CHAPTER – VII

CONCLUSION

It is evident from the study that the increase of irrigation in dry land leads to agricultural development. In Tumkur district with the obscene of canal irrigation at present minor irrigations are predominantly found. There are good number tanks found in the district. Most of the taluks have predominant tank irrigation which has influenced agriculture in Tumkur district on the whole the tank irrigation alone contribute nearly 41.57% of minor irrigation followed by 39.75% of wells. The canal irrigation contributed only 0.30%. Though the proposed new canal irrigation by Hemavathi Dam still to be introduced as a result minor irrigation continued to be major source of irrigation.

There has been an increasing trend in utilization of ground water potential in Tumkur district. Though the potentiality is considered to be less, the digging of bore well is continued. In reality the yield varies from 1500 to 2000 gallon per hour. The increase of more number of bore wells are due to several Government scheme to improve the minor irrigation in Tumkur district. The important minor irrigation schemes found in the district are individual bore well scheme, Morarji Desai Memorial Ganga Kalyana Scheme, Deepening well, Special component scheme Million wells scheme, disilitating of tanks sprinkler system. Most of the scheme are subsidized scheme hence they are very popular in the district.

It is also found that due to increase of more minor irrigation scheme the farmers are tend to shift from subsistence agriculture to
commercial cultivation. As a result commercial crops like coconut, sugarcane and vegetables production is increased. As a result of minor irrigation the yield per hectare has been increased which has led to more marketable surplus among the farmers.

The introduction of minor irrigation has given an opportunity to generate externalities such as income generation, social status, political awareness, house renovation education etc. It has also led to go for more consumer goods such as electric goods, modern equipments etc. The increase in agriculture income responsible for consumption of more industrial goods, which indicate the good terms of trade between industrial sector and agricultural sector.

Increase of yield per hectare has lead to consume more quantity of food grains among the producer. Apart from generating externally due to minor irrigation. It has also passed several problems of to the farmers who have practices minor irrigation.

It is found out from the study that, among the selected 500 farmers in the study area 74% of the farmers are literates which reveals the literacy level has more impact on adopting the new technology in agriculture.

The minor irrigation has influenced for development of subsidiary occupation such as dairying, sericulture and vegetables growing.

It is found out from the study that, the launching of several subsidy schemes for minor irrigation has influenced much on adapting minor irrigation. In the course of ten years period in each taluk of the district, there has been a substantial increase in area under irrigation. With the expansion of irrigation the major crops production has been
increased. The selected major crops like Paddy, Ragi, Pulses, Groundnut and Coconut have been increased under area of cultivation. This increase of area under major crops has been possible due to irrigation.

As the comparative analysis reveals the farmers who are depending only on rainfed cultivation gets less annual income than the farmers adopted minor irrigation. It is obvious that under assured minor irrigation the yield per hectare is more which ultimately leads to more income generation. In the study it has been found out that the more agriculture production make farmers to have more purchasing power. As a result of majority of the formers who practice minor irrigation have purchased many kinds of nonagricultural goods. Similarly many of them have under took renovation of houses and got education to their children. Their consumption patterns also different from the farmers who do not have minor irrigation. Thus the minor irrigation has an impact on agriculture development which ultimately leads to economic development.

The farmer facing the problem due to minor irrigation are in adequate water, power supply in-adequate guidance from the agriculture department. Lack of assistance for finance etc. The problem of big farmers is totally different i.e., they face the problem of labours to work in the agriculture field.

The minor irrigation is more feasible in a country like India where capital is a constrain for development. Generally big irrigation project need crores of rupees and the gestation period also longer and lead to escalation of estimated cost. On the other hand as the study reveals the minor irrigation projects are within in the reach of individuals, who
can afford themselves and use result immediately. There by he burden on state exchequer is reduces. Apart from this the maintenance of minor irrigation is easy and cost nothing unlike major irrigation projects.

**SUGGESTION**

Since India is predominantly agriculture country depending on monsoon climate need to have more number of minor irrigation.

The study area i.e., Tumkur district is a rain shadow region with absence of major irrigation project needs more encouragement from Government to extend minor irrigation. The existing schemes which are confined to Scheduled Caste and Scheduled Tribe small farmers should be extended to other small farmers irrespective of caste.

The medium size and big farmers also should be given incentives in lending loan supplying power etc., to take more minor irrigation projects.

The co-operative organisation should be increased to adapted more minor irrigation unfortunately the co-operative movement in irrigation is not appreciable in Tumkur districts.

Adequate facilities have to be provided to the farmers of dry land who would like to go for minor irrigation than the farmers of well rainfed area.

The maintenance of tanks at present is under nobody’s control only the owners of the land below the tank are using water without any regulation. Hence the maintenance and releasing of water should be rest with either irrigation department or with village Panchayat.
Administration. Thereby it is possible to use water from the tanks judiciously.

Since irrigation is one of the important inputs of agriculture particularly minor irrigation schemes have to be declared as package programme of agriculture in dry land region in co-ordination with dry land development board.

In the recent year it is evident that the power supply is inadequate through out the country as a result of it the supply of power to bore well and tube well is not available easily. Hence it should be made possible to available for all aspirant farmers. The farmers who use power for minor irrigation should be supplied at subsidized rates without any interruption in power supply. Particularly minor irrigation encourage for commercial crops like cotton ground nut and coconut, vegetables and flowers etc., the which require less quantity of water should be given more emphasis.

Particularly Tumkur district is a level surface with little topographical variations has more number of tanks. These existing tanks have to protected by disilting and strengthening the bands.

Under minor irrigation mainly tank irrigation and lift irrigation have to be given priority than the use of ground water.

Ground water exploitation leads to environmental hazards, it should not be allowed to use more ground water for minor irrigation. The central ground water board is the national apex organization vested with the responsibilities of carrying-out nation-wise surveys and assessment of ground water resources and guiding the states appropriately in scientific and technical matters relating to ground
water. Rajiv Gandhi National Training Institute for ground water is set up at Raipur in Uttar Pradesh. This institute provides training and personnel advices to various states in maintaining the underground water resources. The national water management project also established to promote water resources in different states.

Thus various water management schemes are launched in India to utilize the water potential. If the various minor irrigation project are implemented in dry land agricultural production will be doubled in the near future.