CHAPTER- 6

CONCLUSION
The present study has been done on “Studies on helminth parasites of the fishes of Silchar, Assam and Bishnupur District, Manipur” encompassing physico-chemical parameters of water during the year 2009 to 2012. The study led to various types of information, conclusion and suggestions.

- The present investigation concludes with 24 species and 20 genera of helminth parasites comprising 6 species of cestodes, 6 species of trematodes, 5 species of acanthocephala and 7 species of nematodes.

- Many parasite species are host specific. In the present study most of the parasites were found in the intestine of the host. Some parasites were infected in liver, stomach wall and body cavity of the host.

- The results of the present study revealed that there were fluctuations in the physico-chemical characters of the water of Chatla Haor and Awangsoi Lake. Variations in the physico-chemical characters also found between the two lakes.

- In the present study, percentage of infection of parasites was positively correlated with temperature, pH, DO and conductivity in Awangsoi Lake. In Chatla Haor positive correlations were found with temperature, alkalinity and conductivity.

- For seasonal occurrence of parasites, in Chatla Haor the prevalence and intensity of infection was highest during monsoon season. In Awangsoi Lake, the trematode, *Metaclinostomum srivastavai* showed maximum prevalence in monsoon, *Allocreadium fasciatusi* showed in pre-monsoon and *Genarcopsis goppo* showed its maximum prevalence in post-monsoon.
In the present study, concurrent infection was found in some fishes by two or more helminth parasites.

In the present investigation, increase in helminth infection was found with the increase in size of the fish host.

The helminth fauna of fish may depend on various environmental factors such as geographical location of the habitat, season of the year, physico-chemical characters of the water etc. The infection of helminth parasites may also be related to the availability of their intermediate host, life cycles of the parasites and feeding habits of the fish host.

Individual parasite species may have widely differing effects on different host species. It is indeed important to acquire knowledge on different fish pathogens, their biology and life cycle in order to recognize fish diseases and for their control. The results obtained from our research will give preliminary knowledge of parasitic fauna of fishes of Silchar, Assam and Bishnupur district, Manipur which was till date less explored. At the same time it will help the scientific community and also pisciculturists to know about the parasite species found to be infected in different fish hosts.