Chapter-V

IMPACT OF THE GREEN REVOLUTION

The introduction of Green Revolution helped the farmers in raising their level of income. With the increase in farm production earning of the farmers also increased and they became prosperous.\(^1\) The Green Revolution promoted the development of the non-farm sector directly, its effects on poverty reduction and overall economic development continued to be further rain fed.\(^2\) The Green Revolution has made a worthwhile impact only on a portion of the national cultivated acreage.\(^3\) High yielding varieties of crops need regular moisture supply and because of this impact of Green Revolution has been very high in regions with developed irrigation facilities. The Green Revolution lifted many people out of poverty, started economic growth and saved large areas of forest wetlands and other fragile lands from conversion to cropland.\(^4\)

The impact of the Green Revolution on equity was questioned in early critiques. The technology involved can be seen to be selective and biased in favour of resource-rich regions and wealthy farmers.\(^5\) In Tamilnadu a Green Revolution would have reached many remote villages in the Dry Zone.\(^6\) Changes in consumption of diesel pumps and tractors occurred between 1979-80 and 1984-85 in the major states due to the Green Revolution.\(^7\) The quest for land reform is almost everywhere
weakening partly under the influence of the vision of the Green Revolution which is hailed as the solution to the agricultural problem. The Green Revolution may lead to impoverishment and malnutrition. The result, known as the “Green Revolution, “has been quite remarkable, “miracle wheat” and “miracle rice” are splendid technological achievements in the realm of plant genetics. The impact that Green Revolution technologies can have on farming and farmer’s decision making is brought to life in the Green Revolution game, a sophisticated gaming simulation of the drama of rural development and technological change in agriculture based on original field work in India. High agricultural yield achieved by application of high input-high output technology viz use of fertilizers, pesticides and extensive irrigation. Effects of the Green Revolution technology have been positive for agricultural growth and distribution.

The Green Revolution can lead to large, across the board gains in income, nutrition and standard of living for small and large scale farmers and even for the land less poor. In every successful agriculture area, it is the use of largest portion of cultivable area. The impact of agriculture modernization is that they focus solely on employment production and income distribution. Another major impact of Green Revolution has been
that the minor crops that provided diversity in the agro-ecosystem are losing their importance.¹⁷

In 1971, in Tamilnadu the Green Revolution seemed to hold out the tantalizing hope that final solutions for the world’s age old food problems might be at hand.¹⁸ The success of the Green Revolution is dramatically increasing food production, mainly in Asian countries, through high yielding varieties, fertilizers and increased irrigation.¹⁹ The impact of Green Revolution on agricultural efficiency can be studied by making a comparative analysis of the regional agricultural efficiency indices during the pre-Green Revolution period and the post Green Revolution period.²⁰ Like other developing countries, Green Revolution has influenced the economy and way of life in India.²¹ Cereal production in the rain fed areas still remains relatively unaffected by the impact of the Green Revolution, but significant change and progress are now becoming evident in several countries.²² The success of the Green Revolution through the sale of new varieties of conventionally growing but high yielding wheat, maize and rice also brought a certain cynicism.²³ A suite of technological innovations developed in universities and international research centers, which were applied to agriculture between the 1950s and 1980s and increased agricultural yields dramatically, but with a concomitant rise in chemical inputs as well as increased demands for water and machinery.²⁴
Agriculture still plays a dominant role in the national economy. Although the country has witnessed a Green Revolution in the late sixties and our leaders are continuously trying to solve the land labour relationship through land reforms. Since the mid-1980s a Green Revolution technologies began to show diminishing returns. Grain yields have continued to increase. The success of the Green Revolution ran counter to the predictions of economist’s sociologist’s political scientists, agronomists and the gurus from the pesticide and fertilizer industries. In the first Green Revolution of the 1960s to mid 1980s the rapid adoption of high yielding varieties and fertilizer use made possible through the expansion of irrigation. It has now run out of impetus. The Green Revolution also increased income disparities. Higher income growth and reduced incidence of poverty were found in the states where yields increased the most and lower growth. But it registered little change in the incidence of poverty in other states.

