CHAPTER – 3

CONCEPTS AND METHODOLOGY
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3.1 NFED AND IMPORTANCE OF THE STUDY

Development of human society in general involves mobilization of natural resources, augmentation of trained manpower, capital and technical know-how and their utilization for attaining the national goals set from time to time. Wealth of a nation is its people—both men and women. Much of women’s household work remains unrecognised, unvalued. The physical output of women’s household activities had never been sold nor made market-oriented. Therefore, it has no market value and had never been price tagged. This has an impact on the status of women in society, their opportunities in public life and the gender blindness of development policy. Women are tired of being overworked, unpaid and underpaid. The monetary valuation of an unpaid work is a necessary means of turning “assumed” value into real value; that is, public policies which improve the well-being of women, children and their families. Monetary valuation of an unpaid work is a key to challenging the system of an under-valuation of ever women’s paid work that is a primary reason of women’s economic insecurity. Part of goods and services consumed by the population are produced and consumed without undergoing monetary exchange transaction; this non-monetised consumption and the corresponding production go unrecorded in labour statistics and in the nation accounts. There are goods and services provided to the household by unpaid household members who are mostly women. Women’s unpaid household work need to be visible, quantified and well-recognised in monetary terms. Because the monetisation of the non-market, an unpaid work of women is more than question of justice. However, no such detailed study has been carried out so far in Northern western hill region of India. The present study has been undertaken which is ultimately of an immense help to the researchers, academicians, policy makers, planners and students.
3.2 OBJECTIVES OF THE PRESENT STUDY

The present study has been undertaken for detailed empirical verification with a view to achieve the following objectives:

1. to study the socio-economic condition of rural and urban sample households;
2. to quantify, the allocation of labour time by sample households;
3. to valuate the contribution of women’s to the household activities;
4. to study the role of women in family decision making among the sample households; and
5. to list the problems faced by the women and suggest ways and means for measuring their role in different activities.

3.3 SAMPLING PROCEDURE

The present empirical investigation is confined to the “Labour Time Allocation and Valuation of Women’s Contribution in Household Activities—A Comparative Study of Rural and Urban Areas of Himachal Pradesh”. Out of the twelve districts of the State, two districts viz Kinnaur and Shimla were purposively selected. The rural sample was taken from Kinnaur district because the whole of the population of the district is rural. Whereas, of the Shimla district the sample household were selected mainly from Shimla town because Shimla has the highest concentration of urban population in the State. Shimla is essentially a white collar and service city with a tiny industrial sector. Majority of the population here is employed in service sector. Almost all the economic activities are confined to non-agricultural sector. The sample households from rural area were selected on the basis of their size of holdings and urban households on the basis of their income groups randomly in proportion to the total number of households. In all 300 sample households have been selected, 150 each from rural and urban areas of the State.

Administratively the Kinnaur district has been divided into three development blocks viz., Nichar, Kalpa and Pooh. At the first stage all the panchayats in three blocks have been arranged in an ascending order on the basis of female population as per the list of village panchayats as per 2001
and one panchayat from each block has been selected randomly. These total three panchayats have been selected randomly. At the second stage a list of village has been obtained from the office of each selected panchayats and all the villages in each selected panchayat has been arranged in an ascending order on the basis of their respective female population and three villages has been selected randomly from each selected panchayat of each selected development block. Thus, a total number of 9 villages were selected from all selected panchayats. The number of female population in these sample villages varied from the minimum of 60 in village Ruang to a maximum of 1537 in sungra village and overall total stood at 3152. At the third stage a list of households have been prepared in each of the selected villages an ascending order on the basis of their respective size of holdings viz., marginal (0-1 hectare), small (1-2 hectare), medium (2-4 hectare) and large size of holdings (4 hectare and above) and 150 households in proportion to total number of households falling in each category have been selected randomly for collecting the required first hand information.

Administratively the Shimla city has been divided into twenty-five wards which are administered by the Shimla Municipal Corporation. At the first stage a list of wards have been arranged in an ascending order on the basis of their respective female population as per 2001 and nine wards have been selected randomly. The selected wards were 14,8,22,5,17,15,24,20 and 23. The number of female populations in these sample wards varied from the minimum of 1502 in Ward No.14 to a maximum of 4847 in Ward No 23 and overall total stood at 23029. At the second stage a list of households have been prepared in each of the selected wards and all the households in all the selected wards has been arranged in an ascending order on the basis of respective households income viz. group I lowest income group (Rs. 0-8000), group II low income group (Rs. 8000-16000), group III medium income group (Rs. 16000-30000) and group IV high income group (Rs. 30000 and above) and 150 households in proportion to the total number of households falling in each category has been selected randomly for collecting the required first hand information.
3.4 NATURE OF DATA TO BE COLLECTED

