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## CONSUMPTION LEVELS IN THE PEASANT FARMS

### Summary

Studies conducted over a period of many years by the Institute of Agricultural Economics, and based on book-keeping in peasant farms, yielded fairly extensive information relating to consumption levels in such farms. Consumption is considered both from a qualitative and value point of view, and relates both to food products as well as other living necessities of peasant families.

In this paper advantage is taken in the first place of book-keeping data for the years 1951/52—1955/56. It was not possible to take advantage of earlier material as it was not elaborated as averages for the country or for territorial units, but only as individual results for specific farms.

In the part relating to quantitative food consumption advantage was also taken of material in the possession of the Institute of Agricultural Economics for the period 1947/48—1950/51, as during this period the Institute investigated food level consumption on the basis of material from three sources: a) questionnaires collected in peasant farms by students of the Warsaw College of Agriculture, b) farms conducting book-keeping; and c) reports of agriculture correspondents of the Central Statistical Board. The sum of this material allowed for a considerable expansion of the total number of data under study.

Since 1951/52 to the present period studies on consumption are based exclusively on book-keeping results of individual farms. Up to 1950 the number of farms conducting book-keeping was around 500. Since 1950 increasing this number to around 1500 made it possible to do away with questionnaires and base these studies only on fairly accurate book-keeping results. The number of farms in which food consumption levels were investigated is given in table 1.

Inasmuch as in this study average results for the period 1951/52 to 1954/55, and for the years 1954/55 and 1955/56, are used, hence for characterizing the material, tables 2 and 3 are presented illustrating the number of farms under study, the average number of persons per farm, and the average size of farms. This presentation is based on the

background of farms constituting the main source of living of the owner according to the 1950 National Census.

It is necessary to call attention to the fact that farms conducting book-keeping show a higher economical level than average, this being no doubt reflected in both the value as well as the quantity of consumed products; this fact also influences the structure of consumption. In order to characterize the material, it can be stated that yields of cereals and potatoes in farms conducting book-keeping are on an average 25% than yields estimated by the Central Statistical Board. Still greater differences can be observed in respect to the number of livestock per hectare of arable lands. However the doubtful figures relating to the area of arable lands according to mass data does not allow for an accurate estimation of this difference.

Results of agricultural book-keeping for the period from 1951/52 to 1954/55 were elaborated according to social-economic regions, and separated into rural class groups i. e. into: small, medium and large farm holdings.

As a result of studies conducted by the Institute of Agricultural Economics on the social-economic structure of rural areas, the total area of Poland was divided into social-economic regions and sub-regions (see map). Both analyses of questionnaires as well as of results of the National Census indicated the necessity of such a division. Regions and sub-regions differ in respect to the level of production forces, development of agricultural commodity production, degree of rural social group development, weight of specific social trends (socialistic, small commodity, capitalistic). One of the properties of this territorial division consists of the fact that the statistical limits (class divisions) between the area of small, medium and large farms are differentiated for specific regions and sub-regions. Division of farms into social groups was based on their size, this being the most distinct and stable property. Size of the farm cannot constitute the only property for qualifying a holding to one or another social group, hence before fixing statistical limits, for social groups, many features of the farm were considered together with its size. The basic properties taken into consideration were as follows: number of horses, cattle, machines, sale or procurement of working forces, value of total and commodity production. On the basis of data from questionnaires and material from the National Census, it was possible to fix the statistical limits relating to the size of small, medium and large holdings for each region and sub-region.

Thus division into regions gives more uniform and compact territorial units from an economical point of view than division into voivodships.

Due to the fact that farms qualified in specific regions and sub-regions to the same social group differ in respect to size, therefore table 4 is given presenting farm size group limits.

Since 1955/56 book-keeping results of peasant holdings are computed within the frame of agricultural regions according to a uniform grouping of holdings as depending upon their total area; these groupings consider the following size classes: up to 3 ha, 3 to 7 ha, 7 to 10 ha, 10 to 14 ha, 14 ha and above.

The agricultural regions as fixed by Franciszek Dzedzic are basically fairly similar to the social-economic regions, as these latter were found to co-incide and be based to some extent on the agricultural regions fixed some time earlier. Agricultural regions were formed on the basis of physiographic-agricultural conditions with consideration given to the historical and economic factors existing in specific parts of the country. The emphasis placed in agricultural regions on physiographic-agricultural conditions, frequently decisive for agricultural production, forejudged the use of book-keeping data in these studies from agricultural regions instead of social-economic regions. The agricultural regions are furthermore more compact (11 instead of 14 regions) thereby allowing for a better representation of the collected material, and therefore also decisive in favor of these regions.

The data presented in the tables according to farm groups and regions constitute mean averages by the actual number of farms in the country according to the 1950 census. The farms under investigation were grouped according to total size, and arithmetical means computed for these groups within the frame of voivodships (1947/48—1950/51), or social-economic regions (1951/52—1954/55), or finally agricultural regions (1955/56). The averages obtained per one farm in specific size groups were computed per actual number of farms in the country. This total consumption per farm was divided by the number of people living from the farm. The number of people living from the farm resulted from the number of days of living accepting 365 days per person.

