



RURAL-URBAN DIFFERENCES IN FOOD CONSUMPTION TRENDS OF POPULATION IN KUMAON REGION OF UTTARAKHAND

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ABSTRACT

The rapid growth of industrial civilization in urban areas has extensively widened the difference in food consumption trends between rural and urban areas. Frequency of consumption of different food groups was observed since 1950 among rural and urban population of Kumaon region of Uttarakhand. During 1950-60, 76% rural population was routinely consuming rice in compare to only 63% urban population. There was continuous increase in routinely rice consumption in both groups since 1990 but the difference in rice consumption between two groups decreased decade wise. In early periods, routinely consumption of ragi was more among urban population (46%) in compare to rural population, (40%) which decreased decade wise and after 2000 same proportion of rural and urban were routinely consuming ragi i.e. 10%. Difference in routinely consumption of green leafy vegetables was found after 1970, where 51% urban population was consuming it in compare to 37% rural population. Major difference in fruits consumption was found after 1970 and 51% urban population was routinely consuming it in compare to 34% rural population but this difference decreased afterwards. After 2000, 27% rural population was routinely consuming fruits in compare to 24% urban population. During 1950-2000 routinely consumption of milk and buttermilk was more among urban population but curd consumption was more among rural population since 1980-2000 onwards. . During 1950-60, 63% urban and 71% rural population was routinely consuming curd which decreased to 27 and 33 % respectively. Difference was also found in consumption of mustard oil, refined oil, flesh foods, eggs and other additional foods.

Key words : Food consumption, kumaon region, dietary trends, rural-urban difference.

Uttarakhand is a hill state situated in Central Himalaya. The state comprises of thirteen districts, out of which, the six constitute Kumaon division. The food consumption pattern from different geographical parts of the state in different decades is needed to see the differences in consumption pattern among the population of same state. The rural population is entirely dependent upon agriculture and rural mainly consume low cost food but fresh in nature and their food habits are more or less fixed, whereas urban consume different types of processed food (1). Survey on trend in food consumption pattern and rural- urban difference in consumption at national level was conducted by NSSO. Data from the 27, 32, 38, 43, 50, 55 and 61st rounds of NSSO shows that there has been a rise in oil consumption both in rural and urban areas. Consumption of milk, fruits, vegetables and animal foods continues to be quite low both in urban and rural areas. Consumption of cereals, pulses, poultry, fish, fruits and vegetables are higher in rural areas as compared to urban areas perhaps because these

reach the household directly from their farms. Vegetable oils such as groundnut, mustard oil, soya oil, sunflower oil are the major oils used. There has been a small but steady decline in protein consumption in rural areas between 1973 and 2004-05, which is mainly attributed to the decline in cereal and pulse consumption. The protein consumption in urban areas has remained unaltered perhaps because of the increasing consumption of milk and animal products (2). In the urban population of India, refined wheat and rice have virtually displaced coarse grains and millet as the staple cereal resulting in a substantial reduction in fibre content in the diet and possibly also the content of micronutrients (3). According to (4) there is steady long-term decline of coarse cereals whose consumption has fallen by a half over the last 50 years. The last few decades have seen important changes in food habits of rural India especially sharp decline in the consumption of coarse cereals. Keeping above views the present study has been undertaken with the objective to see the differences in food consumption

pattern between rural and urban population of Kumaon region.

MATERIALS AND METHODS

Present study was conducted in three districts of Kumaon region of Uttarakhand. Out of six districts of Kumaon region three districts were selected namely Udham Singh Nagar, Nainital and Champawat for study on the basis of food insecurity status. From each district two blocks and from each block two rural and two urban areas were selected for study. Nearly twelve families were taken from each area. Total 142 families representing different socio-economic status were selected for study. Haldwani and Bhimtal blocks were purposively selected from Nainital districts. The two rural and two urban areas randomly selected under Bhimtal block were Bhujiaghat, Bhalutia, Mallital Ward no.7 and Mallital Ward no.2 respectively. Under Haldwani block two rural and two urban areas were Tallibamori, Quality colony, Haldwani Ward no.19 and Haldwani Ward no.7 respectively. Under Champawat district two blocks were selected, namely Lohaghat and Champawat. Under Lohaghat block two rural and two urban areas were Kaligaon, Chaurigaon, Hatrangia and Bajarangbali Ward respectively. Under Champawat block two rural and two urban areas were Kharak Karki, Mali Madli, Mallihatt Ward no.2 and Sellakulla respectively. The two blocks were selected from Udham Singh Nagar namely Rudrapur and Kashipur. Under Kashipur block two rural and two urban areas were Himmatpur, Hempur Ismail, New Awas Vikas and Awas Vikas. Under Rudrapur block two rural and two urban areas were Shantipur, Jawaharnagar, Adarshnagar and Awas Vikas. The study comprised of male and female between the age group of 56 and onwards. Selection of respondents was done by using snow ball sampling method.