Both secondary as well as primary data has been used in the proposed study. The secondary data has been collected from different government and individual publications as well as from the various levels of administrative machineries. The related information has been collected from the Directorate of Economics and Statistics, Directorate of Land Records of Himachal Pradesh, Directorate of Agricultural Census, etc. The required primary data has been collected with the help of pre-tested schedule from 300 sample household and selected 150 each from rural and urban areas of the state. In rural areas Kinnaur district scattered over nine villages, of three selected panchayats in three development blocks. In urban areas Shimla town comprises of 25 wards, nine wards have been selected. With the help of a pre-tested schedule information pertaining to the family composition, literacy, occupation as well as the value of the household’s assets has been collected from the selected households as it was exist at the time of the survey. The data pertaining to the family labour time utilized in agricultural, horticultural and livestock activities has been collected from the entire selected household for the lean as well as the peak agricultural seasons during the year.

The labour time utilization in non-farm activities such as business, wage work, household industries etc, has also been collected during both the lean and peak agricultural periods, as the number of man days and the amount of an income from business wage work and household industries vary during seasons. The human time utilized in services as well as the amount of an income received which always remains the same throughout the year has been collected for the month preceding the survey.

The questionnaire designed for the time allocation survey has covered all forms of field and household activities usually performed by residents in the study region, comprising a mix System of National Account (SNA), Extended System of National Account (E-SNA) and Non SNA activities. Since these include activities performed on seasonal as well as daily basis, time allocation made by respondents towards both primary and subsidiary occupations, as well to other home based work and leisure time activities have been recorded. The SNA activities performed by members of the rural
households included the usual activity set associated with crop agriculture, including pre and post harvest activities as well as the market activities associated with crop cultivation has been collected. However, the limited extent of land holding among families and their consequent economic dependence on wage work, not all of these has necessarily been performed by respondents as subsistence activities on their own account. Instead, the time allocations made towards these activities include labour services rendered against wage payments as hired agricultural labour, as well as the same service performed by respondents on their own account on self cultivated lands.

A second subset of SNA activities include subsidiary livelihood activities usually associated with home production, including the time devoted to livestock husbandry and to the collection of domestic fuel, agricultural processing and storage for home consumption and construction activities, as well as the production of artisanal craft item for home consumption and for market sale. Once again this includes enterprise activities as well as services rendered against payment to other households, for instance in the commissioned construction of wells and dwellings by workers with the requisite artisanal skills of the construction, management of local irrigation system and village infrastructure, including earthworks, embankments and minor roads. The selected Extended System of National Account (E-SNA) activities have been included through time allocations towards several unpaid domestic activities in which women plays a major part, including cooking, cleaning, care giving, educational and tutoring services, as well as community work in the villages by respondents working as part of a group. The Non-National Account (NNA) has included activities of a more personal nature, including social contact hours, leisure, rest, recreation and personal care.

3.5 ANALYSIS OF DATA

The distributional pattern of household assets, income and consumption expenditure has been analysed with simple average percentage method. The monitory valuation of work is a necessary means of turning assumed value into real value that have improved the well being to women, children and their families. In the present study to understand the critical dimension of women's
contribution to the different categories of work done by them vis-à-vis the man within the sample household and to ensure full measurement of the paid and an unpaid work of men and women has been analysed with widely used methodology in both developed and developing countries.¹

In the present study primary data has been collected for both males and females regarding the various types of work done by them during the year. It needs to be stressed that some person work slowly, using all the time available to them or due to their inefficiency while others may spend much less time, either due to efficiency, burden of other work or due to their inherent work culture. Due to the foregoing differences in the efforts that people put in while working, the problem faced was of quantifying the amount of work done by all the males and females forming the sample. Besides, there were other problems faced in data collection as well as its tabulations like problems of recall of work done during the whole year, the respondents belonging to different age groups, seasonal nature of some of the rural work, and so on and so forth. These small methodological problems were kept in mind in collecting, tabulating and interpreting the data work time put in were measured in hours and minutes per day, and then it has been averaged over the week/month and then divided into nine fold activity classification;

1. Primary production activities:

2. Secondary sector activities;

3. Trade business and services, i.e. the tertiary sector activities;

4. Household maintenance, management shopping for own household;

5. Care of children the elderly and the disabled of own household;

6. Community services;

7. Self learning and education

8. Personal care and self maintenance and

9. Social and cultural activities.
These nine types of activities were further grouped into three categories. The first three activities were referred to as the System of National Account Activities (SNA). Next three activities were called extended system left out of national account were called Non-Economic Personal Activities. Regarding the last category, the criterion in the present study would be that third parties, no one else can eat your breakfast on your behalf or catch up on your sleep. We must do it ourselves. Regarding the E-SNA activities, their distinguishing features were that they could be performed even by hired workers, say, cooking a meal, sweeping the floor, cleaning the utensils and looking after one's children etc. The nature of the system of SNA activities was quite clear because these activities form part of National Income Accounting System in every country. These activities formed the exchange system in the market and these can be purchased and sold.

