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A CLASSIFICATION SCHEME
FOR THE
INDIAN WORKING POPULATION

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Introduction

This paper presents a scheme for classification of the working population in India, which we find useful for the purpose of demarcation of social classes and strata obtaining in India. We understand that definition of class is problematique, even in the general framework of marxist understanding of social phenomena. We, however, do not propose to give the definition of class that obviously, provides the broad framework of this paper, as we have dealt it elsewhere. It should be noted that our classification scheme, infact, gives use to some meaningful socio-economic groups. Classes may be finally demarcated in terms of these socio-economic groups.

Any population can be classified into a number of sub population by any attribute simply by the possession and non possession of such an attribute by individual members of the population. The utility of a classification scheme will depend on the set of attributes associated with it. The existing studies, where the working population in a given economy has been classified into various sectors or groups (with a purpose not necessarily similar to that of ours), essentially adopt uni-dimensional approach based on a single attribute, which itself may be simple or a composite index of a number of simpler attributes.^{1/} In Section I, we take a brief look at a few of the methods of classification adopted in these studies.

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The classification scheme that we are going to propose rests upon four attributes. The attributes have been so chosen as to generate socio-economic groups with some desirable properties from the point of view of our understanding of social classes, Section II of this paper introduces these four attributes and gives an analytical account of them. Section III is an exercise in the estimation of the numerical magnitude of different socio-economic groups, to the extent it is possible from the available data, for two specified years. This section is purely quantitative in nature and should be taken merely as an illustration of our method with the help of Indian data and no finality is claimed about these figures.

Section I

A Review of few methods of classification of working population adopted in the existing studies

Method of Classification in Clark-Kuznets type of Studies

These studies^{2/} were undertaken to explore the nature of association between economic development and changes in the sectoral distribution of working force and national product. The explicit purposes of these studies were thus different from the purpose that we are having for classifying individuals in a society which is to make a class analysis of the society.

If all the same, we take note of these studies that is for two reasons. Firstly these studies provide an approach to the analysis of division of labour which is an important basis of the class structure. A critical look at these studies may help us to formulate our own approach to the analysis of division of labour.

Furthermore, there are profound social implications of long term changes in the sectoral distribution of the working population. Kuznets himself has noted this aspect of his kind of studies in such words as follows, "The sectoral picture of production is of interest because active participation in specific sectors imposes specific patterns on the lives of the participants (and those of their dependents)" ^{3/}

In Clark-Kuznets type of studies - we find a very simple and technical view of division of labour. The entire range of economic activities are first grouped into three broad sectors. The working force is then distributed into those three broad sectors of activities according to the nature of activity one is engaged in.

Every division of labour has two aspects - social and technical. ^{4/} Division of labour, considered in its social-aspect distributes individuals into socially determined 'position' which are essentially hierarchical in nature. These 'positions' essentially describe, for each of them, a certain set of interpersonal relations obtaining in the sphere of the 'economy'.

Division of Labour considered in its technical aspect, distributes the total working force into various sectors of activities, (or braches of production) and within such sectors into various technically determined parts of the total work process.

In Clark-Kuznets type of studies only the technical division of labour is recognised. A study of the technical division of labour has also got its use, within its own limitation, in demarcating classes, as we shall see later. So we have to examine to what extent

the classification of activities used in these studies could be useful for our purpose.

In the usual three sector classification of economic activities, the first line of division is drawn between activities which produce material goods and which do not produce such material goods. The second line of division is drawn within material production sphere i.e. between primary and secondary sector.

What distinguishes this method of classification of activities is its purely empirical approach without any explicit theoretical basis. There is hardly any well defined notion of 'production' in such a method of classification. It is stated that tertiary sector is engaged in the production of services. Therefore, public administration is considered as a sector, producing administrative services, the army 'producing' defence service etc. Such an use of the term 'production' robs it of any social and economic significance. And as no proper concept of production is employed in these studies, the classification of economic activities becomes arbitrary and without any social significance.

