

A study on livelihood of agricultural household in Burdwan district of West Bengal

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Received: 30-07-2014, Revised: 05-09-2014, Accepted: 03-02-2015

ABSTRACT

The study has been conducted in two villages belonging to Galsi-1 and Kanksa blocks of Burdwan district in West Bengal. Villages, blocks and district have been purposively selected. Out of 218 agricultural households 50 have been selected by the technique of Simple Random sampling Without Replacement (SRSWOR). The study has been carried out with the objectives of finding source wise annual level of income and estimating extent of livelihood security of agricultural households. Data have been collected on area under various crops, source wise income, and family living expenditure for various components of livelihood security. The reference year of the study is 2011-12. The study reveals that the largest portion of income is earned from wage labour in marginal size class. In small and semi-medium size classes the largest share of income comes from crop production. Highest percentage of male is occupied in crop production in all the size classes. Most of the female are occupied in wage labour. Across all the size classes expenditure on food commodities of agricultural households is less than the estimated expenditure for balanced diet as recommended by National Institute of Nutrition (NIN) under the aegis of ICMR (Indian Council of Medical Research). In the cases of procurement of other goods and services concerned to livelihood of people expenditures of agricultural households are considerably higher than estimated expenditures based on NSS data related to rural West Bengal. But annual income of all individual size classes of agricultural households is higher than their annual expenditures. In spite of this, it is not affordable for the agricultural households in marginal size class to maintain their food security unless they curtail expenditures on other necessity goods and services. But it is not a problem for other size classes of agricultural households.

Keywords: Components of livelihood security, livelihood security, occupation pattern, SRSWOR

Today livelihood security is an important issue. It is frequently discussed by academicians, policy makers and planners throughout the world. It is an index which expresses attainment of essential goods and services for smooth leading of life by human being. Human beings are aspirants of better standard of living. Main objective of economic development is to increase standard of living of people but it is a hard reality that economic development has not equally touched the people of all countries in the world. There is inter-economy and intra-economy disparity in this respect. A sizable portion of world population have no adequate access to food, cloth, shelter and other needs for maintaining easy and smooth life. In our economy also there is wide disparity in access to essential requirements among people. Some people in society do not have sufficient purchasing power for procuring material goods and services in adequate quantity required for attaining livelihood security. These people lead their lives with some deficiency of livelihood security and it is wise to say that they are bound to live in this condition. In this study an attempt has been made to find extent of livelihood security of agricultural households.

MATERIALS AND METHOD

The study has been conducted in Burdwan district of West Bengal. Two villages have been purposively
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selected from two purposively selected blocks namely Kanksa and Galsi-1. Out of 218 agricultural households 50 have been selected by the technique of Simple Random sampling Without Replacement (SRSWOR). Study is based mainly on primary data. In some cases secondary source of data have been consulted as an when necessary. Data have been collected by Survey method from sample agricultural households on area under various crops, source wise income, procurement and prices of various types of goods and services and family living expenditure including expenses for attaining goods and services which are required for improving livelihood. There are five areas of livelihood security: economic security, food security, health security, educational security and empowerment (Lindenberg, 2002). In the study various items of expenditures for food, cloth, house repairing, health caring, education, recreation, fuel, electricity, travelling charges, ceremony and sociality have been taken into consideration. Information have also been collected on size of family, literacy, occupation pattern, different types of assets, etc from the agricultural households. In the study expenditure for balanced diet for people of various age groups as recommended by National Institute of Nutrition under the aegis of Indian Council of Medical Research (ICMR, 2003) has been estimated and compared with the actual expenditure made by the

agricultural households. A similar attempt has been exercised in case of clothing on the basis of minimum requirement of it for males and females of different age groups (Guruswamy *et al.*, 2006). In other cases actual expenditures made by the agricultural households for attainment of goods and services have been compared with NSS 68th Round of data relating to rural areas of West Bengal chapter (NSSO., Govt. of India. 2011-12). In the study size class of agricultural household has been determined on the basis of their operational holding that is size class of farms and size class of agricultural households have been considered synonymous to each other. Tabular method of analysis has been extensively used in the study. The reference period of the study is 2011-12 agricultural year.

