CHAPTER - I

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I.1 Introduction

The term 'wages' is used in so many diverse contexts that it is difficult to evolve an all pervasive definition. Wage is a major source of livelihood for a large number of employees and their dependents. Wage also represents a cost to employers. In an economic sense wage represents payment of compensation in return for work done. In other words the conception of 'wage' as the income of a man who relies entirely on his own labour for providing him and his family with a living appears to be all embracing. Wage can also be viewed as the price of labour as an input factor in the process of producing goods and services in an economic system. As such it is the wage in relation to price that determines the standard of living of the worker. The basic questions, however arising in this connection are: How wages are determined and what are the various factors that contribute in their movements? What are the main reasons for the existence of wage differentials? These questions have been foremost in the minds of economists right from the beginning of economic science. Therefore, right from classical school of thought a number of theories have been formulated to provide answers to these questions.

2. Ibid., p.4.
1.2 Theoretical Approaches

The word 'theory' refers to any logical statement of an expected relationship, expressed or implied. A wage theory relates wages themselves to the factors which influence the remuneration for human effort and skill or, alternatively, the theory deals with the influence of wages on any of the related factors such as the volume of employment\(^3\). Theories of wages have, therefore, to be built out of a highly simplified picture of the real world, sketching only the broad outlines of the more obvious features, on the basis of general knowledge or else of inference as to the general shape which things have. In other words, the theory of wage starts with a description of how wages actually behave, and how movement of wages are correlated with changes in other factors\(^4\). In fact, there is no longer any single, all purpose theory of wages. Hence various theories have developed gradually in response to the changing facts and doctrines during the period ranging from Adam Smith to Alfred Marshall and John Bates Clark\(^5\).

The historical development of economic theory of wage may roughly be classified into three broad strands of thought which have evolved through time:

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1. Classical theory which prevailed up to 1870, in which the subsistence and wages fund characterised the thinking on wages.

2. Neo-classical theory developed in the form of marginal productivity theory.

3. As a reaction to market-oriented classical or Neo-classical theorizing several institutional approaches also developed to explain wages. These can be considered as the third or modern stream of wages theory.

The Classical Approach

The classical theory of wages had its development during the transition of economic system from feudalism to capitalism. There has been a little real economic analysis prior to the publication in 1776 of Adam Smith's treatise on 'The wealth of Nations'. The classical economists were of the view that wage ultimately gets settled at a bare subsistence level, a level determined by several socio-economic factors, summed up in the form of the customs. Two main ideas which dominated the classical school on wage theory, are derived from the Malthusian principle of population and the conception that there exists fixed amount earmarked as wages fund.

Adam Smith, who was the first to put forward the labour theory of value, believed that the market forces of supply and demand were
generally preferable to customs and regulations in determination of the price of labour as well as determining the price of goods. Indeed Smith never attempted any universal economic theory. Instead, he sprinkled his great work with a series of suggestive observations and partial generalizations. In discussing wage theory Adam Smith, despite his belief in the play of perfect competition in the market for labour, had inevitably to acknowledge the effects of employers' and workers' combinations on wages. He further believed that the liberal reward of labour would increase the industry of the common people; and that where wages where high, workmen would be found more active and diligent, and expeditious than where they were low. Smith also extended the discussion of "equilibrium wage differences".

The next important step in the development of the theory of wages was taken by Malthus. His population theory entered economic analysis as an endogenous variable and became an integral part of the theory of income distribution. Although Malthus was not the originator of any new theory of wages, his ideas provided answers to the basic wage questions of his times. Malthus gave an explanation of the supply side of labour that population is limited by the means of subsistence because under even the most favourable circumstances, the means of subsistence (i.e. the food supply) cannot possibly keep pace with rise in population. Thus

6. Ibid., p.10.
ultimate check to reproductive capacity lies in limitation of the food supply unless excessive numbers were checked almost to the point of natural calamities. Thus Malthus provided a condition which would govern the supply of labour. He held the view that wages were bound to remain at the subsistence level, precisely because any increase in wages would bring about an increase in population, and the larger labour force would tend to reduce wages by competition. The contrary effect takes place in case wages fall below the subsistence level. In Malthus's own words: "The power of population being in every period so much superior, the increase of the human species can only be kept down to the level of the means of subsistence by the constant operation of the strong law of necessity, acting as a check upon the greater power." Thus by emphasizing the rigid dependence of population growth on the food supply, Malthusian theory lent support to the subsistence theory of wages and prepared the way for the Ricardian preoccupation with the land-using bias of economic progress, by explaining poverty in terms of a simple race between population and the means of subsistence. In other words, a population of optimum size is one that maximises income per head. This concept of optimum population implies that the

8. Ibid., p.3.
tendency of wages to sink toward subsistence level is proof of over population. Thus the wages-population mechanism was used to demonstrate the perfect elasticity of the long run supply curve of labour, yielding the result that wages were supply determined independently of demand.  

