Agriculture has always been the backbone of any economy. Even though the percentage share of agriculture in the developed and the developing economies has been decreasing, the basic needs of humanity—hunger has to be met through the agriculture sector. The present study analyses the role of the World Bank in agriculture development of Jordan since the 1970’s. The World Bank has been helping the Jordanian economy in developing the agriculture sector in terms of financial aid and technical inputs, the impart of these factors through directly on the agriculture output of vegetables, field crops and fruits and through policy changes is an important area of research. The aim of the present study is primarily to collect and tabulate data pertaining to the role of the World Bank in the agriculture development of Jordan, analyses the data collected and add new perception and knowledge toward this particular area of research.

The present study concentrates on Jordan, its agriculture and the role of the World Bank. The land area of Jordan is 89,342 sq.km. According to the World Bank study, 1998 World Development Index, the population of Jordan is 4.4 million. The total G.N.P of the country was $6.8 billion with per capita G.N.P at US$ 1520 in 1998\(^1\). Total imports was US $ 4101.9 million and total exports was US $ 1.833.3 million, government expenditures as a percentage of GDP throughout
1990-97 has fluctuated between 37-35.7%. Gross investment, as a percentage of GDP throughout 1990-97 has ranged from 37.4% in 1993 to 28.4% in 1997. Foreign aids in terms of loans and grants to Jordan in 1996 have been US $363 million from bilateral sources and US $458 from international sources.

THE STRUCTURE OF JORDANIAN ECONOMY

The structure of the Jordanian economy in 1970 was such that among the three, agriculture, manufacturing and mining and services, the services sector dominated in the GNP\(^2\). According to the central Bank of Jordan, yearly statistical services, 1996, of the JD 235.1 million GNP at current prices agriculture provided only JD 24.6 million, manufacturing JD 23.9 million and mining and quarrying JD 3.8 million. The rest of the GNP was spread out over trade, finance, transport, communication, construction and electricity as well as government services. Subsequently in 1980 when the GNP at current prices was JD 1213.7 million agriculture provided only JD 83.0 million, whereas manufacturing, mining and quarrying provided JD 173.5 million. In 1990 with the GNP at JD 2428.8 million, agriculture provided 50187.8 million to the GNP with manufacturing provided JD 345.3 million and mining and quarrying having JD 148.8 million of the GNP, the rest coming from services. In the between 1992 and 1997, the percentage of agriculture has shipped from 11.0% in 1992 to 5.2% in 1997, as percentage of GDP at 1985 prices. The percentage of manufacturing in the GDP has stagnated around 14% during the
period 1992 to 1997. The largest contributions to the GDP come from transport and communication at around 15%, finance and insurance etc, at around 21% all during the period 1992 to 1997.

Jordan enjoyed an unprecedented growth during 1973-1984, boosted by foreign assistance and loans, workers remittances and export to regional markets. This ended in the mid-eighties as a result of the rapid decline in the price of oil and the subsequent slow down in regional economies. By 1991, real per capita income had declined, unemployment and poverty was increasing and the income of the people was slowly coming down. The government has responded by undertaking policy adjustments to stabilize the economy and to restore growth. The stabilization policies, notwithstanding the disruptions caused by the Gulf crisis in 1991, have been successful. Inflation has been checked, and now prices, interest rates and exchange rates are largely market-based.

Jordan’s close tie and to some extent too much dependence with the Gulf region as a source of official grant and remittance income constitutes a powerful spur to economic growth. However, it has left deep structural problems for the Jordanian economy in terms of 1. Reliance on foreign savings to finance domestic expenditures and in vulnerability to external shocks.

2. Reliance on uncertain demand from the Gulf region for income and employment opportunities.
The loss of foreign exchange earnings and transfers since the mid-eighties has left domestic wages above their market clearing levels with a small internal market and a strong human resource base.

Growth oriented strategy aiming at greater integration with the world economy has been followed for the last few years with some initial success. The government envisages a growth target of 6% per annum in its draft five-year plan for the year 1993-1997, a gradual decline in unemployment from about 15% in 1992 to 9.6% in 1997 and a decline in current account deficit from 23% in 1992 to 3.1% in 1997. The achievements of the growth and current account objectives as put down in the five year plan of 1993-1997 require that far reaching structural reforms be implemented to grow and develop the domestic economy and improve the efficiency of existing resources.

For a small economy such as Jordan, with a well-educated labor force, located in the passageway among three major continents in the world, size does not matter so long as the economy is integrated with the world market. Such integration would offer Jordan the best prospect for long-term prosperity and could enable her to overcome the limited domestic market scale, and to increase productivity through specialization.

Jordan's economy has continued to grow in real terms in mid 1990's, the growth rate of the economy, exceeded that of the population, thereby causing the Per Capita Gross Domestic Product (GDP) to rise. Moreover, inflationary pressures were contained, particularly those arising from the aggregate demand side.
Additionally, the labour market witnessed some improvement as unemployment dropped from its level in the preceding year.

The economic stabilization and structural adjustment of the economy that has taken place through the several measures that were initiated at liberalizing prices, removing market distortions, and providing greater incentives to the private sector for broader participation in the economy. Further, monetary policy continued to reinforce the country's balanced economic growth objective, despite negative external influences to which the economy was subjected during the year, through the advocacy and upholding of monetary stability, and maintenance of exchange reserves.

The Jordanian economy is expected to achieve further improvement in accomplishing the goals set forth in the economic adjustment program in the coming years. This expectation is based on the continued success of structural reform efforts, the progressive support of entrepreneurship, the opening of new markets to Jordanian exports.

Jordan's Economy

For balanced development and to raise the levels of living for the average rural dweller, agricultural production and the productivity of both labour and land must be rapidly increased throughout Jordan. Like any other country Jordan needs to become self-sufficient in their food production.
Jordan's dominated resources are phosphate and potash deposits. Unlike in most Arab countries, oil and gas are found in very small quantity in Jordan. The country suffers from water shortage, significant unemployment and foreign debt. The UN sanctions at the port of Aqaba following the Gulf crisis had caused economic damage.

The Jordanian government has been aware of the importance of economic development and growth. It has exerted increasing efforts to improve the economy through implementing several economic and social plans and through improving the overall climate of the economy especially the investment climate. By doing so, the Jordanian government has been able to overcome many of its economic difficulties and has to a great extend attracted the attention of various foreign and Arab countries. In October 1994 it signed an agreement with Israel ending the state of war between the two countries.

**Agriculture and Water**

The agriculture sector is restrained by severe water shortages but several projects regarding water facilities are currently carried out. Agriculture is mostly in the Jordan valley. The country has a relatively limited cultivable land, about 40,000 hectares, and over 80% of the country are classified as desert. The Jordan valley depends almost entirely on irrigation. Because of severe shortage of water, saving
water is an urgent necessity. Some three-quarters of water consumption are for irrigation. Not only are the country's water resources extremely limited, but also 60% of current water supply comes from ground water reserves, which are predominantly in the east, while the population is largely concentrated in the west. Jordan has traditionally drawn water from the Jordan river, but Israel is now pumping out of the Jordan river into lake Tiberias (the sea of Galilee), from which it draws its own water supply. Following the peace treaty with Israel however, a 5$ million pipeline was constructed in June 1995 to carry water from lake Tiberias to Jordan's king Abdullah canal at 30-50 million cubic meters. Clearly, the water sector has received the largest allocation of money by Jordan and Israel. Projects include, a water conveyance system from Turkey to Jordan and Israel, the expansion and upgrading of wastewater treatment plants in Jordan, Israel and Gaza strip, desalination plants in Jordan, Israel and the Gaza strip and water management of the lower Jordan river.