RESULTS AND DISCUSSION

Distribution of agricultural households to different size classes and sizes of family of agricultural households are presented in table 1. The agricultural households are observed to belong to marginal, small and semi-medium size classes of farms. The agricultural households in marginal size class having operational holding below 1 hectare are noted to account for 76% of the total agricultural households. The corresponding figures for agricultural households in small and semi-medium size classes are found to be 18 per cent and 6% respectively. The agricultural households existing in small and semi-medium size classes possess land 1- 2 hectare and 2- 4 hectare respectively. No household is noted to exist in medium and large size classes. It is found that percentage of male population is higher than female population across the size classes of agricultural household. Percentage of male population is noted to vary from 53.85 to 57.14 and highest in semi- medium size class. This is lowest in marginal size class. Female population accounts for 35.71% in semi-medium size class, 40.00 and 38.46% in small and marginal size classes respectively. Percentages of children are noted to be 7.69, 5.00 and 7.14 in marginal, small and semi-medium size classes respectively. In inter-size class comparison no wide difference is found in the percentages of each of male, female and child population. Average sizes of family in marginal, small and semi-medium size classes are observed to be 4.7, 4.4 and 4.6% respectively. Irrespective of the size classes a wide difference is noted between male and female population in terms of percentage as in different size classes. Average size of family is noted to be 4.7.

Literacy (education), occupation pattern, consumption of food, clothing, health care, housing condition, recreation, income, expenditure, *etc* are

highly associated with livelihood of people. Necessary information on these matters is presented through a number of tables with descriptions. Literacy of the members of agricultural households is displayed in table 2. It is observed that literacy is higher in male population than in female population in marginal and small size classes of agricultural households. It is also noted that all the children are literate in all the size classes. A comparison among different size classes reveals that literacy rate is highest for both male and female population in semi-medium size class of agricultural households. This is found to be lowest in marginal size class. Literacy rates for male, female and total population are noted to be higher in larger size classes of agricultural households. Irrespective of the size classes literacy rate is found to be 85.47% of the total population.

Occupation pattern of the members of agricultural household is displayed in table 3. The members of agricultural households are engaged in different kinds of occupation such as crop production, livestock rearing, service, business, wage earning etc. It is observed that male participation accounts for 89.80% of total male population for earning income from different occupation in marginal size class. The corresponding figures for small and semi-medium size classes are 100.00% and 87.50% respectively. Percentage of female occupied in different activities is noted to decline across the higher size classes. An observation of male involvement in various components of occupation like crop production, livestock rearing, service, business and wage earning reveals that percentage share of male involvement is highest in crop production among all the size classes and lowest in business sector and wage earning in marginal and small size classes respectively. In semi-medium size class, no difference is noted between percentage share of male participation in service and business sector. The highest percentage share of female participation is found to be recorded for wage earning in both marginal and small size classes. The highest percentage share of female occupation pattern is noted to be recorded for business in semi-medium size classes. Irrespective of the size classes a wide difference is observed between male and female participation in different occupation in terms of percentage as in different size classes.

Annual income of agricultural households in different size classes is displayed in table 4. Agricultural households are found to earn their annual income from various sources like crop production, livestock rearing, service, business and wage labour. It is observed that in

Table 1: Distribution of agricultural households to different size classes with their size of family.