In the present study, the pattern of SNA has been adopted as follows. The SNA activities comprised three groups of activities namely primary production activities, which consist of crop farming (land preparation, sowing, digging, manuring, harvesting/plucking etc.), animal husbandry, processing and storage etc. Secondary activities consisted of construction and manufacturing activities which included rural activities (making of tools and machinery, moulding, welding, assembling machines and equipments, spinning, weaving, processing of textiles, basket making etc.) Tertiary sector activities comprised trade, business and services. The services consisted of employment in Government, semi-Government and private organisations, petty services (i.e. working as a sweeper, hasher, barber, cobbler and guard etc.) and professional services (medical and education services etc.). The second group was the Extended System of National Account (E-SNA) activities. This category of activities was mainly related to the household domestic work, which was unpaid, unrecognized and involves no market value in the form of payment of wages. These could also be performed by hired labour. The study of such activities was important because these have a direct bearing on the status of women. It is well recognized that this category of work gives rise to gender discrimination and male dominance. Activities of the third group are called non-economical personal activities. They are very
important for self-maintenance and for overall development of an individual. This is a category of activities where all human beings work for themselves, no one else can perform for them.

### 3.5.1 Monetary Valuation:

The monetary valuation of an unpaid work is a necessary means of turning "assumed" value into real value; that is, public policies which improve the well-being of women, children and their families. Information on the value of an unpaid work offers an important analytical tool to policy makers. It is a means of re-framing basic policy questions regarding the distribution of resources, rethinking who is "deserving" of government support. Monetary valuation of an unpaid work is also key to challenging the systemic undervaluation of women's paid work that is a primary factor in women's economic insecurity.

Recognising the true magnitude of unpaid household labour, calls for estimating the monetary value of such household work. Australia has been a pioneer in the valuation of household labour. Economist Duncan Ironmonger developed the concept of the 'Gross Household Production' (GHP), a term referring to the value-added to the national economy by unpaid household labour.

Women's unpaid work needed to be visible, quantified and well-recognised. As most of care work was previously carried out within the confines of household, did not figure into the National Account. The moment women entered the labour force to do care work, for pay, their labour began to count as labour and started being counted as part of the national income. However, how much work is actually being done is not clear, until and unless it is estimated and valued. The physical output of household activities had never been sold nor made market-oriented. Therefore, it has no market value and had never been price tagged. It is however deemed an imperative to express the value of physical output of households in terms of units of money. For the purposes of economics valuation, value is synonymous with the market value or, value is simplified by assuming that an hour of market work and an hour of non-market work, have the same value. In the present study,
all the human activities have been taken as productive, market oriented, productive non-market work and personal activities, and they have been called as SNA activities, E-SNA activities and non personal activities respectively.

The work which is not included under SNA activities has been evaluated by using replacement cost (generalist) method in the present study. This method values an unpaid work by an equivalent wages of paid domestic help. The wage rate varies and also depends upon the labour market situation in the concerned area. The replacement cost has been estimated with the help of following formula.

\[ \text{Value} = \text{Average time spent on the activity} \times \text{Wage rate of domestic Worker} \]

Under SNA activities wage rates are fixed for males and females. In the context of the rural area under study for the labour engaged in crop farming, the prevailing wage rate was Rs. 150/ per day for male and Rs. 120/ per day for females during the reference year. In manufacturing and construction activities the wage rates were Rs. 200/ and Rs. 150/ for males and females respectively. In an urban area under SNA activities wage rate in crop farming was Rs. 200/ per day for male and Rs. 150/ per day for female. In manufacturing and construction activities the wage rate were Rs. 250/ and Rs. 200 for males and females during the reference year.

In the E-SNA activities multiple wages rates were prevailing for similar activities, such as cooking at a road side restaurant or at someone's house, washing at home or through washerman. Keeping these actual differences in wage rate, the different average wage rate of all household activities has been taken. As discussed earlier, the E-SNA activities comprises of four parts. The first one is household management work. Its wage rate was Rs.1000 per month, which includes cooking meals (Rs. 600), cleaning utensils (Rs. 250), washing and ironing of clothes (Rs. 100) and home improvements (Rs. 50) per months in rural area. In an urban area wage rate was Rs. 1600 per month, which includes cooking meals (Rs. 800), cleaning...
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utensils (Rs. 500), washing and ironing of clothes (200), and home improvements (Rs. 100) per month.