Other projects aimed at ameliorating the agriculture sector have been carried out. Including the construction of several irrigation works, the introduction of greenhouses, plastic tunnels, construction of an additional capacity on the Karameh dam, etc.

In terms of output, principle crops in Jordan are Citrus Fruits, Melons, Grapes, Bananas, and Vegetables like Tomatoes, Cucumbers, Eggplants, Cauliflower, Cabbages, and Field Crops like Wheat, Barley and Olives.
A review of preliminary indicators related to the developments that occurred in 1996 in the agricultural sector shows a decline in the growth of the sector compared to the previous year. This slowdown was due principally to the decrease in rainfall in the 1996 agricultural season in comparison with the agricultural season of the previous year. The decrease in rainfall had negative impact on rain-dependent agriculture, particularly on field crops, and livestock production because of the resulting lack of natural grazing fields. On the other hand, most irrigated agricultural crops (vegetables and fruit trees) registered positive growth at various rates. In spite of the moderate growth in the sector, domestic agricultural products earmarked for export showed a noticeable rise, whether measured by the quantity index of agricultural exports, or by the data prepared by the agricultural marketing organization on exported quantities of vegetables and fruits, which grew by 12.3% in 1996 to 1997.

REVIEW OF LITERATURE

Importance of Agriculture

Ever since time immemorial it been has emphasized that agricultural progress contributes to the support of greater productivity throughout the economy. The limitation on the growth of agricultural output set the upper limit to the growth of the nonagricultural sector and to capital formation for economic expansion and the issue of the diminishing return in agriculture become very important.
It is now customary to summarize in four ways how greater agricultural productivity and output contribute to an economy's development. They are

1. By supplying foodstuffs and raw materials to other expanding sectors in the economy.

2. Providing an "investible surplus" of savings and taxes to support investment in another expanding sector.

3. Selling for cash "a marketable surplus" that will raise the demand of the rural population for products of other expanding sectors, and

4. Relaxing the foreign exchange through import substitution.

Simon Kuznets (1965) summarizes these contributions as the "market contribution". A given sector makes a contribution to an economy when it provides opportunities for other sectors to emerge, or for economy as a whole to participate in international trade and other international economic flows. These contributions and mentioned the market type because the given sector in this case agriculture provides such opportunities by offering part of its product on domestic or foreign markets in exchange for goods produced by the other sectors, at home or abroad.

Therefore, agriculture makes a market contribution to economic growth through:

1. Purchasing some production items from other sectors at home or abroad.
2. Selling some of its product to not only pay for the purchase listed above but also to purchase consumer goods from other sectors or from abroad, or to dispose of the product in any way other than consumption within the sector.

In all these ways, agriculture makes it feasible for other sectors to emerge and grow and for international flows to develop; just as these other sectors and the international flows make it feasible for the agriculture sector to operate more efficiently as a producing unit and use its product more effectively as consuming unit. 8

The "factor contribution occurs" when there is a transfer or loan of resources from the given sector to others. Thus if agriculture itself grows, it makes a product contribution. If it trades with others, it renders a market contribution; if it transfers resources to other sectors, these resources being productive factors, it makes a factor contribution. 9

The development process is viewed as one of structural transformation, from an economy in which agricultural employment and output is dominant to a slow decline in the percentage share of agriculture in GDP. But this structure transformation is itself dependent on agricultural progress. Industrial development will be cut short by lack of agricultural progress unless the economy is in the exceptional situation of being able to export manufactures for import of raw materials and raw materials.

A "marketable surplus" from agricultural is needed not only to fuel the wage good to industry, but also to widen the home market
for the industrial products. The demand for industrial products depends on growth of farm cash income, unless the country can export its growing industrial output. Barring unlimited export possibilities, and with 70 % to 90 % of the home market in the rural sector, the nature of the rural demand will affect the growth of non-farm employment and output. Increased agricultural productivity, a growing marketable surplus, and rising real income are necessary to raise the rural sector's demand for industrial output.

Finally, agriculture can be a major source of foreign exchange, and agricultural exports dominate in a country's early phase of development. But also important in relaxing the foreign exchange constraint is the possibility in several developing countries to save foreign exchange by replacing imports of foodstuffs with home production. Export promotion and import substitutions are activities not only for the industrial sector but also for agriculture.

Agriculture Development and Employment:

Considering these various contributions of agriculture, that if there is to be in the longer run a structural transformation in output and labor force, there must first be in the short run successful policies of agricultural development with the emphasis on absolute poverty removal and the employment problem, it is necessary to concentrate on agricultural development for the sake of employment and a diminution in inequality. Even though the longer term objective is structural transformation- the absorption of a larger fraction of the rural
population in new income earning opportunities - there remains the complex problem of the timing of this transformation and the intertemporal sequence of policies to accomplish it. According to Edgar Edwards" the lessons of recent history have shown that an "urban bias" can discriminate against agriculture, the net outflow of resources from agriculture may be excessive. Not only may there be an inefficient use of the resources transferred to the non agricultural sectors, but the transfer may itself be at expense of more employment and higher income in the agricultural sector. Should not the "growth-promoting interactions between agricultural and industrial development" mean more than that agricultural development should have simply instrumental value for industrial development?

The emphasis on agricultural development now is not only for its instrumental value in sustaining expansion elsewhere in the non-agricultural sector, but for its own absorption of labour and its own increase of real income among the rural poverty target groups of the small farmers and the landless laborers. The root of the employment problems lies in the fact that modern economic activity is not being diffused to the economy side. An agricultural strategy that would improve the rural-urban balance now requires the extension of planning, infrastructure, appropriate technology, and complementary resources to the rural sector (Mellor, 1986). If in earlier decades of development, agricultural development had instrumental value, in future decades it must have an intrinsic value of its own.
An agricultural and employment based strategy of economic development requires at a minimum three basic complementary elements.  

1. **Accelerated output growth** through technological, institutional and price incentive charges designed to raise the productivity of small farmers;  

2. **Rising domestic demand** for agricultural output derived from an employment oriented urban development strategy; and  

3. **Diversified non-agricultural labour-intensive rural development activities** that directly and indirectly support and are supported by the farming community.  

To a large extent, the 1960's, and 1970's witnessed a remarkable transition in development thinking—one in which agriculture and rural development came to be seen by many as very necessary and basic to national development. Without such agricultural rural development, industrial growth either would or, if it succeeded would create such severe internal imbalances in the economy, that the problems of widespread poverty, inequality, and unemployment would become even more pronounced.  

A major reason for the relatively poor performance of third world agriculture has been the neglect of this sector in the development priorities of the governments. This neglect of agriculture and the accompanying bias toward investment in the urban industrial economy in turn can be traced largely to the misplaced emphasis on rapid industrialisation via import substitution and exchange rare
Overvaluation that permeated development, thinking and strategy during 1950's and throughout most of the 1960's. According to Scapanki\textsuperscript{12} The share of total national investment allocated toward the agricultural sector as a sample of 18 less developed countries was approximately 12%, even though agriculture in these countries accounted for almost 30% of GDP and more than 60% of the total employment. One significant manifestation of this rural neglect and the corresponding emphasis on urban growth has been the massive migration of rural peasants into the teeming cities of third world nations.

The agricultural openness of these countries vis-à-vis the rest of the world almost inevitable raises questions as to what the continued role of agricultural trade should be as attempts are made to foster development. There appear to be three main questions:

1. Can a country attempt to grow further specialization in agriculture, or should growth efforts be concentrated in non-agricultural trade?

2. Even if it appears under present prices and trade arrangements that most rapid growth could be achieved by reliance on agriculture, are there long run uncertainties that militate against following this course?