The total value of consumption is part of the income produced by the peasant family. Hence the value of consumption of a family cannot be analyzed in detachment from the total income obtained by this family. For this reason methods of computing the income at the disposal of the peasant family will first be discussed, after regulating production costs and all other outlays connected with the management of the farm.

Following is an example of computing the income produced, and its division:

### I. Production of income

Total production of farm  
 — Material and financial outlay  
 Clear production  
 + Income from outside the farm  
 Farm income

### II. Division of clear production

Taxes  
 Insurance  
 Rent and interest  
 Hired labor  
 Agricultural income  
 Agricultural income  
 + Income from outside the farm  
 Personal income

### III. Division of personal income

Consumption

Dowries and gifts

Coverage of losses in permanent and turnover means

Difference in the level of the estate

It is a known fact that farm income comes principally from agricultural production. Some method of computation must be accepted for estimating the value of farm produce. The value of total production produced in each farm is computed according to various prices. Total deliveries are counted according to the price of sale i. e. compulsory deliveries at the price of such deliveries, contracted deliveries according to contract prices, etc. Products included in natural consumption (for seeding, feed purposes, consumption) are calculated according to prices fixed each year by the Institute of Agricultural Economics. The price catalogue is fixed as follows: for agricultural products which are the object of mass contraction, contract prices are accepted, for example for hogs, rape, flax, etc. For products purchased en masse by the State such as milk, eggs — State purchasing prices. Plant products which are subject to compulsory deliveries such as grain and potatoes — free market prices are accepted minus a certain margin due to the fact that the given product was consumed in the farm, and did not require transportation costs etc., and was frequently of lower quality (especially if used for feeding purposes). Consequently the prices for-grain and potatoes were similar to prices for surplus (after covering compulsory deliveries) products. These prices for internal consumption were also used for estimating initial and final inventory states, and supplies.

Due to the fact that the value of farm production contained compulsory deliveries, hence it was lower by the difference in the value of these deliveries.

Personal income as presented in the outline given above consists of income based on the agricultural production of the farm (agricultural income) and income from outside the farm. It is used in the farm for upkeep of the family (consumption), dowries and gifts, covering of losses in permanent and turnover means for previous years, and for expanding the farm.

Table 7 presents average personal income for the whole country, and its structure in 1952/53—1955/56. The form of personal income, and its components during this period is also illustrated by graphs 1 and 2.

Personal income, total value of consumption as well as of food products expressed in current prices, is increasing from year to year. A considerable increase in income took place in 1955/56, this increase being more rapid than the value of the consumption. Since 1954/55 the difference in the value of the estate, which in 1952/53 and 1953/54 was negative, becomes positive, and constitutes more than 9% of the income.

The structure of consumption during specific years a fairly similar form. As compared to the pre-war period outlay for clothes and upkeep

of the home show an increase, while expenses for cultural purposes and education show a drop, this being connected with the considerably higher costs of education before the war, and the higher price of books and newspapers.

The structure of the value of consumption, as can be seen, is fairly stable, although showing during the post-war years a distinct tendency towards declining in respect to food products, and increasing in respect to expenses for other purposes. Expenses for the upkeep of the home increase distinctly as a result of increasing expenses for furniture.

The value of the income produced by the farm shows a high correlation with the size of the farm. It should be kept in mind that during the period 1952/53 to 1954/55 Polish farms were segregated according to social groups, and according to farm size groups in 1955/56.

Table 11 presents personal income and its components for the period 1952/53—1955/56 according to farm size groups.

Computations per member of family show a distinct increase in personal income, total value of consumption, and food value as the size of farms increase. Hence the area of the farm corresponds to some extent to the wealth group.

In 1952/53 and 1953/54 a negative difference in the estate level can be observed, similarly as shown in table 7 for the whole country.

The difference between personal income per family member in small and large size farms is around 20%, in 1955/56 almost 30% in favor of large farms (see tables 12 and 13).

In 1952/53 consumption rose more rapidly than personal income, hence diminution of the estate increases as the area increases. On the other hand the situation in 1955/56 is reversed, and personal income rises more rapidly than consumption. Hence as the area of the farm increases, the estate increases also.

Detailed data concerning the value and structure of consumption as depending upon the size of the farm is presented in tables 15 and 16 for the years 1954/55 and 1955/56 as being the closest, and in view of a different grouping of farms (according to social groups in 1954/55, and size groups in 1955/56).

Results of studies on budgets of State farm employees as also of individual farm holdings which do not constitute the main source of living, give a certain view as to the value and structure of consumption of these population groups. Without doubt the absolute values presented in table 17 cannot be directly transferred to present conditions. Nevertheless comparison of the level and structure of consumption (table 18) in more or less the same period for various groups of the rural population gives a certain outlook on this question, and supplies a basis for estimations relating to later periods.