The major benefits of the Green Revolution were experienced mainly between 1965 and the early 1980s the programme resulted in a substantial increase in the production of food grains mainly wheat and rice. Most important result of the Green Revolution is that it enabled the technologies to reduce rural poverty. The decontextualizing models, such as the universal rationality of the Green Revolution or the formation of
neoclassical economic theory, the relation between person and world by subordinating or eclipsing the non-objectifiable local specificities render meanings everywhere so implicit and inextricable. Especially in the 1970s the social scientists have joined the debate with a view to evaluating the impact of Green Revolution on income distribution, employment potential and social differentiation in the countryside. The shape of the class system in rural Tamil Nadu has changed dramatically and for the worse, only in the past three decades because of the land reform acts, the 'Green Revolution' and various ecological factors.

The Intensive Agricultural District Programme (IADP) was started on a 'pilot' basis in 1961 in seven selected districts. Subsequently, it was extended to nine more districts. The facilities provided in these areas included.

1. Adequate and timely supply of production requisites; such as fertilizers, improved seeds, pesticides and implements.
2. Adequate and timely supply of credit through co-operative societies.
3. Establishing workshops for making and repairing agricultural implements and the starting of seed and soil testing laboratories.

Rural electrification plays a key role in modernizing agriculture. Its importance is paramount in providing perennial irrigation in areas not
served by the canals. The rapid mechanization of agriculture is making a staggering demand for mechanical power.\textsuperscript{35}

The use of ground water has such a profound psychological effect on the farmer and makes him reliant even in matters other than irrigation.\textsuperscript{36}

Filter points are normally sunk in sandy aquifers and are provided with strainers. River basins, with sandy formations and high water table are ideal for sinking filter points. Filter points have been successfully sunk in the Cauvery Delta in Tamilnadu.\textsuperscript{37} Large scale river-pumping schemes have also been undertaken successfully in Tamilnadu.\textsuperscript{38} Rural electrification in a planned manner started with the launching of the First Five-Year Plan in 1951. In 1968, the All-India Rural Credit Committee was constituted by the Reserve Bank of India to examine in detail the question of accelerating rural electrification in the country in the overall context of the Plan Programme for increased agricultural production.

From 1969 to 1974 an amount of Rs. 66,170 million was invested in rural electrification. As many as 82,997 villages were electrified and 1,34,000 pumping sets (tube wells) were energized bringing the cumulative total by the end of the Fourth Plan to 2,42,600. The consumption of electricity in agricultural operation rose from 9.3 percent in 1968-69 to 12.6 percent in 1973-74. The institution of the Rural Electrification Corporation as a financing organization resulted in the extension of the Programme in a
more organized manner. The production oriented activities such as tube well irrigation and the rural industries, received greater support. The success of HYV depended on fertilizer consumption. To step up fertilizer consumption, agricultural extension and sales promotion arrangements should be intensified. The farmers in Tamilnadu have only lesser essential fertilizers.

Speedy implementation of land reforms is essential for the spread of Green Revolution throughout the country-side. Security tenure and conversion of tenants into owners enable the farmers to take more interest on the adoption of HYV programmes. Green Revolution is calculated to develop the unutilized cattle wealth of the country. Green Revolution though it has well advanced with its impact on production in Tamilnadu has its own shortcomings as it covers only higher income groups. The cry for the technological improvements for enhancing productivity and production in agriculture and animal husbandry through the Green and White Revolutions has resulted in changes both in size and composition of the Indian livestock which underlines the need to have a look at the compositional changes in the livestock population of the state in order to realize the consequences of these changes.

The cessation of the war did not by any means put an end to the Grow More Food Campaign. The war had shown how precarious the
conditions in India could become, if she were to rely on other countries for
the import of food grains. The moment the National Government took up
office, therefore, they formulated a Five Year Plan to be enforced from
1947-1948 to 1951-1952. The object of which was to produce an additional
annual four million tones of food grains in India by the end of the period.
The Government of India generously came forward to bear a portion of the
cost of the scheme in all the states and fixed a target of production of six
and a half additional lakhs of tones of food grains for Madras. The
Government of Madras thereupon propounded a Five-Year Plan for this
state. They found that of the total arable area of 364 lakhs of acres, nearly
334 lakhs of acres were already under crops of several kinds and that the
real problem was not so much that of increasing the cultivable area as that
of increasing the food and fodder crops in the areas already under
cultivation. They accordingly fixed certain targets for the production of
food grains for each year in the Five Year Plan period and sanctioned
several schemes for achieving an all-round improvement.\footnote{42}

Under Jawahar Velai Vaipu Thittam, construction of percolation
ponds, renovation of temple tanks and standardization of minor irrigation
panchayat union tanks are taken up. Percolation ponds facilitate ground
water recharge, generate employment and serve as multipurpose
community assets.\footnote{43} Under the Minimum Wages Act, state governments
are required to fix minimum rates of wages for agricultural labour by the
end of 1953. The Ninth Five Year Plan (1997-2002), after five decades of
planning continues to accord high priority to agriculture and rural
development with a view to generating adequate productive employment
and eradication of poverty. The Plan also acknowledges that in our country,
the level of agricultural productivity particularly in those areas
characterized by high poverty, is so low that there is sizeable scope and
opportunity, for increasing agricultural output and thereby rural incomes,
across a wide geographical area.

