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## A STUDY ON SURPLUS INCOME IN RURAL AREAS (A CASE STUDY IN ASSAM)

UMANANDA PHUKAN AND DHARMA KANTA BURAGOHAIN

*Agro-Economic Research Centre  
Jorhat ( Assam )*

### SUMMARY

An enquiry was made to find out if there were any tangible surplus income with different occupational classes in the rural areas of Assam. Data were taken from three village survey reports completed by the Agro-Economic Research Centre at Jorhat. The villages were selected from three different districts and the study included 455 rural households. The households or families were classified into six broad occupational classes, viz.: (1) agriculture, (2) trade, commerce and transport, (3) salaried jobs, (4) professions and services, (5) production other than agriculture and (6) miscellaneous. The distribution of the total households according to the occupational classes was 40.44, 18.68, 9.01, 21.54, 8.35, and 1.98 per cent respectively.

The total income of the households amounted to Rs. 6,68,159.86 while the total expenditure was Rs. 6,87,701.34. Per family income of each occupational class mentioned above was Rs. 1,245, Rs. 1,923, Rs. 1,720, Rs. 1,341, Rs. 1,507 and Rs. 1,827 while the corresponding figures of expenditure per family were Rs. 1,328, Rs. 1,881, Rs. 1,602, Rs. 1,437, Rs. 1,872 and Rs. 658. The surpluses were with the occupational classes (2) and (3) only. 51.6 per cent families were within the income range of Rs. 1,000 and all of them had deficit.

The sale and purchase of capital assets were separately examined and it was found that land was the single item which was transacted by the rural community. Considering the excess of sale over purchase and the excess of purchase over sale of different types of assets including land the particular rural community was better off by Rs. 1,14,478 in regard to assets. This had only plunged the community into debt amounting to Rs. 1,34,019.68 including the deficit on account of excess of expenditure over income. No investment was however found to have been made in agriculture in terms of non-traditional inputs. In the total picture, surplus income accrued to the occupational class having trade, commerce and transport.

In the rural economy under study no surplus income was found to exist. On the contrary, it was in debt. This is a picture that prevailed up to 1963 since the data are limited to that year. It is only expected that in recent years the growth in the agricultural sector due to the high-yielding varieties programme has geared up and will have impact on rural income.

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## INCREASING INCOME DISPARITIES DUE TO THE NEW TECHNOLOGY OF AGRICULTURE IN NORTH-WEST U.P.

S. L. SHAH AND L. R. SINGH

*U. P. Agricultural University  
Pantnagar (Dist. Nainital)*

### SUMMARY

Income inequalities have arisen due to variations in the size of holdings, accessibility to and timely availability of inputs to farmers, credit availability and technical know-how. Regression analysis is done with data collected from two districts in North-West Uttar Pradesh in which a random sample of 245 progressive farmers in three size-groups of holdings, small, medium and large, is selected to prove the hypothesis. The regression coefficient of the various inputs, their marginal value products and returns per unit cost of input for each size-group of holdings are computed. It is shown that large farms are the most rational and efficient in the use of the resources, followed by the medium, whereas the resources are used irrationally on the small farm. It is concluded that as the medium and large farms move to the economic optima, the magnitudes of these income inequalities are likely to increase.

AN ASPECT OF AGRICULTURAL INCOME DISTRIBUTION  
PATTERN IN A DYNAMIC RURAL ECONOMY

AJEYA RAY

*Agro-Economic Research Centre, Visva-Bharati  
Santiniketan (West Bengal)*

SUMMARY

In a dynamic rural economy agricultural income distribution pattern is determined by land distribution as well as by the rate of utilization of resources in different size-group of holdings. It is our assumption that increasing disparities in income in Indian rural economy in the present phase are largely due to a higher concentration in land use coupled with an already high concentration of resource ownership. The paper attempts to examine this view with reference to nine sample villages of Burdwan which happens to be one of the most progressive agricultural districts in West Bengal. The data have been collected by the Agro-Economic Research Centre, Visva-Bharati. For the purpose of sampling the district was divided into three zones. Nine villages are picked up out of a total number of 11 villages selected from two zones. Thus their data should give a fairly good estimate of the region covered by those zones. The effect of two most important factors, land and fertilizer, on agricultural income is studied here. To establish the relationship between the distribution pattern of land, fertilizer and income, their concentration ratios are calculated for the nine villages. Analysing the ratios, it is concluded that our observations seem to corroborate our hypothesis. The findings on the income distribution pattern of the region are two : Firstly, in most villages (about 77 per cent cases) the disparity in income distribution is higher than land distribution. Secondly, from about 64 per cent cases it is observed that a higher concentration of income compared to land is associated with a higher fertilizer use concentration compared to land. In Burdwan, there is a recent break-through in agriculture. Our analysis indicates that bigger farms are using higher rate of resources, resulting in further disparity in yield and income.