In rural area the family care activities; wage rate was Rs. 1500 per month and in an urban area wage rate was Rs. 1600 per month. It includes physical care of children, accompanying them to school and looking after them, physical care of elderly, sick and disabled family members. For animal-care related activities the wage rate was (Rs. 600) and it includes grass collection, grazing, mulching and tending of animals in rural area and (Rs. 500) in urban area. For community services the wage rate was (Rs. 400) per month in rural area and in an urban area. It includes work for individuals, group, travel for local and formal groups, civic responsibilities like (voting, rallies, meetings etc).

While performing all the above activities, the time utilization pattern depends upon an individuals' capacity/behaviour. In order to derive the daily wage rate from the monthly wage rates, the following method 
\[
[(1000+1500+600+400)] \times 12/300
\]
has been used. These calculations give Rs. 140 as the average daily wage rate in rural area. In an urban area 
\[
[(1600+1600+500+400)] \times 12/30
\]
the average daily wage rates is Rs. 164. Here, in the nominator the monthly wage rates have been added up, multiplied by 12 months and divided by 300 which are estimated annual days spent by workers on E-SNA activities.

3.6 COMPUTING GENDER-RELATED DEVELOPMENT INDEX (GDI)

The order to have a comprehensive idea of gender in-equality in the areas under study, the Gender-Related Development Index (GDI) has been applied. The methodology for calculating GDI was almost same with a slight modification as prescribed by the United Nation Development Programme (UNDP) in Global Human Development Report (HDRs) 1995. For computing GDI, all the three components viz. (i) Longevity Index measured by the life expectancy at birth, (ii) Education Attainment Index measured as the combination of adult literacy rate and combined enrolment ratio (Primary and Secondary) and (iii) the standard of living index measured by the real GDP per capita expressed in Purchasing Power Parity in dollars (US) i.e. PPP$. of
the Human Development Index (HDI) have been adjusted for the average achievement of rural and urban areas in accordance with the disparities in achievement of men and women. In fact GDI is HDI discounted or adjusted downwards for gender inequality. The methodology for obtaining indicators (ii) and (iii) has been identical with that used by the UNDP in various HDRs. There is a deviation from the standard methodology in calculating health index. Infant Mortality Rate in place of life expectancy at birth (LED) has been used to work out health/life index. GDI has been calculated with the help of following indicators.

i) Percentage shares of males and females to total population.

ii) Infant Mortality rate for male and female child.

iii) Adult literacy rate for males and females.

iv) Combined primary and secondary enrolment rate for males and females.

v) Share of males and females in economically active population.

vi) Agricultural and Non-agriculture wage rates for males and females.

Extent of Inequality Aversion Adopted:

The Gender Equity Sensitive Indicator (GESI) methodology has been used, utilizing the $1-e$ averaging. The value of $e = 2$. In the context of the gender based index this is a measure that indicates the contribution of a one unit increase in female achievement to the $X_{ede}$ i.e. to the equally distributed equivalent achievement. Female achievement, because their achievement values are lower than those of men, the implication is that in conditions where male achievement is lower than that of female and $e$ will measure the contribution of a unit increase of male achievement to the $X_{ede}$. It ($e$) indicates social preference for equality because it is the elasticity of the marginal social valuation of achievement (Anand and Sen, 1995)\textsuperscript{4}.
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GDI has been calculated with the help of following steps:

Step One:

a) Equally distributed health/life index

i) Female health/life index

\[ \frac{x_i - x_{\text{Min}}}{x_{\text{Max}} - x_{\text{Min}}} \]

ii) Male health/life index

\[ \frac{x_i - x_{\text{Min}}}{x_{\text{Max}} - x_{\text{Min}}} \]

\[ X_i = \text{Infant Mortality Rate} \]
\[ X_{\text{max}} = 100 \]
\[ X_{\text{min}} = 0 \]

(1-\(\epsilon\) represents extent of inequality aversions)

iii) Equally distributed health/life index = ((female population share) x (female life index)\(^{1-\epsilon}\) + (Male population share) x (male life index)\(^{1-\epsilon}\))\(^{1/1-\epsilon}\)

Step Two:

b) Equally distributed educational attainment index

i) Adult Literacy Rate Index

Males

\[ \frac{x_i - x_{\text{Min}}}{x_{\text{Max}} - x_{\text{Min}}} \]

Females

\[ \frac{x_i - x_{\text{Min}}}{x_{\text{Max}} - x_{\text{Min}}} \]