Thus the earlier economists assumed for the sake of simplicity that there was natural law of population according to which the wages of labour were kept at starvation limit. They did not suppose this to be true of the whole working population, but the exceptions were so few that they thought that the general impression given by their assumptions was true. Even before classical economists the ideas on same line can be seen in the writings of the Physiocrats. Malthus also observes that "an inferior mode of living may be cause as well as a consequence of poverty." He traces this effect almost exclusively to the consequent increase of numbers.

Ricardo simply carried forward the population theory of Malthus and developed the concept of subsistence further to contend that wages tend to equal the minimum subsistence level of the labour. This theory popularly is known as the 'iron law of wages' which explains that wages could not remain higher than what is required

11. Ibid., pp.74-75.
13. Ibid., p.421.
for the labourers' minimum subsistence. If wages rose above what was necessary to maintain the supply of labour, it would increase bringing down the wage. Conversely, if wage fell below the subsistence level it would result in a decrease of labour supply which would lead the wages to rise again.

The exponents of this subsistence theory admitted that wages are also influenced by habit and custom. Ricardo, for instance, maintained that habit and custom were instrumental in determining what was necessary in the workers' diet. In the subsistence level to which wages were supposed to adapt themselves was included, not only bare physical necessities, but also a modicum of comforts as well. Thus he enlarged the notion of subsistence to include a variety of amenities to which labour gets habituated every time there is a slight increase in wages and consequently the subsistence level tends to rise. In fact, Ricardo was not only aware that necessary or natural limit of wages was fixed by no iron law, but it is determined by the local conditions and habit of each place and time. It meant that the subsistence theory in its absolute form only held good so long as one could take habit and custom for granted and assume a certain level of conventional necessaries as entering into the subsistence level.

14. Maurice Dobb, op.cit, p.93.
17. Maurice Dobb, op.cit, p.94.
Around 1850 a new turn is given to the theory of wages. These steps were taken by John Stuart Mill by paying greater attention to the demand aspect. Mill maintained that the wage level was dependent on the relation between the laboring population and the amount of capital (the wages fund) set aside by the capitalist for the payment to the labourers who offer themselves for employment. This wage fund constitutes demand for labour. If population is given and uniquely determines the labour supply, demand for labour becomes a decisive factor in the wage determination. It means that when supply of labour was assumed to be constant, the rate of wages will increase with increase of wage-fund and be lower if the entrepreneurs had relatively low wage-fund. If the amount of capital remains the same and the population increases in numbers, their individual wage would tend to decrease, but if they decrease in numbers, their individual wage would tend to increase. Thus a theory explains the demand side by treating the wage goods as a fixed wage fund and the supply side in terms of labour availability which is expected to be influenced to an incremental extent by the amount of extra wage fund available over the minimum subsistence outlay so that equilibrium is conceived only at the minimum subsistence level.\(^\text{18}\)

But this particular theory was quickly discarded both by Mill and by his contemporaries, who threw much doubt on the existence of any such specific fund. It was further realised that the

\(^{18}\) A.N. Mathur, op.cit., p.7.
wage fund was not a unique sum even in the short period. For it depended upon the savings of the people, the amount of savings rose or fell with the rise or fall in the return to investment and the rate of interest. As Mill put it, wages not only depend upon the relative amount of capital and population, but cannot under the rule of competition, be effected by any thing else.\textsuperscript{19}

On the foundation of Ricardo, Marx built his famous wage theory in terms of "the industrial reserve army". He believed that under capitalism, due to substitution of machinery for labour, the supply of labour always tended to be kept in excess in comparison to its demand and this led to the exploitation of labour by capitalists. Due to the presence of the industrial reserve army of labour, wage of labouring class would never exceed the level of what was required for their subsistence and while the workers received a wage corresponding to the subsistence level, the surplus value consisting of rent, interest and profits went into the pockets of the capitalists.\textsuperscript{20} He argued that when unemployment prevails, there is pressure in the labour market from the supply side, and so far as there is free competition among labourers, wages tend to fall. However, since there is physiological limit below which wages cannot fall, excess supply of labour remains. The condition of the economy is such that

\textsuperscript{19} Maurice Dobb, op.cit. p.98.
\textsuperscript{20} A.J. Fonseca, op.cit, p.5.
capital, it possesses, is inadequate for the absorption of available labour force even at a wage rate which is just sufficient for the subsistence of the labourers\textsuperscript{21}.