RESULTS AND DISCUSSION

Trends of rural urban difference in food consumption. (56 years and above age groups)

1. Difference in cereal consumption (decade wise represented as % of population)

There was decade wise increase in routinely consumption of rice from 1950-1990 in both rural and urban population. During 1950-60, 76% rural population was routinely consuming rice in compare to only 63% urban population, which increased to 93% and 90 % respectively since 1990. After 1990 there was decrease in consumption of rice in both group but comparatively

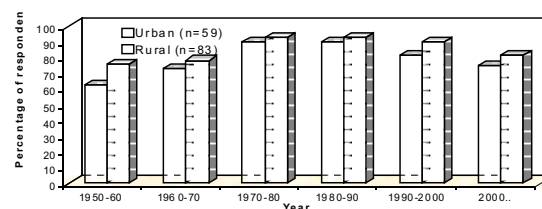


Fig-1 : Frequency of routinely consumption of Rice.

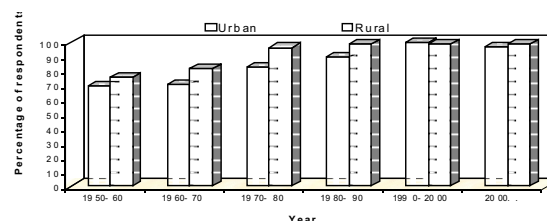


Fig-2 : Frequency of routinely consumption of wheat.

more percent of rural population was consuming rice. The trend was nearly same for wheat also but frequency of people routinely consumption wheat was more as compare to rice.

2. Difference in Madua consumption (decade wise represented as % of population)

A 46% urban population was routinely consuming madua as compare to 40% rural population during 1950-60 but at the same period 22% rural population was consuming madua in 2-3 days in a week, whereas only among 14% urban population. Decrease in consumption started after 1970 and continue after 2000. There was more than four times decrease in routinely consumption among both population but 2-3 days in a week consumption decreased by ten times in rural population and by less than two times in urban population.

3. Difference in Maize consumption (decade wise represented as % of population)

Routinely consumption of maize among rural population was 22% as compare to 14% urban population during 1950-60. Sharp decrease in consumption started after 1970 and after 2000 urban population was not consuming maize on routinely and

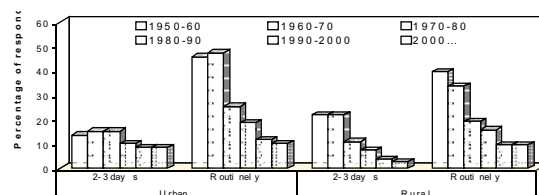


Fig-3 : Frequency of routinely consumption of Ragi.

2-3 days in a week basis, whereas 1.2% rural population were consuming it routinely.

4. Difference in madira/kauni consumption (decade wise represented as % of population)

Madira was routinely consumed by 18% rural population during 1950-60 and only by 10% urban population. 2-3 days in a week consumption among rural population was more than four times (percent population) as compare to urban population. Sharp decrease in consumption started after 1970 and after 2000 urban as well as rural population were not consuming it routinely and 2-3 days in a week basis.

5. Difference in pulse consumption (decade wise represented as % of population)

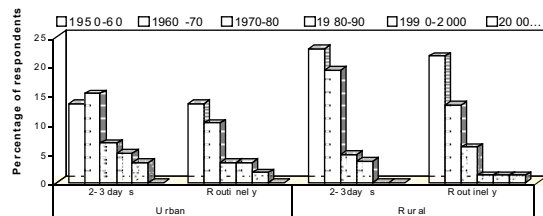


Fig-4 : Frequency of routinely consumption of Maize.

During 1950-60 nearly 90% urban population was routinely consuming pulse in comparison to 72% rural population, which decreased to 54% after 2000. Eighty-six percent of urban population was still routinely consuming pulse.

6. Difference in Green Leafy Vegetable consumption (decade wise represented as % of population)

There was decade wise decrease in green leafy vegetable consumption in both rural and urban

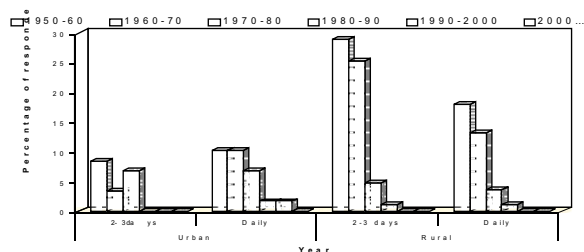


Fig-4 : Frequency of consumption of madira/kauni.

people but comparatively more percent of urban population was routinely consuming green leafy vegetable. During 1960-70, 54% urban population was routinely consuming it in comparison to 46% rural

people. After 2000, also nearly 8% more urban population was consuming.