Where

\[ X_i = \text{Actual Literacy rate} \]
\[ X_{\text{min}} = 0 \text{ Minimum literacy rate} \]
\[ X_{\text{max}} = 100 \text{ Maximum Literacy Rate} \]

ii) Combined Gross Enrolment Ratio Index

Males

\[ \frac{x_i - x_{\text{Min}}}{x_{\text{Max}} - x_{\text{Min}}} \]
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\[
\text{Females} = \frac{X_f - X_{\text{Min}}}{X_{\text{Max}} - X_{\text{Min}}}
\]

Where

\[X_f = \text{Combined enrolment ratio (Primary secondary)}\]
\[X_{\text{Min}} = 0 \quad \text{Minimum enrolment ratio}\]
\[X_{\text{Max}} = 100 \quad \text{Maximum enrolment ratio}\]

iii) Educational Attainment Index

Males = \(\frac{2}{3} \times \text{(Male adult literacy rate index)} + \frac{1}{3} \times \text{(Male combined enrolment ratio index)}\)

Females = \(\frac{2}{3} \times \text{(Female adult literacy index)} + \frac{1}{3} \times \text{(Female combined enrolment index)}\)

iv) Equally distributed educational attainment index =

\[\left[(\text{Female population share}) \times (\text{female educational attainment index})^{1-c} + (\text{Male population share}) \times (\text{Male educational attainment index})^{1-c}\right]^{1/1-c}\]

Step Three:

C. Equally Distributed Income Index

(Note: UNDP adopts ratio of female non-agriculture wage to male non-agriculture wage. Here ratio of female agriculture and non-agriculture wage to male agriculture and non-agriculture wage has been used).

1. Proportional income Share:

i) Average wage (\(W\)) = \([(\text{female share of economically active population}) \times (\text{ratio of female wage to male wage}) + (\text{male share of economically active population}) \times 1]\)

ii) Female wage to average wage = ratio of female wage to male wage/average wage (\(w\))

iii) Male wage to average wage = 1/average wage (\(w\))
iv) Female share to earned income = (female wage rate to average wage) X (percentage share of the female economically active population)

v) Male share of earned income = (Male wage to average wage) X (percentage share of the male economically active population)

vi) Female proportional income share = (female share of earned income) / (female population share)

vii) Male proportional income share = (Male share of earned income) / (Male population share).

2. Equally Distributed Income Index

For computing the equally distributed income index, the weighting parameter ($\varepsilon = 2$) is applied.

(i) Equally Distributed Proportional Income Share = \[ ((\text{Female population share}) \times (\text{female proportional income share})^{1-\varepsilon} + (\text{male population share}) \times (\text{male proportional income share})^{1-\varepsilon})^{1/1-\varepsilon} \]

(ii) Equally distributed proportional income PPP$ = (\text{Equally distributed proportional income share}) \times (\text{Adjusted GDP per capita PPP$}).$

Step Four:

d. Gender Related Development Index

Gender-Related Development Index = \(1/3 \times (\text{equally distributed health index} + \text{equally distributed education attainment index} + \text{equally distributed income index})\)

3.7 Definition of Concepts

In the family the role of the women has been and still is auxiliary to that of the men in the household. Accordingly it is difficult to draw a line between those working substantially and those whose work is considered minor. The women’s household duties in rural and urban India shows that women engaged predominantly in domestic duties also perform a set of activities, of which some could be classified as economic and other as beneficial. The implications of such a heavy involvement in domestic activities for their labour
market participation are explored. The important concepts used in the present study which deals with the women's participation in numerous activities irrespective of whether the activity is economic or recognised to be beneficial to households are defined as follow.

**Household:**

A household is a group of family members/persons normally living together and taking food from a common kitchen.\(^5\)

**Household size:**

The size of the household is the total number of persons in the household.\(^6\)

**Economic Activity:**

Any activity resulting in production of goods and services that add value to national product was considered as an economic activity. The economic activities have two parts:-

i) **Market Activities:** These activities involve remuneration to those who perform it i.e., activity performed for pay or profit. These are essentially production of goods and services for the market including those of government services, etc.

ii) **Non-Market Activities:** These activities are the production for own account production of fixed assets. It include construction of own houses, roads, wells etc. and of machinery, tools etc., for household enterprise and construction of any private or community facilities free of charge.\(^7\)

**Household Activities:**

The various activities performed by women engaged in domestic duties and relative activities which are generally intangible in nature, without any economic remuneration. These can be classified under following:

i) **Food Related Activities:** This includes time consuming for preparing meals, snacks. (including preparing coffee, tea or drink) setting the table, meal cleanup, dish washing, baking, preserving, freezing
canning, gathering of wild food, tending edible plants, purchasing everyday consumer goods and procuring water etc.

ii) Family services: The time spent in family care. This involves following:

(a) Child care: Physical care, supervision of the child (including babysitting) reading and playing with child, talking to the child, learning with the child (help with homework, guiding in doing things) outdoor with children, visiting school / nursery (including parents meeting) medical and dental services for children.

