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TRENDS IN URBANIZATION AND FOOD CONSUMPTION IN PAKISTAN

by

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## TRENDS IN URBANIZATION AND FOOD CONSUMPTION IN PAKISTAN

### INTRODUCTION

Urbanization is a centuries-old phenomena characterized by the geographical concentration of population. In recent years, there has been a growing concern about spectacular growth of urban population in the developing countries. By the year 2000, one billion more inhabitants of the developing countries would be living in urban areas and the number of cities having a population larger than five million would rise to 40 from only 5 in 1950 (World Bank, 1979). Out of these, 2 cities would be in Pakistan. Already one city of Pakistan, Karachi, has exceeded the 5 million mark and by the year 2000 another city, Lahore would be in the 5 million category. If Karachi is allowed to grow at the present rate, it would turn into a megalopolis and be one of the eighteen cities of the world exceeding a population of 10 million in another fifteen years. Amongst the countries of South Asia, Pakistan has the highest percentage of its population living in urban areas. According to the 1981 census, 28.3 percent of the population resided in urban areas of which 53 percent was concentrated in cities having a population of 500,000 and above. The number of cities in this size category increased from 2 in 1951 to 8 in 1981 (Abbasi, 1987). Urbanization influences food production and consumption, causes urban-rural competition for natural resources and introduces socio-economic changes. All these factors affect the nutritional status of urban population. (Hussain and Lunven 1987). This paper deals with trends in urbanization and food consumption patterns in Pakistan.

### Trends in Population Growth

Higher population growth rate in Pakistan was accompanied by significant internal migration. According to the 1981 census, a total of 5.92 million persons had migrated within the country. The pattern of internal migration shows a considerable flow of population from rural to urban areas, as 87.6 percent of the total migrants were found to come from rural areas compared to only 12.4 percent from urban areas. Such heavy flows to urban areas have led the urban population to grow at a much faster rate: from 1972 to 1981 at the annual rate of 4.4 percent, compared to 2.6 percent in rural population, and 3.1 percent in total population, (Table 1).

The rapid rate of urbanization has exerted considerable pressure on urban infrastructure and has contributed to urban unemployment problems. It has also given rise to the creation of densely populated large slums causing unhygienic conditions and exerting pressure on all civic amenities.

Since 1951, 180 new urban areas came up increasing the total number of agglomerations from 208 in 1951 to 388 in 1981. Of these 8 cities in 1981 had a population greater than 500,000 while another 21 cities fall between 100,000 - 499,999. Interestingly, 51.1 percent of the country's urban population lives in these 8 cities (Karachi, Lahore, Faisalabad, Rawalpindi, Hyderabad, Multan, Gujranwala and Peshawar). Though the number of towns having population below 25,000 is 263 but they contain only 17 percent of the country's urban population.

### Urbanization Tempo

Table 2 indicates that during 1951-61, the urban population of Pakistan increased by 60 percent compared to an increase of about 20 percent in the rural population. Over the next intercensal period, 1961-72, the percentage growth in the urban and the rural populations were 72 and 47. The corresponding figures for 1972-81 were 44 and 24 respectively. Besides due to natural increase, the relatively higher growth of the urban population is the result of rural to urban migration which has continually been contributing to the increasing levels of urbanization.

The rise and fall in the net in-migration rates to the urban areas and consequently a decline in the tempo of urbanization was explained in terms of the general development strategy of urban industrial centres, new growth foci, settlement patterns of refugees, nationalization policies and political factors. To begin with, the general development strategy emphasized growth rather than distribution, whether intersectoral or interregional. The first industrial policy of the country, emphasized the transformation of the predominantly agricultural economy through expansion of industrial activities and provided maximum encouragement to the private enterprise. Hence, the industrial location decision in the initial phase of industrialization geared the trends and patterns of urbanization. As there was no expansion in the infrastructural facilities (roads, railways etc.) hence the large urban centres with better infrastructural facilities were the focus of industrial activity. The spatial location of industry and the unbalanced growth rates of industry and the agriculture sector in 1951-61 led to a lopsided pattern