Size class	No. of household	Male	Female	Child	Total	Average size of family
Marginal (< 1 hectare)	38 (76.00)	98 (53.85)	70 (38.46)	14 (7.69)	182 (100.00)	4.7
Small (1-2 hectare)	09 (18.00)	22 (55.00)	16 (40.00)	2 (5.00)	40 (100.00)	4.4
Semi-medium (2-4 hectare)	03 (6.00)	8 (57.14)	5 (35.71)	1 (7.14)	14 (100.00)	4.6
Combined	50 (100.00)	128 (54.24)	91 (38.56)	17 (7.20)	236 (100.00)	4.7

Note : i) Figures in parentheses in column 2 indicate percentages of total agricultural households.
ii) Figures in parentheses in other columns indicate percentages of total population in the respective size classes.

Table 2: Literacy of the members of agricultural households.

Size class	Number of literate persons				Number of illiterate persons		
	Male	Female	Child	Total	Male	Female	Total
Marginal	88 (89.80)	49 (70.00)	12 (100.00)	149 (82.78)	10 (10.20)	21 (30.00)	31 (17.22)
Small	21 (95.45)	14 (87.50)	2 (100.00)	37 (92.50)	1 (4.55)	2 (12.50)	3 (7.50)
Semi-medium	8 (100.00)	5 (100.00)	1 (100.00)	14 (100.00)	-	-	-
Combined	117 (91.41)	68 (74.73)	15 (100.00)	200 (85.47)	11 (8.59)	23 (25.27)	34 (14.53)

Note: i) Figures in parentheses indicate literacy and illiteracy percentage of total, which have been calculated in respect of size of family displayed in table 1.
ii) Children below age of 6 have not been considered for estimating literacy.

Table 3: Occupation pattern of the members of agricultural households

Occupation	Marginal		Small		Semi-medium		Combined	
	Male	Female	Male	Female	Male	Female	Male	Female
Crop production	38 (43.18)	-	9 (40.91)	-	3 (42.86)	-	50 (42.74)	-
Livestock	17 (19.32)	-	5 (22.73)	-	2 (28.57)	-	24 (20.51)	-
Service	9 (10.23)	4 (16.00)	3 (13.63)	1 (25.00)	1 (14.29)	-	13 (11.11)	5 (16.67)
Business	8 (9.09)	-	3 (13.63)	1 (25.00)	1 (14.29)	1 (100.00)	12 (10.26)	2 (6.67)
Wage earning	16 (18.18)	21 (84.00)	2 (9.09)	2 (50.00)	-	-	18 (15.38)	23 (76.67)
Total	88 (100.00) (89.80)¹	25 (100.00) (35.71)¹	22 (100.00) (100.00)¹	4 (100.00) (25.00)¹	7 (100.00) (87.50)¹	1 (100.00) (20.00)¹	117 (100.00) (91.41)¹	30 (100.00) (32.97)¹

Note: i) Figures in parentheses in each column indicate percentages of the total in the respective column
ii) Figures in parentheses with superscript one in total row (last row) indicate percentages of male and female population of the respective size class of table 1.

marginal size class the highest percentage of annual income is earned from wage labour. Income earned from this source is found to account for 35% of total income. In this size class crop production is noted to be the second largest source in accruing annual income. The other sources in descending order of generating percentage share of income are service, business and livestock. In small size class largest share of income is found to be earned from crop production. Income from the sources accounts for 61.32% of the total annual income in this size class. Next to crop production service is another important source of income in this size class. In semi-medium size class also the highest percentage of annual income is found to be accrued from crop production. No wide difference is noted between percentage share of income generated from crop production and business. In this size class no agricultural household is observed to earn from wage

labour. Irrespective of the size classes it is observed that largest share of annual income is accrued from crop production, which was also found in another study (Dey, 2009) Income earned from this source is noted to account for 38.66% of the total income. Wage labour is another important source from which annual income is accrued to the extent of 24.89% of total income.

