REPORT OF THE

FAO/PARC WORKSHOP ON

DIETARY GUIDELINES FOR FOOD AND AGRICULTURE PLANNING

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III. CONCLUSIONS AND RECOMMENDATIONS

a) Total Dietary Energy

10. The workshop broadly reviewed the food production and availability situation in Pakistan during the decade of 1977-1987. The workshop observed that the overall production of cereals over the period increased from about 15 million tonnes to about 18.4 million tonnes with the average annual growth rate of 2.5 percent. Among the cereals particularly wheat production increased from about 9.1 million tonnes to over 12 million tonnes over the period with an average growth rate of 3.7 percent. Considering that wheat is the basal ingredient in Pakistani diets, the growth rate of 3.7 percent, which is above the population growth rate, is considered a highly commendable achievement. The workshop recognized that barring the years when production falls due to adverse climatic conditions, Pakistan by and large is self-sufficient in the production of cereals needed for its population.

11. As regards the production of roots and tubers, Pakistan did extremely well; the total production of roots and tubers went up from 326 thousand tonnes in 1977 to 612 thousand tonnes in 1987. The average annual growth rate of roots and tubers was 7.2 percent during the period.

12. Reviewing the production of pulses, the workshop observed a static situation and a growth rate of merely 0.9 percent over the decade. The workshop felt that a breakthrough is needed in the technology of pulse production in Pakistan in order to increase the availability of this important food group.

13. Pakistan also made excellent progress in the production of oil crops. The production increased from 350 thousand tonnes in 1977 to 582 thousand tonnes in 1987 growing at an average annual rate of 6.3 percent.

14. In the case of fruit it was observed that the production went up from about 2 million tonnes to nearly 4 million tonnes increasing at an excellent rate of 6.6 annually. The production of vegetables increased from about 1.75 million tonnes to about 2.74 million tonnes with a growth rate of 4.6 percent annually.

15. The workshop observed that Pakistan also made a tremendous progress in the production of livestock. The base of 100 in 1979-81 for gross livestock products increased from 90 in 1977 to 137 in 1987.

16. The workshop realized that the potential for increasing agricultural production of most food groups is tremendous in Pakistan. The country also has research facilities for breakthrough needed in improving the production and yield of pulses and beans and other food crops.

17. Considering the above mentioned impressive growth rates in the major food crops in Pakistan and the potential that exists for further increases, the workshop had no doubt that Pakistan has already achieved food self-sufficiency.

18. The workshop however, recognised that inspite of making tremendous strides in food production, the country still has unacceptably high incidence of under-nutrition and malnutrition. The evidence shows that 61 percent of children

under the age of five are below their normal weight for height. Similarly, the average body weights of adult males and females are below the acceptable international norms. Under-nutrition among children impairs their growth potential and under-nutrition among adults lowers their productivity.

19. The workshop observed that food availability in Pakistan which takes into account import, export and stock changes also increased impressively. In 1987-88 it exceeded the requirement level of 2310 Calorie per person per day by 3 percent and stood at 2385 calories. The workshop strongly recommended that in the light of the agriculture production achievements, the time for Pakistan is now ripe to move the focus from mere food self-sufficiency to feeding its people for nutritional adequacy.

Nutritional Adequacy

20. From the point of view of achieving nutritional adequacy for improving the Pakistani diet, the workshop examined the most recent dietary pattern available for Pakistan in-terms of various food groups. According to the food balance sheet figures of the average for 1984-86 the Pakistani diet was composed of 60.1% cereals, 0.4% roots and tubers, 7.4% pulses and beans, 0.3% nuts and oilseeds, 2.7% fruits and vegetables, 14.3% total sweeteners, 13.6% added fats and oils and 7.9% animal products. In-terms of Kilogram (Kg) per person per year, the availability of various food groups per person per year was 156 Kg from cereals, 5 Kg from roots and tubers, 9 Kg from animal products, 13 Kg from fats and oils, 1 Kg from nuts and oilseeds, 6 Kg from pulses and beans, 47 Kg from total sweeteners and 56 Kg from fruits and vegetables. The total diet amounted to 374 Kgs. Since then improvement in food supply indicate that in 1987-88 the total food provided 2385 Calories per person per day indicating an increase of about 6 percent over the 1984-86.

In other words the present total amount of food is about 400 Kg per person per year.