of development whereby few urban locations grew as growth poles in the regional metropolises. The higher pace of urbanization in 1951-61 and its subsequent lowering in 1961-72 bears a close association with the corresponding growth rates of the industrial and agricultural sectors. In the first decade, (1949-50 to 1959-60), the growth rate of the large-scale manufacturing was 9.7 time higher than the growth rate in the agricultural sector. During this decade there was massive migration from the rural areas to the urban centres. In 1961-72, the changes in the agrarian structure following the Green Revolution affected the tempo of urbanization and the gap between the growth rate of the large-scale manufacturing and the agricultural sectors narrowed, the former remained only 2.7 times higher than the later. The higher tempo of urbanization in 1951-61 and its substantial lowering in 1961-72 was also attributed to the settlement patterns of refugees and their reshuffling in fifties while 1961-72 decade was free of any such influx of refugees from across the border. The decline in the tempo of urbanization in 1961-72 has also been attributed to the ribbon type development around the urban core, i.e the growth of the industrial units and complexes along the national highways. It needs to be underscored that those districts which were benefitted from this ribbon type development were serviced by the national highways.

Fig. 1 shows that tempo of urbanization experienced a slight increase in 1972-81 compared to 1961-72, whereas during this period the net in-migration rate slightly declined. The drastic social and economic reforms leading to nationalization of industries; discouragement of the private sector; stagnation of large-scale manufacturing coupled with favourable policies of manpower export to Middle East affected the rural urban migration

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negatively, particularly in the earlier half of the seventies. Emigration to the Middle East probably consumed a significant share of the potential urban-ward migrants as a majority of the emigrants originated from the rural areas.

Almost similar tempo of urbanization has been projected till the year 2000 as experienced during 1972-81. There is an urgent need to device well conceived and comprehensive urban and industrial location policies. At the same time, national development policies need careful planning so that they do not build spatial biases. In addition, opening up of new areas as part of the long range transport policies through roads/railways can prove effective in diverting the migration streams to less developed areas. Agricultural and rural development plans with measures to strengthen the economic base of the rural areas may prove as a major deterrent to the out-migration from the rural areas. Furthermore, availability of appropriate avenues of investment in the rural areas or the smaller towns would also help encourage the returnee Middle East migrants to settle in these areas, as they constitute a potential group that has a propensity to settle in urban areas.

#### Food consumption patterns

The food consumption patterns in rural and urban areas of the country between 1965-66 to 1985-87 are presented in Table 3.

The consumption of cereals was higher in rural than the urban areas during 1965-66. This trend has not changed during the last 20 years. Wheat is still the commonest cereal consumed in both areas and its consumption is still higher in the rural than the urban areas and the cities. Its consumption has

increased somewhat since 1965-66 in both rural and urban areas and that of the other cereals e.g. sorghum and millet appears to be negligible on a national basis. The consumption of sugars and sweets, pulses and nuts and total vegetables has also increased in both urban and rural areas while that of leafy green vegetables has shown a decline. The consumption of all other food items has increased during the last 20 years. The figures reported for 1976-77 are on the higher side as they are based on overall food intake data, while the individual intake data collected during the survey showed much lower intakes.

Except for meat, eggs and fish the intake of all food groups was higher in rural areas in 1965-66 than in urban areas. The consumption of starchy roots, sugars and sweets and milk and milk products are still higher in rural than in urban areas and those of meat, eggs and fish are still lower in the rural as compared to the urban areas. The differences in the consumption of pulses and nuts and leafy vegetables between the urban and rural areas have since disappeared. The amount of fruits consumed, though small, used to be higher in the rural areas. The amount consumed is still small but more fruit is now consumed in the urban areas.