The agricultural sectors have historically played an extremely
important role in providing employment in India, and are likely to continue
to do so for years to come. The Green Revolution created wide regional
and interstate disparities. The significance and magnitude of the impact of
the so called Green Revolution is best illustrated by changes in cereal
production in India, Pakistan and the Philippines. In 1971, the
fundamental research and higher education activities of the Department
hitherto under the control the Department were transferred to the newly
formed Tamilnadu Agricultural University, Coimbatore excepting the
Regional Research Stations. In 1977-78, the activities of the Department
with regard to Agricultural Marketing were separated and vested with the
newly formed Directorate of Agricultural Marketing with headquarters at Trichy since shifted to Madras.

Likewise in 1979-80 two Departments namely, Seed Certification and Horticulture and Plantation Crops were formed separating the subjects from this Department. In 1980-81 two more Department viz Oil seeds and Agricultural Engineering were formed. In 1981-82, all the research stations which were hitherto with the Department were handed over to Tamilnadu Agricultural University leaving behind only extension activities, inputs supply, quality control, soil testing and adaptive research. In April 1991, the Oilseeds Department was merged with the Department of Agriculture.\textsuperscript{46} A block level the Agricultural Development Officers are in charge of Agricultural Development activities and they are vested with pay drawing and other related financial powers over the agricultural staff of the block. There are one to three Agricultural Officers, Assistant Seed Officers, Assistant Agricultural Officers and Field Demonstration Officers in each block under his control.

The Agricultural Engineering Branch was engaged in arranging supply of implements, oil and electric-driven pump sets and mechanical cultivation units such as tractors and bulldozers. The application of mechanical aids considerably helped to increase food production and there is increasing demand for them from ryots.\textsuperscript{47} Paddy improvement work was
carried on at the Paddy Breeding Station, Coimbatore, and in the Agricultural Research Stations at Aduthurai, Ambasamudram, Anakapalre, Buchireddipalayam, Mangalore, Maruteru, Palur, Pattambi, Pulla, Samalkota and Tirukuppam. Stationary and portable engines on the market fall into three classes: (a) Petrol engines (b) Paraffin engines and (c) Diesel engines.48

When compared with mid sixties, a remarkable change is taking place in rural life. The ancient bullock carts are rapidly replaced by tyre carts, most of the houses are furnished with fans, radios, furniture etc, and there is gradual increase in the use of cosmetics and other luxury goods, petrol and refrigerators. The noise of motor cycles and tractors is becoming a common feature and rural student are turning up for collegiate education in large numbers particularly from the poor strata of society. The second criticism is that the green revolution is responsible for a glut on Indian grain markets.

Agriculture revolution also created more awareness for the necessity of industrial revolution. It was considered agricultural revolution to precede the industrial one for the greater sustenance because agricultural products and commodities would have processing factories for different purposes. The momentum created by modern seeds and fertilizers was considered as the initiation of Green Revolution.49 The development of high yielding
varieties of crops in the mid-sixties shed new rays of hope and confidence towards increasing the agricultural productivity in India in order to meet the challenge of growing population.

Mass acceptance of these varieties by the farmers led the governments to extend its support to supply good quality seeds, fertilizers, pesticides and credit facilities for installing tube-wells, purchasing farm machines, reclamation of land, etc, to the cultivators. Tamilnadu Women in Agriculture Project popularly known as TANWA started its working in Tamilnadu in November 1986. This project is aided by DANISH International Development Agency. Many development programmes like the Intensive Agricultural District Programme, Intensive Agricultural Area Programme and the High Yielding Varieties Programme were introduced in Tamilnadu for achieving increased food production. The High Yielding Varieties Programme was initially introduced in 1966-67 in Tamilnadu.

