CHAPTER-1

INTRODUCTION: A THEORETICAL BACKGROUND

A conceptual framework is usually considered as a possible structure of underlying ideas relating to the study of a particular theme. It is also considered as a theoretical framework that normally attempts to connect to all aspects of inquiry such as problem, definition, purpose, literature review, methodology, data collection and analysis. Conceptual framework mirrors like a map that gives coherence to empirical inquiry. However, this is potentially so close to empirical inquiry, they take different forms depending upon the research question or problem. Therefore, for an intensive and detailed analysis of the present work, the study of conceptual background becomes very significant and essential. Following are the detailed picture of the conceptual framework concerning the dimensions of human resource development.

Concepts, Meaning and Significance of Human Resource and Human Resource Development:

Concepts and Meaning of Human Resource: The concepts and meaning of human resource provides the basis for understanding the interconnectedness of various elements of the dimensions of human resource development. Different scholars such as Harbison, F.H. (1973, p. 3), Jakubasuskas and Palomba (1973, p. 14), Marx (1974, p. 164), Mehta M. M. (1976, p. 3), Rosen, Borok (1983, p. 345), Ebi-Bio (1984, P.46) have considered human resource as a wealth, an asset, capital, input, consumption and investment good, labour power, skills and abilities. But all these terms signify almost the same meaning and all are collectively considered as a productive wealth, which is used in producing a use
value for satisfying the needs of a person(s) or people in a society. Bose Ashish (1993, PP 53-54) stated that people are the most important and valuable resource that any nation possesses. It is strategically very vital in the social and economic progress of the community as a whole. Sen Amartya (2004, p. 3) considered capability expansion of a person as an ingredient of development and emphasized on the role of human beings. According to him human beings are the agents, beneficiaries and adjudicators of progress, but they also happened to be-directly or indirectly-the primary means of all production. Here, the word ‘capability’ stands for functional ability or capacity of a person which is developed through the process of human resource development and can be used in constructing or producing a use value for consumption. Misra, S. K. and Puri, V. K. (2009, p. 139) also regarded human being as a resource for production processes.

In the words of Sinha, B. R. K. (1998, pp. 145-146) human resources are the sum total of knowledge, skills, energies, creative abilities, talents, physical or mental capacity for sustained work and other human qualities inherent in all people actually or potentially available which they exercise or may exercise whenever they produce or may produce a use value of any description for satisfying social needs. In other words, human resources are the working capacity or capability or the productive social values of person or persons which they achieve either through formal or non formal education, on the job training and practice or learning by some other sources of human resource development with an integration of health, food and nutrition.

Investigator’s opinion is that people or human population of an area is not the human resource but the functional capability or capacity in terms of knowledge, skills, energies, creative abilities, talents and other physical or mental capacity in them should be considered human resources. Such ingredients in human beings
are termed as human endowments and when such endowments are made available and used or exercised in producing usable things or quality value for satisfying human wants become human resource. In fact, such endowments exist in actual or potential form in all people of an area and need to be developed and made available for use in and across different economic activities to produce usable things or usable wealth in quantitative or qualitative form for use in satisfying social needs. Thus, human resources (the composite result of both the mental and physical faculty) are the working capacity or capability or the productive social values which the people of an area achieve through the process of human resource development. Admittedly, human resource in an individual starts with his/her birth and is developed or acquired with advancing age and ends with the end of life of the person.

**Significance of Human Resource:** It explains the importance or role of human resource in the creation of physical, social, cultural, economic, political and overall geographical landscape of a region. In the light of this it is noted that out of the triad of resources - natural, human and cultural- human resource is considered as the most active factor of production and determines a region’s capacity for social, cultural, economic and political development. Human resource factor seems to be the most crucial one as it improves every aspect of life of the people in a society by restructuring the complex existing conditions of a region. A region may possess abundant and (may be) inexhaustible natural resources and the necessary machinery and capital equipment, but unless there is the human resource to mobilize, collect, organize and harness the nature’s resources for producing usable and consumable goods and services, the region can not make any progress. In fact, all round development of a society or an area depends primarily on the development of human resources and its rational use in productive processes.
Different scholars have treated human resource as wealth of nation or as an asset, capital, input, consumption good and investment good in their own ways. But all the terms signify almost the same meaning and all are collectively considered as a resource, which has a use value in production. Desatnic, R.L. (1972, p.1) gave emphasis on the importance of human resources and held that the human resources are one of the most valuable assets of a company. Mehta (1976, p.3) considered the words Human Capital in place of human resources and laid emphasis on its formation through education, training etc. Huq (1976, pp.67-68) has emphasized that human capital as the quality of labour input is an active agent of economic growth that can be developed through schooling, training, etc. He has also stated that “capital, once created, is a free good in the sense that its use by one individual does not diminish its availability to others. Intellectual capital is both part and product of investment in human capital and an important input in the production of new physical capital through technological change”. Upton (1976, pp. 233-234) considers human resource as an input of production and it is indivisible input that can not be separated from human beings. He has suggested the measurement of this input in terms of man hours or man days or man years. Where ever or whenever man goes, this input goes with him. So human resources are inputs in the production of anything that satisfy human needs. Joll Carolin and others (1983, p. 49) held that “educational decisions are formulated in terms of the utility derived during the process of learning, the cost of provision and prices. Education is treated as an investment good within the traditional utility/profit maximizing paradigm” e.g. students during schooling period learn or gain knowledge, skills etc. by their teachers. Here, students consume the education and the teachers are treated as investors of human resources getting remuneration. It is therefore, clear that human resources are consumption and investment goods and they are consumed and invested in the process of production of anything.
Weisbroad and Hughes (1983, p. 150) have also treated education as both a consumption good and an investment good in the process of production. They have stated that “as per capita income grows a greater fraction of the population seeks higher education because of the consumption value it offers. As an investment good, education opens up job opportunities that persons without it can not pursue. Ebi Bio (1984, p. 46) has also considered human resources as an asset and in context of human resources development in developing nations, he has stated that any development strategy and technology that will benefit these nations must utilize the greatest asset they possess human-resources- and develop them to find solution to whatever problems that exist….” According to Sinha, B. R. K. (1995, p. 45) human resource or human capital is like material capital that is very useful and important in economic and social development. In fact, there should be no controversy over treating human resource as wealth, capital, asset, input, consumption good and investment good. Richard Jolly (2004, p. 107) Economist and development strategist long ago discovered the importance of human resources in the development process. This has led to an emphasis on investment in education and health towards human resource development.