7. Difference in Other Vegetable consumption

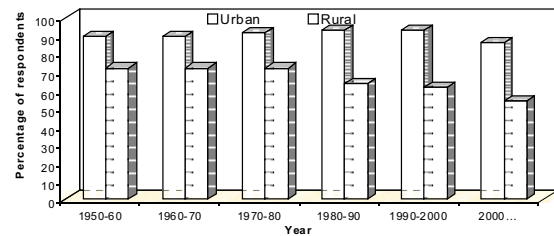


Fig-6 : Frequency of routinely consumption of pulse.

(decade wise represented as % population)

There was decade wise increase in other vegetable consumption percentage in both rural and urban people, but comparatively more percentage of urban population was routinely consuming other vegetable. During 1950-70, 80% of urban population was consuming it in comparison to 69% of rural people and the difference increased after 1970 (88% urban and nearly 70% rural). But after 1990, nearly same percentage was consuming it (nearly 2% difference).

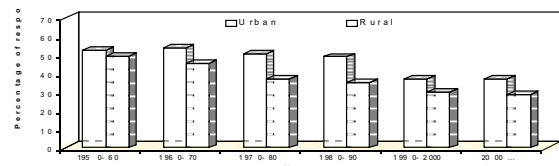


Fig-7 : Frequency of routinely consumption of Green Leafy Vegetable.

8. Difference in Fruits consumption (decade wise represented as % of population)

During 1950-70 nearly same percent of rural and urban people was consuming fruits but after 1970, 51% urban population was consuming fruits in comparison to 34% rural people. The difference in urban-rural consumption percent decreased decade wise and after 2000,

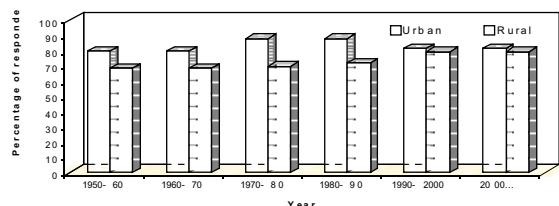


Fig-8 : Frequency of routinely consumption of Other Vegetable.

consumption percent was little more among rural people (less than 3% more).

9. Difference in milk consumption (decade wise represented as % of population)

Routinely consumption of milk among urban population was comparatively more than rural during 1950-2000. During 1950-70 nearly more than 80% urban population was routinely consuming milk whereas only 73%-79% rural population. There was decade wise decrease in routinely consumption of milk in both rural and urban population during 1950-2000. After 2000 only 41% urban population was routinely consuming milk where as consumption was nearly 52% in rural population.

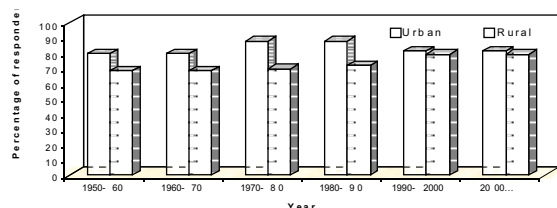


Fig.-9 : Frequency of routinely consumption of Fruits.

10. Difference in consumption of Butter milk (decade wise represented as % of population)

There was little difference between routinely consumption pattern of buttermilk in rural and urban population during 1950-1960. After 1960 decade wise decrease was steeper in rural population in comparison to urban population and after 2000 only 4% rural population was routinely consuming buttermilk where as 12% urban population.

11. Difference in consumption of Curd (decade wise represented as % of population)

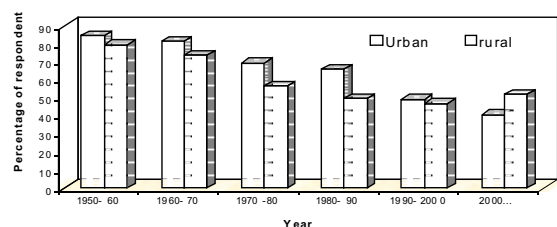


Fig.-10 : Frequency of routinely consumption of milk.

Except during 1970-90, routinely consumption of curd was more among rural people in compare to urban. During 1950-60, 63% urban and 71% rural population

was consuming curd which decreased to 27 and 33 % respectively.

12. Difference in consumption of Mustard Oil (decade wise represented as % of population)

Routinely consumption of mustard oil among rural population was comparatively more than urban throughout the decade discussed but difference was very sharp after 1990. Eighty four percent rural population was consuming mustard oil in comparison to 59% urban.