Though Marx stressed the influence of bargaining power on the level of wages by stating that trade union action was capable of raising labour power above subsistence level, monopolistic action on the employers' part could depress the wages below that level. Hence Marx's subsistence theory of wage can hardly be sustained today with the great growth in the power of the union and the control of ownership by the state in the so-called capitalist countries of the world\textsuperscript{22}.

The classical economists heavily lean on population theory for an explanation of why wages tend to be equal to minimum subsistence. Therefore, the classical theory has been criticized on this ground since it is based on the Malthusian theory of population which in turn is highly controversial because experience shows that population growth does not obey the rigid classical rule. In fact odd things happen here. The correlation often turns out to be just the opposite of what the classical economists envisaged. The lower income group usually shows higher birth rate than their richer neighbours. On the other hand, the view


\textsuperscript{22} A.J. Fonseca, \textit{op.cit.}, p.6.
that death rate is higher in societies where the average income is low than in a society where the average income is high which is not always observed in practice. Secondly, this theory does not explain the multiplicity of wage rates which prevails not only in the unorganized sector but also in the organized sector. In India, for example, vast differences exist between different industries, and between different centres which can be hardly explained in terms of differences in the cost of living. Thirdly, according to this theory wages can only be pushed up either with an increase in the amount of wages fund or by a decrease in the number of labourers, but these days we find that wages, interest and profits are rising simultaneously. Lastly, classical analysis was based upon unrealistic assumptions like perfect competition, homogeneity of labour, perfect information and mobility of labour. These limitations make this approach unable to bring out meaningful results in the analysis of labour market. Perhaps because of these limitations Marshall had admitted the influence of unemployment, a permanent excess of supply to the demand for labour, in wage determination.

The later theorists concluded that Ricardo and Marx were both wrong or at least incomplete in their reasoning on these matters.

24. Ibid., p.31.
The wages of labour do not necessarily tend towards subsistence level under capitalism. And the whole range of wage problems cannot be solved, either by a theory of relative value in a static economy or by a theory of some inevitable progression of events of the Marxian type. The long run wages in the classical system depend on the rate at which capital accumulation proceeded, which in turn depended on the state of demand. But Ricardo and even Marx were inclined to treat the supply of capital as being governed by a minimum of existence rate of profit on lines analogous to the wage-population mechanism. Ultimately, classical economists provided no determinate analysis of the conditions governing the supply of capital and never gave the state of demand a position which is at par with the conditions of supply. In this sense, the Ricardian theory of distribution not only lacked generality but also stopped short of fulfilling its own promise. Besides there would be no necessary tendency in an advanced country for wages to fall to any minimum subsistence level. Employers might prefer to pay low wages. But that would not matter, in a competitive market they are unable to set the wage rates as they would like. As long as employers are numerous and do not act in collusion, their demand for any grade of labour will bid its wage up under competitive condition to the equilibrium level at which the total forthcoming labour is absorbed.

The Neo-Classical Approach

The shortcomings and unrealistic assumptions of classical theory gave rise to neoclassical thought. From the determination of wage rates resting on supply aspect of labour, the emphasis shifted to an analysis of the demand for labour expressed in terms of its marginal productivity. Historically the central notions of marginal productivity had been stated earlier by Longfield and Thunen. But the ideas gained hold when the law of marginal utility had been developed to explain the behaviour of consumers. This theory is an extension of marginal analysis to the problems of price determination of production or inputs. The basic concept of marginal productivity can be traced to Ricardo and West who applied it to analysis of rent on land. Ricardo had demonstrated that, land being a fixed factor with a specific use, rent accrues only to intramarginal farmers. He had used the marginal principle to show that the fixed factor earns a residual surplus, determined by the gap between the average and marginal product of the variable factor. But the idea of marginal productivity did not gain much popularity till the last quarter of 19th century, when it was re-discovered by economists like J.B. Clark, Wicksteed and Wicksell. They emphasised that any variable factor must obtain a reward equal to its marginal product. However, Alfred Marshall and J.R. Hicks have contributed much in regard to popularising the doctrine of marginal productivity.