**Concepts and Meaning of Human Resource Development (HRD):** The concept of human resource development has a very wide canvas as it involves complex web of several human resource dimensions. To make the concepts of HRD clearer the explanation of following human resource development strategists is essential. The work of Harbison F. H. and Myers, C. A. (1964, p. 2) occupies very important place in the field of human resource development. According to them HRD is a process of increasing knowledge, skills and other capacities of the people in a society. Harbison,F. H. (1967, pp. 136-138) further stated that human resource development is the process of man’s acquiring skills, knowledge and capacities for work. Myrdal, G. (1968, p. 21) explained that human resource can be developed with the development of food and nutrition,
clothing, housing & sanitation, health facilities, education, information media, energy consumption and transport. According to Harbison, F. H. (1973, p. 14) human resource development is a lifetime process of human capital (human resource) formation. Ghosh, B. N. (1985, p. 142) also defined human resource development as the process by which knowledge, skills and capacities of the people of a country are enhanced. Nadler, L. (1994, pp. 16-22) defined HRD as planned continuous effort by management to improve employee capacity levels and organizational performance through training, education and development programmes. Rao, T. V. (1999, p. 46) also defined human resource development as a process of competence building, commitment building, culture building as well as the process of general capabilities building of individuals. Similarly, Kumar, B. and Hansra, B.S. (2000, pp. 17-18) described HRD as an approach to facilitate the development of individual's competence, environment and organization. HRD lays stress on development of individual, the family and the community. According to Michael Armstrong (2000, pp. 479-480) human resource development is concerned with providing learning and development opportunities, making training interventions and planning, conducting and evaluating training programmes. It is essentially a strategic process which is concerned with meeting both business and individual needs. Human resource development involves learning process, education, development and training. Again, Rao, T.V. (2002, p. 25) defined human resource development as the process of enabling people for competence development and creation of conditions (through public policies, programmes and other interventions) in themselves as well as in that of others for use in all sectors of a region’s economy. Griffin and Knight (1990, pp.9-40) explained that human resource development is an enhancement of capabilities that requires changing technologies, institutions and social values so that the creativity within human beings can be unlocked.
Website (www.humanresources.about.com) states that Human Resource Development (HRD) is the framework for helping employees to develop their personal and organizational skills, knowledge, and abilities. It includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification, tuition assistance and organization development.

The focus of all aspects of human resource development is on developing the most superior workforce so that any organization or any sector of economy and individual employees can accomplish their work goals in production process. Human resource development or employee development can be both within and outside of the workplace. Human resource development can be formal such as in classroom training, a college course, or an organizational planned change effort. This can be informal as in employee coaching by a manager. Healthy organizations believe in human resource development.

**Steps and Importance of Human Resource Development:** The process of human resource development involves some steps that are based on certain means required for developing human capability. Schultz (1961, p. 143) the most quoted scholar in the literature of human resource development explained that there are five steps of developing human resources. These are health facilities and services, on the job training, formally organized education at the elementary, secondary and higher levels, study programmes for adults and migration of individuals to changing job opportunities. Harbison and Myers, C. A. (1964, P. 2) also suggested five steps of developing human resources. *First*, through formal education beginning with primary education, continuing with various forms of secondary education and then higher education including the colleges, universities and higher technical institutes. *Second*, on the job training through systematic or informal programmes in employing institutions in adult education
programmes, and through membership in various social, cultural, religious, political groups. Third, through self development, as individuals seeks to acquire greater knowledge, skills, capacities through preparation on their own initiative by taking formal or correspondence course by reading or by learning from others informal contacts. Fourth, through improvement in the health of people employing better medical and public health programmes, and Fifth, through improvement in food and nutrition. Similarly, Paul, Streeten (2004, p.103) also pointed out that human resource development is one of the means of human development. In addition to this economic growth; human rights and participation; role of culture; issues of gender equity; peace, security and sustainability are also the contributing means of human development.

