CHAPTER VII

CONCLUSION AND SUGGESTIONS
I have been allotted the area of Eastern Satpura range of Madhya Pradesh for my research by my guide. This area includes four districts namely - Chhindwara, Seoni, Balaghat and Mandla. The population of this area mainly consists of the three tribes of the tribals called the Gonds, Baigas and Pradhans. They have their own traditions, culture and defects. They are ignorant of the modern ways of life and therefore, suffer in many ways. Though they live mostly on agriculture, they are still using primitive ways and means. They don't get sufficient food containing protein, nutrients, minerals and salts necessary for a healthy life. It has been felt that a through study of these tribals will bring their pitiable condition to the knowledge the Government and the social workers so that efforts may be made for their uplift and improvement. In the 31 Villages surveyed by me about 90% population is of these tribals. The study are comprised of 29802 Sq.Km. Total population of area according to 1981 census is 31,89,958 persons. The most of the tribals mainly depend upon forests for their resources of daily life. Their dietary habits, therefore are chiefly based upon the forest produce. Recently a change has taken place in their food consumption,
ecosystem and food problem. The object of my study has been to study a protein energy malnutrition and deficiency diseases among young tribal children in the eastern safpura range. It has also been the idea to study their food habits and the short coming in so that proper suggestions can be given for the improvement of their life worth living.

In the south of the study area there is Maharashtra state. In the north-west is bordered by Betul, Narsinghpur, Jabalapur, Shahdol and in the east stands Rajnandgaon district. The main rivers watering the region are the Narmada and wainganga. The main mountain ranges in the area is Maikal range. The climate of the region is hot and rainfalls in July and August Chiefly. The summers, Specially April and May are very dry and hot. In winter it does not become very cold like the northern plain of India. The average rainfall of the region is about 121 Cms.

The tribals live mostly in small but their houses are at some distance from one another. In their dieledd they call it Ghotul. They have the chief of every village and religious rites are performed by the ojha of the village. The houses mostly made bricks and mud have that chet roof on them. The
Ventilation is not proper in their houses and surrounding have in Sanitary conditions. They even to day have the traditional food of 'pej'. The method of preparation these foods is also traditional. They put on very clothes. They are miythful people and love their festival very much and they provide them with occasions to enjoy life with music and dance. The also enjoy going to weekly market with the whol family and enjoy the ready made food available there. It being a hilly region the means of transport are few. Bullock-carts and tracks are the main means of transport for them. The railways and roads are very few in the area.

The Study area is covered by forest and is hilly in the most parts. The uneven land remains uncultivated. The main summer crops paddy (rice), jowar, The winter crops are wheat and gram. The irrigation facilities are not wide spread. Wells and tanks are the main sources of irrigation. The monsoon rain is also unevenly distributed. Hence the product per acre is not very high. The implement used by the study area tribals in agriculture are the primitive ones like wooden plough drawn by their bulls. The use of machines in agriculture is very little.
Habits and Dietary intake forms a part of study. Soil, climate, rainfall have their role. Our country is the seventh most populous country. Consumption of diets is defective. cereals, root, tubers, are taken but of no avail. calorie, protein, vitamins and minerals are lacking. Diseases are rampant. We need, milk, eggs, fish, vegetables and fruits. But protective foods are not available. Dietary intake is poor. Type of land and farming play a vital role. Ignorance, superstitions have a separate story and plight. Diet is not balanced. Deficiency or excess of any item results in poor heath. Age, sex, physical activity, economic status and physiological states play a role. Diet in different physiological groups is a factor. Balanced diet differs from person to person. Age factor, nature of work available all made a separate study. Growth and stature are ensured by enery and nutrients, protein mostly. Sex, occupation, diet and diseases food stuffs, bruits, vegetables have a vital role, fat, ghee, butter, all have respective value. Pulses are no exception having protein. Habits form the base and consumption is the watchward. Land, literacy, population have direct link. Tribal is a food gatherer, of course a relisher of meat, fish, liquor, 'pej' etc. Lucnch/breakfast items also
have say. Agencies of food supply have been explored. Then food procurement, presentation and cooking have their order. Kitchen garden products, oil seeds are in profuse use. Cereals and millet have their cymology condiments, and spices are notable.