3. Does short-run instability of prices of agricultural exports interfere with development efforts?

As a result of this disappointing experience and realization that the future of most underdeveloped countries will depend to a large extent on what happens to their agriculture, there has been a
marked shift in development thinking and policy making. This shift, which began in the late 1990's and continued through the 1990's has been a way from the almost exclusive emphasis on rapid industrialization and toward a more realistic appreciation of the overwhelming importance of agricultural and rural development for national development. A first step toward understanding what is needed for agricultural and rural development, however, must be a comprehension of the nature of agricultural systems in diverse third world region and, in particular, of the economic aspects of the transition from subsistence to commercial agriculture. This applies to the present study of agriculture in the Jordan's economy.

Agriculture Structure and Productivity

Low productivity in agriculture can limit economic growth. Industrialization and agricultural development are not valid alternatives. Effective development plans must embrace both goals. Raising agricultural productivity and including a marketed surplus of farm products must be a major concern, as must development of linkages the two sectors that will give effect to the interdependence required between them in a modern industrial economy.

According to Johnston and SouthWorth, number of broad interrelationships between agriculture and the nonagricultural economy in development are well recognized. As the largest sector of the economy, at least in the earliest stages of development, agriculture is the source of manpower for industrial expansion. It is source of
essential supplies for maintaining a growing industrial population and of export to be traded for industrial goods, and it is the chief potential source of savings for nonagricultural investment. For these roles to be fulfilled, however, agricultural productivity must be increased. This requires a variety of off-farm inputs; providing them can be a stimulus to the industrial sector. It also requires incentives to farmers to invest in these inputs, in the form of attractive markets for their increased output; this also the growing non-form sector can provide. For incentive income to be meaningful to farmers there must be goods that they can buy with it; the development of this rural market can also provide stimulus to non-agricultural industries. Thus growth in the two sectors of agriculture and Industry interact each other supporting and stimulating both the sector and the overall economy.

In general, raising farm productivity as well as output depends mainly upon the use of increasing quantities of purchased input and for these farmers must depend upon nonagricultural sources. Their ability to purchase input from outside of agriculture depends upon their receipts from sales of farm products. But in a predominantly agricultural economy, the market demand for agricultural output (except for the possibility of exports) is severely limited because of the relatively small population dependent upon purchased food. As a result, most farm household is of necessity mainly engaged in producing food to meet their own subsistence requirement.

Thus the scope for raising output per worker in agriculture (again apart from the possibility of export production) is dependent upon the growth of domestic demand for agricultural products; relative
to the size of the farm population. Here, again, the population problem complicates the picture, because in most developing countries population is concentrate to increase rather than to decrease. In concert terms, overcrowding on the land is aggravated, or where it is not yet a problem is certain to become one, unless non-farm employment opportunities are growing more rapidly than the population of the working age.

Given the availability of inputs needed to improve technology and a sufficient final demand for increased output, how rapidly farmers will adopt the improved technology depends upon additional factors. Efficient sources of credit may be important in enabling more rapid adoption by farmers of new technology that requires use of purchased inputs. Equally important is an organization of production that both permits and gives incentive to producers to increase their output.

In agriculture, the biological production process depends upon solar energy, rainfall, and, must be adapted to the peculiar conditions of individual locations. Production is seasonal, and each worker must be skilled in a variety of seasonal tasks. The production process is only partly subject to human control, and the management requires the ability to cope with randomly variable exigencies of local weather and other growing conditions. Production is normally carried on by a large number of individual farm operators for whom it is not only a livelihood but also the source of their families' sustenance. Errors are costly, and individual farm operators are understandably hesitant to assume the risk of innovations whose advantages over traditional methods are uncertain.
Agriculture Production and Development

In early stages of economic development, agriculture is the dominant sector in employment of resources and in generation of income. The consequent interdependence of agriculture and the nonagricultural sector limits the usefulness of considering the development of either in isolation from the other. Because agriculture is an industry of major proportion at the start of economic development, its development is a process of modernization rather than the creation of a new industry. The nature of the existing agricultural base strongly conditions the development process for agriculture. Thus a theory of agricultural development must rise from a theory of the operation of a traditional agriculture. The distinct character of agriculture and of its development, as well as its importance, argues for treating agriculture as a separately delineable sector in theories of economic development.\textsuperscript{14}

The great variability in the conditions of agricultural production makes it difficult to drive a conceptually simple and yet operationally useful concept of agricultural development, this variability traces from three principal sources as stated below:

1. The physical conditions of agricultural production vary considerably from place to place. The types of agricultural product commodities that can be produced, the kinds of resources used in production, and the transformation rates of input into output vary correspondingly, because of differences in their products and
production conditions. Agriculture in different regions face different price and income elasticity for their output; they require different resources with different opportunity costs and supplies schedules; and they yield different returns, both net and gross, from the use of these resources. Put concretely, the means of modernizing agriculture and hence the role agriculture will play in development will differ significantly in the different regions of the world. A theory of agricultural development must be broad enough to encompass these widely divergent conditions. Practical programs of development must be detailed enough to deal successfully with widely divergent problems.

2. Agricultural production normally takes place on an enormous number of independently managed small units. The operators differ in natural capacity, training, and inclination for farming. Consequently there is substantial variability from farms in the results of particular agricultural development programs. Such interregional variability influences the strategy of agricultural development agriculture’s potential role. Differences in the human factor may also imply different regional patterns of development.

3. Present planned development is conditioned by the past. Previous development efforts, private and public, have modified economic, cultural, institutional, and physical environment of agriculture, thereby changing output possibilities, input requirements, and input returns. Today’s priorities arise in part from yesterday’s actions. Such differences also appear in other sectors of the economies but they are more sharply marked in agriculture. They create unusual
problems of generalization for a theory of agricultural development. Such a theory can point at best only to the nature of complex interrelationships and provide useful background for generating rules of the thumb and operating procedures.

The learning process, needed for modern industrialization is sometimes long; but it is fallacious for a nation, comprising above all a promising but overwhelmingly underdeveloped agriculture, to conclude that, in order to begin the process of learning, a general attack on numerous branches of industrial activity should be initiated. A far better way is to concentrate first upon high-yielding mass rural development, supported (partly for learning's sake) by such selective ancilable rapid industrialization on a broad front.

The first generation agricultural production problems and the second-generation marketing and demand difficulties created by the green revolution, were largely short-run issues. By contrast, the third-generation agricultural problems, having to do with equity, welfare, employment, and social institutions generally arise from four principle sources as below.\(^{15}\)

1. Population growth rates in excess of 2.5% annually in areas already extraordinary densely populated;

2. Very low average income levels, coupled simultaneously with great regional and personal disparities in income, wealth and political power,

3. Limited opportunities for non-farm employment, even if the manufacturing and service sectors grow very rabidly.
4. The possibility for technological leap forging with agricultural inputs and techniques, which are often of a labour-displacing nature.

The resulting dilemma can be stated as that the countries need agricultural growth if ever they are to break the chains of poverty; but they need equity as well, for obvious humanitarian reasons and in order not to find themselves in a continuous cycle of violence and repression. The challenge of these forces or to be faced is far greater in magnitude than the problems ever faced most of the developed nations. Moreover, the latter are not in a position to help. Although they are perhaps capable of exporting the growth technology, they have few institutional forms to export that can come to grips with the income distribution and employment questions that now agricultural problem in developing countries.

Perhaps even more important than the direct effects, and often-neglected in discussions on employment, are the side effects of increased food supplies and lower prices on public and private savings and investment generally. The food price constraint is an important one and has a pervasiveness that extends far beyond the agricultural sector. Here too, the green revolution helps, provided that its potential for increasing saving is realized and is transferred into real investment. Far more disturbing, however, are two other effects of the green revolution on employment, welfare, and stability. Both of these derive basically from the unequal regional growth that seems to be a concomitant of the new technology.
There are several recommendations and reconsideration suggested in the light of these third-generation questions. Some of them are identified as below.