Investigator, here, opines that the concept of human resource development can be explained in a variety of ways. In general sense, human resource development is to build knowledge, skills, attitudes, aptitudes and other mental or physical capacity inherent in human beings, required for economic, social, cultural and political growth and provide avenues for participation in the productive activities so that they may create a better society for their well being. Besides, above suggested five steps certain programmes contributing towards social welfare should also be included as the means of enhancing qualitative values of various forms in human beings because social welfare services in a variety of ways are preventive, promotive, developmental and rehabilitative. They are complementary in nature and supplement in enabling the larger section of society to realize their full potential for growth. They are concerned with working conditions and amenities commensurate with satisfying needs of the people.

**Importance of Human Resource Development (HRD):** Theories of human capital formation or human resources development treat human beings as a means to economic growth. In this context, human resource development is
considered as a core theme of study. In fact, the core concept of human welfare lies in the optimum development and efficient utilization of human resources. It is also due to the fact that human resource development is an important and more reliable indicator of development than any other single measure. Particularly in developing countries this issue still remains more challenging and important. Human resource and its development play a very crucial role in agriculture, industry, mining, trade and commerce, construction, transport and communication, and in all other economic, social, cultural and political activities. It is also important in restoring, maintaining or conserving the quality of physical, human, social and cultural environment for the well-being of the people in society. Human resource development helps people to lead fuller and richer lives; less bound by tradition and unlocks the door to modernization. It helps individuals, groups and the entire organizations. It is necessary because people, technology, jobs and organization are always changing.

It is one of the necessary conditions and helps the people in maintaining the social mobility or social order, in achieving the growth of wealth, prosperity, exaltation, beatitude and also in enjoying the life of peace and comfort by liberating them from poverty, illiteracy, illness and other socio-economic bindings. That is why, human resource development is considered as the core concept in the field of geography of human welfare. HRD, according to Gupta, S.P. Das (1998, p. 397), is the complete form of physical and mental growth of individuals. Rao, T.V. (1999, p. 41) has emphasised the importance of HRD and stated that it has the role of getting the right kind of people, creating a culture that nurtures and retains talent, providing avenues for competence development at all levels, ensuring utilisation of talent and aiding in renewal of various productive human processes.

According to Sinha, B. R. K., (Dec.1999, p. 87) human resource development is regarded as one of the processes of regional development as it adds a special
dimension to development studies. In brief human resource development is considered as the core concept in the field of geography of human welfare. According to Sinha, B. R. K. (2003, p. 323) human resource development is also considered as an important and more reliable indicator of modernization or development than any other single measure. In fact, human resource development unlocks the door to modernization. So the development of human resource brings the best from the nature and culture for the quality of life of the people. In lack of human resource of right type and of right quality in right time and space there is no meaning of natural and cultural resources. So, it is human resource that extract, collect, transform natural endowment into useable goods. Similarly cultural resources also derive its significance from human resource development.

Website (www.shvoong.com) highlighted the importance of human resource development. According to this, an effective performance of an organization or a region depends not just on the available resources, but its quality and competence as required from time to time. The difference between two nations or regions largely depends on the level of quality of human resources. Similarly, the difference in the level of performance of two organizations also depends on utilization value of human resources. Moreover, the efficiency of production process and various areas of management depend to a greater extent on the level of human resources development. The term human resources refer to the knowledge, skills, creative abilities, talents, aptitude, values and beliefs of an organization’s work force. The more important aspects of human resources are aptitude, values, attitudes and beliefs. The vitality of human resources to a nation and to an industry depends upon the level of its development. For the organization or region to be dynamic, growth-oriented and fast-changing it should develop their human resources. Though the positive personnel policies and programs motivate the employees, buy their commitment and loyalty but
these efforts cannot keep the organization dynamic. Organization to be dynamic should possess dynamic human resources. Human resources to be dynamic acquire capabilities continuously adopt the values and beliefs and aptitude in accordance with changing requirements of the organization. Similarly, when employees use their initiative, take risks, experiment, innovate and make things happen, the organization may be said to have an enabling culture. The competent human resources can be dynamic in an enabling culture. Thus, the organization or state can develop, change and excel, only if it possess developed human resources. Thus, HRD plays significant role in making the human resources vital, useful and purposeful. Another website (www.oppapers.com) also noted that human resource is the most important and vital factor of economic development or it can be said that humans are the agents of development. The importance of human resource development can be summarized under the following heads: (1) any country develops if the human resource of it is developed. To enhance economic development the state constructs roads, buildings, bridges, dams, power houses, hospitals, etc. and to run these units doctors, engineers, scientist, teachers, are required. So if the state invests in a human resource it pays dividend in response. (2) Increase in productivity: The better education, improved skills, and provision of healthy atmosphere will result in proper and most efficient use of resources (non-natural & natural) which will result in increase in economic production. (3) Eradication of social and economic backwardness: Human resource development has an ample effect on the backwardness economy and society. The provision of education will increase literacy which will produce skilled human resource. Similarly provision of health facilities will result in healthy human resource which will contribute to the national economic development. (4) Entrepreneurship increase: Education, clean environment, good health, investment on the human resource, will all have its positive effects. Job opportunities would be created in the country. And even business environment will flourish in the state which creates many job opportunities. (5) Social
revolution: Because of human resource development the socio economic life of the peoples of a country changes drastically. Over all look changes thinking phenomena changes, progressive thoughts are endorsed in to the minds of peoples.

