

TRAGEDY OF PAKISTAN AGRICULTURE CEREAL-CULTURE VERSUS HORTICULTURE

M.H. Panhwar.

The examination of human population of Pakistan and statistics of edible agricultural and animal products for past 35 years our achievements and short-falls in brief are:-

We have increased rice and wheat production on per capita basis, but there is decrease in production of following important items of food:-

- i. Vegetables.
- ii. Fruits.
- iii. Vegetable proteins (various pulses or dals).
- iv. Vegetable oils.
- v. Milk and milk products.
- vi. Animal proteins (meat and fish).
- vii. Animal fats.
- viii. Tree nuts.

This clearly shows that quality of food has deteriorated over past 35 years, although no body is starving, as atleast flour and rice are plentiful and are available in more quantity than they were in 1951, on the per capita basis.

The Surgeon General to the viceroy of India carried out experiments on rats from around 1875 on wards. Rates were used for experimentation for the first time in the World. Such experiments had not been done even in the then, the world's richest country, leading in technology, i.e., England. Viceroy had provided funds. England would have shuddered at the idea of this extravagancy. It however turned out to be a revelation to the whole scientific world, once results were published. Hence forth all kinds of experiments for future application of drugs on humans, were started on rats.

This doctor divided a group of rats originating from the same progeny, in three groups, and generation after generation fed them, the kinds of food, people in British India's different parts were normally taking from day to day. Since rats mature and reproduce in a few weeks, a number of generations of reproduce in a few weeks, a number of generations of them can be reproduced in a full year. The experiments were continued for some years to re-confirm the findings. This doctor had divided mice in three equal groups and called these groups:-

- Madrasi.
- Sikh
- Upper Class Pathans.

- a) The Madrasi group of tats were given same food as was being taken by people of South India's Madras area i.e., rice, spices, pulses, vegetables and occasionally small quantity of fish or meat or fruit, but they were not allowed to starve on any day.

- b) The Pathan group of rats were given hypothetical food, the Upper class Pathans would take i.e., meat, fruits, salads, vegetables, milk, butter and bread of wheat flour.
- c) Sikh group of mice, were given food, which was mixture of Madrasi and Pathan group Records were kept generation after generation of the rats. Results were astonishing:-
 - The Madrasi group of mice became dwarfed. Not only that they were thin and lean physically but besides they were thin and lean physically but besides they were quarrelsome, noisy, agitative, un-restive and kept fighting each other. Their life also was comparatively short.
 - The Pathan group of rats had become taller, larger in size, and weight and were quite, co-operative, playful and did not fight among themselves. They seemed to be content and happy. Their average life was longer than Madrasi group.
 - Sikh group was in between the two but not noisy or quarrel some, like the first group.
 -

It is obvious now what we are going to face generation after generation due to inferior food we are providing to our poor population, specially the farmer and farm labour decade after decade and generation after generation.

It is also known that average height of men and women in America has increased by some 5 to 7 inches since 1800 A.D., due to better food.

Since early fifties when there became food shortage, there has been continuous efforts to grow more cereals i.e., wheat and rice in Latter part of sixties insistence was on maize in northern areas. Fruit and vegetables were forgotten is luxury items. With opening of new barrages, previous pasture lands were turned in to grain producing areas, making no provision for alternate pasture or grasslands for animals feed.

Smuggling of beef animals from India across the long border was accepted as normal additional source of meat.

Nepalese are Buddhists and won't eat honey, as bee has stored it as its winter food, but they collect honey and sell it to Indian-Hindus and think that it is not they but the latter who are going to commit sin. Hindus in India do not eat beef, but they tactfully allow beef animals to be smuggled across the long border, to Pakistan so that Maleechas (a word for Muslims) eat it and become sinners, thus production of beef animals was neglected in Pakistan.

The climate of the whole of Pakistan is such that any type of fruits, nuts and vegetables, grown any where in the World can be grown very economically at some other place here, be it tropical, sub-tropical, temperate, evergreen or deciduous bush or tree. Cheap labour and almost as free supply of water from the Indus and its tributaries, could have helped in probably the cheapest rates in the World and export more on cereals. Aid, loan or grants awarding agencies too were ready to assist for cereals and not for fruits nuts and vegetables. The Western Europe, Israel, South Africa, New Zealand and many states of U.S.A, planned more and more for fruits, nuts and vegetables. New entrants to this type of horticulture were Mexico and Brazil, both of which are now on the verge of shifting from developing stage to developed stage.