Marginal productivity theory contends that in equilibrium each productive agent will be rewarded in accordance with its marginal productivity as measured by the effect on the total product of the addition or withdrawal of a unit of that agent the quantity on the other agents being held constant.\(^3\)

With reference to labour theory implies that under perfect competition given the wage rate, an employer will employ the labour upto the point where the value of marginal product of labour equals its price. This equality of marginal revenue product and marginal cost outlay to the entrepreneur is obviously based on the assumption of profit maximisation. At different wage rates, the employer will employ different amounts of labour units depending on the corresponding amount of the value of the marginal product. Thus the relationship between the wage rate and the marginal productivity of labour provides the demand curve of labour. The theory asserts that no worker under perfect competition can expect to receive wages greater than the value of marginal product. Thus given a certain supply of labour, its price was treated as being determined by the extra product that was yielded by the additional labour or the marginal unit of that supply.\(^3\) Thus the quantity of factors of production has to be proportional to marginal physical productivity and the marginal value productivity of each factor be equal to its price. In

30. Ibid., p.426.
brief this theory says that wage, the price paid to labour, should be equal to its marginal productivity expressed in terms of value. Wage rate will be higher when the marginal productivity is higher and vice-versa. This is true of any factor of production including labour services and it holds regardless of the character of competition. Thus marginal productivity theory postulates a relationship between wages, productivity and employment.

As a critique of the marginal productivity theory it is recognised that the prices of factor are not determined by marginal productivity alone. Marginal productivity established demand schedules, but factor pricing also requires supply schedules. Thus marginal productivity theory is not a theory of wages but only a statement of the demand side. The theory did not by itself constitute a complete theory of wages. A reason for its incompleteness was that it included nothing to tell one how the supply of labour was determined. It had to assume a given quantity in order to find what was the marginal net product of labour. It also left many things unsaid about how the supply of capital was determined.32. Secondly, this theory concentrates more on how much labour would be employed at a particular wage than how the wage rate is determined. Thirdly, 'marginal net product' of labour depends not only on the supply of labour but also on the supply of all the other factors of production, and

32. Ibid., p.106.
when this has been said, the theory is robbed of much of its apparent simplicity and finality\textsuperscript{33}. Further, wage according to this theory depends upon the marginal productivity of labour but at the same time it is also true that the productivity of labour depends upon the wage that labour receives. Moreover, the fact that factor combination is fixed in the short run and there exists imperfect information about workers' reservation wages and in some cases about their efficiency, imply that firms are not price takers in the labour market implying a serious limitation of the theory.\textsuperscript{34} Further, neo-classical concept had the same limitation from which classical concept suffered, for example perfect competition, maximizing behaviour, malleability of capital, free mobility of labour free market economy etc. Walras and Pareto also criticized the marginal productivity theory on the ground that in the latter case marginal productivity theory fails to provide a satisfactory explanation of how factor prices are determined.\textsuperscript{35} The criticism was most vigorously stated by John Hobson in his book entitled Industrial system (1909) that if every change in the quantity of labour is accompanied by change in the organization of capital, how can variations in output be attributed to labour alone? Is there a discernible and specific marginal product of labour?\textsuperscript{36}.

\textsuperscript{33} Ibid., p. 106.


\textsuperscript{35} Mark Blaug, op.cit., p.430.

\textsuperscript{36} Ibid., p.436.
Institutional Approach

Indeed the older theory provided a good chain of logic for dealing with questions of determination of wage rates and wage shares in macro economic distribution. However, it seemed inadequate to deal with the new facts and practical issues of the twentieth century. The depression of the thirties brought in focus the controversies regarding the causes and remedies of unemployment. Keynes came to the conclusion that the wage rates are determined in the labour market but the volume of employment is determined by forces working outside the labour market. The real wage rates equated with marginal productivity are adjusted to whatever level of employment is generated at a given level of consumption and investment. Thus Keynes had drawn the attention of economists to the importance of macro economic inquiry and his theory gave importance to the question of functional shares of various factors of production in the national income. Further, the social situation has changed since the times of the classical theory and wage level came to be determined by organised groups confronting each other where often direct government intervention came to occupy prominent place in decision making.

It is felt that demand for labour not only concerns with productivity of labour but is also influenced by a set of other

factors like employers' preference, market demand for product, behaviour of employers' associations, explicit agreement among trade unions and employers, employment conditions and employment standard. In the same way labour supply is also influenced by non-economic factors like ethical, social, political, psychological and managerial factors. Thus other than purely economic factors, non-economic factors having effect on labour market process gave rise to institutional approach. Under such changing situation wages were not to be explained by any universal law of balance between the forces of supply and demand but by the prevailing institutions under which wages were determined.38

American scholars took the lead during the early twentieth century in developing the institutional approach to economic problems. Veblen, Mitchell and Commons were three leading American Economists (institutionalists) who challenged the accepted wage theory and gave a new institutional approach to wage determination problem. Veblen developed a new kind of logic that wage could be determined by social arrangements and by general sentiments rather than by gain seeking individual calculation of pleasure and pain (utilitarianism).39 Wesley Mitchell emphasised the economic facts compared to accepted economic theories with a view to mitigate the business cycles.