**Concepts and Meaning of Human Resource Development Dimensions:**

Dimensions of human resource development occupy the central position in geographical study of a region. Dimensions of human resource or population resource are equated with the dimensions of population of a region. Human resource development dimensions become the foundation upon which other aspects of prosperity of population of a region or country depend. Dimension stands for size, extent, component or aspect of human or population resource. Zelinsky, W. (1966, pp. 55 - 57) has used the word dimension for different population characteristics. According to him dimension means the components or attributes or characteristics of human population. Similarly, Newman J. L. and Matzke, G. E (1984, pp. 2 - 5) have shown twenty two dimensions of quantitative and qualitative nature of population and its problem. He has also used the word aspects in place of dimension in which different population characteristics are included. Singh, S.N. and Yadav, K. N. S (1982, pp. 393 - 410) have given emphasis on different quantitative and qualitative characteristics of population under the study of dimension of rural urban migration in India. Aperyan, V. (1976, p.11); Premi, M. K.; Ramanamma, A. and Bambawale, V. (1983, pp.10 - 11); Henk, R.; Ton Dietz and Leo, D.H. (1992, pp.50 - 53); Ghosh B. N. (1985, pp. 145-150); Coates, B. E.; Johnston R. J.; Knox, P. L. (1977, pp. 5 & 66); Akhtar, R. and Learmonth, A. T. A.(1985, pp. vii & 8) have included different population characteristics of quantitative nature in the dimension of population. Some of them have explained dimensions as aspects of population also. Human Development Report (1998, p. 20) has considered health, knowledge, participation and human security as the dimensions of population and stressed
that the assessment of all these is essential in the progress of human development or human resource development. From these literatures it is clear that dimensions stand for different quantitative and qualitative components or characteristics of population. The same concepts are applied in the context of human resources and its development.

**Approaches to Human Resource Development Dimensions:**

Dimensions of human resource development are a complicated notion as it has interconnections with several approaches and has involvement of variables of multiple natures. Human resource development dimensions can be divided into different groups on the basis of the following approaches.

**Quantitative and Qualitative Approach:** Quantitative and qualitative are the two terms qualifying for different meanings. The former stands for size, magnitudes, dimension, amount, sum etc. that can be measured directly in number and weight and lend to statistical treatment. Mehta (1976, p. 9) also includes composition and distribution of population and labour force, the number of hours worked, the output and earning per head as the quantitative aspects. The term qualitative on the other hand stands for nature, capacity, ability, knowledge, skill, mental or physical attribute, trait, aptitude, value, motivation and other characteristics of man that can not be measured in terms of number or weight and do not, therefore, lend themselves as easily to statistical treatment as quantitative characteristics. In this way, quantity is measured directly in terms of number and quality is measured in terms of grade or level of the characteristics. In the present study human resource development has been divided into two - quantitative and qualitative dimensions, where quantitative dimension of HRD deals with the distribution, density, growth, age-sex composition, marital status, workers, number of persons employed in different economic activities, non working persons, income categories etc., whereas, qualitative dimensions include
literacy and education, skills, disease, health, physical conditions, quality of labour, life expectancy, technical training, etc. Qualitative dimension as suggested by Ghosh B. N. (1985, pp. 145-147) is judged by health and education—the two major component of human resource development. According to Valentei, D.; Kavasha, A. and Evanov, S. (1986, pp. 6 - 7) “population development is manifested in the occurrence of continuous change in the population both in terms of quality and quantity and reflected in its growing over all productive force, man gaining better knowledge of the natural and social processes and mastering them, the rising potential of science, tools and technology, a rise in the educational cultural and technical level of all members of society and development of the persons. The quality of population is the sum of its most important traits. These important traits are closely tied to the development process. The quality of population resource is, therefore, a complicated notion. The most important qualitative traits are educational level, occupational structure, and type of relations between individuals. In this way, quality of population is the sum of social structures. Quality of population also includes population health in combination with illness, life expectancy, social stability, occupational skills, and mobility of labour and so on. Thus, the analysis of general quantitative characteristics of population such as distribution, density, growth, migration, workers across different economic activities, non-working persons and their structure, age and sex composition, social classes, income profile, elements of the dynamics of population growth, etc. as well as the analysis of qualitative traits of population such as education, skills, diseases, physical conditions and composite health status in space and time is fundamental to the comprehensive understanding of human resource development in kalimpong Sub-Division, District-Darjeeling, West Bengal.
Importance of Quantitative and Qualitative Dimensions:

Human resources development largely depends on the quantitative and qualitative dimensions of population. Quantitative and qualitative dimensions are the broader category and include various components of human resources of an area. They are also called the aspects of population profile and play a very vital role in the development of human resources and in turn a region. The scale of utilisation of human and other resources primarily depends on the constituent parts of these two aspects of population. These two dimensions also influence the reproductive behaviour of population (population dynamics), social, cultural, economic and political activities. Any kind of development plans and policies are related to the component parts of human resources. They also have its bearing on employment, population growth, mobility of persons, human resources development, prosperity, peace and comfort etc. Human or population resource particularly working persons of an area include both the quality and quantity and the rate of employment or the rate of utilisation of work force depends mainly on the characteristics of human resources and amenities available in the area.