1. As long as the new agriculture varieties remain limited to a few regions and as long as farm incomes are primarily dependent on acreage rather than people, it is naive to believe that the new technology for agriculture is likely to be a stabilizing influence. Growth generally is destabilizing, and this form of unequal agricultural development is particularly so. Even if the first borrowing of technology are neutral to scale (which in practice probably they are not), subsequent borrowings are likely to be labour-displacing unless strong policy measures are introduced. The magnitude of this phenomenon will vary by commodity and region, but the direction seems fairly clear.

2. Some way must be found to close the gap between social and private benefits from certain forms of agricultural technology. It is not sufficient to appeal and to urge labour-intensive techniques for agricultural and industry, or to proclaim the virtues of small-scale industry. Such pronouncements must be transformed into instruments of direction and control; high taxes on tractors; a possible lowering of wheat and rice prices as a stimulant to the rest of the economy; much higher interest rates on capital and higher de facto rates for foreign exchange, progressive land taxes; and perhaps even ceilings on farm size so as to make uneconomical, from a private point of view, certain forms of technology. And in any
Asian country, no one should discount the size and power of the forces that are likely to be against most of these policies.

3 Either no growth or equity problems can be solved by the green revolution or even by the agricultural sector alone. The employment problem in particular is total economy in character, whose solution requires increased saving, more foreign exchange, higher investment rates, altered factor-and product-pricing structures— in short, economic development. While agricultural policies should not aggravate the situation, meaningful answers to these issues must look to other sectors as well.

4 Given the tearing effect that unequal regional growth has on the national fabric, there is need to stress again the importance of developing new technology for the monsoon/dryland areas.

The thrust of the above argument is that it is possible and desirable to devise and implement agricultural strategies which are efficient in terms of number of objectives, including but not confined to the objective of achieving desired increase in farm output at low cost, the following objectives, seem to be especially relevant to the design of strategies for agriculture that are efficient in a broad sense.

The objective would be contributing to the overall rate of economic growth and the process of structural transformation and achieving a satisfactory rate of increase in farm output at minimum cost by encouraging sequences of innovations which exploit the possibilities for technical change most appropriate to a country's factor endowments. Further achieving a broadly based improvement in the
welfare of the rural population, and facilitating the process of social
modernization (including the lowering of birth rates, the extension and
improvement of rural education, and the strengthening of
entrepreneurial capacities) by encouraging wide spread attitudinal and
behavioral changes among farm households.

**Agricultural Pricing and Infrastructure**

The effects of government intervention in agricultural pricing
have become a major concern in economics. This concern is directed
to an analysis of the interrelationships among agricultural prices and
resource allocation, incentives, income distribution, and employment.

It has been argued strongly that the economic potential for
agricultural development has been largely unexploited because of
government intervention to suppress economic incentives by pricing
agricultural products below competitive market equilibrium relative to
inputs. These government interventions are based on:

1. Under valuation of agriculture's contribution to growth derived from
   the misunderstanding of agriculture as an inherently backward
   sector incapable of innovation.

2. The false assumption that the market mechanism is an instrument
   for middlemen to exploit small farmers and poor urban consumers.

3. The false assumption that there is a trade off between agricultural
   efficiency and equity in income distribution both within agriculture
   and between rural urban sectors.
Agricultural infrastructures may be divided into two major types: capital intensive infrastructures are those which heavily involve reproducible capital for the provision of the service, such as roads, bridges, warehouses, or dams. This category comes close to the usual notions of social overhead capital. Also included are the organizations and institutions, which maintain and operate the capital infrastructure facilities such as marketing firms to transport farm products or cooperatives to store and to process crops.

Capital extensive, or service, infrastructures are those in which the capital component is negligible, such as extension education, conservation schemes, agencies for plant and animal protection, disease and pest control organizations. In both types, one is eventually concerned with the flow or provision of a service, which affects agricultural production on an individual farm or production unit. The distinction between the two is arbitrary, in that the proportion of capital costs per unit of service varies throughout a wide spectrum. But at the capital-intensive end of this spectrum, is the heavy investment that turn upon the traditional economic criteria for investment in non-human, reproducible capital.

Agricultural Farm Size

In agriculture it may be possible to operate under a wide variety of farm size conditions it is particularly noticeable that the output per worker varies among countries with stages of economic development. Agricultural progress seems to be a related to a wide
complex of conditions rather than to the pattern of farm size. Many countries have dual size structures involving many small farms and a heavy concentration of land in large units the relatively rapid economic progress of agriculture in Mexico, consequently, may be ascribed to the complex of agricultural development policies, including agricultural prices and land tenure policies, rather than to the dual size structure in which 85% of the land still remains in holding of over 500 hectares. Similarly, the more rapid agricultural development in Japan than in India and other small farm size, countries must be primarily related to the complex of agricultural policies. In countries where extremely large farms predominate, however, do suggest that problems of scale exist in reaching intensive margins in agricultural production. 18

The conditions that give rise to questions about size of farms required for improving agricultural productivity in the less developed countries vary greatly, but three major situations can be identified as below.

1. In small farm countries where resources are distributed relatively evenly among farms, questions both of minimum size farms and economies of larger farms arise. Do the sizes of farms that prevail, in terms of land area and number of workers per farm, make efficient use of available resources? Or smaller units lead to increased efficiency?

2. In dual size structure countries where land resources are distributed unequally among farms, questions arise concerning the effects of increasing sizes of small farms by reducing sizes of large
farms. Is land on large farms used more extensively? Are factor costs different on large and small farms? Would a more equal distribution of land resources among farms lead to increasing in resources used?

In countries where extremely large farms predominate, questions arise concerning the effects of size on problems of coordination and incentives. Are these factors important to the economics of farm size in the less developed countries? What alternative to large-scale organization of agriculture should be considered?

Farm size questions arise in developing plans for land settlement projects. Frequently, the land area available for settlement is limited, and the number of potential settlers exceeds the number that can be settled on farm. In these instances, it is necessary to decide what is the maximum adequate income. In instances where land is not a limiting factor, questions arise concerning what farm size will be most economic, taking into account available capital and technology should family-size or large units are established?

Farm size problems, of course, cannot be separated from those of type of farm, including different kinds of crops and livestock to be produced, and forms of land tenure. Similarly, farm size problems are closely related to those of developing supporting services for marketing farm products, supplying capital inputs, and providing credit, extension and other services.
Agriculture Programming

At the general and historical level much has been written on the place of agriculture in the process of economic growth. Particular elements of agriculture policy, such as price stabilization, trade taxation, agricultural credit, agrarian reforms, and improvement of marketing, research, and extension. However, the actual process of building up a national development program for agriculture as a whole, and the principle for arriving at an optimum pattern of public expenditure in this field have not yet been greatly shown in research work.

It is now agreed that if steady and lasting progress is to be made, agricultural programming must be conducted as an integral part of a comprehensive, multi-sector approach to the planning of overall economic development. Developments in agriculture and in other sectors are interdependent and should be mutually supporting. In development planning it is important to exploit as far as possible the positive linkages between the sectors and keep some kind of balance in overall growth. This is possible only if the economy is considered as a whole.

The nature of the agricultural programming therefore partakes, to a large extent of the nature of general economic programming, although there are some important differences in method and approach.