DISTRIBUTION OF FARM INCOME ON SELECTED HOLDINGS  
IN SANGLI DISTRICT

JAGANNATHRAO R. PAWAR

*Assistant Professor of Agricultural Economics  
College of Agriculture, Poona-5*

SUMMARY

The study of distribution of farm income was undertaken on the basis of information obtained from a sample of 63 randomly selected cultivators of Sangli district in Maharashtra for a period of six years. From the farm business analysis of these cultivators it was observed that the cultivators have invested a large amount for the building up of fixed capital assets on the holdings and use of modern inputs for crop production. The creation of fixed capital assets on the holdings, the use of modern technology in farming and the increase in the prices of agricultural commodities have resulted in increased farm income of the cultivators. It was observed that during the period of six years, *i.e.*, from 1962-63 to 1967-68 the average farm income of the cultivators has increased from Rs. 8,675.76 to Rs. 21,093.51. With the increase in the farm income, the cultivators were able to undertake various improvements on land and use of modern inputs for crop production. A part of the farm income was utilized for the purposes of investments in fixed capital assets and expenditure on crop production. The per holding expenditure on fixed capital assets and crop production increased from Rs. 5,719.21 to Rs. 7,284.84 during the period. The remaining part of farm income was utilized by the cultivators for consumption, savings in co-operative banks in the form of share certificates, deposits in sugar factory, repayment of loans, expenditures on luxuries and marriages and religious ceremonies. On an average, the amount of farm income utilized for these purposes increased from Rs. 2,956.55 to Rs. 13,808.67 during the period. During the enquiry it was observed that the expenditure on account of luxuries and marriages has increased tremendously during the period.

INCOME, SAVINGS AND EXPENDITURE IN RURAL AREAS OF  
THE MALWA REGION OF MADHYA PRADESH

J. S. SISODIA AND V. L. AGARKAR

*Department of Agricultural Economics  
College of Agriculture, Indore (Madhya Pradesh)*

SUMMARY

In this paper an attempt has been made to study the effect of increase in income, owing to the adoption of new technology of agriculture, by different categories of cultivators on the magnitude and patterns of income, savings and expenditure. For the purpose of the study a sample of 50 progressive and 50 less progressive farmers was randomly selected. The study reveals that the composition of total assets showed that among the "modern" farms tangible assets accounted for 89 per cent, financial assets 8 per cent and consumer durables 3 per cent whereas in the 'traditional' farms the percentage share of the above three components are 86, 8 and 6 respectively. As the size of the farm increases, the importance of financial assets decreases. On modern farms, next to ornaments deposits have a good share of the total assets whereas on traditional farms, the same is very negligible.

The average annual income (gross) of small and medium cultivators of modern farms is almost twice compared to the same category of farmers of traditional farms and that of large farmers in the modern farms is thrice to their counterpart in the traditional group. Capital expenditure in the modern farm stood at Rs. 4,915 as against Rs. 692 in the traditional farm. The new investment as percentage of total agricultural investment for modern farms is 23 per cent as against only 8 per cent for traditional farms.

The per acre average expenses on seeds, manures, fertilizers, pesticides, wages and 'others' are Rs. 62, Rs. 58, Rs. 51, Rs. 3, Rs. 96 and Rs. 146 respectively, in the modern farms as against the corresponding values of Rs. 25, Rs. 28, Rs. 16, Re. 0.4, Rs. 28 and Rs. 232 in the traditional farms. The study reveals that the pattern of investment in the modern farms is dominated by purchased inputs, which accounted for 70 per cent of the total non-durable capital investment. In contrast, purchased inputs in the traditional farms have a very low share (only 40 per cent) of total investment. It is also revealed that the rate of saving in the case of modern farms increases with the size of farm. The per capita saving of progressive farmers is eight times greater than the less progressive ones. Lastly the marginal propensity to save of medium farms in the modern group is higher than the small and the large ones. The marginal propensity to save of the modern and traditional farms stood at 133.8 per cent and 78.1 per cent respectively.

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PATTERNS OF INCOME DISTRIBUTION—A STUDY IN TWO REGIONS  
OF MADHYA PRADESH AND UTTAR PRADESH

J. S. SISODIA AND V. L. AGARKAR

*Department of Agricultural Economics  
College of Agriculture, Indore (Madhya Pradesh)*

SUMMARY

An attempt has been made in this paper to study the pattern of income distribution in the Indore villages of Madhya Pradesh and in the Kanpur villages of Uttar Pradesh. Three villages from each region were purposively selected and 75 holdings (25 from each village) from each tract were selected by a proper stratified random sample. The size of land holding showed a close relationship with the gross produce of the farm and the gross value of production from cultivation progressively increased in the larger sized holdings. The Indore region is much superior to the Kanpur region in respect of most of the characteristics like the average size of operational holding, intensity of cropping and irrigated area. The proportion of area under commercial crops to the total cultivated area is higher on bigger size-groups, compared to the smaller size-groups for both the regions. In the case of superior cereals and pulse crops the proportion of area under these crops declined among the higher size-groups in the Indore villages, whereas in the Kanpur villages the case is just the opposite. There is no such distinction in the case of coarse cereals.