A tractor is a prime mover. For attachment to the tractor we must provide different agricultural operations. The tractors are classified into crawler tractor or track layer, four-wheeled tractors of 15 to 60 Horse Power and small tractors and power tillers. The Government of Tamilnadu have set up Tamilnadu Agro Engineering and Service Co-operative Federation and Tamilnadu Agro Industries Corporation to provide Agro Engineering services to rural farmers and to encourage industries which
help the growth and modernization of agriculture. They also render service to the farmers by supplying quality seeds, fertilizers, pesticides, agricultural implements, and plant protection equipments etc.

For the production of quality seeds with genetic purity, physical purity and good germination, a series of quality control measures are adopted right from selection of variety till it is processed and distributed to farmers. The rich men who invested capital on land were willing to adopt new methods of cultivation. Jethro Tull disliked the wasteful method of scattering the grain by hand and he invented a machine which would sow the seeds in a straight line. The machine was known as ‘Drill’ and its use prevented the birds from picking up all the seeds.

Traditional agriculture relies heavily on indigenous inputs such as the use of organic manures, seeds simple ploughs and other primitive agricultural tools, bullocks etc. Modern technology on the other hand consists of chemical fertilizers, pesticides, improved varieties of seeds including hybrid seed, agricultural machinery, extensive irrigation, use of diesel and electric power, etc.

Achievements of the new agricultural strategies are,

1. Boost to the production cereals
2. Increase in the production of commercial crops.
3. Significant changes in crop pattern.
4. Boost to agricultural production and employment

5. Forward and backward linkages strengthened.52

In every Five Year Plan, the Planning Commission fixed specific targets for each crop and commodity. It also specified the various programmes for increasing agricultural production like irrigation, soil conservation, dry farming and land reclamation, supply of fertilizers, ploughs and improved agricultural implements, adoption of scientific practices, etc. The Government has also given considerable attention to institutional changes like setting up of the Community Development Programme and agricultural extension services, implementing land reforms and other facilities. From the Third Five Year Plan onwards the Government, is laying emphasis on Intensive Agricultural District Programme and High Yielding Varieties Programs, Multiple Cropping, Raising Land Productivity, etc.53

The Coromandel plain region lies squarely in the large agro climatic zone of the semi-arid tropics, which constitutes about 42 per cent of India’s area and accounts for the same proportion of its production of food grains. Historically, the region’s agricultural population has protected itself against long periods of drought by systems of tank irrigation, collectively maintained, which also served to recharge underground aquifers. A combination of invertible agricultural surplus, nationalized bank credit and
state-funded rural electrification had enabled these wells to be expanded in number, electrified and deepened.\textsuperscript{54}

If the Green Revolution cannot be taken to the rest of India, the prospects for Indian agriculture are not very bright. We have made a measure of progress, but this is still inadequate.\textsuperscript{55} The afore mentioned studies and their subsequent updating highlight that at least half the country has remained completely outside the pale of the Green Revolution and another one quarter has derived only marginal benefits from the same. To answer the question Green Revolution, how green it can best be said that the Green Revolution has made a worthwhile impact only on a portion of the national cultivated acreage.

The Sixth Five-Year Plan has targeted an increase of 15 million hectares in the total gross irrigated area of India from 1978 to 1983. According to the ratio of the net to gross irrigated area about 0.8 in recent years this would imply an increase of about 12 million hectares in the net irrigated area or, alternatively put, an increase of 8 to 9 percentage of net sown area.\textsuperscript{56} The more efficient manner in which this Programme is planned and administered it would be better for the success of the campaign for the Green Revolution. The introduction of Green Revolution in 1967-68 has resulted in phenomenal increase in the production of
agricultural crops especially in food grains. From 1967 onwards, the Green Revolution aimed at bringing about a Grain Revolution.

With the increase in farm production the earning of the farmers also increased and they became prosperous. The main benefit of Green Revolution was the increase in the production of food grains as a result of which there is diminishing imports. We are now self sufficient in food grains and have sufficient stock in the central pool. The introduction of Green Revolution helped the farmers in raising their level of income. Green Revolution brought about large scale farm mechanization which created demand for different types of machines like tractors, harvesters, threshers, combines, diesel engines, electric motors, pumping sets, etc.