Particularly qualitative dimension plays a very significant role in the development of an area. For instance, literacy, education and health are the most important characteristics of qualitative dimension of human resources. They are the qualities of persons and the qualities of any kind of production greatly depend on the qualities of people inhabiting the area. Literacy, health and education enhance knowledge skills, energies, interest, attitudes, aptitudes and other inherent qualities of people. In the words of Chandna, R. C. and Sidhu, M. S. (1980, p. 96) “Literacy is that qualitative attribute of population which is fairly reliable index of the socio-economic development of an area.” Literacy and education play a vital role and give new vistas in eradicating poverty and mental isolation of the people in the society. It is essential for economic, social, cultural and political advancement. Apart from this, literacy affects other characteristics
of human population like birth rate, death rate, economic pattern. Education is very essential because the “educational level of the labour force affects the volume of population” (Kothari, 1965, p. 24). Similarly, (Correa, 1963, p.183) pointed out that each level of capital intensity requires a labour force with a determined level of education. In brief, one can say that each human resource component or quantitative and qualitative traits are of vital importance and plays a very crucial and dynamic role in all sided development of a region and contribute towards human welfare.

**Synergetic Relation between Quantitative and Qualitative Dimensions:**

The quantitative and qualitative characteristics of a person do not work in isolation. One can not be separated from the other. The combination of both becomes a source of resources in human beings and plays an instrumental role in social, cultural, economic and political development. In fact, the relation or association between the quantitative and qualitative dimensions provides clear ideas or understanding about the importance of these two dimensions. Quantitative and qualitative characteristics of a person may be by birth and achievement. Trewartha, G.T. (1969, p. 92) stated that population characteristics are of ascribed or achieved nature. That is how; each human being possesses some sort of ascribed or achieved qualities. Particularly, achieved qualities vary from person to person with the advancement in age and due to impacts of prevailing atmosphere of a society in which he/she lives. The impact of both the physical (natural) and human environment is important as these two moulds the quantitative and qualitative characteristics of human being. In this sense, both the quantity and quality of a person are inalienably related to each other and the exclusion of any quality from the quantity or from the mind and body of a person is not at all justifiable and possible. Gosal, G. S. (1996, p. 2) rightly noted and explained that the quality of population is interrelated with its numbers. The word quality here does not have meaning at all, if it is excluded from quantities.
Quality signifies any thing whether it is in the material or in the abstract form and these become useful for satisfying human or social wants. For example, ‘minerals’ are material which have different types of qualities and these qualities become useful after extracting and processing and ultimately they satisfy human or social wants. In the same way, human resources (in the form of power, capacity, energy, knowledge, and different types of skills) are indirectly materialised and quantified in different forms or grade or level. Sinha, B. R.K (1987, pp. 13-14) also stressed that the direct measurement of human qualities is very difficult and they are always measured indirectly in unit or grade. It can not measured directly by counting heads of the persons inhabiting an area as the qualities are inherited in the mind and body of individuals which are useful and required or to be required in the production of further social, cultural, economic resources for satisfying human or social wants. Therefore, in the light of the above concepts all people from all age groups and from all socio-economic categories are expected to have the desired qualities which they may exercise whenever they produce or may produce a use value of any description for satisfying social needs and in turn go towards human well-being.

**Human Resource Formation Approach:** relates two aspects - human resource on formation and human resource off formation. When human resources are continuing on the process of acquiring knowledge, skill, ability through formal and non-formal educational systems, on the job training or learning and enhancing by some other sources with an integration of health, food and nutrition etc. are called as ‘on human resource formation’. But those human values which are already achieved by the same process as feed-back are called as, ‘off human resource formation’ and become as a stock of human resource. This stock may be both in terms of quantity and quality as the basic characteristics of human resources of an area. The number of persons or population of an area is treated as quantitative human resource and physical and intellectual energies or capacity for
sustain work of the same persons or populations are the qualitative human resource. According to Harbison, F.H. and Myers, Charl A (1964, PP. 24-27) the stock of human capital indicates the levels of HRD already achieved which is measured by the levels of educational attainment and the ‘net addition’ (by human capital formation) to the stock of human resources. Net addition indicates the rate of accumulation of human capital over a certain period of time measured by the enrolment of students at various educational levels. Sinha, B. R. K. (2003, p.323) stated that HRD creates the resources in human beings and adds to the stock of human resources of an area. Thus, HRD deals with the on going human resource formation as well as the existing level and pattern of human resources already achieved as a stock.