This becomes evident when we take a critical look at the so called tertiary or service sector. It includes activities which are dissimilar in some crucial aspects. Firstly, from the point of view of social purpose, this sector is a highly heterogeneous collection of economic activities. For example the social roles of activities like public administration and trading are too different to be put together in a single sector. While the former is required to maintain a definite political superstructure, the latter is necessary for

continued renewal of commodity producing activities. From the point of view of social production, trading activities are functionally integrated with the sphere of material production, while public administration, strictly speaking, is an activity utilising social surplus which by no way is an integral part of the sphere of social production proper.

It may be, however, argued that this three sector classification scheme provides a most satisfactory framework to analyse the changes that occur in the structure of a working population during the course of economic development. In Clark-Kuznets type of studies this change is revealed through a shift of working population from primary to secondary industries, in absolute and relative terms. The primary-secondary division within the goods producing activities could be justified on this ground alone.

But the movement of working population away from Agriculture to Industry is not really the principal aspect of the changes we are studying. We are interested in the changes in the institutional arrangements of production, which occurs both within Agriculture and Industry. The shrinkage of working population attached to Agriculture that we consistently observe for an economy experiencing economic development, is a reflection of this fundamental change, which the narrow technical view of division of labour implicit in Clark-Kuznets type of studies fails to account for.

In this respect we may cite another weakness of this classification scheme. We are referring here to the lumping of two entirely different kinds of services within tertiary sector. The first type

of services, which we may call modern services, exhibits an increasing trend in its size of working force, during the course of economic development. Functionally, a large part of this type of services is directly related to material production. These are trade, commerce, transport, communication and business services. It is not difficult to identify reasons for growth of employment in these activities, within a framework of a capitalist economy.^{5/} Firstly, growth in commodity production in general necessitates growth of these activities. Secondly, rise in concentration among the commodity-producing enterprises means the destruction of the scattered small units and the creation of large firms catering to the needs of a widespread area. Consequently there is a rise in the demand for activities like transport and communication. Thirdly, in the course of capitalist economic development, the financial structure of business enterprises changes and the role of banking capital and outside finance increases within business enterprises. As a result the size of such activities as banking and other commerce expands considerably. Fourthly, it has been observed that after a certain level of per capita income, the demand for services associated with delivery of goods rises much faster than the demand for the material goods themselves.^{6/} The frills associated with material products tend to be valued more than the substance of material products themselves. Lastly, since these service-activities are more labour intensive than other activities and less susceptible to mechanization, a relatively faster growth in the demand of these services will lead to a rise in the share of these activities in the total working force.^{7/}

In contrast to these services, we have a different type of services, which we may call traditional services. The size of working force attached to these services shows a declining tendency during the period of rising per capita income. Domestic servants, barbers, washermen, religious preachers etc. are examples of occupational categories which are included in these traditional services.^{8/} The institutional arrangements within which these services are organised are also typical of pre-industrial societies based on tradition and custom.

Thus we find that the three sector classification is far from satisfactory as a framework of division of labour even in the single dimension of activities. The limitations of such an one dimensional approach also comes out clearly when we discuss the next group of studies in which the dimension of occupational role is considered.

Method of Classification based on Occupation

The dimension of occupation has been the most frequently used aspect of working population in constructing social strata or status groups, in non-marxist sociological tradition.^{9/} The basic methodology in all these studies has been to construct a scale of gradation for each occupation in terms of social status and position and then to group together occupation with comparable status in a single social strata or status group.

Use of occupational characteristics in stratification analysis dates back to Dudley Paxton who in 1867 classified occupations into three major classes, namely, upper, middle and manual labour classes.^{10/} No objective criterion for classification was taken and each occupational category was put into one of the three classes according to the

subjective judgement of Baxter.

Alexander-Carr Saunders and Carady Jones, on the basis of 1931 census data studied the social structure of England. They divided adult males into eight classes "including a bottom group of 'institutional cases'" quite below the ordinary level of employability.^{11/} Here also the social position of each occupational category was heuristically evaluated and occupations with similar social status was put in the same strata. For example, clerical and highly skilled manual workers were grouped together in a single stratum.