Green Revolution is a unique event in the agricultural history of Independent India.57

The growth and development of agricultural marketing in Tamilnadu during the post-Green Revolution period have not been coincided with the growth of agriculture. The state intervention, which took place in various farms, has not revitalized the prospects of the marketing structure. The achievements, made by the marketing, are partial and they cover few crops. Therefore, in order to reap the benefits of Green Revolution, new marketing strategies became inevitable for achieving growth and equity and for sustainable development.58
The early criticism that the Green Revolution had benefited only large-scale farmers was stood in sharp contrast to the findings of all these studies. Empirical evidence indicates that small farms also benefited, albeit later, in terms of productivity and income growth. The benefits of the Green Revolution did not assume greater significance because of the depressed wage rates attributable to migrants from less endowed regions. On the other hand it is found that migrants shared in the benefits of the Green Revolution through increased employment opportunities and wage income. In the Green Revolution period from the 1960s through the 1980s, private sector investment in plant improvement research was limited, particularly in the developing world, due to the lack of effective mechanisms for propriety protection on the improved products.\(^{59}\)

The impact of the Green Revolution was confined primarily to cereals and to regions with good irrigation potential. As the success of the Green Revolution depends upon the assured rainfall or irrigation and the availability of capital, it resulted in inter-regional disparities.\(^{60}\) The benefits from the Green Revolution were confined to wheat and rice grown in more or less homogeneous tracts both agro-climatically and socio-economically provided with assured irrigation and located by resourceful farmers.

The success of Green Revolution depended also on the assured food-grain production. This led to rapid and significant increase in food grains
production needed to make self sufficient in food grains. The benefits of new genetically improved to customer are likely to vary according to how they earn their income and how much of their income they spend on food. The benefits of the Green Revolution by obtaining higher wages from agriculture and from expanded non agricultural occupations many of these labourers like the marginal and small farmers, have been unable to rise above the poverty line. The Green Revolution rice varieties proved much better adapted to the hot dry areas. Here, more than anywhere in the region the benefits of the Green Revolution have been most thinly spread, and increases in rice yields have proved hard to achieve.

Despite the many obstacles to equitable development under Indian conditions, a few recent studies have argued that the “Second generation”
effects of the Green Revolution technology have been positive for agricultural growth and distribution. Small farmers in dry areas worked under an extra hardship, for designers of the revolution had deliberately developed their seeds for areas endowed with ample irrigation-land that, naturally, tended to be owned by wealthier farmers. Not only was the experiment more likely to succeed on well-irrigated land, but many of the new crops required more water than traditional varieties. The agricultural imperative not only subsumed cultural consideration and ignored economic reality; it can roughshod over the environment. The Green Revolution scientists and proponents have assumed from its inception that nature was the source of scarcity, and that nature-induced scarcity could be perspective, soil becomes an inert “factor of production” and ecosystems are seen as “resources”. Most of the production gain came from states in which the Green Revolution also has had an offsetting positive, but largely unacknowledged impact on the environment.

In post Independence India rice production steadily increased, keeping up with population growth, thanks to the proactive dominant roles played by agriculture scientists in synergy with policy makers. In contrast in Tamilnadu, a strong crop improvement programme, supported by advances in crop management and protection practices, led to a quantum
jump in rice production such that self sufficiency was achieved. Rice has been bread in Tamilnadu for more than 100 years.\textsuperscript{71}

Recent research by the World Bank has shown that the average income of the poorest fifth of society rise proportionately with overall average income. So the poor generally benefit from these systemic growth inducing investments in water resources management and infrastructure. In Tamilnadu, for example, it was hypothesized that it was large farmers who had benefited most from the Green Revolution.\textsuperscript{72} Technical change in Indian agriculture resulted in both positive and negative aspects. In the positive side agricultural production was increased in three ways: average yields are increased, the area devoted to agriculture is extended and the number of crops grown in a year is increased.\textsuperscript{73} By utilizing improved seeds, proper application of fertilizers and irrigation, the production of wheat is significantly increased after the Green Revolution.

In addition to high yielding varieties (HYV) or genetically modified (GM) crops, good quality local varieties of crop plants, should also be cultivated. It might be possible that as a result of cross-breeding between local and HYV variety, some new better adapted and better yielding variety comes up, which will be more successful in exploiting the local resources and will have better chances of survival. Livestock, of course, disappeared as a part of farming with the Green Revolution because tractorization
totally displaced the need for animal power, and trees disappeared with the Green Revolution because now it was just crops.\textsuperscript{74} The Green Revolution in India and the consequent shift towards the capitalization of agriculture has accentuated class differentiation among the peasantry.