**Physical and Mental Approach:** This approach addresses the physical and mental faculty of individuals. *Physical dimension* of HRD is meant for the growth, improvement, and enhancement and for an increase in the status of physical faculty of an individual. This dimension stands for sound physical stamina, muscular capacity, race characteristics etc. According to Park, J. E. and Park, K. (1991, pp.12-13) physical dimension of health implies the notion of perfect functioning of each and every cell or organs of the body of a person. *Mental dimension* refers to right, fit and healthy creative abilities of mind. This dimension also stands for a state of balance between the individuals and the surrounding world, a state of harmony between oneself and others, a coexistence between the realities of the self and that of the other people and that of the environment (Park, J.E. and Park, K. 1991. P. 13). In fact, this dimension is an essential component of health and meant for enhancing, upgrading, improving and increasing the status of mental or intellectual capability of an individual. More or less the same factors as stated in the context of physical dimension are equally important for mental faculty or mental health also. However, education, training and other learning systems of various types and at various levels are
exclusively important for raising or developing knowledge, skills, talents, attitude, aptitude, awareness of individual persons. Therefore, such human resource ingredients are the products of mental dimension of human beings.

Positive and Negative Composite Score Approach: Human resource development is the composite result of the combination of a variety of variables or parameters having positive and negative characteristics. Some variables are of positive nature and some are of negative nature and some others work as either positive or negative sign depending on the positive or negative response of the respondents at the time of their interview. The dimensions of human resource development can therefore be explained on the basis of total positive or negative composite scores of all variables under study. In this way, human resource development has positive and negative dimensions referring to the positive and negative functions of different organs of the body and mind of the concerned persons. These are considered very significant in the concept of human resources and their development. Here, positive dimension of HRD (result of total positive health) stands for positive development, improvement, enhancement or upward growth in both the physical and mental (intellectual) capability of an individual. Such positive growth boosts up the well being of the people. Contrary to this, negative dimension stands for loss, deterioration, depreciation in both the physical and mental health status of the people of a region at a particular point of time. According to Park and park (1991, p.14) the state of the positive health (functional ability or capacity to work) implies as the notion of perfect functioning of the body and mind. It is also a reality that positive health always remains a mirage because everything in our life is subject to change in the surrounding environment of natural, social, cultural, economic and political types and that is why nobody is considered perfectly healthy. It is because of the fact that somehow or other every one stands with some sort of deviation from the normal state of health and that is how the range of positive
and negative dimensions of human resource development varies from person to person. Positive development of health (human resource) depends on congenial environment, well educational system, income, food and nutrition, proper food and drinking habits, proper lifestyle, health care, self care, health delivery, capital investment, proper housing condition, absence of illness or disease and other physical, social, economic, cultural and political factors operating positively in the society of a region. Similarly, negative dimension of human resource development is the result of diseases or illness, poverty, illiteracy, bad habits or bad lifestyle of a person in taking food, drink, smoking; lack of proper and adequate food and nutrition, lack of medical and educational facilities, lack of curative and preventive systems, environmental pollution and other natural, social, cultural, economic and political situations operating negatively in the society of a region.

From the point of view of present study human resource development dimensions have been divided into the Quantitative and Qualitative Dimensions as all the above approaches involve both the quantitative and qualitative characteristics of Population or human resource.

**Classification (Typology) of Human Resource Development:**
Literally the word ‘typology’ means the study of types. In broader sense, it is meant for classification, categorization of things into classes or groups or categories on the basis of certain common characteristics. Here, the typology of human resource development maybe on the basis of the elements involved in the process of developing knowledge, skills, health and energies for use in productive economic activities. The major elements involved in developing human resource belong to demographic, social, cultural, economic, political and spatial groups. These elements work independently or in combination with others in the process of human resource development of an area at a fixed point of time.
The role of human resource elements belonging to several dimensions in developing human resources is of great importance. There is scarcity of literature on the typology of human resource development. Very few scholars have carried out their work on the typology of human resource development. Not only this, but also there is lack of unanimity among the scholars over this topic. However, to make the classification comprehensive and applicable Sinha, B.R.K. (1987, p-21) adopted the approaches of educational attainment, economic activities or occupation, age and sex of the individuals, labour input (in terms of hours worked), utilization of human resource and its development.

The following approaches involving various demographic, social, cultural, economic and spatial elements may provide some better ideas for making human resource development typology more meaningful and relevant.

**Gender:** The word ‘gender’ refers to the socially determined ideas and practices of what it is to be female or male. This is different from ‘sex’ that refers to the biological characteristics and identifies someone as either female or male. Gender training is a tool, a strategy, a transformative process, a space for reflection, a site of debate and possibly for struggle (Reeves, Hazel and Baden, Sally, 2000, pp. 20 and 30). Similarly, UNESCO (April, 2003 on www.venet-eu.com/assets) pointed out that Men and women both perform different roles. This leads to women and men having different experience, knowledge, talents and needs. Gender analysis explores these differences so policies, programmes and projects can identify and meet the different needs of men and women. Gender analysis also facilitates the strategic use of distinct knowledge and skills possessed by women and men. Kumar (1996, p, 887-895) pointed out that states like Haryana and Punjab despite being relatively high income states were facing the problems of serious gender inequality in basic capabilities. There were 13 countries in the world that had a lower value of GDI than that of the states like
Bihar, Uttar-Pradesh which pointed to be the seriousness of the problem of development at global level. Nayak and Thomas (2009, pp. 71-72) analyzed the trend and status of human development and deprivation in Meghalaya and found a considerable degree of unevenness between rural and urban areas, across different districts and also between genders in the state.