39. Ibid., p.55.
In place of a normative wage theory and easy generalisation. He laid greater reliance on investigation of specific situation of particular group of workers. He emphasised the analysis of wage problems in terms of statistical measurement. In Commons' view, wages were determined by the pressure of groups of people, that is by social institutions such as trade unions. Wages could be raised if social arrangement would be changed. Thus institutionalists emphasized the possibilities of raising wages by changing the environment under which men acted. They emphasized the importance of prevailing institutions in determining the wage of labour and discouraged the tendency of deriving universal generalisations. Thus institutionalism opened the way for new wage theories, supported by representative facts. They carefully limited themselves to the specific wage problem to which given factors applied.

Trade Unions as Institutions

In the context of industrialisation and economic development, the efforts of organised labour to improve wage and enhance other benefits gave new push to the revision of wage theory. In the changing institutional circumstances and processes the growth of workers' trade unions became a positive institutional force in

40. Ibid., pp.56-57.
41. Ibid., pp.58-59.
42. Ibid., p.65-66.
wage settlement. The trade union practices raised new problems and stimulated the development of new wage theories which existing economic theories found incapable of explaining. The trade union has a decisive role to play in this process. It is an important wage-fixing and decision making unit. It is also a bargaining unit trying to charge what the market will bear. According to Ross, "the trade union is a political institution which participates in the establishment of wage rates... The formal rationale of the union is to augment the economic welfare of its members, but a more vital institutional objective - survival and growth of the organization - will take precedence whenever it comes into conflict with the formal purpose. Trade union wage policy is a function of the leadership. It is expressed in the various operating decisions which officials are required to make in the course of wage bargaining." 43 According to J.W.R. Rowe "trade unionism has been the yeast which has altered the whole shape and nature of the loaf". 44 But in contract with the melancholy nihilism of professor Hicks Mr. Rowe concludes that the practice of trade unions is not to equate wages with marginal productivity, but to increase the marginal productivity of labour by reinforcing competition as a spur to progress. 45

45. Ibid., p.20.
Trade union by taking initiative may define the nature of the job and try to determine pay for each category of workers in such a way that same payment is assured for same job and different for different job so that imbalances in the internal and external, regional and occupational wage structure are removed. The active involvement of trade unions have advanced their say not only in wage determination process but also in other processes of the organisation viz. recruitment, labour productivity, career prospects, other conditions of employment, labour costs, labour welfare, social security etc.

The general view among several scholars on trade unions and labour market analysis, such as Ross has been that trade union acts as the power force signifying political and other institutional factors in labour market. Professor Dunlop, on the other hand, attempts to show that despite the presence of the so-called political behaviour of the union, in the long run it is the economic forces of the situation that ultimately determine the wage policy at the union. It is the economic elements that are dominant in determining the wages. According to Brochier, trade unionism is too complex matter to be explained by one single exclusive principle, or by a single dominant motive.

48. Ibid., p.30.
Wages and Collective Bargaining

It is found that in the sphere of institutional wage setting, the collective bargaining is commonly observed method. Wages are determined here by collective groups of workers organised into trade unions and employers organised into employers' associations. It is the process by which wages and related conditions are regulated by agreements between representatives of employees and employers. Collective bargaining is a constructive method used to influence the market force and its success depends on the bargaining power of the respective parties. The determination of wage rates and the minimisation of industrial conflict are the twin functions of collective bargaining. Hicks finds that in collective bargaining wages get determined at the point where the "concession curve" of the employer meets the rising "resistance curve" of the union and the wage corresponding to this point is the highest wage which skillful negotiation can extract from the employer.49 Though he did not give any other motive except economic once affecting the bargaining. Professor A.C. Pigou, in discussing the effects of trade unions on wages, describes that, "wage rates are settled, not only by the action of free competition, but by bargaining between workmen's association on one side and employers' association on other hand. The rate of wages is no longer determinate at a single point.

There is, on the contrary, a range of indeterminateness. The workmen's association will prefer to the competitive rate something higher than that rate, and the employers' association something lower. In view of the fact that there will be a certain maximum rate above which the workmen's association will not wish to go and there will also be a certain minimum rate below which employers' association will not wish to go. The range of indeterminateness is constituted by all the rates enclosed within these two limits. Some of the theoretical models of bargaining behaviour have been elaborated by Shackle, Pen and Zeuthen.