(b) Adult Care: The physical care of a sick or elderly adult, visits to hospitals, washing, cutting hair, massaging, mental help, information and advice are included in it.

(c) Making and Care of Textiles: The activities connected with Laundry, ironing, mending and care of clothes and shoes, Producing textiles, weaving cloth, dress making, tailoring, Handicrafts (knitting, needlework, embroidery) irrespective of whether the final produce for family consumption or commodity production.

iii) Tending of Livestock: This includes collection and carrying of grass, taking animal for grazing, cleaning of sheds, mulching, wool shearing, caring domestic animals and pets.

iv) Household Maintenance and Management: The time spent on Purchasing durables, maintenance of vehicles, administrative Work (visiting bank, post offices etc.) water, electricity, phone bill deposit, planning and arranging budgeting, making shopping lists, supervising and correspondent with authorities' falls in it.

v) Community and Social Affairs: The work for organization, work in child care group, leader of a youth group, attending marriage, religious ceremonies, fair and festivals and public activities etc. are involved here.
vi) Personal Care: This consist of time consuming in studies, social life and entertainment, arts, sports, games, hobbies and mass media (watching T.V., Radio etc.)

**Human Activities:**

This activity is grouped into three main categories (a) personal or non-economic activities (b) Productive non market or E-SNA activities (c) Productive market-oriented or SNA activities.\(^8\)

**Dependency Ratio:**

This ratio of population defined as dependent—those under 15 and those over 64—to the working-age population, aged 15-64.\(^9\)

**Literate:**

Those members of the family, who can read and/or write and have formally joined institution dealing with such practices, have been treated literate. Here all non-school going children in the age group of 0-6 are excluded.

**Household Income:**

Household income includes current income of all member of the household from all sources. It consists of both farm and non-farm income.\(^10\)

**Consumption Expenditure:**

Consumption implies utilization of goods and services to satisfy the human desire and wants. The pattern of consumption varies from place to place and may be influenced by the socio-economic and psychological consideration. But for the purpose of general studies, consumption expenditure implies all expenditure incurred by a household exclusively towards its non-productive domestic consumption, thus, excluding all expenditure towards the enterprise activities of the household, transfer payment in kind like loans advanced, charities, gifts and other payment, in kind are not considered in consumption expenditure. But any consumption out of transfer receipts in kind or free collection is considered for determining total consumption.\(^11\)
Engel's Law:

The proposition of the Engel's law of consumption is as income increases the expenditure on different items have changing proportions and the proportion diverted to urgent needs decreases, while on luxuries and semi-luxuries increases. Thus, according to Engel's law with given tastes or preferences, the proportion of income spent on food-items diminishes while on non-food items increases with an increase in income.\textsuperscript{12}

Demonstration Effect:

The consumption standards of low income group are greatly affected by the consumption standards of high income groups. This phenomenon is called demonstration effect.\textsuperscript{13}

Standard Consumer Units:

The National Institute of Nutrition has calculated the 'standard consumer units or adult-man value' by assessing the calories need of women and children in terms of the average man by applying various coefficients of the different age and sex groups. For example of family consisting of father, doing sedentary work, mother and three children aged 10, 8 and 6 years, has and 'adult man value' or 'standard consumer unite' of 3.9 (i.e. 1.0+0.8+0.8+0.7+0.6) and the minimum daily calories requirement of the family would be equal to the total number of standard consumer unites multiplied by the per consumer unit per day minimum calorie requirements.\textsuperscript{14}

Farm Activities:

This includes all operations, big or small, which are done on the farm and/or for the farm. These obviously will cover various operations done on land, crops, farm animals, machinery, building etc. These can broadly be classified under following sub-heads:

i) Crop Production: This will include preparatory tillage, sowing, transplanting, manuring weeding and hoeing, irrigation, sparing and dusting of pesticides etc., harvesting, threshing, winnowing, cleaning, grading, packing etc.
ii) Other Farm Work: This includes work in orchards/fruit trees, manure preparation, fencing of fields, levelling, land improvement, soil conservation, preparation and maintenance of irrigation and drainage channels, arranging of inputs and disposal of output etc.

Non-Farm Activities:

This includes all the commercial activities performed by male and female in rural and semi-urban areas such as dairy and poultry farming, handicrafts, brick making, small scale public works, construction, services, commercial transport, processing, weaving, blacksmith, cobbler, tailoring, flour mills, barber, goldsmith, manufacturing of wood, leather and repairs.