It is obvious that shortage of quality food is already affecting not only our physical and mental, but also spiritual health. In the past 35 years we have seen utter disregard for moral values or heritage left by the British Administration and have turned into agitators, selfish and the exploiters of the faith and faithful. The rural areas are the worst affected, as its population, even in the depression days of thirties was getting better food then, than now. Any farmer of Sindh and the Punjab was able to get a glass or more of milk every day, butter or yogurt for breakfast, skimmed butter milk or Lasi any time during the day. Pulses were available in the houses in plenty. Fish or meats were usually taken three to four times a week. Today all these have disappeared from rural areas. The substitute is Chora-Chai (rejected tea leaves) boiled long enough to make sure that all nicotine, a poisonous oily alkaloid in it, is extracted fully from leaves and dissolved in tea water to make the person addict. The farmer takes bread or rice with his cup of tea, in which one or two tea spoons of sugar and one table-spoon of milk is added. This is the only source of his milk for, this is his drink for breakfast, lunch and dinner. He gets pulses once a day. Meat is served only on festivals like, Eid or Marriage. He works twice as many hours as he did fifty years ago, but his purchasing power is curtailed as he gets less than half as much for his produce, as he did then. Fifty years ago inputs formed a nominal percentage of his gross income but today these are substantial. May-be the moral degeneration in the country is cause of the lack of quality foods.

The past 35 years have been the time of ill-planning ill-advice, from our own experts or out-siders and there seems to be no end to it.

Meat and pulses contain amino-acids. Meat has 22 amino-acids which are essential for human body and must be taken in proper proportion with each meal. No pulse provides all 22 amino-acids. Each provides only a few amino-acids. A combination of different pulses can provide this requirement. Vegetarians invariably eat a number of pulses with each meal, to provide all amino-acids.

Fourteen mineral elements calcium, sodium, zinc, iodine, copper, phosphorus, sulphur, fluorine, manganese, iron, magnesium, cobalt and chlorine are essential nutritional constituents for human body. No food has all of them but some fruits, vegetables and mild each have some of them. A combination of vegetables, fruits, meat and milk products can provide all of these elements. This is why the policy of past 35 years of concentrating all efforts on raising cereals is un-wise.

The doctors and nutritionists working on the food ingredients all-over the world have concluded that deficiencies of proteins in the food cause not only an early death but the persons having dietary deficiencies, will suffer from following physical and mental dis-order.

- i) Insomnia (treatable with changed nutrition).
- ii) Anxiety (treatable with control of blood sugar).
- iii) Early wrinkling of face (irreversible).
- iv) Bleeding tendencies.
- v) Head-aches (most head-aches treatable with vitamin C or fruits and vegetables containing vitamin C).
- vi) Low immunity.

- vii) Cold and cough.
- viii) Cancer (anti cancer diet includes dark green vegetable, cruciferous vegetables, fruit, whole grain, cereals and milk).
- ix) Arthritis.
- x) Diabetes.
- xi) Protein-Calorie Malnutrition disease.
- xii) Kwashiorkor.
- xiii) Edema.
- xiv) Liver trouble.
- xv) Cataract.
- xvi) Skin diseases.
- xvii) Early senility.
- xviii) Low or high cholesterol level.
- xix) Hypoglycemic fits.
- xx) Besides these, malnutrition causes bleeding gums, mental sluggishness, irritability, easy bruising of flesh, slow healing of injuries, poor skin conditions and tone, kidney and bladder stones, loss of sexual potency, stooped stature in youth and rheumatism. In the worst cases it can cause leprosy, dysentery, leukemia, atherosclerosis, heart diseases and influenza.

It is also suspected that the present high incidence of cancer may be due to wrong and untimely use of fruits and vegetables, of insecticides and pesticides; some of which are known to cause cancer.

III-advice on agriculture policy has thus caused the country to suffer not only economically but physically and mentally.

Had we concentrated on fruit, nut and vegetable production, we would have earned 10 times as much from each acre of land and this money could have pushed us up from developing country to a developed country and we would not have taken loans and debits.

All what is said above is not 'Third worldism'. The proper planning should have been to increase area under horticultural crops and reduce that under grains over years. There has never been a wheat shortage in the world as there are areas, which are highly suitable and economical for raising grains under rainfed conditions in the temperate and cold zones of Northern Hemisphere and where man-hours spent on raising an acre of wheat are nominal. By exporting horticultural crops of one acre, we could have bought wheat produced on 10 or more acres. South Africa and Israel have been in the fore-front in switching over to horticultural crops. They lie in the same latitudes as some areas of Sindh and the Punjab. If they can do it, why can we not?

This Article was taken from 'Sindh Quarterly' Vol. XVI 1988 No.1, pp 28-33