These statements address and indicate the difference in human resource such as experience, knowledge, talents, etc. achieved and developed through education, training and practices. Therefore, gender can be considered as one of the important bases of the classification of human resources development. It is because of the fact that human resource development involves both male and female population of an area and the role of gender particularly in the developing regions are quite different, the human resource development can be classified into two groups – Male human resource development and female human resource development. This approach has been adopted because there is wider gap between the levels of human resource development at gender level. It is found that in most of the developing regions the level of development of male human resource is higher than that of the females. So this approach of classification would be a step forward in examining the male-female variation and in formulating plans and polices for abridging the gap between the male and female human resource development.

Age: Age of a person is an index of human resource development because human resource development depends on the age composition of population of an area. In fact, age is considered as one of the vital factors in influencing the level of human resource development. In other words, age is an index of a person’s capability and is a significant measure of regions vitality. Socio-economic activities of a region are governed by the age composition of its population. Papalia, Dyane E. and Olds, Sally, W. (1992. pp. 5-8) focused on age
of individual and his/her development from the point of view of human development (the scientific study of how people change and how they stay the same over time). Both the quantitative and qualitative change such as height and weight, intelligence or capability depends on age of the persons. Papalia and Olds have categorized age period and major human developments into eight categories as shown in Table 1.1. These are prenatal, infancy and toddlerhood (birth to 3 years), early childhood (3-6 years), middle childhood (6-12 years), adolescence (12-20 years), young adulthood (20-40 years), middle age (40-65 years) and late adulthood (65 years and above). At the lower and younger level human development or human resource development remains faster, in middle age both the physical and intellectual development starts declining and at old age level both the physical abilities and intellectual capabilities start declining fast.

The classification of age as made by Sinha B.R.K. (1999, pp. 87-95) based on the quality and characteristics of human resource seems to be more logical. These are: 0-4 years (it includes infants or children up to 4 years of age. They are considered as future potential human resource and remain in the indoor learning process under their parentalship). 5-14 years (this includes under working age group children. They are also known as school going children and are expected to attend schools for the development of their basic knowledge and skills. They are also considered as potential human resource). 15-34 years (this age group includes younger working age group persons and most of them are meant for developing their knowledge, skills, talents, energies and other functional capabilities through formal and non-formal learning process at school, college and university levels to be used in various productive economic activities. They are considered as more active, more mobile and more energetic human resource of an area). 35-59 years (this is known as older working age group and includes the persons from 35 to 59 years. From human resource development point of view they are meant for experiencing their functional capabilities on their job practice and training. However, they are relatively less active, less mobile, and
less energetic owing to a gradual decline in their physical and intellectual capabilities. Yet, they have greater sense of responsibility to their jobs, family members and society. 60 years and above (this age group is known as over working age group and include the persons of 60 years and above are included in this category. From human resource development point of view they are meant for maintaining, restoring or conserving their human resources such as knowledge, skills, energies, talents, and other functional capabilities through various types and levels of health facilities and healthcare services. They are known as less energetic and less utilizable human resources because of faster deterioration in their physical and mental functional capability). However, the above classification of age of the persons and their characteristics are not a final yardstick in the field of human resource development as several others factors are also involved in the process of human resource development.

The above classification may conveniently be rearranged on the basis of stages and general characteristics of human resource development. Such rearrangement or reclassification of age may also be read as: age for infant and child human resource development. This age spans from 0 to 4 years and 5 to 14 years. Young aged person’s human resource development age from 15 to 34 years. Middle aged person’s human resource development age from 35 to 59 years, and old age person’s human resource development age from 60 years and above. This classification can conveniently be used while dealing with the detailed study of the dimensions of human resource development.

**Social Group:** Human resource development can also be viewed on the basis of social categories. Social structure plays a significant role in the process of human resource development. In Indian context the level of human resource development varies from one social group to another. The detailed study of human resource development can easily be made by dividing the people on the
basis of their overall socio-economic conditions. With regard to present study the people of the area are generally divided into four groups known as General castes, other backward castes, scheduled castes and scheduled tribes. This classification is more or less on the line of national classification made by the government of India. Therefore, with a view to analyze the development of human resources of an area these caste groups may be taken into consideration as one of the important factors of human resource development.

**Educational Attainment:** Literacy and education are the powerful means to develop human resources because they are viewed as a strategic tool and play a vital role in human resource development. Education and learning are in one form or other helping to increase knowledge and skills of the persons of various ages, sex, religion, social groups and occupation. Harbison and Myers (1965, pp.2-3) rightly emphasized the role of education in human resource development. According to him “education plays a dominant role as an effective instrument for large scale achievement and revolution in all spheres. Purposeful education enables the individual to understand and study the real life situation and to develop an opportunity for creating confidence in the minds of younger generation and provide a strong base for national and value oriented and nation building progress. Rena, R (2006, p. 67) noted that technical and vocational courses in higher education play a significant role in developing human resources. Education is, in fact, considered as an instrument in enhancing knowledge, skills, and other functional capabilities in human beings. Taking into consideration the role of education from primary to secondary and higher levels of education human resource development can be categorized on the basis of composite scores of total education of individual persons. In fact, on the basis of variation in composite scores of educational achievement of individual persons human resource development can further be classified as undeveloped, under
developed, developing, developed and highly developed human resource. These categories vary across race, gender, age and social class.