The average per household income of Indore and Kanpur villages is of the order of Rs. 5,659 and Rs. 10,180 respectively, indicating a difference of 80 per cent. The per capita income for both the places is of the order of Rs. 590 and Rs. 695, the difference is of the order of 18 per cent. Farm income is the major source of income for both the regions constituting nearly 80 per cent in the

Indore villages and 66 per cent in the Kanpur villages. The top 5.33 per cent of households in the Indore district obtained 15 per cent of the total income whereas in the Kanpur district the share of the top 6.66 per cent households in total income was 17.16 per cent. In contrast, the share of the bottom 8 per cent households in the Indore villages was only 0.72 per cent while 6.66 per cent of households in the Kanpur villages obtained 0.55 per cent of the total income. The concentration ratio of income for Indore and Kanpur villages is very low being 0.0690 and 0.0642 respectively. Income variability in the Kanpur villages is more pronounced than in the Indore villages. The concentration coefficients of land ownership for both the places are high as compared to income concentration. Income is more equitably distributed than land ownership in both the places.

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PATTERN OF INCOME DISTRIBUTION, SAVING AND EXPENDITURE  
IN RURAL AREAS ( 1969-70) (A CASE STUDY)

V. D. GALGALIKAR

*Professor of Agricultural Economics  
College of Agriculture, Parbhani*

M. K. SHINGAREY

*Professor of Agricultural Economics  
College of Agriculture, Akola*

AND

C. D. DEOLE

*Assistant Professor of Agricultural Economics  
College of Agriculture, Parbhani*

SUMMARY

To study the pattern of income distribution, saving and expenditure in rural areas, a village Jalalpur from the Parbhani district was selected. There were 67 families in the villages out of which 50 families were agriculturists. Non-agriculturist families numbered 17. The families were grouped according to the size of holdings. The average size of holding in the village is 20 acres. Thirty per cent of the families have land less than 10 acres, accounting for only 6.35 per cent of the total land in the village. Crop production accounted for about 80 per cent of the gross income. The contribution of livestock or other subsidiary industries is very meagre. In small sized holdings, wages formed a substantial portion of gross income and exceeded net income from crop production. By and large, net income per acre from crop production seems to decrease with the size of holding. Though investment in farming in the smallest size-group is minimum no definite pattern of investment according to the size-group could be identified. In regard to consumption, the low income and middle income-groups had to resort to borrowing to meet their consumption expenditure. The higher income-group spent proportionately less on foods. The middle income-group spent proportionately more on ceremonials. It is revealing that the bulk of the co-operative finance was availed of by the high income-group. Savings are very meagre. There is a tendency to utilize savings for purchase of silver and gold. Whatever savings are there with the co-operatives, they are of a compulsory nature in the form of shares required to secure loans from the banks.

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PATTERN OF INCOME DISTRIBUTION, SAVINGS AND  
EXPENDITURE IN RURAL AREAS

D. K. SOHONI

*Professor of Agricultural Economics*

AND

R. D. KHANDARKAR

*Agricultural Officer*

*College of Agriculture, Nagpur*

SUMMARY

Since irrigation happens to be the single major factor which influences income as well as the pattern of income distribution of the families in rural areas, an attempt has been made to assess the changes in the income of the cultivators and their pattern of distribution as influenced by increasing availability of irrigation to their fields by major irrigation project. The paper is based on a sample of 99 cultivators selected from the command area of Bor Project located in the Wardha

district of Maharashtra. The proportion of area irrigated during 1965-66 was 1.18 per cent of the net sown area. In the first year, it increased to 8.06 per cent, in 1967-68 to 17.88 per cent and in 1968-69 to 30.72 per cent. The availability of irrigation to such a large proportion of the net sown area has caused some changes in the cropping pattern in which there has been a gradual shift from less profitable to more profitable crops. With the possibility of increase in the irrigation facilities, there has been an increasing trend in the allocation of area to cash crops including commercial non-food crops as well as foodgrains. There has been significant increase in the area under irrigated cotton, wheat, fruit crops and vegetables. This induced the cultivators to carry out improvements in the methods of cultivation and use of different production inputs.