#### Consumption patterns in relation to income

The monthly per capita consumption data from the national household income and expenditure survey (1984-85) are presented in table 4. In all the income groups, the consumption of wheat and rice was higher in the rural areas than that in the urban areas. The consumption of pulses was similar in both urban and rural areas and was not affected by the income level in both areas. The consumption of milk and milk products was higher in

rural than the urban areas and was positively related to income. The consumption of ghee and cooking oil was slightly higher in the urban areas upto an income level of Rs. 3000 per month. Beyond this income level, the consumption in both the urban and rural areas was similar. The consumption of meat was higher in the urban areas and was positively related to income. Egg consumption was similar in both urban and rural areas for the low income group. In the medium and high income group it was higher in the urban than the rural areas and was positively related to income. Sugar consumption was higher in the rural areas than the urban areas and was also positively related to income levels.

#### Nutrient Intake

The nutrient intake data are presented in Table 5. The latest data show that the total calorie, protein and iron intake has increased in both urban and rural areas since 1965-66. In both 1965-66 and 1976-77, the intake of all the nutrients was higher in the rural than the urban areas. The latest figures (1985-87) indicate that this difference has almost disappeared for both protein and iron intake. The calorie intake in the rural areas is however, still slightly higher than in the urban areas. The data suggests that the urban population has nutritionally benefitted more from Govt. policies during the last 20 years. Its intake of calories, protein and iron has increased, while the rural population only gained in terms of a slightly higher calorie intake.

Deficiency diseases

The percent prevalence of deficiency diseases is presented in Table 6. During 1965-66, the incidence of conjunctival pallor was higher in urban than in rural areas (56.0% Vs 36.3%). This has decreased significantly during the last 20 years. It came down to about 14-15% in 1976-77 and the incidence is now somewhat higher in both rural and urban areas (22.6% Vs 21.2%). The incidence of bitot spots in 1965-66 was almost two times in urban areas when compared to the rural areas (2.7% Vs 1.3%). This has also decreased significantly during the last 20 years and is now slightly higher in the rural areas (0.3% Vs 0.1%). The incidence of angular lesions/scars was higher in the rural areas in 1965-66 when compared to the urban areas (7.9% Vs 3.8%). It showed no change in the rural areas during 1976-77 but increased in the urban areas to about the level of 7.6% in the rural areas. This incidence has also decreased significantly and was reported to be about 1.5% in both rural and urban areas in 1985-87.

The incidence of goitre during 1965-66 was almost two times in the urban areas as compared to the rural areas (4.8% Vs 2.5%). By 1976-77, it fell to 1.9% in urban areas but rose to 3.5% in the rural areas. By 1985-87, it appeared to have completely disappeared from the national sample and may now be a public health problem in isolated areas like Gilgit and Chitral. The incidence of PCM was not directly determined during the 1965-66 survey. Based on serum albumin levels, it was estimated to be 60% in the rural and 40% in the urban areas. By 1976-77, its incidence in urban areas rose sharply and reached the same level (60%) as in the rural areas. The latest survey data (1985-87)

show that it has somewhat fallen in the urban areas to about 55%. Its incidence almost remains unchanged in the rural areas. The incidence of vitamin C deficiency was higher (60%) in the rural areas during 1965-66 when compared to the urban areas (3.5%). During the last 20 years, its incidence has significantly fallen in both rural and urban areas and is now at a very low level (0.7% Vs 0.3%). Thus a comparison of the results of three national surveys carried out during the last 20 years show that only PCM and anemia still remain major public health problems in both rural and urban areas of Pakistan. The incidence of anemia although still high, has significantly fallen during the last 20 years. Our efforts to control/eradicate PCM do not seem to have succeeded so far. However, even in case of PCM, the urban areas seem to be slightly well-off when compared to the rural areas and perhaps it is fair to say that urbanization has not in anyway deteriorated the nutritional status of the people in Pakistan. This is probably due to better medical care (curative and preventive), better sanitation and comparatively safer water intake, in spite of lower nutrient intake.

