CONCLUSION

Iraq is an Asian developing country, (4,384,446 sq. km area) located in the south-western part of the continent. Its geographical framework has a great impact on its economic life specially in the field of agriculture. Its climate, being hot and dry in summer and cold and rainy in winter, in association with the relief has led to diversification of crops and their productivity pattern. In the northern part, with abundant rainfall, agriculture has survived on rainfall alone and the productivity has positive correlation with the amount of rainfall, but the central and southern regions, with less rainfall, have to depend on the means of irrigation emanating from the rivers Tigris and Euphrates. The underground water plays an important role in providing water to the farms in the sub-montane and semi desert regions.

The soils of Iraq are deficient in organic matter but rich in mineral salts. Climate has got its own effect as the summer season in Iraq is long and dry and the scarcity of organic matter in the soils decreases the fertility of soil. In northern region erosion has caused great damage while in the central and southern regions
the salt percentage is high and the land suffers from salinity and alkalinity. In general the soils of Iraq require great attention so as to preserve its fertility. One of the important ways in this direction is to change the old pattern of agriculture. "Neir and Neir" the practice of fallowing which aims to recuperate the soil fertility exposes the soil to erosion and this system needs to be abandoned. Drainage network needs both extension and improvement. The construction of many irrigation projects without proper drainage would give negative results and lead to an increase in the underground water table thereby leading to the spread of salts in the soil. This is what has actually happened as vast areas of Iraq suitable for agriculture have fallen into disuse and the people had to leave the land owing to increase in the salt percentage.

The period following the establishment of Republican rule in Iraq in 1958 and the short period after that were important for the construction of big irrigation projects, the main purpose of which was to provide irrigation facilities and also to prevent floods which frequently occurred in Iraq. Among the big project is that of Habbaniya lake and the project of diverting the waters of river Tigris towards the Thar Thar depression
and thereby saving the city of Baghdad and nearby towns from the danger of floods without attempting to use those waters for irrigation purposes. During the period between the sixties and the eighties irrigation underwent a considerable development. Proposals were made for bigger projects, most important of which is the Al-Thar Thar project which provides water to both river Tigris and Euphrates when necessary and irrigates vast agricultural lands. Dams and artificial lakes were also made to store water and make use of it during summer to increase the agricultural production. Some of the most important dams are the Mosul dam, Hamriyen dam and Haditha dam. In addition to all these big projects, medium and small projects were undertaken in all parts of Iraq along with drainage projects. Inspite of a large number of irrigation projects, enormous quantity of water still goes waste to the sea. If the water wealth of Iraq is exploited to an optimum degree with utmost efficiency, it will enhance further the agricultural production.

As a result of this study the author suggests that the agricultural production is greatly influenced by the socio-economic factors as well as the government policy in addition to the physical factors. A good deal of change occurred in agricultural production of Iraq,
after 1968 as the government introduced the cooperative pattern in agricultural production and supervised it directly and indirectly. The state farms and the cooperative farms became the prevailing patterns in agriculture. It preserved the agricultural ownership after abolishing the bigger ownerships. Smaller ownerships were rational and the surplus land was distributed among farmers. It also laid down the agricultural reforms laws number 117 for the year 1970. This law came as an amendment to the first law enacted in the year 1958, which aimed at abolishing feudalism. When the law of the year 1958 was applied many flaws were noticed in it. These flaws were an obstruction in bigger agricultural production and in the development of the agriculture sector. The Law No. 117 for the year 1970 has made significant progress in establishing cooperatives, collective and state farms.

The production of crops in summer and winter months as well as those of vegetables and fruits show great fluctuations so much so that in some years the government exported the excess foodgrains while in some years it imported, which clearly indicates a lack of stability in agricultural production, and calls for the introduction of New Agricultural Technology as adopted in India to create stability in agricultural production. The
stability in agriculture will check the migration from the rural to the urban areas. Moreover the establishment of a Price Commission for agricultural products and the announcement of prices of foodgrains much in advance of the harvesting season will further provide opportunity to the farmers to make their decision about the crop to be sown. The improvement in the economic conditions of the people in the country after 1972 helped in creating jobs in other fields and the farmers in some cases left cultivation to undertake other professions which brought handsome remuneration which they could not get from agriculture. However, intensity in agricultural production in respect of some crops, like truck farming, was as high as ten times after the introduction of Land Reform Laws and liberal credit facilities. There was in fact a psychological break through among the farmers as a result of the Land Reforms. The rise in the income of the people raised the demand for vegetables and fruits and the cultivation of vegetables substantially increased after 1972. It is hoped that the agricultural production in Iraq may witness big rise after the completion of some of the irrigation projects. The case of rice in the central and southern regions could be cited.
The increase in the agricultural productivity per hectare has a great impact on the increase of agricultural production. The author has applied four methods, namely those of Enyedi, Shafi, Bhatia and Kendall in determining the agricultural productivity of Iraq. Applying Kendall's method for measuring productivity of land in Iraq for the years 1973 and 1980, the author finds that the provinces of Duhok, Wast, Qadissiyah are characterised by very high productivity and the provinces of Ninevah, Anbar, Baghdad, Babylon with high productivity and the provinces of Arbil, Diyala, Maisan with low productivity whereas the provinces of Attamim, Salahuddin, Muthanna and Basrah have very low productivity level.

The agricultural lands with low and medium productivity require adequate inputs on regular basis and therefore there is need for proper planning. It should be a continuous on going programme. Areas of low to medium productivity should be taken to higher level. A joint programme based on efficient technology and skilled man power is a must toward off any wasteful inputs as well as to check the process of desertification. Iraq with 12 million hectares of land suitable for agriculture and water estimated at 72 million cubic metres offers vast potentialities for development. The pre-production and post harvest technology including the facilities of storage, transport, public distribution system need to be strengthened. Food losses in storage should be minimized.
by providing suitable storage facilities. The shortage of labour could be tackled by mechanization and the development of food processing industry will further help in increasing agricultural production.

Some of the measure which the author would like to suggest for increasing agricultural production are as follows:

(1) Extensive use of fertilizers and chemical pesticides to be made available at cheaper prices.

(2) Mechanization of agriculture to compensate for lack of agricultural labour.

(3) Supply of improved variety of seeds.

(4) Enlarging rural services, agricultural guidance and eliminating the system of "Neir and Neir" and adopting a new system to preserve the soil.

(5) Measures should be devised to combat erosion.

(6) Improvement in drainage to get rid of salts.

(7) Increase in agricultural research to make innovations in the system of cultivation.

(8) The supply of irrigation pumps at cheap prices and within easy reach of the farmers.
(9) Introduction of adequate rural electrification to mechanize agricultural process as well as reduce the gap between villages and urban centres.

(10) To eradicate illiteracy among villages.

(11) To improve means of transport and communication for easy and fast movement of agricultural produce as well as the people.

(12) In areas of acute scarcity of water, dry farming methods should be introduced.