Annual average family expenditure per agricultural household is presented in table 5. Various items of expenditure like expenditure on food, cloths, house repairing, health care, education, recreation and miscellaneous have taken into account for working out family expenditure. Access to these items of goods and services has been considered to be related to livelihood of agricultural households. It is found that there is a similarity among three size classes of agricultural households in respect of relative position of expenditure on food, house repairing, recreation and miscellaneous

Table 4: Source wise annual income of agricultural household

Size class	Amount of income for different sources (Rs.)					Total
	Crop production	Livestock	Service	Business	Wage labour	
Marginal	1020767 (31.96) (26862) ¹	205910 (6.45) (5419) ¹	468000 (14.65) (12316) ¹	384000 (12.02) (10105) ¹	1115000 (34.91) (29342) ¹	3193677 (100.00) (84044) ¹
Small	536956 (61.32) (59661) ¹	44640 (5.10) (4960) ¹	216000 (24.67) (24000) ¹	60000 (6.85) (6667) ¹	18000 (2.06) (2000) ¹	875596 (100.00) (97288) ¹
Semi-medium	202400 (41.85) (67467) ¹	78160 (16.16) (26053) ¹	8600 (1.78) (2867) ¹	194500 (40.21) (64833) ¹	- (6.85) (6667) ¹	483660 (100.00) (161220) ¹
Combined	1760123 (38.66) (35202)¹	328710 (7.22) (6574)¹	692600 (15.21) (13852)¹	638500 (14.02) (12770)¹	1133000 (24.89) (22660)¹	4552933 (100.00) (91058)¹

Note: i) Figures in parentheses indicate percentages of total in respective size classes.

ii) Figures in parentheses with superscript 1 indicate average income in respective size classes.

Table 5: Average annual expenditure per agricultural household

Size class	Expenditure (Rs.)							Total
	Food	Cloth	House repairing	Health caring	Education	Recreation	Miscellaneous expenditure	
Marginal	49762 (65.25)	4160 (5.46)	1560 (2.04)	5232 (6.86)	4392 (5.76)	2437 (3.20)	8716 (11.43)	76259 (100.00)
Small	50592 (57.12)	4576 (5.17)	2335 (2.64)	7579 (8.56)	6767 (7.64)	3082 (3.48)	13635 (15.39)	88566 (100.00)
Semi-medium	53222 (59.33)	5934 (6.62)	1947 (2.17)	4763 (5.31)	3890 (4.34)	2818 (3.14)	17124 (19.09)	89698 (100.00)
Combined	50119 (63.22)	4341 (5.47)	1723 (2.17)	5626 (7.10)	4789 (6.04)	2576 (3.25)	10106 (12.75)	79280 (100.00)

Note: Miscellaneous expenditure includes expenditure on fuel, electricity, travelling charges, ceremony sociality, etc.

in terms of percentage share in total of the respective size classes. An expenditure on food commodities and expenditure on house repairing account for largest and smallest share respectively in total expenditure across all the size classes. Expenditure on miscellaneous items is noted to be second largest share in total expenditure of all the size classes of agricultural households. Percentage share of expenditure on recreation in each of the size classes is observed to hold 6th position. In the cases of expenditures on other items, a similarity is found between marginal and small size classes of households in respect of ordinal position based on percentage shares of expenditure. In both the size classes percentage shares of expenditure in descending order are observed to be recorded for health caring, education and clothes. However, in semi-medium size class percentage shares of expenditure in descending order is recorded for cloths, health caring and education. The pattern of expenditure on various items of goods and services in marginal and small size classes is found to be reflected on combined group. That is, as a whole, percentage shares of expenditure, in descending order, have been recorded for food, miscellaneous, health caring, education, cloths, recreation and house repairing.

Availability of food to people is an important component of their livelihood. In this respect question arises as to whether or not the people can afford to consume food up to the requirement based on calorie and nutritional norms. In this study food requirement of the people of agricultural households has been estimated on the basis of balanced diet recommended by NIN under the aegis of ICMR in 2003. Comparison between expenditures for required balanced diet of people in agricultural households and actual expenditure for food consumed by them has been exercised in the study. This is displayed in table 6. Actual expenditure on food is found to be lower than expenditure for required level of balanced diet across all the size classes. This clearly indicates deficiency in food consumption of agricultural households up to the requirement. Inter-size class comparison reveals that extent of deficiency in consumption of balanced diet is highest in marginal size class and lowest in semi-medium size class.