There has been an increase of 31 per cent in the income of the cultivators in the first year; 71 per cent in the second year and 141 per cent in the third year. This has enabled the cultivators to increase their actual expenditure on variable production inputs as well as towards capital formation in the succeeding years. On an average there appears to have been an increase of 119 per cent in the actual expenditure on crop production during the period of three years. The increase in expenses has been at an increasing rate during the succeeding years. During the first year the increase in the expenses on crop production has been to the tune of 22 per cent, during 1967-68 it increased to 57 per cent and in 1968-69 to 119 per cent over the base year.

There has been a gradual increase in the capital formation during the initial two years, *i.e.*, 2 per cent and 9 per cent respectively. It gained momentum in the third year. The value of capital assets increased by 20 per cent during the three years. The rate of increase in the value of capital assets has been more in the case of the small size-group. This has increased the propensity of the cultivators to allocate increasing proportion of their income to production purposes rather than increasing consumption.

The consumption expenditure has not increased appreciably except to some extent in the case of the small size-group. On an average, the consumption expenditure has increased to 3.3 per cent in 1966-67, 5.9 per cent in 1967-68 and to 9.5 per cent in 1968-69. The increase in the consumption expenditure is quite insignificant against the background of large increases effected on recurring farm business as well as towards capital formation.

The gross income received is utilized to repay loans incurred during the season and to allocate the rest to meet the next year's production expenses and consumption. On the basis of the above assumption, figures compiled in respect of gross income received on the one hand and costs of production and consumption incurred during the succeeding years on the other, show that the income received during 1965-66 fell short to meet the increased investment on crop production necessary during the succeeding year. The increased investment has been met with by loans.

The availability of increasing irrigation facilities thus not only increased the income of the cultivators but also created the ability to raise loans for making greater investment on crop production in the variable as well as fixed inputs and thus accelerate the rate of increase in the income to be able to properly allocate the same to meet the farm business obligation and consumption. The picture given out by three years of the commencement of irrigation project indicates significant changes in the pattern of income distribution as influenced by the availability of increasing facilities of irrigation. The momentum given during the initial three years of the project may be accelerated and it is expected that the change in the technology may further cause changes in the income distribution, expenditure, saving and consumption in the tract, leading to larger allocation of income to annual production expenditure and further capital formation in the farm business.

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## ADOPTION OF HIGH YIELDING VARIETIES PROGRAMME AND FORMATION OF RURAL SAVINGS

P. N. CHAUDHURI

*Joint Director  
Programme Evaluation Organisation  
Planning Commission, Government of India, New Delhi*

### SUMMARY

The field surveys conducted by the Programme Evaluation Organisation on adoption of high-yielding varieties of seeds, during *Kharif* 1968 covering 974 participant and 643 non-participant cultivators in 44 selected development blocks of the country for four crops, *viz.*, paddy, bajra, jowar and maize enable us to indicate the magnitude and direction of formation of rural savings in the agricultural sector. Analysing the collected data on expenditure on (1) land and farm buildings

including their acquisition, construction and improvement, (2) irrigation including acquisition, installation or sinking of tube-wells, (3) acquisition and/or installation of agricultural machinery and equipment and (4) purchase of livestock including bullocks, draught and milch, and other animals, we find that the major investment by the participant cultivators belonging to all size-groups of agricultural holdings was directed towards land and farm buildings, creation of irrigation infrastructure and acquisition of machinery and equipment leaving aside the purchase of livestock to secondary importance. The cultivators belonging to the size-groups of 5—10 acres and above had considerable expenditure for purchase of land. Expenditure for improvement of land by cultivators of 5 acres and below was very meagre while the farmers in the higher ranges of land holdings had quite good expenditure on this item. Farmers with holdings of 10 acres or more were found to be in a better position to acquire farm buildings.

Even though the areas covered by the programme of high-yielding varieties were benefited by irrigation canals, households of all categories of land holdings were found to be eager to have independent sources of irrigation. The cultivators of 10—20 acres were found to have considerable preference for owning pump sets over the alternative source of irrigation by tube-wells.

Households having 20 acres and more were very active in acquiring machineries and equipments for modernizing agriculture. Summarising, it can be said that households operating a holding of 20 acres or more were capable of mobilizing rural surplus incomes for financing modern agriculture although in some items even the households with 10—20 acres seem to be quite enthusiastic in following their affluent colleagues.

Liquidation of old and current debts figured prominently in the pattern of expenditure of all rural households. The average amount of loan repayment, however, increased with the holding size. Farmers of all holding size-groups above 2.5 acres were found to indulge in considerable lending operations. Persons with 10 acres or more had heavy expenditure in lending money to their other colleagues. Institutional investment in rural areas in the form of fixed deposits, life insurance, national saving certificates, purchase of shares were found to be insignificant and the proportion of participants reporting institutional investments as well as the average amount were found to increase with increasing operational holdings.