Alba Edwards in 1943 working with U.S.A. census data classified occupations into 6 broad socio-economic groups, according to "nature of the work, the skill and training involved in it, the income it brought, the common opinion about its prestige".^{12/}

In a study on social mobility in Britain, occupations were grouped into seven broad categories, "in terms of social status and prestige"^{13/} In a large number of subsequent studies on social mobility, a similar procedure was followed and 'social status and prestige' associated with different occupations were estimated in terms of evaluation made by some members of the community for which a stratification was being made.

The methodological presuppositions that are implicit in these studies are clearly at variance with our understanding of social classes and also with our conception of what a scientific approach for studying a society should be. Firstly, in these studies the occupations are classified in a single hierarchy of occupational

classes according to their positions in a linear status scale. But why should we at all expect the existence of such a linear status scale in terms of which all occupations are comparable? According to our view, it is futile to compare the hierarchical positions of two occupational groups without bringing in the dimension of activities. Hierarchy of occupations can be a meaningful concept only when considered as an hierarchy of control over the labour of one occupational group by another. And we can talk of such control only in the context of a single group of activities - strictly speaking in the context of a single labour process.

Secondly, occupations are graded according to social positions and status associated with them. But how are these social position and status determined? In most of these studies they are determined not by any objective criterion but by the subjective evaluation by the people themselves.^{14/} In other words, if there is any social differentiation among various occupational categories in terms of power, status, wealth etc., this differentiation is best revealed in the consciousness of people and what is more, the image of this differentiation in people's mind is the reality itself. In other words, there is no question of any objective evaluation of the job content of an occupational category, of its decision making power, of the degree of control it exercises over labour of other occupational categories etc. etc. The theoretical emptiness of such an approach is obvious.

From our above discussion of two broad types of classification scheme, using dimensions of activities and occupations respectively, we find that both these dimensions are by themselves inadequate

for providing a suitable framework for classifying the working population. Along with both of these two dimensions, we, however, require to take into account several other dimension of working population for construction of an adequate framework.^{15/} It is to this that we pass on in the next section.

Section II

A Classification Scheme based on four Attributes

To develop a satisfactory scheme for classification of working individuals within a society we need to use attributes which express the position of an individual in the social system of production and the role he plays within that system. In other words, a meaningful set of attributes for our purpose should express some aspects of the complex totality of production relations. As we have seen, a single attribute will not suffice.

The attributes to be chosen should be such that the social groups demarcated by them should be large enough to have significant impact on social dynamics and be homogenous and cohesive enough to ensure common interest, among their members. We propose to use as many as four attributes to construct an analytically useful classification scheme. These attributes are (i) nature of activity (ii) occupational role within an activity (iii) ownership relation to means of production and (iv) form of economic organisation.

First attribute

The first attribute that we use is the nature of activity, that an individual is engaged in. An individual's position in the structure of activities is important for understanding his class position for the following three reasons.

The nature of activity one pursues broadly determines the work environment and possible modes of participation in labour process. For example, the work environment and the types of concrete labour associated with Industry and Armed Forces are radically different. This difference in turn creates different life styles and life chances for individuals occupied in respective sectors. Since material conditions of life broadly determine an individual's mental perspective and his potential social-behaviour this attribute is important for demarcating social groups.

The nature of activity also determines the potentiality of technical division of labour within the activity and consequently the structure of hierarchy among participants in the activity. For example, hierarchy occurring within an educational institution is not of the same character as occurring within a manufacturing organisation. The intrinsic technical aspect of an activity only determines the possible limits to the progress of technical division of labour within the activity but the actual level will obviously be determined by the specific institutional features of the organisation in which the activity is carried out.

Finally the most important reason for accepting the nature of activity as an attribute for the demarcation of social groups lies in the fact that there may exist deep-seated divergence of interests between individuals who share equal positions in terms of all other attributes but are engaged in different activity groups. In fact, the classification of activities in some broad sectors would be unnecessary for our purpose if conflicts arising out of such divergence of interests did not exist.