21. The workshop then compared the Pakistani dietary pattern with the nutritionally desirable dietary pattern proposed by FAO. This dietary pattern suggests the levels of various food groups which should be present in a diet to make the diet nutritionally balanced, palatable and of sufficient bulk. This pattern has been assigned a score of 100 so that other dietary patterns can be scored against this reference score. The comparison showed that the Pakistani diet is generally high in its contents of cereals, added oils and fats and total sweeteners, and the diet is low in its contents of total animal products, pulses and fruits and vegetables. With suitable adjustments in the production and availability of various food groups through agricultural diversification, it is possible that the average national Pakistani diet will achieve the dietary score of 100 in the long run. For short term objective, however, the workshop recognized that it is feasible for Pakistan agriculture to bring about changes in the availability of food groups to achieve the nutritional score of 82 before the end of this century. For this particular objective, the workshop agreed on the following composition of the average Pakistani diet by the year 2,000.

Food item	Kilocalories(%)
Cereals	56
Roots and tubers	3
Animal products	12
Added fat	10
Nuts and oilseeds	1
Pulses and beans	3
Sugar	8
Fruit and vegetables	4
Beverages and seasonings etc.	3

22. In order to achieve the suggested improvement in the Pakistani diet, the workshop recommended that policies and strategies should be undertaken to reduce the pressure on cereal in the diet by in-corporating more potatoes. Similiarly reduction in the supply of oils and fats and sugar should be considered. It will be necessary to give incentives and impetus for further increasing the availability of total animal products.

23. The workshop pointed out that for achieving the diet mentioned above in the terms of kilograms/person/year, it will mean a decrease of 10.6 Kg in cereals, 32.5 Kg increase in roots and tubers, 46.7 Kg increase of animal products, decrease of 3.4 Kg in fats and oils, increase of 2.3 Kg in nuts and oilseeds, increase of 1.5 Kg in pulses and beans, 16.4 Kg decrease in sugar and 27 Kg increase in fruits and vegetables. The total food should increase by about one-fourth of the 1984-86 quantities.

24. The workshop recognized that the national dietary pattern of Pakistan may vary considerably from one province to the other. The workshop therefore recommended that the desirable dietary pattern be used in food and agriculture planning at provincial level. Taking into account the feasibility of increasing or decreasing production of various food groups, dietary guidelines should also be prepared at provincial levels.

Prevention of food losses

25. The workshop recommended that prevention of food losses through pre and post-harvest conservation and

processing should receive as much attention as increasing agricultural production as a means of increasing food availability. In the calculation of food availability, requirements for seed and feed plus allowances for wastage are considered to vary within the range of 5-30 percent. Food wastage alone due to handling etc. is reckoned to be 8 to 10 percent. A reduction of 5 percent in post-harvest food losses would increase the food availability to abolish the caloric gap at national level. Such measures are important in raising the degree of self-reliance and improving the standards of nutrition.

Dietary Energy Requirement

26. The workshop discussed the requirement of dietary energy at various levels and based on the reported evidence agreed that the recommended dietary energy allowance (RDA) for Pakistan is 2100 Calories per caput per day. Considering the usual losses between RDA and availability another 10% is necessary to be added which will make the average national dietary energy requirement as 2310 Calories at availability level. The workshop further considered losses between food availability and production levels. Based on the present evidence from the country such losses were recognized to be around 12.5%. Therefore the dietary energy requirements at production level would be about 2600 Calories per person per day.

Monitoring and Evaluation

27. Keeping in view that the progress of measures taken to improve the national diet of Pakistan will need periodic monitoring and evaluation, the workshop strongly recommended that an expert committee in this regard be set up. The

workshop suggested that the action should be initiated by Ministries of Food, Agriculture and Cooperatives and Planning and Development for setting up this committee. The workshop agreed that the Secretariat of the committee should be located at PARC.

Nutrition Awareness and Education

28. The workshop realized that changes in the dietary patterns may involve changes in food habits. It will, therefore, be necessary to undertake promotional and social marketing programmes based on nutritional messages. The workshop recommended that nutrition awareness of the massess and nutrition education measures will have to be undertake through formal and non-formal channels of communicating the pertinent information. The use of mass media and special groups such as women groups, were identified as important sources in this regard. Food production programme for nutritional adequacy and nutrition awareness and education programmes of necessity should go side by side.