The key item in agricultural programming is the rate of the growth of the economy as a whole which is to be aimed at, usually
expressed as an annual percentage increase in the national income. From this is derived some times by use of an estimated capital-output ratio, an assessment of the overall capital requirements for the economy over the period of the plan, which is usually 5 years. In the light of production of domestic savings, projection and investment, public aggregates are made—total private consumption and investment, public expenditure, total exports and imports and balance of payments and likely need for foreign aid. More detailed programming goes on to fill in this framework with the totals for major industries or sectors of the economy, for major development projects and perhaps for specific regions of the economy. In order to assure consistency and to avoid large-scale waste and disorganization, care is to be taken that the component parts of the programme form a coherent and coordinated whole.

The end product of agricultural programming in the ideal case is a recommended pattern of development and of public expenditure over a definite period of years providing for the implementation of an integrated set of policies, measures, and projects geared to the attainment of goals and targets for food and agriculture consistent with the objectives of the national economic development plan. More specifically, the main elements of a comprehensive agricultural development programme may be taken to include as follow:

1. A statement of the agricultural development objectives and strategy within the framework of the overall development objectives of the country.
2. Targets, actual or indicative, for all-important branches of agriculture over the plan period.

3. A detailed statement of the policies and measures to be adopted to enable the targets to be reached.

4. A list of any special projects of public investment required, with detailed justification.

5. A statement of the long-range needs of agriculture for which some provision should be made in the current plan period.

6. Any organizational change needed to promote for facilitate the implementation of the plan, and to check on the progress required for implementation of the program.

The World Bank

The World Bank, consisting of the International Bank for Reconstruction and Development (IBRD), and the International Development Association (IDA), has one overreaching goal; helping its borrowers reduce poverty. It is a partner in strengthening economies and expanding markets to improve the quality of life for people everywhere, especially the poorest.20

The IBRD and IDA make loans for projects and programmes that promote economic and social progress by helping raise productivity so that people may live better lives. Along with these loans, the World Bank provides advice and technical assistance. The International Finance Corporation (IFC) - which works closely with
private investors and invests in commercial enterprises in developing countries- and the Multilateral Investment Guarantee Agency (MIGA) which encourage direct foreign investment by offering insurance against non-commercial risk-all share the same overall goals. The International Center for Settlement of Investment Disputes (ICSID) share the World Bank's objective of promoting increased flows of international investment by providing facilities for settling disputes between foreign investors and their host countries. Collectively, these five institutions are known as the World Bank group.

The World Bank presently 178 member countries are each represented by one governor who is usually the finance minister of the country. The share of the World Bank that each country owns is determined largely by the size of its economy. The share of capital determines a country's voting share in the bank. The board of governors delegates its authority to a small group of representatives, the Board of executive directors who are responsible for decisions on policies affecting the Bank's operations and for the approval of all loans. The World Bank president is the chairman of the board of Executive Directors. The Board, which is in permanent residence, meets several times a week to approve loans and World Bank policies. Finally, the World Bank's staff members from over 100 countries carry out the management and day-to-day operations.

The IBRD raises most of its money from bonds and other debt securities issued in world financial markets, based on the guarantee of share capital subscriptions from its members. Other sources of World Bank funds are shareholders' capital and retained
IBRD loans are given for a period of 15 to 20 years, and generally have five-year grace period. The interest rate on these loans is adjusted every six months according to changes in the cost of funds to the Bank.

The executive directors consider and decide on the IBRD loan and IDA credit proposal made by the president, and they decide policy issues that guide the general operations of the bank. They are also responsible for policies made by the president, and they decide policy issues that guide the general operations of the Bank. They are also responsible for presenting the board of governors at the annual meetings an audit of accounts, an administrative budget, and an annual report on the operations and policies of the bank, as well as any other matters that in their judgement require submission, to the board of governors.

In addition work groups of executive directors and alternate executive directors at times make special trips to borrowing counties to observe bank-supported operations and the bank’s assistance strategy first hand. They meet a wide range of people including staff of the bank’s resident missions or field offices, government officials, project managers non-governmental organizations (NGO’s), project beneficiaries, and the business community. In fiscal 1998, groups of executive directors visited the Middle East and North Africa (Jordan, Tunisia, West Bank and Gaza, and Yemen) and eastern and southern Africa (Eritrea, Lesotho, and South Africa).
Under its renewal programme the World Bank established business practices to link staff who work across the World Bank through four thematic networks:

1. Human development (HD),
2. Environmentally and socially sustainable development (ESSD).
3. Finance, private sector, and infrastructure (FPSI), and
4. Poverty reduction and economic management (PREM).

The HD network, for example, automatically includes all staff working on education, health, nutrition, and population, and social protection. These communities of professional working in the same field help staff work together across organization boundaries, and equally important, with partners outside the Bank. The networks help draw lessons across countries and regions and bring global best practices to bear in meeting country specific needs in four ways:

1. Applying the "knowledge management", the process of systematically collecting knowledge on development issues from inside and outside the bank and disseminating it- both inside and outside of the bank.
2. Setting common strategies for regional and central units;
3. Ensuring that skills are deployed effectively by putting together strong task teams to deliver higher-quality products to clients, and
4. Helping enhance staff skills.
Components of World Bank

The IBRD was established in 1945, and Governments of 181 countries now own the IBRD. To join the IBRD, countries must first be members of the International Monetary Fund (IMF). Upon joining the IBRD, members subscribe to its capital stock. The amount of share each is allocated reflects its quota in the IMF, which in turn reflects the country's relative economic strength in the world economy. Members pay in a small portion of the value of their shares; the remainder is "callable capital" and would only be paid when the IBRD is unable to meet its obligations, a situation that has never arisen.21

The IBRD lends only to worthy borrowers and only for projects that promise high real rates of economic return to the country. As a matter of policy, the IBRD does not re-schedule payments, and it has suffered no losses on the loans it has made. While it does not aim to maximize profits, but rather to intermediate development funds at the lowest cost, the IBRD has earned a net income every year since 1943.

The IBRD borrows most of the money it lends through medium and long-term borrowings in capital markets across the globe. It also borrows funds at market-based rates from central banks and other government institutions conservative lending policies. Strong financial backing from members and prudent financial management give the IBRD strong standing in the markets. As well as borrowings, the IBRD is funded by the capital its members have paid in, its retained earnings and repayments on its loans.
IDA was established in 1960 to provide assistance to poorer developing countries that cannot meet the IBRD's near-commercial terms. IDA provides credits to the poorest countries—mainly those with an annual per capita gross national product in 1997 of $925 or less. By this criterion, about seventy countries are eligible.

All members of the IBRD are eligible to join IDA, and 160 have done so. Unlike the IBRD, its richer members contribute most of IDA's funds, although some developing countries contributed to IDA as well. In addition, IDA receives transfers from the net earnings of the IBRD and repayments on its credits.

IDA credits are made only to governments. The repayment period is thirty-five to forty years. Credits carry no interest, but there is a small service charge, currently 0.75%. There is also a commitment charge, which is set annually, within a range of 0-0.5% of the undisbursed balance; the commitment charge is currently set at zero%. Although IDA is largely and financially distinct from the IBRD, it shares the same staff, and the projects it supports must meet criteria as do projects supported by the IBRD.

Under its articles of agreement the World Bank cannot allow itself to be influenced by the political character of member countries; only economic considerations are relevant. To ensure that its borrowers get the best value for the money they borrow, bank assistance is united and may be used to purchase goods and services from any member.
The IFC, established in 1959, helps promote private sector growth in developing countries and helps mobilize domestic and foreign capital for this purpose. It has 174 members. Legally and financially the IFC and the World Bank are separate entities and the IFC has its own operating and legal staff. It draws upon the World Bank for administrative and other services, however, the IFC provides loans and makes equity investments in support of projects. Unlike most multilateral institutions, the IFC does not accept government guarantees for its financing. Like a private financial institution, IFC seeks profitable returns and prices its finance and services to the extent possible, in line with the market while taking into account the cost of its funds. The IFC shares full project risks with its private sector partners. The IFC issues its own annual report.