Conflicts between social groups with different positions in activity structure may arise, firstly due to conflicting sets of forces that determine share of each social group in the total social product. If the products of a group of activities are used as inputs in another group of activities and/or vice-versa, relative prices of the products of two sets of activities will be an important determinant of the relative share of each activity group in the total social product. For example, the price of agricultural commodities is an important determinant of real wages of industrial workers. If the price of agricultural commodities should rise, under ceteris paribus conditions, real wages of industrial workers would fall. Should industrial workers try to restore the original level of real wages, a strike between workers and capitalists would ensue. So it is desirable for industrial workers and capitalists both to keep prices of agricultural commodities at a minimum. On the other hand social groups accruing within Agriculture would prefer to keep agricultural prices high (except such groups that might themselves be net buyers of agricultural products)

A classic example of contradiction between Agriculture and Industry is provided by the supply of labour to Industry.^{16/} If the masses of working people are retained in Agriculture, growth of Industry cannot but be hindered for lack of adequate supply of labour. Moreover a shortage of labour would tend to increase real wages of workers and reduce share of profit. It is for this reason that industrial capitalists have always desired conditions permitting reduction of the manpower requirements of Agriculture, excepting of course in the situation^{of} tremendous labour surplus in the economy. Such reduction would call for drastic changes in the organisation of Agriculture and dominant classes of agriculture in the pre-capitalist sector would stand in direct conflict with industrial employe.

Other conflicts may arise between two sets of persons depending on two different activities if they contend over the same amount of resources, like state subsidies, credit for investments etc.

A very detailed classification of activities will not, however, be meaningful. That is because the conflicts that might be there between social groups defined by any two narrowly defined sectors of activities might be of extremely transient character, without any social significance. In a too detailed subdivision of activities, the mobility of individuals with respect to different groups of activities, may be expected to be very high and the movement of working individuals from one activity to another would not signify any structural change within the working population. So the classification of activities into various sectors should be such that there would exist a relatively stable relationship between

sectors of activities and individuals working within it.

According to our understanding, it is the functional relation to the totality of the social process of production and reproduction that each activity bears provides the best basis for achieving such a grouping of activities. In a class divided society the processes of production, distribution and consumption can be best understood as a process of generation, distribution and appropriation of social surplus and hence the role of each activity from this point of view may be taken as the basis for classification of activities.

We take the view that surplus is produced mainly, if not only, in the material goods producing activities. Some explanations of our notions of surplus and productiveness of labour are necessary in order to justify our view. We shall not stop here to give that explanation which are provided in the appendix I of this paper.

Taking this perspective, we divide all the activities into a number of sectors which we name as (i) Core (ii) Ancillary (iii) Ideological services (iv) public administration and Defence (v) "Organised" services and (vi) "Unorganised" services. We discuss each of these groups below:

The Core Sector: As the name implies, this sector occupies a pivotal role in the social system of production and the social groups given rise to by this sector constitutes the principal components of the major classes in all known modes of production. This sector includes all those activities the end results of which are tangible

material goods and also some activities which are necessary extensions of the former activities. Included in this sector are Agriculture and related activities, Manufacture and Mining, Transport and Communication and construction.

The primacy of the sphere of material production over all other spheres is too obvious to need any elaboration. Development of material production, qualitatively or quantitatively is a necessary pre-requisite of overall economic development, if not synonymous with it.

The products of this sector are necessary to different degrees for all economic activities that we can think of. As a supplier of the means of subsistence, this sector plays a decisive role in the determination of the size of the economy as a whole.

An important question regarding our definition of the core sector is how to draw the boundary of this sector. The production of material goods cannot be distinguished from the production of services by the nature of labour process involved but only by the nature of the products. It is only in the physical nature of two types of products that we can locate the difference. The fundamental distinction between the two types of products lies in their durability. In case of service producing activities, production and consumption is simultaneous and there is no possibility of storing and transferring the products from one place to another.

But the practical problem of isolating these two activities can be formidable, when some of these service rendering activities

are internalised in the sphere of material production. In the Soviet Union, for example, where national income is measured by the 'net material product approach'. a "wide array of services is provided within the organization of factories engaged in material production e.g. factory restaurant, factory housing, nurseries for children of working parents, etc." ^{18/} And these "services are treated as part of material production and their costs are embodied in the price of the product and included in the net output of the branch of material production involved". ^{19/}

Therefore, for all practical purposes these services become integral part of the processes of material production, and there remains no firm line of demarcation between the activities producing goods and those producing services. These problems arise because the concept of material production in isolation is an abstraction and in reality there exists only a complex unity of processes called social production of which material production is but an integral part. In reality there does not exist any activity the products of which can exist or be produced without a material substratum to it. ^{20/} So our identification of the core sector with the sphere of material production is not meant in any rigorous sense and the core sector comprises of the activities which are conventionally understood as producing material goods.

