of inner contradictions — contradictions between growing productive forces and backward production relations — within the old society. An agrarian or bourgeois democratic revolution, which abolished feudal

relations of production, preceded the industrial revolution. The agrarian revolution changed the serf of the feudal society to a wage labourer who was made free — free from his obligations to his feudal lord and free to sell his labour power to the owner of the means of production who was willing to buy it. In the West, capitalism once played a revolutionary role: it fought and overthrew feudalism, established bourgeois democracy and released immense productive forces. It founded bourgeois nation-states which have been jealous of their freedom.

On the other hand, in India, after the establishment of British colonial rule, the indigenous capitalist manufacture (which employed wage labour but which did not use machinery), that had appeared in some places, was destroyed together with its know-how. After some considerable lapse of time, large-scale machine industry (the factory) with its capital goods and technology, developed in the metropolitan country, was exported here. In colonial India capitalism was an extraneous growth, something grafted on the old pre-capitalist society. It emerged here as a result of the impact of the developed capitalism of an imperialist country, backed by state power, on a dependent, pre-capitalist society, and could grow only by relying on imperialist capital. L. H Jenks was right when he observed that there was almost no Indian economy as it formed an organic portion of the British economic system.[212] It has been the policy of imperialism to transform the economy of the colony into an appendage of the economy of the metropolitan country or countries, to destroy the equilibrium between separate branches of production, to plunder its resources and thus to hinder the development of productive forces. It is imperialism that has raised and nurtured the big bourgeosie in India : it has grown under the fostering care of imperialism. Its chief role has been to serve as an intermediary between imperialist capital and the sources of raw materials and the market in India — market for consumer goods, capital goods and technology — and its interests have coalesced with those of imperialist capital despite some contradictions which are secondary. The upper stratum of the bourgeoisie in India has waxed fat by serving foreign capital and has helped imperialism to penetrate into the sub-continent and dominate it economically and politically. Besides, it has grown not by waging struggle against the feudal class

but in close alliance with it.[213] Instead of playing any revolutionary role, it has been reactionary from its very birth. While imperialist capital is the 'monopoly supreme exploiter', it has remained content with being a sub-exploiter. Quite naturally, it has failed to transform Indian society. Expatriate foreign capital and Indian big capital have built up some enclaves of capitalist industry, but in the vast rural areas semi-feudal relations of production are still preserved and merchant– and usury-capital flourish. Jean-Paul Sartre emphasized that it was imperialism that "created a native bourgeoisie, *sham from beginning to end*", in a country of the third world.[214]

Though India is no longer under direct British rule and has changed into a semi-colony dominated over by several imperialist powers, chief among which is the U.S.A., the basic condition of India's dependence has not changed. 'Decolonization' in 1947 was actually a manoeuvre by British imperialism to preserve its economic, strategic and political interests when it was confronted with a rebellious Indian people and beset with other contradictions. To quote Harry Magdoff, "Despite the striking transformations in the world capitalist system since the end of the Second World War, two major distinguishing features of the third world did not change in general, and in a fundamental sense, the chains of dependency binding the periphery to the centre remain. Secondly, the gap between the periphery and the centre keeps on widening, as it has throughout the history of capitalism."[215]

Though factory industry was first transplanted here one century and a half ago, India has not only remained undeveloped, but has underdeveloped, and capitalism here is retarded, deformed and dependent.

Marx said :

"It is in the nature of capitalist production to continually reduce the agricultural population as compared with the non-agricultural..."[216]

Commenting on this, Lenin wrote :

"*Thus, one cannot conceive of capitalism without an increase in the commercial and industrial population at the expense of the agricultural population...*"[217]

Lenin again wrote of "the law governing all developing commodity economy, and the more so capitalist economy — the industrial (i.e., non-agricultural) population grows faster than the agricultural and diverts an ever-growing part of the population from agricultural to manufacturing industry."[218]

But, in India, capitalism has failed to divert the "ever-growing part of the population from agricultural to manufacturing industry". In the U.S.A. and the U.K. only 2 per cent, in Germany 4 per cent, in France 5 per cent and in Italy 6 per cent of the workforce are engaged in agriculture while, in India, as the *Eighth Five Year Plan 1992-97* stated,

"Even after some shifts in the occupational structure during the last two decades, agriculture still occupies a predominant place in employment structure, employing about two-thirds of the total workers."[219]

At the beginning of this century — in 1901 — the percentage of people engaged in agricultural activities was almost the same — 69.4 per cent. So during the course of the century that is passing, there has been hardly any growth of the non-agricultural population compared with the agricultural.