Enterprise:

An enterprise is an undertaking which is engaged in the production and/or distribution of some goods and/or services meant mainly for the purpose of sale, whether fully or partly. An enterprise may be owned and operated by single household or by several households jointly, or by an institutional body.\textsuperscript{15}

Labour Force:

Persons, who, were either working (or employed) or seeking or available for work (or unemployed) constituted the labour force. Persons who were neither ‘working’ nor ‘seeking or available for work’ for various reason during the reference period were consider as “out of labour force”. The person under this category were students, those engaged in domestic duties, rentiers, pensioners, recipients of remittances, infirm or disabled persons, too young or too old persons etc. and casual labourers not working due to sickness.\textsuperscript{16}

Primary Occupation:

Primary occupation has been taken as the one among the listed occupations from which a household derived maximum percentage of income, i.e. greater than 50 per cent of the total household income.\textsuperscript{17}

Assets:

Everything that the household owns and which has a money value is classified as an asset. The assets of the households are those items from
which he hopes to get an income or which he keeps to protect his interest. In
the present study the household assets have been divided into two categories
viz., productive and unproductive assets (i.e. household durables). All these
household assets (such as land, livestock, poultry, agricultural implements,
household industries, commercial vehicles and rented-out building etc.) have
been termed as productive assets, which provide gainful employment to the
family human labour and directly add to the household income. The
household durables constitute those assets which have no direct effect on
household income and/or employment, but they indirectly help to raise the
efficiency, skill as well as the levels of living of the households which include
good housing conditions, electrical appliances, furnishing articles, beddings
etc.  

Operational Holding:

An operational holding includes all land which is wholly or partly used for
agricultural production and is operated as one technical unit by one person
alone as with others without regard to title, legal form, size or location. The
technical unit is that which is under the same management and has the same
means of production such as labour force, machinery and animals.

Individual and Joint Holding:

If the land holding is operated either by one person alone or by a group
of persons being members of the same household, the holding is called
individual holding. If two or more persons belonging to different households
share jointly (as partners) the economic and technical responsibility for the
operation of the agricultural holding, the holding has been termed as joint
holding.

Net Area Sown:

The net are sown represents the total area sown with crops and
orchards, counting areas sown more than once and/or only once in the same
agricultural year.
Land put to Non-Agricultural Uses:

Land put to non-agricultural uses includes all land area occupied by free holdings, roads and railways or under water and land area put to uses other than agriculture; whereas, land under miscellaneous tree crops and groves includes all cultivable land which is not included in net area sown but is put to some agricultural uses such as land under casuarian trees, is not included under orchards.22

Land Holding Groups:

The farmers with land holding upto 0.50 hectares of class 'I' irrigated land or the farmers with holdings upto 1.00 hectares of unirrigated land have been termed marginal farmers. The farmers with land holdings between 0.50-100 hectares of class 'I' irrigated land or the farmers with land holding between 1-2 hectares of unirrigated land have been termed the small farmers. The farmers with land holding between 1-2 of irrigated land or 2-4 hectares of unirrigated land have been termed as medium farmers. The farmers with land above 2.00 hectares of irrigated land or the farmers with land holdings above 4 hectares of unirrigated land have been termed as large farmers.23

Income Groups:

Families living in cities and towns with annual income of up to Rs. 1 lakh or monthly earning of up to weaker section (EWS) = Rs 8,334, low income groups(LIG) = Rs 16,667,24 Medium income groups (MIG) = up to Rs= 25,000 thousand or Rs.= 25,000 thousand and High income groups (HIG) = above Rs= 25,000 or Rs= 40,000 .25

Agricultural Labourer:

A person without any land but having a homestead and deriving more than 50 per cent of his income from agricultural wages have been termed agricultural labourer.26

Non-Agricultural Labourer:

A person whose total income from wage earning does not exceed Rs. 200 per month is termed as non-agricultural labourer. Persons who derive their income partly from agriculture and partly from other sources can also be
brought under this category provided at least 50 per cent of their income is from non-agricultural sources. They need not have a homestead but must be residents of the village in which they are identified.\textsuperscript{27}

\textbf{Earner:}

All such household members who contribute financially towards the total family income are called earners. An earner is defined as one whose income is sufficient for his (or her) maintenance, and earning dependent as one whose income is not adequate of his (or her) maintenance and non-earning dependent as one who earned no income at all and is dependent for his (or her) maintenance on others.\textsuperscript{28}

\textbf{Universe:}

The whole group, from which the sample is to be selected, is technically called universe or population.\textsuperscript{29}

\textbf{Sample and Sampling Unit:}

A small group selected as representative of the universe is called a sample and in order to draw a sample from the universe, the unit of sample in terms of a house, a family, an individual or group has been decided which is termed as sampling unit.\textsuperscript{30}