Recent Directions in Wage Theories

Modern wage theories attempt to incorporate elements of all existing theories. Some multi-disciplinary theories have been forwarded through empirical researches. Lester focused on market behaviour in explaining wages and wage differentials. In his view, "wages are affected by all sorts of economical, political and social influences. Certainly market forces are far from adequate to explain the variety and complexity revealed by wage statistics. Any satisfactory explanation must include such factors as company and union policies and practices, community attitudes and personal and historical influences". Dunlop

approaches the wage determination through emphasis on wage structure analysis in terms of two concepts of job cluster and wage contours. A job cluster is defined as a stable group of classification or work assignments with a firm which are so linked together by (a) technology, (b) by the administrative organisation of the production process, including policies of transfer and promotion or (c) by social custom that they have common wage making characteristics. A wage contours on the other hand is defined as a stable group of firms which are so called linked together by (a) similarity of product markets (b) by resort to similar sources for a labour force, or (c) by common labour market organisation. The wage rates for the operation and job within cluster are more closely related in their wage movements than the rates outside the cluster.\textsuperscript{52} Ross believed that wage rates are determined by conscious human decision rather than impersonal market forces. He stressed the effects of union and employer decisions as well as customary criteria in wage determination.\textsuperscript{53} Dahl regards the power and influence of large firms along with the organised political influence of trade union leaders as dominant factors in wage determination. In his analysis the study of individuals, groups, organisations and welfare funds has assumed greater significance which leads to


several approaches in finalising employees’ emoluments.54 Among the institutions government has been playing an important role affecting both wage level as well as wage differentials. Government influence is felt in a pronounced manner through various legislative measures and regulatory mechanism particularly in wage setting and wage related disputes’ resolution. The most important legislation influencing wage setting at lower level is Minimum Wage Act. Government also settles wage question by referring them to tribunals when there are disputes and sometime appoints wage boards on the recommendation of which wage structure is revised.

I.3. Applicability of Wage Theory in a Developing Economy

In general the theories of wages which developed right from the classical period to the contemporary period have failed in drawing the attention of the wage fixing authorities. Even Western economists do not believe that wage theory is applicable to real conditions which considerably modify the operation of the market forces, and produce wage differences which cannot be explained in terms of the orthodox theory of wages.55 Paul Samuelson once wrote that, despite the multiplicity of wage theories, economists were yet to know how wages are determined.


He remarked "I fear that when the economic theorist turn to the general problem of wage determination and labour economics, his voice becomes muted and his speech halting. If he is honest with himself, he must confess to a tremendous amount of uncertainty and self-doubt concerning even the basic and elementary parts of the subject". If this be the state of wage theory in respect to the advanced countries of the west, it is all the more complex and indeterminate in the context of developing countries, where there hardly exists a general labour market. Moreover, in the developing countries where feudal system prevailed till recently and which got independence from colonial rules, growing population pressure and existence of abundant labour supply are crucial problems. In this context, how far the stated theories of wage determination can be applied in these economies is a mute question.

A general theoretical model was developed by Ricardo long ago in the form of subsistence theory of wages which could be applicable to a labour surplus economy with a rapidly growing population. In some respects it is applicable in the developing countries. This was mainly because of the fact that many of the developing countries are found to have high population growth and abundant labour supply, which keeps the wages below or at the subsistence level. Moreover the Ricardo conditions of slow rate of

productive capital formation and almost stationary or slow rate of over-all growth are found in some of the developing countries of the world and hence to some extent subsistence theory is relevant in such situation. But Ricardo's assumptions of free and perfect competition in the labour market, free mobility of labour and full employment are not observed in the case of developing countries. 57

The neo-classical explanation of wage determination is also not helpful in explaining the factors and forces of wage determination in a developing economy. In the neo-classical system, the equilibrium wage is determined by marginal productivity which gave more emphasis on demand side and assumed that the supply of labour is scarce or fixed. Though in most of the cases particularly in developing countries where employers are few and number of persons seeking employment is large, supply factor becomes dominant in the determination of wages. When demand increases, wages do not increase simultaneously in such an economy because of excess labour supply. Moreover, wages in a developing economy may be low not because the productivity of labour is low but because of wide spread unemployment and exploitative institutional structures which lead to the lowering of real wage. Besides segmented labour market, existence of formal and informal sectors, difference in wages according to

occupations, regions and different industries and absence of single labour market are the characteristics of the labour market in developing countries. Therefore, neo-classical explanation of wage determination is not found to be relevant to a developing economy plagued by chronic unemployment.58

