In the present investigation, effect of integrated nutrient management and pre-sowing seed soaking with agro-chemicals on growth and yield of yellow sarson were studied. These results provide sound guidelines for efficient management of nutrients with proper selection of agro-chemicals for pre-sowing seed soaking for better emergence in yellow sarson under terai zone of West Bengal. Again, the salient findings of the study provide the basis for further research on the following aspects:

I. The integrated use of organic manures, bio-fertilizers and inorganic fertilizers may have promising beneficial influence on the biological properties of soil. Some local manorial sources can be identified for their potential use in INM-system.

II. The detailed study on efficiency of different microorganisms is needed as their efficiency is accelerated in presence of organic manures. The comparative study of efficient microbial activities in soil after organic and inorganic amelioration need to be undertaken.

III. Isolation of efficient strains from the bio-fertilizers specific to different agro-climatic conditions, particularly thermal and moisture regime, and its field testing need to be pursued vigorously. Thoroughly planned field experimentation is needed to compare the homologous strains of these bio-fertilizers.

V. In case of phosphate bio-fertilizers equal emphasis need to be laid on isolation and multiplication of P-mobilizers and P-solubilizers. The heterotrophic phosphate solubilizing microorganisms have the ability to solubilize inorganic phosphates through excretion of many organic acids like
oxalic acid, lactic acid, glutamic acid, fumeric acid, tartaric acid etc. The extent of organic acids produced by these microorganisms to form stable soil complexes need to be studied in terai soil.

VI. Long term trials with different combinations and sole application of organics, inorganics and bio-fertilizers under intensive cropping need to be conducted to study the stability of soil fertility. Compatible cropping systems are to be developed in different agro-climatic zones after working out the appropriate fertilizer schedule for sustaining productivity.

VII. The effect of INM and pre-sowing seed soaking on the quality of produce, i.e., variations in fatty acids, phospholipids, triacidglycerols, ally-iso-thiocyanate and glucosinolate content of the major edible Brassica oil may be taken under consideration for further research.