Malnutrition means the adverse situation of nutrition. Balanced diet is of much help (i) protein (ii) carbohydrate, (iii) fats (iv) mineral (v) vitamin (vi) Raphage and water form balanced diet. Need is essential for our body. Balance of nutrients is also a must. General appearance, physical structure, maladies and resultant diseases must be kept in mind. Role of vitamin 'A' deficiency, symptoms of PCM, anaemia etc. may be traced to those children under 5 years of age have PCM THOUGH IT MAY BE RAMPART IN ANY AGE. Figures have been worked out agewise. Malnutrition has a telling effect and dulls growth, mental, intellectual learning capacity and memory and vulnerable conditions and discerned. A note of surveys has been mentioned. Lack of calories is located. How tissues tone up and decay is shown well. What is the role of acids is a matter of attention marasmus, Kwashiorkor, dermatitis, depigmentation are found. Liver troubles crop up magnitude of the problem is outline. Position
of India in respect of malnutrition is depicted. Curse of poverty, illiteracy, lack of Ken proper transport, population, order of meals, gap between meals, adulteration and plethora of reasons are recounted. Wrong ways of bottle feeding, bad atmosphere, defective food, food havits, access to water, religion, micro-environment, want of time, geographical reasons have occupied a place. Assigning other reasons, detection at an early stage of PEM, methods of clinic and anthropometric methods have been enlightened. Weight (gradewise) is disfussed. Chest, head circumference ratio, weight, head circumference ration, mid arm circumference, subcutaneous fat, biochemical tests have a reference. Mathodology has been worked out. PEM in tribal boys/girls is also a feature, and its prevention is shown through intake of nutrients, proteins, vitamins, carbohydrates with fatals results if ignored. Health centre, its role finds a place. then we have immunisation measures, use of radio, T.V., schools, colleges, advertisements, exhibitions. And different programmes have been enlisted (i) ANP (ii) MMP (iii) SNP (iv) ICDs (v) FWP and different contributions UNInternational儿童's emerging fund have been out lined in the field of malnutrition. Role of WHO is also cited.
Deficiency diseases are a menace. Lack of physical, mental, growth is discernible with morbidity and mortality. It has two types. Under nutrition and malnutrition. Hunger is crystal clear. It means quantitative inadequacy of food. Food must be rich. Under this we have PEM - symptome sparse hair, moonface, Diagnosis of Kwasiorkor is need ad oedema, growth retardation, muscle wasting, psychomotor changes. Treatment of PEM is detailed. Proteins vitamins and their roles in this fielded are mentiond. Deficiency of vitamin is longdrawn. Table 6.1 and 6.2 give a clear outline. Night blindness, (Nictalopia) causes, remedies have been shown. Then conjunctival xerosis, Bitot's sports, keratomalacia, corneal opacities, are show. A chapter has been devotedto Vitamin 'B' complex deficiency as Angular stomatitis cheliosis, blossitis, papilae-artophic, pepillac, hypertorophic, nassolibial dyssebacea, pallagoral dermatotitis, beri-beri and its types. Treatment is discussed. Riboflavin deficiency is shown Then study area switches over to Pellagra, symptoms and clinical findings. Neurologic systems are traced. Anaemia scurvy or scorbutus find a detailed place with measures to root-out to gether with rickets. Frontal Parietal Bossing, Knockness of Bow Legs is pin pointed. Treatment and quantity of calcium
has been emphasized.

There is a chapter on other deficiency diseases - as Thyroid enlargement, Spleen and Liver and Parotid enlargements, with deficiency diseases in rural India, chapters on factors affecting these as :

(i) Nutritive food
(ii) Ignorance
(iii) Uncontaminated drinking water
(iv) Habits
(v) Concept and diagnosis/treatment
(vi) Adequate housing
(vii) Waste disposal sanitation
(viii) Social and cultural factors

In the end all methodology and a chapter to deficiency diseases in tribal children is devoted and mention of vitamin deficiency is made bordering on steps for cure and treatment, plus a field of other deficiency diseases is explored fully.

The hard work done for a long time with the tribal in the area of study and close observation of their difficult and miserable life has compelled me to think how their condition can be improved. The ways and means of improving their lot
has also been deeply throught. As a result of that I have though of giving a feul suggestion for the same. They are being given here point-wise.