Perhaps the Marxian analysis may provide some insights into wage determination in a developing economy. Marx's view about the existence of unemployment of labour and growing reserve army of labour as a crucial factor depressing the level of wages to the subsistence level seems to be relevant to the prevailing conditions of developing counties. Many developing countries are characterised by capital deficiency restraining demand for labour and whenever technological changes take place they are mostly capital intensive displacing human labour. These tendencies lead to expand unemployment which keep the real wage down. Further, Marx's view of collective bargaining power of trade union may be relevant in many developing countries of the world in the context of industrial sectors. Thus the Marxian analysis of wages is helpful in explaining the process of wage determination in developing economy.59

Another satisfactory and more realistic theory of wage determination is based on collective bargaining. Though

58. Ibid., pp.216-217.
underdeveloped countries have not been in a position to derive desired benefit from such method because of lack of proper trade union organisation. Many of the labourers in these countries are not organised and even if they are organised, they are weak organisationally. For this reason in many cases particularly in agriculture and informal sector governments have to come forward to protect the interest of labour and fix wages by means of legislation e.g. by passing Minimum Wages Act and also settles wage problems by referring them to tribunals when there are disputes.

In short, developing economies are characterised by certain peculiar features like unlimited supply of less efficient labour, capital deficiency, traditional and outmoded techniques of production, over-population resulting in excess dependence on primary agricultural activities, market imperfections, immobility of factors of production notably labour and so on. All these together with so many other factors make the problem of wage determination very complex.60 Besides, changing system of consumption, production and distribution, the economic environment is by and large considered to be guiding factor for the practitioners in wage determination.61 Moreover, unorganised


labour force, low rate of growth of productivity, variations in economic, industrial and social situation of a country are various other factors which make the problem of wage determination very complex. Therefore to a large extent, wages in such economies are not determined by purely economic forces and cannot be explained by any single set of wage theories, but by many other factors which are closely linked with the whole economic, non-economic and industrial system and with the social system.

I.4 Agricultural Wages and Labour Market in Developing Economies

Generally developing countries to which India is not an exception, depend mainly on agricultural output. The share of agriculture in its total income is high. Much of the population gets its income from agricultural activities. But there are several problems observed in the functioning of agricultural sector in such economies compared to that in case of the developed economics. The special features of agriculture create many problems in determination of agricultural wages. The problems relating to wages in agriculture are wholly different from those to wages in organised industry. This is because of four basic factors: (1) agriculture is essentially seasonal in character, (2) majority of holdings are small, fragmented and uneconomic which cannot provide even a bare subsistence to the owner of land (3) the productivity in agriculture of developing countries is extremely low as compared to world standards and depress the capacity to pay, and (4) the supply of labour
(unskilled) in agriculture is far in excess of the demand. Thus the basic problems of the rural economy are low income, low productivity and lack of continuous employment.

Economic and institutional factors have been deeply rooted in conventional agricultural system viz. imperfection of labour market in which demand and supply theory cannot be used in toto. Among such factors are seasonal variations, difference in economic condition of landlords and farmers especially marginal farmers, size of labour force, surplus labour, mobility and migration of labour. Moreover, the most notable fact about agricultural wages is that there is absence of uniformity in the method of payment in which the wages are paid in cash, in kind and in perquisites. In agriculture wage differentials are prevailing as between different regions, different operations and between men, women and children which are difficult to assess. Further, because of the excess labour supply, labour is always ready to offer itself for work and consequently agricultural labour has no bargaining power. Due to this fact wage determination and wage differentials in agriculture are based not merely on the demand and supply position but on consideration of a sociological and institutional nature.

Besides, several other factors such as general growth of population, slackness in Industries, progress of allied activities related to farming and growth of urban areas near villages and most important today's growing inflation are also having their effect on agriculture wages.
Although the wages in agricultural labour market like any other market, are determined by the interplay of demand and supply, the market for farm work has certain distinguishing features which make the demand and supply theory imperfectly applicable. The demand for labour depends upon the cropping pattern, the use of complementary inputs, labour substituting techniques, family participation, extent of irrigation, the size of farm and also the demand from non-agricultural sector of the region. However, the demand for labour in agriculture is always unstable and irregular and fluctuates according to seasons causing seasonal fluctuations. During the peak agricultural season supply may fall short of demand which directly exerts upward pressure on wages. But looking to the matter the other way to avoid shortage during peak seasons and for completing farm operation in time, farmers particularly the richer ones keep certain category of poor farmer workers in permanent or quasi-permanent employment, while other category of workers are employed on casual or temporary basis. Many workers who migrate in the area of labour shortage prefer to work with the same known families even on the temporary basis year after year. Such situation may weaken the bargaining power of workers despite seasonal bunching of demand. This process adopted by the richer farmers dampens the growth of farm wages.