Strategy of World Bank Loan

In making or guaranteeing a loan the World Bank is obliged under its articles of agreement to pay “due regard to the prospects that the borrower, and, if the borrower is not a member, that the guarantor, will be in a position to meet its obligations under the loan”; the articles further enjoin the World Bank to act ‘prudently’ in the interests both of the borrowing country and of the members as a whole. Even apart from this provision of the charter, it would be implicit in the concept of the World Bank as a continuing institution, designed to operate on a sound business basis and with funds borrowed in the private market,
that it should make loans only where there are reasonable prospects of repayment.

This does not mean, of course, that the World Bank adopts the standards of the market place in determining how much it can lend in individual countries. On the contrary, one of the principal reasons for creating the World Bank was to have an agency, which accept the special risks inherent in international investment in cases where, by reason of those risks, private investors were unwilling or unable to act unaided. For example, the World Bank must accept the risk of another world war if it is to achieve the purposes envisaged in its articles of agreement. Similarly, the World Bank has to accept the risk of a recurrence of a worldwide depression of the type experienced in the 1993’s. In fact, for the long term the World Bank adopts for operational purposes the assumption that production, income and trade in the world as a whole will continue to expand.

Underlying many of the Bank’s lending policies is the provision of the articles of agreement requiring that “loans made or guaranteed by the World Bank shall, accept in special circumstances, be for the purpose of specific projects of reconstruction or development”.

The objective of this provision is simply to be assured that bank loans will be used for the most productive purposes. In effect, the only requirement which it imposes is that, before a loan is granted, there shall be a clear agreement both on how the proceeds of the loans are to be expended and what the loan is expected to achieve.
Otherwise it would be impossible for the World Bank to judge whether or to extend a loan is likely to be effective in raising the level of production.

In the early days of the operations, there was considerable criticism of the specific project approach, but the criticism was almost always based on the assumption that the World Bank examines the merits of particular projects in isolation, without reference to their relation to the over-all development needs of the borrowing country. In fact, the World Bank does precisely the opposite. The World Bank seeks in the case of each borrowing country to determine what are the appropriate investment priorities and then to adapt its financial assistance to meet the priority needs. Consistently with this approach the World Bank has encouraged its members to formulate long-term development programs and has provided them with substantial technical assistance for this purpose. The existence of such a programme, particularly in countries whose investment requirements are large in relation to their available financial resources, greatly facilitates the task of determining which projects are of the highest priority in the light of their prospective contribution to the program.

Once a determination has been made of the most urgent needs of any member country, the only safeguard by which the World Bank can assure that its resources are in fact used to meet those needs is to require, before granting a loan, that an agreement be reached with the borrower on the precise purpose of the loan, whether it be for a single project or for a programme of related projects. If the World Bank were to make loans for unlisted purposes or for vague
development programs which had not been worked out in terms of the specific projects by which the objectives of the program are to be achieved, there would be danger that the bank's resources would be used either for projects which were economically or technically unsound or had low priority.

Where the project under consideration is revenue-producing such as a power system, railroad or manufacturing plant, which is intended to pay its way, the World Bank wishes of course to satisfy to achieve that objective. But the relative profitability of different projects is frequently not a sufficient test of their relative contribution to a country's development. In many cases, certain basic investments in public utilities, transportation and ports, flood control, reclamation, irrigation and similar projects are required before other investments in more immediately profitable activities can be undertaken. The indirect benefits properly attributable to these basic investments may be very great even though the direct earnings of the activities, at least in the short run, are not high or may even be nonexistent. But it may foster all kinds of industrial and agricultural activity. Similarly, flood control, irrigation or land reclamation projects may often be among the most useful and most urgent investments to be undertaken, even though, if their cost is paid out of general tax revenues rather than from water charges or other direct assessments.

As a matter of general policy, derived implicitly from the article of agreement the World Bank concentrates its lending on projects designed to contribute to productive capacity and normally does not finance community projects of a primarily social character.
such as street-paving, water supplies, sewage housing, hospitals and schools. Although projects of this latter type are plainly basic to the development of any country, the World Bank loan of the total investment expenditures of the borrowing country can most effectively be applied in the more directly productive sectors of the economy.

Determination of the priority of the project is, of course, only a first step. The World Bank also needs to assure itself that the technical, financial and administrative plans for the project are satisfactory. Determination of these points often involves investigation, study and negotiations over a broad field, for example, the World Bank wishes to be satisfied that the engineering plans have been competently drawn, that the project is suitably designed, and that construction will be entrusted to competent hands and will be properly supervised. And the cost estimates are as complete and accurate as possible and that the financial structure of the enterprise is appropriate for the type of venture involved. The arrangements for obtaining the remainder of the capital not supplied by the World Bank are also carefully scrutinized to determine their adequacy to assure prompt completion of the project. If the planning or proposed arrangements appear unsatisfactory in any of these respects, the World Bank seeks to help the borrower to work out suitable modifications.

Goals and Activities of World Bank

Recent United Nations conferences have adopted several goals for the twenty-first century. The World Bank is helping to
achieve the goals and will monitor them in the countries it assists. The goals are to:

1. Reduce by half proportion of people living in extreme poverty by 2015.
2. Achieve universal primary education in all countries by 2015.
4. Reduce infant and child mortality by two thirds and maternal deaths by three-quarters by 2015.
5. Provide universal access to reproductive health services by 2015 and.
6. Reverse current global and national loss of environmental resources by 2015.

The broad-based economic recovery of recent years has yet to resolve major challenges facing the Middle East and North Africa (MENA) region, including high unemployment against a background of rapid force growth and important disparities in socioeconomic welfare and opportunities. In fiscal 1998 the World Bank work with regional partners to promote the policy reforms and private sector development needed for productive job creation, to support equitable growth based on human development and poverty reduction, notably through targeted efforts to help the region's poorest and most vulnerable people, and to protect the region's natural resources and unique cultural heritage.
Several operations approved by the executive director in fiscal 1998 targeted specific impediments to private sector-led growth. Jordan has received funds from the World Bank on different aspects of agriculture under the Jordan Agriculture sector adjustment loan, Jordan Economic reform and Development, Jordan Amman Water and Sanitation and second and third Economic Reform and Development loan in the West Bank and Gaza, where the growth of employment and incomes has been largely hostage to the pace of the peace process, the bank and the IFC along with the Palestinian authority, bilateral donors, and private investors supported an innovative public-private partnership for the creation of the Gaza industrial estate, which will create up to 50,000 jobs for Palestinians. Opportunities for competitive participation in today's increasingly skills-intensive global markets can be restricted by shortages of appropriately qualified manpower, to address such shortages, bank loans to Lebanon and Tunisia are supporting vocational and technical training and market-oriented reform of the higher education sector, respectively.

Well-functioning physical infrastructure plays a key role in domestic and overseas businesses investment decisions and hence in promoting dynamic private sector employment creation and growth. And the desirability of private participation in infrastructure development is becoming increasingly recognized, notably because it both relieves government budgets of some of the very large costs involved and typically enhances services quality and cost effectiveness. During fiscal 1998 the bank continued to support
The World Bank and the MENA Countries

The World Bank's Middle East and North Africa (MENA) region extended from Morocco in the west and Iran in the east. The region is economically very diverse, including both the oil-rich economies of the Gulf and countries that are resources-scarce in relation to population. Per capita incomes in the countries in which the World Bank is active vary widely—from less than $300 a year to an estimated $2,700 a year.