Cloth is another important basic necessary of human beings. Availability of this essential commodity is also related to livelihood of people. A comparison between expenditure for minimum requirement of cloths (Guruswami and Abraham, 2006) and actual quantity of cloths used by the people of agricultural households in

Table 6: Comparison of expenditures on balanced food and actual food intake per agricultural household

Size class	Estimated food expenditure based on balanced diet (Rs.)	Actual expenditure on food (Rs.)	Differences between col.2 and col. 3 (Rs.)	Actual expenditure on food as % of estimated expenditure for balanced diet
Col.1	Col.2	Col.3	Col.4	Col.5
Marginal	63970	49762	14208	77.79
Small	58248	50592	7656	86.85
Semi-medium	59204	53222	5982	89.90
Combined	62654	50119	12535	79.99

Note: Requirement of food expenditure has been estimated on the basis of balanced diet recommended by National Institute of Nutrition under the aegis of Indian Council of Medical Research (ICMR)

Table 7: Comparison of expenditures for minimum clothing requirement and actual clothes used per agricultural household

Size class	Estimated expenditure based on minimum clothing requirement (Rs.)	Actual expenditure on cloth (Rs.)	Differences between col.2 and col.3(Rs.)	Actual expenditure on cloth as percentage of expenditure on minimum clothing requirement
Col.1	Col.2	Col.3	Col.4	Col.5
Marginal	2836	4160	-1324	146.69
Small	2636	4576	-1940	173.60
Semi-medium	2827	5934	-3107	209.90
Combined	2799	4341	-1542	155.09

Note: Source of information on Minimum requirements of cloths is an article entitled "Redefining Poverty- A New Poverty Line for a New India" published in Economic and Political Weekly June 24, 2006.

Table 8: Comparison of various items of expenditures on goods and services estimated by NSSO and actual expenditures per agricultural household

Size class	Expenditures on various goods and services estimated on the basis of NSS data			Actual expenditure of agricultural household			Differences between two expenditures for respective items of goods and services			Actual expenditure as percentage of expenditure estimated based on NSS data for respective items of goods and services										
	House repairing	Health action	Misc. repairing	House repairing	Health action	Misc. repairing	House repairing	Health action	Misc. repairing	House repairing	Health action	Misc. repairing								
Marginal	906	5232	478	695	8439	1560	5232	4392	2437	8716	-654	0	-3914	-1742	-277	172.19	100.00	918.83	350.65	103.28
Small	841	4855	567	645	7831	2335	7579	6767	3082	13635	-1494	-2724	-6200	-2437	-5804	277.65	156.11	1193.47	477.83	174.12
Semi-medium	883	5038	378	677	8222	1947	4763	3890	2818	17124	-1064	275	-3512	-2141	-8902	220.50	94.54	1029.10	416.25	208.27
Combined	893	5156	488	685	8316	1723	5626	4789	2576	10106	-830	-470	-4301	-1891	-1790	192.95	109.12	981.35	376.06	121.52

Note: NSS 68th Round data of 2011-12 related to rural West Bengal have been used for various items of goods and services.

Table 9: Comparison of annual average income and expenditure of agricultural households

Size class	Annual average income (Rs.)	Annual average expenditure (Rs.)	C2-C3	Household expenditure as percentage of household income
C1	C2	C3		
Marginal	84044	76259	7785	90.79
Small	97288	88566	8722	91.03
Semi-medium	161220	89698	71522	55.63
Combined	91058	79280	11778	87.07

Annexure 1: Distribution of literate family members of agricultural household with different literacy level