The agricultural labour consists mainly of three categories of labourers, viz., casual hired labour, attached labour and small
farmer-cum-wage earner.62 On the supply aspect farm labour has grown faster than the job opportunities in the agricultural sector. As a result of natural growth of population and partly because non-farm sector has not developed enough to absorb this population, the problem of unemployment as well as wage differences is observed all around. The existence of surplus labour which can be converted into labour supply at any wage rate in lean agricultural season lead to imperfection in agricultural labour market. In a perfectly competitive labour market wage rate is determined by the supply of and demand for labour. But perfect competition does not prevail in agricultural labour market. Due to existence of surplus labour and hence elastic supply curve, the increased demand for labour would not be able to increase wage rate but it would only increase the volume of employment. Thus wage rate of agricultural labour is not determined within the labour market. This is so because supply of labour shaped as it is largely by non-economic factors acts only positively as a contributory factor in wage determination in agricultural sector. Therefore, non-economic factors much be responsible for higher or lower wage rate in a particular region or sub-region. One can rightly infer that factors such as local tradition, employer-worker relations, character, of contract between farmer and worker, availability or alternative opportunities of work in rural and urban areas and

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mobility of labour play a more important role in wage determination in agrarian economy than the economic factors. Besides, institutional factors also will have some impact on variations in agricultural wages.

The labour market in agriculture is characterised by indifferent condition of work, low wages and poor living conditions and very little legal protection which is often ineffective due to dispersed nature of industry. These conditions make collective bargaining and union activity, more or less impractical. Thus there exists a vast agricultural labour market, with traditional way of work, unorganised labour, a lot of disguised unemployment and practically no influence of legislative measures and administrative control which fail to reach out to country side.

The agricultural wages are also affected by the level of economic development of the region. Within a region the differences in geo-physical conditions and inputs availability lead to spatial wage differences. Development leads to an increase in the value of crucial variables like yield per hectare, which gives rise to high productivity of agricultural labour and upward rise in agricultural wages. The unevenly developed areas show fluctuations between region and region. The examples of Haryana and Punjab are illustrative of the role of mechanization and

64. K.G. Seth, op.cit., p.281.
better irrigational facilities in increasing cropping intensities and improving input use leading to increase in demand for labour and wages.

The basis on which the agricultural labour is required and used on farm, reflects his wage. The intensity of labour in different operations depends upon the farm requirements which differ from period to period and necessitate the operation to be completed within the specific period. Thus periodical difference leads to temporal difference in wages. Sowing and harvesting are time bound operations. The time factor leads to high wages for these operations. The operations requiring high physical, and strenuous efforts are normally performed by males and fetch higher wage compared to less skilled, low physical activity involving operations like watering, manuring, weeding and sowing etc. With increase in irrigated area, mono cropping is replaced by multiple cropping needing more labour per unit of area. As noticed above there are various operations which require skill and high physical strength for which male labourers are preferred by the landlords but the other operations can be handled by female and child labour. Thus there exist differences in wages among different sex and age categories.

I.5 Need for Study at Regional Level

The problem of agricultural labour is not only pressing but also a puzzling problem for a developing country such as India. This problem is likely to vary from region to region and state to
state. They would vary in view of their different agricultural practices and socio-cultural traditions, differences in land policy and reforms. When such varied factors go into determining the agricultural wage levels, it is indeed difficult to make generalisations about the behavior of agricultural wages. Therefore, the need for regional studies on agricultural wage behaviour and labour markets is necessary. The present study has concerned itself with analysis of agricultural wage behaviour in Gujarat, which has vast variations in respect to physical agro-climatic and socio-cultural characteristics.

Gujarat is relatively industrialized state with strong pressure on demand for labour. It would be interesting to see if this exerts an influence on the working of agrarian labour market specially in matter of agricultural wage determination. With Industrial development in the state, shortage of farm labor will arise because the wage earnings in factories are better compared to those in agriculture.

This study deals with behaviour of agricultural wages and their determinants through state and district level analysis. The agricultural wage rates are studied in both nominal and real terms and factors affecting them and their differentials are highlighted. An attempt is made to examine the effect of seasonal variations, and composition of labour supply in terms of socio-economic groups on agricultural wages. The study examines different types of wage differentials observed within agricultural sector of Gujarat.