This maldevelopment has led to the pauperization of a large section of the peasantry. In 1988, a sub-committee of the parliamentary consultative committee of the ministry of Labour visited eight states and studied the problems of rural labour. In its report it states that, unaided by any effective law, neglected by governments and unorganized in trade unions, about 70 million people in the agricultural sector are left at the mercy of the landlords. The report says that lack of job opportunities, preponderance of single-crop areas in the overall farm scene, etc., have led to the pauperization of the largest stratum of the country's peasantry and their cruellest exploitation. The sub-committee frequently heard complaints that 'the state enforcement machinery, instead of being sympathetic towards the farm labour in their efforts to realize minimum wages, was generally helpful to the landowning classes'. Police atrocities on landless labour, according to the report, are common. The 36th session of the labour ministers' conference in May 1987 agreed that the minimum wage of agricultural labour

should not be lower than Rs 11. But, in about mid-1988, the sub-committee found that wages as low as Rs 3 were being paid in some places and in several other places wages varied between Rs 5 and Rs 5.30. It was told that the landlords would not even pay this meagre sum to agricultural workers, who would, instead, be paid in kind. It received complaints that bonded labour existed in Madhya Pradesh, Bihar, Orissa, Andhra Pradesh and Tamil Nadu. It found that the state governments were not always serious about identifying bonded labourers or rehabilitating them.[220]

The overcrowding of agriculture and the pauperization of a large section of the rural workforce is a colonial legacy. In the second half of the 18th and the first half of the 19th century, the British colonial rulers perpetrated inconceivable oppressions on industrial workers to convert India from a manufacturing to an agricultural country exporting raw produce to industrializing Britain. This colonial legacy is yet to be liquidated.

As noted before, employment in the factory sector in India was a meagre 8.5 million in 1993, about 3 per cent of the total number of people employed, which was 306 million — hardly an improvement on the percentage of factory workers in 1951. In its report *World Employment 1995*, the International Labour Organization stated that the proportion of employment in the unorganized segment of the manufacturing sector was as high as 75 per cent of the total manufacturing employment in 1990.[221] A development research group of the Reserve Bank of India also pointed out that the component of labour making up organized sector employment in India was very small and that in the eighties it showed decline or stagnation.[222]

In its report *World Labour*, released in 1993, the ILO stated that debt bondage, a form of disguised slavery, entraps tens of millions of people, including children, in South Asia and Latin America.[223] In India bonded labour exists not only in agriculture and allied activities but also in industries and the services sector. Child labourers, practically slaves, are forced to work for unlimited hours in all the sectors including very hazardous industries. The number of child workers in India runs into several millions.

Though one century and a half old, the factory industry in India generates employment that is pitifully small. Because of its underdevelopment, capitalist industry fails to absorb the huge surplus agricultural population, which desperately clings to agriculture for lack of any other means of livelihood. This serves as a constraint on the growth of capitalism in agriculture and keeps alive the remnants of semi-feudalism.

With the advent of the 'green revolution' capitalist farmers have grown richer and more powerful. The interests of the upper strata among them are getting tied with those of the TNCs which are engaged in food-processing or other agribusiness. This section hopes to grow fatter by exporting a larger portion of their agricultural produce while a large number of people starve. As the comprador merchants and comprador industrialists have a symbiotic relationship with imperialist capital, so do the big capitalist farmers when agribusiness is expanding under imperialist auspices. If we assume India to be a nation (which it is not) then within this 'nation' these strata constitute an 'anti-nation' (to use Cardoso's expression).[224] They are happy and proud to kiss the chains that bind them.

Today, agrarian relations in India are like a tangled skein : a farmer who makes large capital investment in land to produce for the market may employ bonded labour. Because of uneven development, regions differ from one another : even production relations in areas within the same region may vary. It is not uncommon for the same farmer practising the capitalist mode of production in one part of his holding and the feudal mode in another. Reports and books may be of help but it is necessary for interested persons and organizations to undertake class analysis in different areas to grasp the complexities and obtain a correct understanding.

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