Within the core sector, two important subdivisions are Agriculture and Industry including mining. In fact, Agriculture may be rightly treated as a separate sector by itself, since there exists definite contradictions between social group associated with

Agriculture and those with Industry. Since Agriculture supplies the basic subsistence goods for all social groups, the non-agricultural social groups would always stand to lose if there is a general increase in the relative prices of agricultural commodities, especially food grains.

Moreover, in a country like India where backward agriculture has not been transformed into just another branch of capitalist production it stands out as a distinct sector with distinct production relations of its own. Besides these, the material production conditions in agriculture are so different from the other sectors of production as to require to be treated as a separate sector. But Agriculture remains outside our scope of discussion and hence no separate treatment of it is attempted in the following pages.

The Ancillary Sector: Our next sector of activities is what we call ancillary. Products of the core sector require to be disposed of, value added requires to be realised, surplus requires to be appropriated and distributed. Activities which are necessary for all these are included in this sector. The term ancillary reflects this supporting nature of these activities. Apart from trade - wholesale and retail, we include here, banking, finance and business services.

The existence of the ancillary activities presupposes the existence of commodity producing activities within the core sector. In fact, the size of the ancillary sector is directly related to the

size of the commodity producing part of the core sector and also to the size of surplus generated there. For a given level of commodity production in the core sector, the size of ancillary sector would depend upon the modes of surplus generation. For example in an economy, where production is carried out in small scattered units the ancillary may have to be relatively large.^{22/} It may also have to be large in an exactly opposite type of economy, e.g. one where the core sector is highly concentrated and the level of labour productivity is very high.^{23/} In the former situation, the dispersed nature of the market, necessitates a relatively large trading sector to establish links between the producers and their distant consumers, even if the level of production is not very high. A non-mechanised transportation method may also require a relatively large ^{number} / labourers to transport a relatively small volume of goods.

Since, in such a situation, traders themselves are also largely carriers of their goods the number of traders may be relatively large. In the latter situation, geographical concentration of producing enterprises and consumers in large urban conglomerate and introduction of modern trading methods like supermarket etc. reduces the relative size of employment in trading activities. But other ancillary activities, like advertising, which are essentially sales promotion activities tend to expand enormously. Furthermore, the scope of banking and related financial activities increases enormously.

As no surplus is produced in the ancillary sector, income received by the groups associated with this sector is a net deduction

from the surplus available for appropriation by the surplus appropriating groups in the core sector. Now in a situation where commodity production has developed so much that the ancillary sector has been subordinated and reduced to a part of the core sector, the social groups associated with the ancillary sector could be treated at par along with the corresponding groups associated with the core sector. There wouldn't be conflicts to any significant degree between two social groups having similar social positions in terms of other three attributes but belonging to two different groups of activities i.e. the core and ancillary.

But this would not be so in a situation where the ancillary activities have a large degree of independence and have not been fully subordinated to the core sector.^{24/} In many underdeveloped countries including India, the trading activities have expanded considerably, disproportionate to the level of commodity production within the core sector. Overdeveloped trading sector in such an economy thrives on the small base of commodity production and siphons off surplus generated there and thus retarding overall development of productive forces in the economy.

The Public Administration and Defence: To reproduce the existing social order and maintain the hegemony of ruling classes, a definite political superstructure is needed. Functioning of this political super structure requires services like public administration, judiciary, police and armed forces. The labour force engaged in these services is included in this sector.

The distinctive features that justify grouping of these services in a separate sector are as follows:

Firstly these services are not 'produced' as commodities. There exists no market, no price, imputed or real for the services 'produced' by this sector. Furthermore, no use value may be said to exist of these services, for the general public who may be identified as 'consumers' of these services. In fact some activities of the state are in the nature of coercion upon certain social groups and thus useful to the ruling social groups. The state, however, provides utilities, which are enjoyed by every sections of the population, to varying degrees.