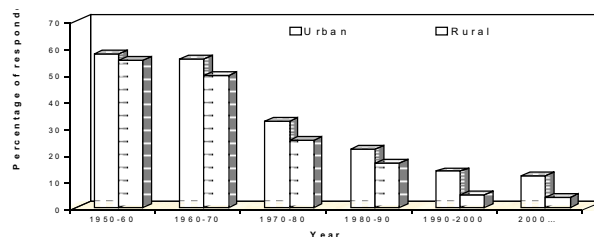


Fig.-11 : Frequency of routinely consumption of buttermilk.

13. Difference in consumption of Refined Oil (decade wise represented as % of population)

After 1970 percent consumption of refined oil increased in urban population and doubled after 2000 in comparison to rural population (59% urban and 29% rural).

14. Difference in weekly consumption of flesh food (decade wise represented as % of population)

During 1950-60, 24% rural people was weekly consuming flesh foods in comparison to only 12% urban people but after that there was decade wise decrease in percent of rural population consuming it. After 1970 there was not much rural urban difference in weekly consumption of flesh foods.

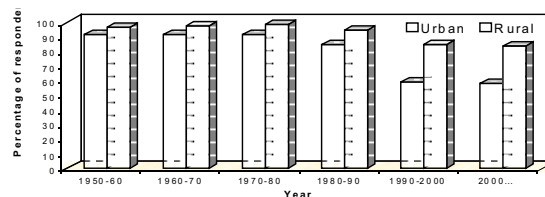


Fig.-12 : Frequency of routinely consumption of mustard oil.

(5) Clearly observed that comparing 2002 with 1998, overall cereal monthly consumption per capita declined from 11.05 kg to 9.44 kg in urban areas and from 14.8 kg to 12.2 kg in rural households. In the

study also there was decrease in consumption of rice in both groups after 1990, but comparatively more percent of rural population was consuming rice. Per capita consumption of meats, fish and eggs rose from 2 kg to 2.5 kg in urban areas and from 0.9 kg to 1.5 kg in rural households. Consumption of dairy products increased from 4.5 kg to 5.3 kg in urban areas and from

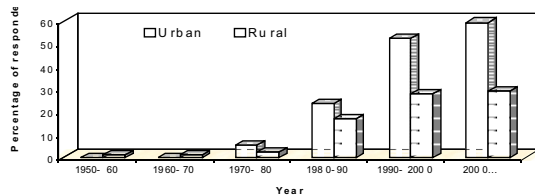


Fig.-13 : Frequency of consumption of refined oil.

3.3 kg to 3.9 kg per capita in rural households. Fruits and vegetables increased by 17 percent in urban areas and by 36 percent in rural areas. Recent data from the District Nutrition Profiles survey, which shows differences particularly in the intakes of vegetables and

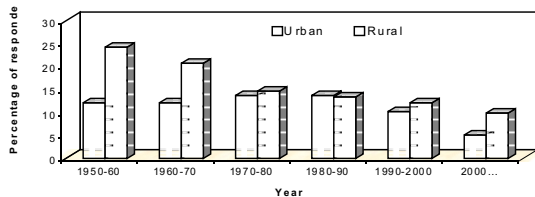


Fig.-14 : Frequency of weekly consumption of flesh food.

fruits and fats and oils between urban and rural populations. The National Family Health Survey provides information on the consumption of specific and selected foods once a week at least and demonstrates, for instance, that the percentage of women consuming meat/chicken/fish once a week is higher in urban than rural locations and not related to standard of living index or educational status except for the illiterate group intake (6). According to (7), in the rural population of Kumaon hill areas meat, fish and eggs were rarely consumed. Sixty percent of families not ate animal protein and only 4.55 of them had intake about ten gram daily. (8) also reported the mean number of days in a week when fruits were consumed was higher in urban population (3days) as compared to that in rural (2 days). A family in rural mountains areas

on an average retains 3.07 liters of milk per day purely for its consumption. Average amount of milk retained at peri-urban farms actually amounts to per capita per day milk consumption which is 492 ml. i.e. 242 ml. higher than the recommended amount (9).

CONCLUSION

There was overall decade wise reduction in frequency of routinely consumption of healthy foods in both rural and urban population i.e. coarse grains mainly ragi, pulse, fruits, milk and milk products, green leafy vegetable but reduction was more among rural people. It may mainly due to unavailability in rural areas as well as low purchasing power. Mustard oil was mainly consumed by rural. After 1970 percent consumption of refined oil increased in urban population and doubled after 2000 in comparison to rural population (59% urban and 29% rural).

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