#### Diarrhoea

51 percent of the children suffered from diarrhoea at any given time during summer while 30 percent of the children had diarrhoea in winter. The overall incidence of the disease was nearly of the same severity in all the four provinces. In two provinces, viz., Punjab and Sind, the incidence of diarrhoea was more in the urban than in the rural areas. This pattern was reversed in NWFP and Baluchistan where more children suffered from diarrhoea in the rural areas.

### Infant mortality rates

Mahmud (1984) has studied diarrhoeal disorders and feeding patterns in Pakistan. This study found that the infant mortality rate (0-1 year) was 127.6/1000 children in rural areas compared to 116.6/1000 children in the urban areas. The provincial values of infant mortality rates were similar to the national figures with no significant differences. However, the rural infant mortality rates in case of Baluchistan were significantly higher (130.4/1000) than for urban areas (90.9/1000) of the province.

### Measures to reduce urbanization

The migration of population from rural to urban areas is a natural consequence of economic growth and therefore, cannot be stopped. The speed of urban growth is however accentuated by the almost universal urban bias in development planning that provides for the concentration of industry, higher education, medical facilities, subsidized food and housing programmes and political power. There is an urgent need to modify such policies to slow migration in order to promote the orderly development of both urban and rural areas.

Improvement must be made in rural infrastructure and provision of services including electricity. In addition, health and educational facilities must be expanded to improve the quality of rural life.

Rural industries must be developed to provide employment. Labour intensive agro-based industries will be particularly suitable for providing jobs for surplus agricultural labour.

Family planning services are needed in both rural and urban areas - in rural areas to reduce the population and thus out - migration, and in urban areas to reduce natural growth.

Population can be redistributed by creating satellite towns near large towns and planning small towns in rural areas, and encouraging people to settle there instead of clustering into the large cities. In experience todate, however, such ventures have been costly and less successfull than expected.

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Table 1: Rural-Urban Population in Pakistan, 1961-81.

	(Population in Million)		
	1961	1972	1981
Population (in million)	46.20	65.31	84.25
Rural	35.80	48.72	60.41
Urban	10.40	16.59	23.84
% Share in Total	100.00	100.00	100.00
Rural	77.48	74.60	71.70
Urban	22.52	25.40	28.30
Inter-censal, Growth Rate (% p.a)			
Total		3.02	3.1
Rural		2.69	2.6
Urban		4.10	4.4

Source: Economic Survey, 1987-88.

Table 2 Urban-Rural population growth patterns during the inter-censal periods and tempo of urbanization.

Census years	Population (in 000s)			Intercensal % growth			Ratio of urban to Rural growth	Tempo of urbanization.
	Total	Urban	Rural	Total	Urban	Rural		
1951	33,780 (100)	6,019 (17.8)	27,761 (82.2)	19.4	49.9	14.4	3.5	22.5
1961	42,880 (100)	9,655 (22.5)	33,225 (77.5)	27.0	60.0	19.7	3.0	23.5
1972	65,309 (100)	16,593 (25.4)	48,716 (74.6)	52.3	72.0	46.6	1.6	10.4
1981	84,253 (100)	23,841 (28.3)	60,412 (71.7)	29.0	43.7	24.0	1.8	12.8
1991 (Projected)	111,210 (100)	30,030 (27.0)	81,180 (73.0)	27	26	34	0.8	8.5
2001 (Projected)	138,330 (100)	38,720 (28.0)	99,580 (72.0)	28	29	23	1.26	10.2

Source: Economic Survey, 1987-88.