\textbf{Sampling:}

Sampling is simply process of learning about the universe/population on the basis of the sample drawn from it. A number of methods are used for drawing a sample. Random sampling is one where the individual unit constituting the sample are selected at random and probability of the inclusion of each item of the universe in the sample is equal. The selection of item is thus, entirely objective. Purposive sampling means selecting the items of the sample in accordance with some purposive principle and the probability of inclusion of some units of the universe in the sample is very high while probability of inclusion of others is very low. In this method some criterion of selection is first laid down and items are selected in accordance with it. In mixed sampling there is a mixture of random sampling and purposive sampling. The universe is first divided into some groups on the basis of
purposive sampling and then from each sub-division certain items are selected in accordance with random sampling. If the universe is first divided into 'Strata' by purposive method and then from each stratum some units are selected by random sampling, the method is called stratified random sampling method.\(^{31}\)

**Reference Period:**

Reference period means the period of time for which data of all activities was collected.\(^{32}\)

**Value:**

It means by assuming that an hour of market work and an hour of non-market work, have the same value, to provide estimate of the value of household and other unpaid work.\(^{33}\)

**Economic Valuation:**

For the purpose of economic valuation, value is synonymous with market value.\(^{34}\)

**Valuing Women's Work:**

To value the amount of time a woman puts into works which is so important for the household and for the entire economy.

**Time-Units:**

Hours and minutes per day are used as time units.

**Value of Consumption:**

Consumption out of purchase is evaluated at the purchase price. Consumption out of home produce is evaluated at ex-farm or ex-factory rate. Value of consumption out of gifts, Loans, free collection and goods received in exchange of goods and services imputed at average local retail prices prevailing during reference period.\(^{35}\)
Monthly Per Capita Consumer Expenditure (MPCE):

For a household, this is household consumer expenditure over a period of 30 days divided by household size. A person's MPCE is understood as that of the household to which he/she belongs.36

Economically Active Population:

All persons of either sex who supply labour for the production of economic goods and service as defined by the UN System of National Accounts, during a specified time-reference period. According to this system, the production of economic goods and services should include all production and processing of primary products, and whether for the market, for barter or for own-consumption, the production of all other goods and services for the market and, in the case of households that produce such goods and services for the market, the corresponding production for own-consumption.37

Enrolment Ratio (Gross and Net):

The gross enrolment ratio is the number of students enrolled in a level of education, whether or not they belong in the relevant age group for that level, as a percentage of the population in the relevant age group for the level. The net enrolment ratio is the number of student enrolled in a level of education that belongs in the relevant age group, as a percentage of the population in that age group.38

Female-Male Gap:

A set of national, regional and other estimates in which all the figures for females are expressed in relation to the corresponding figures for males, which are indexed to equal 100.39

Life Expectancy at Birth:

The number of years a new born infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.40
Concept and Methodology

Purchasing Power Parity (PPP$):

The purchasing power of a country’s currency: the number of units of that currency required to purchase the same representative basket of goods and services that a US dollar (the reference currency) would buy in the United States (or a similar basket of goods and services). Purchasing power parity could also be expressed in other national currencies or in Special Drawing Rights (SDRs).^41

Real GDP Per Capita (PPP$):

The GDP per capita of a country converted into US dollars on the basis of the purchasing power parity of the country’s currency. The system of purchasing power parities has been developed by the United Nations International Comparison Programme (ICP) to make more accurate international comparisons of GDP and its components than those based on official exchange rates, which can be subject to considerable fluctuation.^42

Education:

This includes expenditure on goods purchased for the purpose of education viz., book and journals, newspapers, paper, pen, pencil, etc., and also magazines, novels and other fiction. It also includes fees paid to educational institutions (e.g. schools, colleges, universities, etc.) on account of tuition and other fees like game fees, library fees etc., and payment to private tutors.^43

Urbanization:

Growth in the proportion of the population living in urban areas.^44

Limitations of the Study:

1) The primary informations on most of the variables has been collected at a particular point of time. Hence, comparison over a period of time is not possible.

2) Time use does not measure human effort i.e. it makes no distinction between one hour work in harsh circumstances and one hour work in comfortable circumstances and one hour work in comfortable circumstances.
3) It examined only the allocation of time by women and men during the day or workdays, since a significant portion of women's work occurs at night, so the data suffers from that limitation.

4) This study related only the valuation of rural and urban women's contribution to household activities and gender differentials in consumption pattern in the district of Kinnaur and urban city Shimla and due to varied topography, climate condition, cropping pattern, occupations, sources and level of income, customs and traditions, faiths and belief, prevailing among the population of different districts of the State the results of the present study cannot be applied with hundred present precision to the entire economy of Himachal Pradesh.
REFERENCES


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