Quantitative consumption of food products constitutes a basic part of the problem of consumption in a broad sense. In the farms under study food consumption constitutes over 60% of total consumption. As noted above quantitative consumption of food products was a subject of study of the Institute of Agricultural Economics since 1947/48.

Computation of consumption norms both during the first (1947/48—1950/51) as well as second (1951/52—1955/56) period resulted from

total turnover in a given product in the farm i. e. from the total balance of a given product. These were not therefore theoretical estimations of consumption, as the determined level of consumption is based on reckoning of the income and out go of each product under study for each farm. Constant notes in book-keeping accounts are without doubt more accurate than single estimations for the whole year based on questionnaires.

Table 19 presents a comparison of data obtained for the whole country computed per head of population for the period 1947/48 to 1955/56 on the background of pre-war data taken from individual farm accounts for 1936/37.

In analyzing table 19 and graph 4 it can be seen that consumption of meat and animal fats, as also sugar, increases systematically up to 1952/53, showing a declining tendency during the following years, and checked in 1955/56.

The declining consumption of cereals (mainly rye), legumes and potatoes, and an increase in meat consumption and animal fats constitutes a normal process appearing at a certain stage of development in all societies. However this phenomenon has been somewhat checked during recent years. A certain stabilization in quantitative consumption has taken place evident in the value of consumption. Table 20 presents changes (in percents) in the consumption of basic agricultural products over nine years as compared to 1936/37 consumption levels.

Table 20 analyzed together with table 21 presenting population growth in Poland, increase in the number of pigs on the background of grain and potato production explains to some extent the degree and character of changes in rural consumption.

Studies hitherto carried out in rural areas show that food consumption per head of population differs depending upon the size of the farm held by the peasant family.

This is noticeable both from studies for the period 1947/46 to 1950/51, as also for later years.

Table 22 illustrates consumption of food products as an average for the period 1951/52 to 1954/55 according to social groups for the whole country, table 23 data for the year 1955/56 according to farm size groups, uniformly for the whole country.

The Institute of Agricultural Economics since 1953, and up to 1956, is conducting studies on budgets of families employed in State farms. As a result of these studies the Institute is in possession of a certain material relating to consumption in these families. It must be noted that the number of families investigated is not large, however results obtained seem to be both logical and correct. Table 25 illustrates per caput consumption in private farms which constitute the main source of income of the land holder (1492 farms), as also in co-operative farms (148 families), in small holdings constituting an additional source of income (36 families), in families of permanent State farm workers (40 families), in families of State farm professional workers (8 families) and in families of State farm administrative employees (4 families).

The differences evident in consumption levels of specific population groups are very characteristic and typical. Thus for example in compa-

ring consumption of bread and flour, it can be observed that workers and administrative employees consume less flour, but purchase more bread than peasant families. Accepting consumed flour and bread as grain, assuming both wheat and rye as being equal to 70%, and bread and rolls as equal to grain, a characteristic picture is obtained presented in table 26.

On the background of table 25, it can be concluded that the peasant farm population, notwithstanding the high qualitative level of consumption, notwithstanding the high qualitative level of consumption (meat, fats, sugar), also maintains quantitative consumption (grain, potatoes).

An effort to illustrate personal income and value of consumption in a territorial aspect, was made on the basis of material for the period 1952/53 to 1954/55. During this period income and the value of consumption gradually rose, principally however as a result of price increases. Thus the influence of this factor was uniform throughout the country. Similar economic conditions over this period, and uniform elaboration of material according to social-economic regions, and lastly representativity of material reached by pooling results for three years, persuaded us to accept average values for the period 1952/53—1954/55 as a basis for territorial differentiation of wealthiness and living conditions of private peasant farms. Results of computations are illustrated by the cartograms 1, 2 and 3, and in table 28.

Consumption differentiation according to regions on the basis of one year data does not seem to be accurate, as quantitative consumption is subject to certain fluctuations from year to year depending in the first place on the volume of production for a given year. Furthermore certain fluctuations can take place as a result of relatively low representation (1500 farms). Some times changes in the number and level of farms keeping accounts can also influence these fluctuations. In order to eliminate this type of phenomena, many year averages were accepted.

Average many year data for basic articles are presented on maps and in table 36.

Participation of cash expenses for consumption in the total value of consumption is shown in table 24. As results from calculations, cash outlay for consumption increases from year to year and reaches in 1955/56 around 44% of the total value of consumption; hence 56% of this value constitutes products taken from the farm.

Inasmuch as the income of other population groups are measured by cash income hence it is important in discussing consumption to indicate the actual difference between the two categories of economic measures used in peasant farms. Table 45 presents cash income and personal income for 1953/54—1955/56 according to farm size, as also agricultural income and commodity production, discarding income from outside the farm as being constant on both sides.

Comparison of the data presented in table 45 shows that personal income and cash income are magnitudes similar in medium sized farms, deviating considerably however in the end groups. As the farms increase, cash income approaches personal income, to exceed the latter considerably in farms of more than 14 hectares.

In order to facilitate understanding of the results of this study, an annex is included presenting the contents, list of tables, graphs and maps.

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