Table 3 Intake of Food by Food Groups (gm/person/day)

Food Group	1965-66		1976-77		1985-87		
	Rural	Urban	Rural	Urban	Rural	Urban	City
Total Cereals	479.3	346.6	626.0	433.8	570	534	404
Wheat	398.0	318.3	503.8	376.6	488	466	370
Rice	59.7	38.7	95.4	47.8	82	68	34
Others	21.6	6.6	26.7	9.5	-	-	-
Starchy roots	18.5	28.1	15.8	36.5	49	40	30
Sugars and Sweets	23.8	32.2	73.1	53.5	48	32	31
Pulses and Nuts	20.8	14.8	27.0	20.1	42	42	44
Total vegetables	67.1	66.8	54.6	51.3	80	77	83
Leafy green	31.2	10.8	40.1	24.2	14	16	3
Fruits	3.1	2.5	16.3	1.9	4	7	13
Meat	13.9	26.3	15.8	36.5	26	42	53
Eggs	1.0	2.7	3.4	7.7	5	7	9
Fish	1.3	5.8	5.9	6.9	8	11	2
Milk and Cheese	147.8	107.4	458.6	240.7	257	114	75
Fats and Oils	19.8	21.2	33.1	82.1	29	36	36
Miscellaneous	5.3	5.2	-	-	148 (tea)	140 (tea)	158 (tea)

Source: 1. Nutrition survey of West Pakistan (1965-66)  
 2. Micro-nutrient survey of Pakistan (1976-77)  
 3. National Nutrition survey (1985-87)

**Table 4. Monthly per capita consumption (kgs) of major food items by income groups and areas during 1984-85.**

Food Item	Low Income Upto Rs. 1500		Medium income Rs. 1501-3000		High income Rs. 3001 & more	
	Rural	Urban	Rural	Urban	Rural	Urban
Wheat and Rice	5.92	4.94	6.91	4.85	7.44	4.76
Pulses	0.08	0.09	0.10	0.09	0.11	0.10
Milk and milk Products.	2.85	2.10	3.76	2.63	4.58	3.19
Ghee and Cooking Oil.	0.17	0.19	0.20	0.22	0.24	0.24
Mutton, Beef etc.	0.10	0.19	0.18	0.20	0.22	0.30
Fruits	0.34	0.55	0.63	0.91	0.92	1.40
Vegetables	0.68	0.72	0.73	0.86	0.83	1.04
Sugar	0.33	0.28	0.44	0.33	0.57	0.37
Eggs	0.79	0.79	1.62	2.08	2.37	4.39
Tea	0.04	0.05	0.06	0.05	0.07	0.08
Salt and chillies	0.17	0.15	0.16	0.14	0.16	0.14

Source: Federal Bureau of Statistics, Statistics Division, "Household Income and Expenditure Survey, 1984-85".

Table 5 Per Capita Nutrient Intake

Nutrients	1965-66		Urban as % of rural	1976-77		Urban as % of rural	1985-87		Urban as % of rural
	Rural	Urban		Rural	Urban		Rural	Urban	
Calories (Kcal)	2126	1806	84.9	3283	2858	87.1	2379	2259	95.0
Protein (gm)	69.8	58.4	83.7	97.9	73.8	75.4	68.0	66.0	97.1
Iron (mg)	20.5	16.1	78.5	29.7	21.1	71.0	23	22	95.6

Source: 1. Nutrition survey of West Pakistan (1965-66)  
 2. Micro-nutrient survey of Pakistan (1976-77)  
 3. National Nutrition survey, (1985-87)

Table 6 Percent Prevalence of Deficiency Diseases

Deficiency Disease	1965-66		1976-77		1985-87	
	Rural	Urban	Rural	Urban	Rural	Urban
Conjunctival pallor	36.3	56.0	15.0	14.0	22.6	21.2
Conjunctival wrinkling	21.5	41.1	-	-	-	-
Bitot spot	1.3	2.7	-	-	0.3	0.1
Angular lesions/scars	7.9	3.8	7.6	7.6	1.5	1.5
Goitre	2.5	4.8	3.5	1.9	0.0	0.1
PCM	60.0	40.0	60.7	59.6	58.8	54.9
Swollen red papillae	6.0	3.5	-	-	0.7	0.3

Source: 1. Nutrition survey of West Pakistan (1965-66)  
 2. Micro-nutrient survey of Pakistan (1976-77)  
 3. National Nutrition survey (1985-87)