Despite the difficulties of recent years, the countries of the region have the opportunity to enter the 21st century with real prospects for substantial increases in national prosperity and individual well-being for their citizens. World economic growth prospects, driven by the dynamic forces of trade liberalization and globalization of production and service provision, are bright and provide unprecedented opportunities for developing countries that make determined efforts to seize them. Within the region, "early reformers such as Jordan, Morocco and Tunisia, and more recent reformers such as Algeria, Egypt, and Yemen, have undertaken or are embarking on determined programmes of macroeconomic stabilization and economic restructuring. In several cases, these programmes are beginning to pay off in terms of more rapid growth.
in incomes, exports, and jobs. Meanwhile, the middle east peace process, if successful, efforts middle east countries of the region the chance to focus their priorities away from political and military confrontations and towards economic development an could help restore urgently needed private investment flows as perceptions of political risk gradually recede.

The World Bank has a long history of creative and productive bilateral partnership with individual MENA countries. The cumulative total of financing provided to 11 borrowers in the region including one, and one recent addition, the West Bank and Gaza has reached nearly $29 billion. More than half of this total has been provided over the last 10 years. And the decade has seen changes in lending priorities designed to match countries changing needs. Only about half of the decade's lending has seen in the bank's traditional areas of concentration.

New or expanded areas of emphasis have included support for public sector management and policy reform (multi sector lending) for financial sector development essential for private-sector-led growth, for the environment, and for human resources development (education, health and social welfare), which serves both equity and efficiency goals-bringing opportunity to those not previously empowered by it, and providing the skills base for a labour force able to match international competition while also protecting the disadvantaged.

Meanwhile, the World Bank has expanded its product mix
of services beyond direct lending in two important areas. It is supporting inflows of private investment into the region by the active use of guarantees that simultaneously reduce investors’ perceptions of risk and recipient countries borrowing costs. The guarantee function is of special importance for promoting essential new private financing flows for infrastructure development.

The World Bank has broadened the scope of its analytical work and policy advice in support of MENA borrower country development strategies. In addition to traditional country economic studies, this work is now focusing on such critical areas as private sector development, poverty, and the environment. The bank also has an active technical cooperation programme with the Arab states of the gulf, those income levels makes them ineligible to borrow for investment projects. This programme consists of (mainly reimbursable) technical assistance that emphasizes sharing with these countries best practices with respect to macro economic and sectoral policies, based on bank development experience throughout the world. It also provides a precedent for supplying non-lending services to countries elsewhere in the world those successful efforts lead them to "graduate" from borrower status.

The World Bank is also placing increasing emphasis on its role as sponsor and facilitator of an expanding network of multilateral partnerships between MENA countries and their external supporters and among MENA countries themselves in key areas of common concern. These partnerships range from the Mediterranean Environmental Technical Assistance Programme (METAP), through
the multilateral working groups on regional economic development, water and environment set up under the auspices of the Middle East organized to mobilize funding for the West Bank and Gaza, and the MENA desertification initiative by the European Union for a Euro-Mediterranean partnership and economic area.

Finally, the World Bank is working to improve its responsiveness to MENA countries, needs by changes in its own organizational structure. The World Bank's local presence in the region has been expanded in recent years with the establishment of new offices in member countries, and the delegation of more responsibility to them.

Both the IFC and MIGA were active in supporting private sector investment in the MENA region during fiscal 1998. About half of the IFC’s MENA operations supported the expansion of financial services in partner countries, with a special focus on services designed to support employment creating small and medium sized enterprises. The IFC is making special efforts to encourage private sector development and also to establish a first of its kind $100 million peace technology fund, primarily designed to boost high technology and high value added industrial activity and promote joint venture partnerships. The IFC has also initiative, entailing the establishment of a $ 40 million small enterprise fund, which has already made four investments in small and medium sized manufacturing enterprises.
World Bank Support to Human Development and Poverty Reduction

Even under conditions of accelerating GDP growth, special interventions may be needed to ensure those poor or marginalized groups benefit from economic growth. Hence, a significant proportion of operational work during the year supported MENA government's strategies to address the impoverishing effects of inadequate or insufficiently accessible health care and to respond creatively to the special needs of poor communities, including rural population where poverty is often disproportionately high.

The Bank's poverty reduction strategy, first outlined in the World Development Report (WDR) 1990 involves policies and institutions to:

1. Promote broad-based labour-demanding growth.
2. Improve poor people's access to basic education, health and nutrition; and
3. Create effective safety nets for those who can not take advantage of income-earning opportunities or who are heavily risk prone.

While development experience has confirmed the soundness of this strategy, the bank has been reviewing ways to enhance the effectiveness of its own efforts to help clients reduce poverty. With poverty assessments completed in 83 of 105
countries, covering approximately 90% of the world's poor, more is now known about poverty than ever before; data availability has improved immensely, and the assessments have helped increase client awareness of poverty work. However, the quality of data is uneven; the analysis varies in quality and effectiveness; poverty assessments do not always guide operational strategies and action; domestic institutional capacities for monitoring and analysis remain weak, and evaluation and feedback need to be strengthened. To address these problems, in fiscal 1998 the bank shifted directions in its work on poverty in two ways:

1. From describing poverty to formulating strategies for reducing poverty, through operational strategies in individual countries and policy research on poverty in preparation for the WDR 2000; and

2. From counting poverty-focused projects to assessing their impact on the poor, and from focusing on measuring inputs (such as lending amounts or number of projects) to measuring outcomes in poverty assessments.

The bank is moving toward better evaluation of the impact of lending and projects on household's welfare and in fiscal 1999 it plans to select a few projects from different regions for a rigorous assessment of the impact on poor households.

In the health sector, rapid growth and constrained government budgets have created an urgent need both to improve the efficiency with which health care resources are deployed and to expand basic preventive and curative services.
In fiscal 1998 the executive directors approved innovative operations directly targeted at improving the living conditions of poor and marginalised communities and special groups.

In Jordan a $30 million bank loan is supporting the community infrastructure for up to about 1.6 million people living the country's poorest municipal areas and villages. The project, which represents the pilot phase of the wider government social productivity programme, will also test the potential for supporting income-generating activities and, possibly, micro enterprise development in Jordan's poorest communities. Strong beneficiary participation is a central feature of the project's design and implementation arrangements.

Several of the year operations were targeted at the special plight of very poor rural water supply and sanitation to about 1.3 million rural inhabitants in the country's poorest provinces. In addition to its health benefits, the project is expected to have an especially impact on girls school attendance, which is currently often curtailed by domestic duties, including having to fetch water from distant locations.

Finally, the World Bank continued to offer mainly reimbursable technical assistance to the countries of the region through a long-established technical cooperation programme (TGP), which is designed to support the development strategies of these economies. TGP activities in fiscal 1998 included work on privatization, export promotion, power, water, and tourism. Reimbursable technical assistance under the TGP amounted to US $4.2 million during the
year, including thirteen years of staff time; non reimbursable activities amounted to an additional US $11 million, including three years of staff time.

**Human Development (HD)** is crucial if the development target adopted by the international community are to be met; no country can cure sustainable economic growth or reduce poverty without health, well-nourished and well-reeducated people. Thus, the World Bank in partnership with client governments is helping promote human development through three mutually reinforcing principles:

1. Expanding opportunities through broad-based sustainable economic growth.
2. Improving poor people's access to basic social services.
3. Providing social safety net programmes to protect vulnerable groups.

The World Bank remains the largest external financier of HD programmes (education, health, nutrition and population, and social protection) in its client countries with the total HD active portfolio increasing by more than 13% in fiscal year 1998. By the end of the fiscal year, cumulative lending for HD totaled $49,180 million with 449 active projects in all countries.