The process of proletarianisation of labour has been accelerated by the Green Revolution. Small peasant households are pushed out of agriculture, thus transferring them from being self-employed to bring wage earners or for some, unemployed. In its initial stage, the Green Revolution had a positive impact on female labour. The new cropping pattern brought about by increases in paddy field size demanded more female labour. The impact of Green Revolution has been more significant in sowing harvesting and post-harvest work. It has had a double effect on women. First it pushed many women into unemployment. Second, women were affected in terms of their food security, which had been mostly gained through harvest and post-harvest work.\textsuperscript{75} The Green Revolution has been very successful in increasing crop production.\textsuperscript{76} The word Green Revolution for the promise they conveyed. That promise became their mantra: feeding millions, saving lives, reducing poverty.\textsuperscript{77} Tamilnadu Government believed that only by giving free electricity to all farmers for well irrigation could they neutralize the demands created by the farmers’ movement.
The Tamilaga Vyvasayigal Sangam (VS), or the Tamilnadu Agriculturists Association (TNAA) was the first of the new producer-oriented farmers' movement in India emerging after the advent of the Green Revolution. It will then trace the trajectory of collective actions and state reactions and the specific political opportunity structure with in which these took place. In the process, class differences among the peasants and farmers involved in the movement also seem to have played an important role. It was not the Green Revolution as such that sparked off a new farmers' movement in India, it was the 'pumpset revolution'! This revolution happened in the dry areas of Tamilnadu. The poor generally benefited from these total growth-inducing investments in water resources management and infrastructure development processes.

The new strategy required large scale expenditure on inputs. To have a wide diffusion of high yielding varieties, every farmer should have sufficient funds at his disposal. Expansion of bank credit is essential. Further, there is urgent need for apt price, policy to protect the farmers. There is also lacuna processing, storage and marketing. The Government should have procurement and buffer stocks to guarantee reasonable and fair prices to the producer. Capital investments in agriculture broadly fall into three groups viz., long term investment on the purchase of land and permanent improvements of it, intermediate investment on the annual
agricultural operations, including to borrow, for, barring, a few well-to-do landlords and farmers, cultivators all the world over have to depend upon outside funds to meet their financial requirements. Corresponding to the capital needs of agriculture, the types of credit needed also fall into three kinds. For the repayment of prior debt and for the purchase and improvement of land, credit would be required for long periods, ranging between ten and thirty years, the actual length of the period depending on the productivity of the investment and the margin available in the income of the borrower to meet the debt charges.

For meeting the expenses connected with the annual operations, short period loans are required, repayable after the harvest. The period hardly exceeds a year, though in some localities where the agricultural season between ploughing and reaping is shorter, eight to ten months will be the usual period. These loans are needed for the conduct of ploughing, sowing, transplanting, hoeing, weeding manuring, reaping, etc., and for meeting domestic expenditure and should be available in small amounts and at short notice. Short term loans are an annual requirement unlike the other two types which the cultivator has occasion to resort to only at times. Normally too some loans are taken for land purchase as it revealed by the statistics relating to the transaction of land mortgage banks, but loans for improvement to land are of negligible amount. Some borrowing from the
Government under the Land Improvement loan Act takes place annually, but the amount involved bears an insignificant proportion to the total long-term loan outstanding. Reductions in water-rate were made and penalties for technical infringement of irrigation rules were waived.

Loans were advanced on a liberal scale for bringing new lands under cultivation, for purchasing seeds, manures and implements and for deepening existing wells and digging new wells. Fertilizers, seeds and pesticides, for 2,000 acres will be given at 50 percent costs. The farmers’ share of 50 percent will be meeting by providing short term loans from commercial banks. Under the programme to develop co-operative marketing, a number of measures need to be taken or strengthened, such as state participation in share capital, management subsidy, loans and subsidies for construction of godowns and finance for marketing at concessional rate of interest. Along with these measures, there should be some consolidation of the societies to ensure that they work at a profit.

The Central Bank should play an active role in the development of co-operative credit by endeavouring to attain targets relating to increase in membership affiliating of credit societies with marketing societies, pledge loans etc. The bank recommended the adoption of policies, programmes and institutions to exploit this new technology which became known as the Green Revolution. Several years later, questions were raised about the pros
and cons of the Green Revolution, but at the time, most Indians praised both the increase in agricultural output and the collaboration with the Bank forced the Green Revolution on a power less and reluctant India, but that is not true. After a decade of growth in the 1970s, the Bank’s capital, ideas, and institutions set root and flowered in many different forms around the world: national development banks, national development institutes, national centers for agricultural or Green Revolution research, large dams, highways, power plants, mines and national forestry projects.  

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