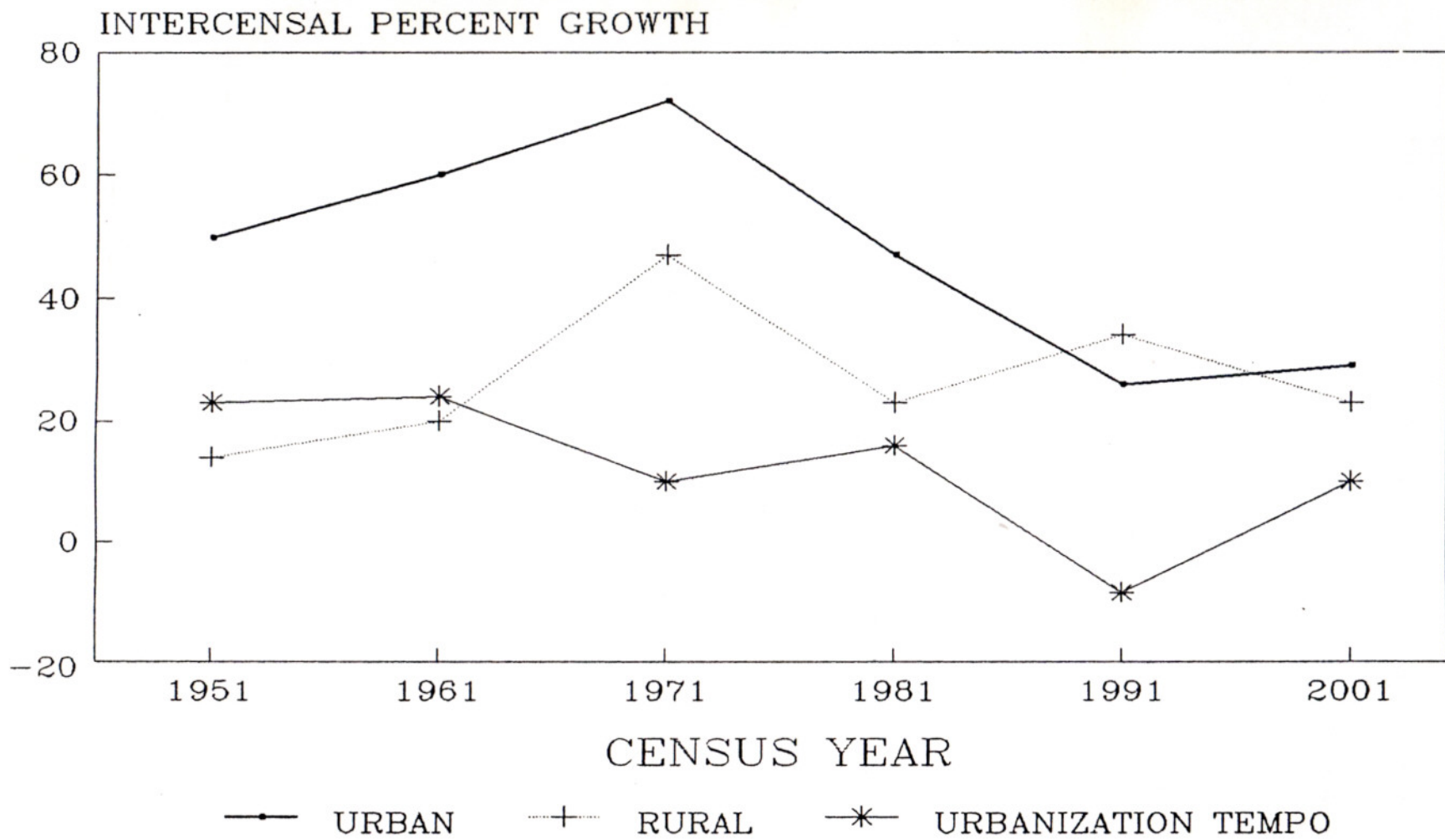


Fig.1 URBANIZATION PATTERN IN PAKISTAN