In the study area some villages are such as have no facilities of approach road and the inside roads are not 'Pucca' which form cess-post of water in rains. It is expedient to link the villages with roads, to gether with 'Pucca' inside road.

Environment of tribal villages is getting polluted and an awakening is compulsory amongst those who abide in these villages, specially non-Adivasis. This needs all round cleanliness, evenness of pits and proper designs of houses and infuse such interest in the inhabitants. Trees must be planted.

Soil of some of the tribal villages is not fertile. There must be a systematic plan to have cows of good breed, she buffaloes, sheep, pigs and poultry farming. Special campaigns must be launched by the Government. This will raise quantity of milk, Milk-products and its consumption. This will also help in removing their habits of non-vegetarian at
the same time there will be adequate supply of meat, fish, eggs to them. For this fish ponds, tanks must be used for fishery and the forders of the fields can be used to plant trees for fruits and for seasonal fruits plums, mango, guava etc. and plants must be got planted by the adivasis, and handsome remuneration must be paid. Not only this they should all be consigned to their care. Fruit yielding trees are becoming rare. This will enable to them to supplement their income and regular supply of edible fruits.

It is generally seen that food-items are not available to eat. Business men raise their prices and consumption is out of question. Therefore fair-price shops must be opened to render it possible good and pure, clean ediblesin all the seasons.

Nutritive value of food item must be made popular to ensure physical and mental development through such education, Paregnant women and lactating mothers, child-diet must have priority through camps with due verification that fair price-shops are stuffed with them, levelling them as foodstuffs and things of daily use, must remain in ready stock.
In every village there must be a trained health worker and a nurse duly posted. They must perform prompt duty, keep proper records, distribute medicines and get admitted serious patients in the hospital/clinic. They also impart first hand information about infectious diseases and other ailments and suggest measures to help eradicate them and adopt preventive measures.

In the Tribal area systematic diet survey and nutrition survey must be undertaken. There must be minute information of each village about the deficiency of nutrients prevalent. This will require importing them a good knowledge of food items containing nutrients, and their compulsory intake.

Agriculture needs prompt attention in the Adivasi area. Agricultural operations must be done by them and even by the land-lord for a period of two or three years, through latest techniques. High nutrient value crops must be raised together with the production of fruits and vegetables.

Unemployment looms large throughout the year therefore, some crafts must be initiated in the village and impetus must be given. Some industries can be introduced, easily as insect
breeding, bee-breeding, glasswares, ropes, bidi-making and preparations of pulses and pumpkin. Use of leaves for food serving, gum, mat-making, dolls of wood, herbal medicines, and jellies and juices are some other industries. Raw material for these is not difficult to procure.

For some time (as in rains, tree plantation and after that construction of roads, houses bridges is a good occupation. Local people can be employed.

In every village supplementary feeding programme must be adopted and applied deficiency and its type must be detected and foup-wise need of nutrient must be planned and that type of nutrient must be administered and distributed daily.

Immunization must be carried out on a large scale and injections to eliminate disease or root out them is must be carried out. Vaccine must be adhered to and consistent record of immunization must be maintained.

It is a matter of pride that the Adivasis have perfect knowledge of medicinal value of trees and this variety is on the verge of extinct and plantation of such trees must be profusely done. Installing of factories for preparing
medicines and herbal medicines must be encouraged. Price of herbs must be handsome.

Their dietary and cooking habits are traditional, outdated. They must be trained to form good habits and aesthetic sense must be increased.

Hospital is a necessity, specially at a distance of 10 Km or over to villages, with the opening of a dispensary. Hospitals must have beds and system of medicines.

A camp of doctors in a year will be an asset and patients must be imparted knowledge of cleanliness and clean habits.

One primary and one middle school, these two must have a radius of 5 Km to impart compulsory and free education and emphasis must be laid on sanitation and dietary habits.

Clean drinking water must be easily available after performing a laboratory test so as to ensure adequate supply in all the seasons.

In the Adivasi areas corner-one act plays must be performed and televised in the local dialect. Use of Vidoes,
slides must be used to educate them. All the aspects must be represented as food, clothing, house, cleanliness, drinking water, animal husbandry, cultural life, dances, music, malnutrition, deficiency diseases; also must be shown to adopt measures and steps for uplift and give up bad habits of drinking, smoking. This will root out superstitions, taboos and high rate of birth (through family planning, and other social relics of the past will also be done away with.