To enhance its role as a provider of up-to-date knowledge on HD practices, help desks and web sites up by the HD network are providing advice, data, and information for staff and clients alike (World Bank, 1997, 1998).
World Bank and Rural Strategy

In fiscal 1998 the World Bank published its new rural strategy paper (World Bank, 1997), and selected rural development as one of the top size areas of emphasis for the next few years. Nearly three quarters of the poor people in developing countries live in rural areas so it is essential to focus on rural economies if poverty is to be reduced. Effective rural development also contributes to food security and helps protect the environment by making land and water use more efficient. This is critical if the world is to feed a rapidly growing population—estimates suggest population could grow by 45% over the next thirty years.

The revitalization of the Bank's work on rural development is showing demonstrable results. The operation evaluation department (OED) evaluations show that projects are now performing much better than in recent years, with 72% of completed projects being judged satisfactory in fiscal years 1995-96. The goal is to achieve an 80% satisfactory rating by 2002.

Bank supported rural strategies are raising the emphasis of rural development particularly in the twenty-two focus programmes, which are intended to accelerate rural development by leveraging incremental activities (assisted by $6.5 million funded under the strategic compact). These activities in 1998 included rural strategies for Jordan, India, Morocco, and Vietnam; a water management strategy in the Middle East and North Africa region, and analysis of
cross-country agricultural policy issues by seeking admission to the EU.

Demand for World Bank support for rural projects is growing. The pipeline for agricultural and rural projects for fiscal 1997-99 averaged some fifty-seven new projects per year, up from forty-six per year in fiscal 1994-96. In fiscal 1998 lending for rural development projects totaled US $3,162 million and included projects supporting rural transport and rural water supply and sanitation. Some of IBRD's projects for Jordan are:

1. IBRD-$5 million. This pilot project, targeted at the unemployed poor, will introduce an efficient and effective linkage between public expenditures for short-term training and business needs. Total cost $6 million.

2. IBRD $32 million. Sustainable and environmentally sound tourism will be increased, urban infrastructure developed and the environment protected. Total cost $44 million.

3. IBRD $30 million. About 1.6 million poor people's living conditions will be improved through provision of small-scale infrastructure. Total cost $140 million.

The total IBRD and IDA cumulative lending operations (loans and credits) for Jordan till June 1998 was US $1757.3 million.
RESEARCH METHODOLOGY

Research is matter of raising a question and then trying to find an answer. In other words, research means a sort of investigation describing the fact that some problem which added new knowledge and developing of theory as well as gathering of evidence to test generalization.

The Webster's International Dictionary defines research as "a careful critical inquiry or examination in seeking facts for principles, diligent investigation in order to ascertain something". The people when they talk about research are not specific and precise enough to get a complete and clear idea to what research involves. Improving upon the definition given above, it may be stated that research refers to a critical and exhaustive investigation or experimentation having it as aim of revision of accepted conclusions in the light of newly discovered facts. The researcher is constantly concerned with researching of the accepted conclusions of the theories and degrees of agreement existed at a given point of time. So he does research by probing for facts of the empirical that confirm or falsity the accepted conclusions. In a way, research may in effect turn to build up of new theories to take place of those no longer suitable to the data of the empirical world. Stated otherwise, research is a systematic endeavor to seek beyond our level of knowledge truth, and reality and difficult to perceive and follow to keep on these horizons without end. In modern times research is often a corporate affair in as much as the complex technique of collecting and proceeding data resulting in generalizations.
Another important definition given by the encyclopedia of social science, defines research as the manipulation of things, concepts or symbols for the purpose of generalizing to extend correct or verify knowledge whether that knowledge aids in construction of theory or in the practice of an art.

J Francis Rummel defines “research is an endeavour process that has developed over hundreds of years”. Ever changing in purpose and form and always searching for truth, research may be defined by W.S Monroe as “a method of studying problems whose solutions are to be desired partly or wholly from facts. The facts dealt with in research may be statements of opinions, the results of tests answer to questionnaires, experimental data of any short, and so forth”.

Thus, research looking up for facts and figures involves an integration of them in a new way to shed light on a new problem. The term research does include the formulation of hypothesis, the developing of theory as well as the gathering of facts to test the generalization. Therefore, research is the function of solving problem, which leads to new knowledge using method to inquire which is currently accepted as adequate by the researchers in the field. The final purpose of research is to ascertain principles for developing theory. The testing validity of theory can not be possible but for research. That is why research is often defined as “scientific thinking”.

The critical examination of past or happenings in order to know the truth and later on to generalization is known as historical
research. By historical research, previous efforts on the topic convey the depth of knowledge on the subject. Therefore, this method of research is important to methodology. It studies people and their problems. One can create a sense of continuity and a consciousness of unity among people by doing research under this method.

A research design is a plan of the proposed work. It is a blueprint and therefore, at its best only tentative. Changes in the design are permitted and are dictated by considerations during the operations of the project. In other words, a research design is not a highly specific plan to be followed without deviation but rather a series of guideposts to keep one headed in the right direction.

**Research Design**

A research design is a catalogue of the various phases and acts relating to the formulation of research efforts. Research design is an arrangement of the essential conditions for collection and analysis of data in a form that aims to combine relevance to research purpose with economy in the procedure. A research design should be based on rigorous methodology. It should be made once, the topic and problem for research have been selected and formulated, objectives have been properly outlined, concepts have been properly defined and the hypotheses have been properly framed. The presentation of the guidelines for the design some of the practical difficulties, deficiencies and shortcomings in the planning and executing of
are highlighted. The intention is to help the future researchers to learn from the lessons and formulate systematic research design.

A good research design should possess the following four characteristic features, viz., objectivity, reliability, validity and generality.

**Objectives of the study**

The present study an titled "Role of the World Bank in Agriculture Development of Jordan Since 1971" is generally based on secondary data which has been collected from various resources primarily data by meeting of the farmers in Jordan Valley and I interview various farmers their who gave me reliable primary data for this research work. I have examined and analyzed this research work mainly on the basis of secondary data and partly on the primary data.

Main objectives of this study are given below:

1. To find out the role-played by the agriculture by the economy.
2. To find out the role-played by the World Bank in the developing agriculture in Jordan.
3. We have to find out by this study the impact of the World Bank on Agriculture development in Jordan with special reference to field crops, vegetables and fruits.
4. We have also to critically examine the role of World Bank in this regard.
5. Finally to find out changes in the policy of financing by World Bank group for agricultural production and give suitable suggestions in this regards.

The objectivity of the findings to the methods of collection of data and securing the response. Any research design should permit the use of measuring instruments that are fairly objective in which every observer or judge seeing a performance arrives at precisely. This ensures the objectivity of the collected data that will be used for the analysis, inference and generalizations.

Reliability

Reliability refers to consistency throughout a series of measurements. That is to say if a respondent gives a response to particular item, he is expected to give the same response to that item whenever he is asked subsequently. The investigator should frame this item in such a way that the respondent can’t but give only one genuine response. There are different methods in determining the reliability of the responses given out by a respondent.

Validity

Any measuring instrument is said to be valid when it measures what it purposes to measure. For example, an intelligence test constructed for measuring intelligence should measure only intelligence and nothing else.
Tabulation of Data

Tabulation is a part of the technical process in the statistical analysis of the data. The technique of presenting data, either qualitative or quantitative in the columns and rows is called tabulation. The purpose of tabulation in investigation is to arrange in easily accessible form. Thus, the most important use of a table is that it makes required information easily accessible. By arranging in the form of table, the significance of data is made very clear.

Research is a systematic search for information and new knowledge. The present study will help us towards an understanding of the various policies and programmes trends and composition of the finance of World Bank in agriculture development of Jordan since 1971, and the trends in the production of different agricultural products in Jordan.
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