Size class	Number of student					Number of others					Grand Total			
	Prim-ary	Post primary	Madhyamik	H.S level	Degree level	PG level	Total	Primary	Post primary	Madhyamik		H.S level	Degree level	PG level
Marginal	2	13	10	2	3	2	32	27	30	11	23	25	1	117
	(6.25) ¹	(40.63) ¹	(31.25) ¹	(6.25) ¹	(9.38) ¹	(6.25) ¹	(21.48)	(23.08) ²	(25.64) ²	(9.40) ²	(19.66) ²	(21.37) ²	(0.85) ²	(78.52)
Small	-	2	3	1	1	2	9	5	2	4	7	9	1	28
	(22.22) ¹	(22.22) ¹	(33.33) ¹	(11.11) ¹	(11.11) ¹	(22.22) ¹	(24.32)	(17.86) ²	(7.14) ²	(14.29) ²	(25.00) ²	(32.14) ²	(3.57) ²	(75.68)
Semi-medium	-	1	1	-	-	-	(14.29)	2	2	-	2	5	1	12
	(50.00) ¹	(50.00) ¹	(50.00) ¹	(50.00) ¹	(50.00) ¹	(50.00) ¹	(100.00) ¹	(16.67) ²	(16.67) ²	(16.67) ²	(16.67) ²	(41.67) ²	(8.33) ²	(85.71)
Combined	2	16	14	3	4	4	43	34	34	15	32	39	3	157
	(4.65)¹	(37.21)¹	(32.56)¹	(6.98)¹	(9.80)¹	(9.80)¹	(100.00)¹	(21.66)²	(21.66)²	(9.55)²	(20.38)²	(24.84)²	(1.91)²	(78.50)
														(100.00)²

Note: i) Figures in parentheses with superscript 1 indicate percentages of total students; ii) Figures in parentheses with superscript 2 indicate percentages of those other than students; iii) Figures in parentheses without superscript under column 8 and 15 indicate percentages of grand total under column 16.

Annexure 2: Distribution of family members of agricultural households to different age groups
Distribution with different age groups

Size class	1-4 years		7-10 years		10-13 years		13-18 years		More than 18 years	
	Infants 6-12 months	4-7 years	7-10 years	Boys	Girls	Boys	Girls	Boys	Women	Men
Marginal	-	2	4	-	8	-	5	8	65	90
Small	-	-	1	-	1	-	2	2	14	20
Semi-medium	-	-	1	-	-	-	1	-	4	8
Combined	-	2	6	-	9	-	8	10	83	118

Annexure 3: Average yearly requirement of food materials of agricultural households
Average yearly requirement of different food materials

Size class	Cereals(Kg)	Pulses(Kg)	Tonned milk(liter)	Roots and tuber(Kg)	Green leafy vegetables(Kg)	Other vegetables(Kg)	Fruits(Kg)	Sugar(Kg)	Fat/oil(Kg)	Yearly expenditure(Rs.)
Marginal	978.01	149.27	576.32	331.38	173.86	173.86	174.82	83.81	87.65	63970
Small	912.50	138.70	535.33	308.22	162.22	162.22	162.22	77.87	81.51	58248
Semi-medium	973.33	146.00	620.50	316.33	170.33	170.33	170.33	82.73	88.82	59204
Combined	966.01	147.17	571.59	326.31	171.55	171.55	172.28	82.67	86.62	62654

Note: This has been estimated on the basis of recommendations for balanced diet of different age groups of people by National Institute of Nutrition (NIN) under the aegis of Indian Council of Medical Research (ICMR).