**Skill:** Skill like education is also important means of developing human resources. Skill is comparatively more functional than knowledge achieved by formal education. Like education, skills also vary from person to person depending on race, gender, social group, income and occupation. The role of skills is closely related with human resource development and requires strong policy on skills and human resource development. Batra (1978, pp. 61-64) led emphasis on skills and human resource development and stated that skills embodied in individuals are very important and on the basis of variation in skill levels human resource can be classified as (1) high level human resource (manpower with critical skills and competences). In this group he included doctors, physicians, metallurgists, chemists, biologists, educators, mechanics, civil and electrical engineers, administrators in private firms, public enterprise, government agencies and educational institutions. (2) Technicians such as Draftsman, Surveyors, testing technicians, dentist, medical and biological technicians, radio operators and communication technicians. (3)Manual skills: this includes carpenters, brick masons, dye makers, photo engravers, loom fixers, moulders, and many others with traditional skills. In other words, on the basis of variation in technical skills human resource development can be classified as technical and non technical human resource development. Similarly, human resource development can also be known as unskilled human resource development (with no skill), semi skilled human resource development (with some skills) and skilled human resource development (with critical and high level skills).

**Occupation:** Occupation and human resource development are one of the concerned areas in the field of development studies. Generally, this area remains
neglected. It has not received much attention from the scholars of social sciences. Human resources are found actively engaged in various occupations in both the rural and the urban areas. The level of human resource development varies across economic activities and the quality of human resources depends considerably on the types and nature economic activities. For instance, level of human resource development in terms of qualitative achievement is generally low in agricultural sector and it is generally better and higher in non-agricultural sector. Occupations or economic activities are generally divided into agricultural and non-agricultural groups on the basis of nature of occupation or activity. This is also known as agricultural or non-agricultural sectors of economy. Similarly, depending on the nature of production and services required, economic activities are also classified into primary, secondary and tertiary. In all such type of activities human resources of varied types and quality are found engaged, therefore, human resource development can also be divided on the basis of occupations or economic activities in which human resources are utilized. Depending on working and non-working activities of persons human resource typology may be made as human resource development of working and human resource development of non-working persons. In other words, it may be called as HRD of utilized and HRD of unutilized human resources. Human resource development can further be classified as HRD of underutilized persons, HRD of fully utilized persons, and HRD of over utilized persons. Depending on the sectors of economy human resource development can be classified as primary sector HRD, secondary sector HRD and tertiary sector HRD. Similarly, on the basis of occupancy of persons in the nature of occupation, human resource development can be classified as agricultural HRD and non-agricultural HRD, and depending on detailed economic activities human resource development can also be divided as HRD in agriculture, HRD in forestry, fishing and lumbering activities, HRD in industrial and processing activities, HRD in construction,
HRD in trade and commerce, HRD in transport and communication and HRD in other occupational activities.

**Rural/Urban Residence:** On the basis of rural / urban residence population can be divided into rural population and urban population. The space or areas of any country is normally divided into rural areas and urban areas depending on the residence or settlement in which the people live and economic activities are carried out by them. Since the economic activities in rural and urban areas need human resources of varied types and nature, the levels of quantitative and qualitative human resource varies. Therefore, depending on the population living in rural and urban areas, human resource development can also be classified as rural HRD and urban HRD. This classification is of great importance as human resource development in urban areas is better than that of rural areas. This is because of better human resource development infrastructure in urban area than that of rural areas. Such situation creates a gap between rural and urban areas and this rural/urban human resource development differential is of great concern to the scholars at global level. Therefore, with a view to shorten the gap between rural and urban areas the study of rural/urban human resource development differential is essential. Thus the classification of rural/urban HRD is very vital.

**Spatial or Territorial Scale:** Spatial locations and structure of population also play a great part in the typology of human resource development. Space or the area of any country is divided into different regions on the basis of human activities carried out and the nature of physical landscape. Spatial arrangement is generally explained at local level, regional level, and national level. In other words, spatial arrangement can also be made on the basis of territorial status defined by political line or boundary and the spatial units can be delineated at village level, community development block level, district level, state level, country level or world (global) level. Depending on such spatial or territorial
arrangement human resource development can be organized and known as village level HRD, block level HRD, district level HRD, state level HRD, national level HRD and international level HRD. Since human resource is embodied in human beings, the typology of human resource development can also be made at individual level, community or social group level and even at household level. This approach of classification seems to be more appropriate as it deals with the individual person or group of people and population at any spatial or territorial scale.

**Composite Score:** Composite score is the summation of weight or scores of several variables. This provides the best overall picture of the theme under study. Depending on the composite score the composite index can be calculated and the persons or populations of an area can be grouped into certain classes as per variation in composite index of human resource development scores. This approach can be applicable in any spatial unit at a given point of time. In fact, on the basis of this approach human resource development can be classified as high level HRD, medium level HRD and low level HRD. Similarly, human resource development can also be known as very high level HRD, high level HRD, medium level HRD, low level HRD and very low level HRD. This classificatory scheme may be conveniently applied to deal with Individual, group of persons or people of a region at a given point of time.