Annexure 4: Minimum clothing requirements and expenditure of agricultural households in different size classes

Size class	Child (age 0-4)	Male (age 5-18)	Female (age 5-18)	Male adult	Female adult	Yearly expenditure (Rs.)
Marginal	-	46.8 meters of shirt material 26 metres of trouser material	46.2 metres of shirt material 25.2 metres of skirt/salwar material	126 metres of shirt material 108 metres of trouser material	65 three-metre sari blouse material	107779
Small	-	10.8 meters of shirt material 6 metres of trouser material	9.9 metres of shirt material 5.4 metres of skirt/salwar material	28 metres of shirt material 24 metres of trouser material	14 three-metre sari 14 metre blouse material	23720
Semi-medium	-	3349	6.6 metres of shirt material 3.6 metres of skirt/salwar material	9884	4 three-metre sari 4 metre blouse material	8483
Combined	-	57.6 metres of shirt material 32 metres of trouser material	62.7 metres of shirt material 34.2 metres of skirt/salwar material	165.2 metres of shirt material 141.6 metres of trouser material	83 three-metre sari 83 metre blouse material	139981
	-	17863	25465	58317	38336	

Note: i) Minimum clothing requirement has been estimated on the basis of information on requirement of clothes for various age groups of people obtained from an article published in Economic and Political Weekly, June 24, 2006.

ii) Prices of clothes have been obtained from NSS Report No. 558: Household consumption of various goods and services in India 2011-12, NSS 68th round (July 2011- June 2012), National Sample Survey Office (NSSO), Ministry of Statistics and Program Implementation, Govt. of India.

different size classes has been attempted in this study. These comparative figures for expenditures are presented in table 7. Actual expenditure for clothing is found to exceed the expenditure for minimum requirement of cloths across all the size classes. This surplus expenditure is noted to be higher in large size classes of agricultural households. As a whole, these surplus expenditures for clothing reveal that the people of agricultural households in all the size classes use more than sufficient quantity of cloths.

Health care, education, recreation and other requirements for leading life with satisfaction have been quite naturally taken into considerations in the study. Due to unavailability of information on minimum level of these requirements minimum expenditure could not be estimated in the study. For this reason actual expenditures for fulfillment of these purposes of the agricultural households have been compared with the expenditure estimated on the basis of NSS 68th round of data in 2011-12 related to rural West Bengal. This comparison is presented in table 8. In almost all the cases it is observed that average actual expenditure of agricultural households of all existing size classes in the district has exceeded average estimated expenditure based on NSS data. In house repairing actual expenditure of the agricultural households is found to be higher than estimated expenditure based on NSS data by 72 to 178 % in different size classes. In the cases of health care no surplus or deficit actual expenditure has been noted over the expenditure based on NSS data in marginal size class. In small size class of agricultural households, surplus is noted to be 56%. But actual expenditure is observed to be less than expenditure estimated on the basis of NSS data by 5% in semi-medium size classes. So far education is concerned; actual expenditure is found to exceed the estimated expenditure based on NSS data by 819 to 1093 %. Actual expenditure for recreational purpose is also noted to be higher than estimated expenditure based on NSS data by 251 to 316 % in different size classes. Actual expenditure for other purposes (miscellaneous) is found to exceed the estimated expenditure based on NSS data by 3 to 108 % in different size classes.

Comparison of annual average income from different sources and expenditure for procurement of various types of goods and services by the agricultural households is furnished in table 9. It is found that in each of the size classes annual income is higher than annual expenditure. In marginal size class 90.79 % of the

income is noted to be spent for various purposes. The corresponding figures for small and semi-medium size classes are 91.03 and 55.63 per cent respectively. So a similarity is there between marginal and small size classes of agricultural households in this respect. As a whole, the agricultural households spend 87.06 % of their annual income. A surplus income over expenditure is found to be recorded for the agricultural households in each of the size classes.

The agricultural households in marginal size class and as a whole cannot afford to maintain food security unless they curtail their expenditure on other necessary goods and services related to livelihood of people. The other size classes of agricultural households do not face such a problem. Their surplus income over expenditure on all goods and services exceeds the extent of deficiency in making expenditure on balanced diet. Actual expenditures on various items of goods and services excepting food exceeds estimated expenditure based on secondary data in all size classes of households. It is reasonable to maintain food security by increasing expenditure on food at the cost of reduction in expenditure on other goods and services of relatively low importance. The livelihoods of the people in agricultural households belong to more or less a high stratum.

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