- Secondly this sector is maintained out of surplus generated in the core sector and is purely a surplus consuming sector. This surplus is siphoned off the core sector mainly by way of indirect taxation. A relative rise or decline in the volume of employment in this sector and in the volume of expenditure incurred by this sector would indicate a change in the pattern of utilisation in the social surplus.

- Thirdly, what is most important, coercive nature of the state apparatus perforce puts the social groups associated with this sector in a situation of confrontation with other social groups that are not part of the ruling classes.

- Fourthly, the organised nature of the state apparatus creates the possibility of frequent interactions between the members of social groups associated with it. Particularly, the monolithic

character of the armed forces creates strong ties among its members. In a social situation, where a number of social classes are contending for dominance, without any overwhelming supremacy of any single class, this organised nature of some of the social groups associated with this sector put them in a position of special advantage. Particularly, the armed forces may emerge as one of the most important pressure group within the society. In many third world countries, such a situation does exist.^{25/}

The ideological services: The social fabric of a class divided society cannot be held together by the repressive instruments of the state alone. An ideological superstructure is also necessary so that the existing social order can have an ideological mooring and social classes can be induced to conform to the existing social structure, without involving repressive measures of the state on every occasion. The activities which are required to reproduce the ideological order of a society are grouped together in a sector that we call Ideological Services.

We, however, need to decide exactly which activities are to be included in this sector. There cannot possibly exist any objective criterion for deciding this issue. We take the view that any activity which is in the nature of disseminating ideas should be included here.^{26/} But this position calls for a number of explanations. For example, what should be the status of educational activities by this criterion? ^{27/} Teaching by definition is an activity meant for disseminating ideas, which are of routine nature, codified and well formulated, requiring no much improvisation on the part of their disseminators. In other words, not much of creative or imaginative

faculty is necessarily invoked in the act of teaching. In the field of so called general education and especially in the social science, (at the higher levels) where teachers are called upon to sharpen the existing ideologies, seek justification for the continued reproduction of existing social order and thus rear fresh ideologues for the ruling classes, teaching is largely ideological in nature. But in the fields of physical sciences teaching as an activity is largely non ideological in nature.

In this sector are included activities like production and distribution of cinema, theatre, literature, music, painting etc. i.e. all the activities which are classified as 'entertainment and culture' in the standard industrial classification. This sector also includes all kinds of religious activities.^{28/} The ideological role of religious activities is hardly disputed and needs no elaboration. But the activities relating to creation of artistic objects as well as provision of entertainment necessarily involve upholding or opposing certain social values and attitudes, a certain world outlook. This world outlook may or may not directly coincide with the interests of a given class at a given point of time.

What justifies the grouping of all these activities in a separate sector is the specificity of labour process involved and the particular social role of these activities. The specificity of labour process involved in all these activities lies in the relatively high degree of independence and control over their own labour process performers of these activities exercise. There is hardly any way one can lay down rules for creating any new idea;

a new work of art. An artist, an author or a musician may have to produce to meet the needs of his patron be it a feudal kind or a capitalist buyer or the general public but, so far as his work-process is concerned, he enjoys a considerable degree of freedom. The scope for subdividing a work process that results in a piece of art is minimum (not in theatre, cinema etc.) and therefore, we can hardly have a technically determined hierarchy of labourers working together within a creative activity. For some modern art form like production of a movie, which requires a co-operative labour process, this is not true. A cinema in modern capitalist society may be produced in the same way as any other product is produced within a factory, but still we have a different kind of work organisation here, with a large degree of initiative and decision making power left to individual workers (except for those who either carry out routine technical job or perform only manual labour).

This very independence of a creative labourer belonging to this sector puts him in a delicate position clearly revealing his ideological preferences. If he chooses to give expression to the ideological prejudices of the ruling classes and endeavours to uphold their ideas, then he is directly working against the dominated classes. If he does otherwise, he is pitted against the ruling classes. In either way, his action goes in favour of some classes and is detrimental to some other classes.

The 'Organised Services': From the rest of service activities, we separate out those which are organised mostly on a social basis and group them together in a single sector. We call this sector - 'Organised Services'. Education, Medical and Health and Sanitary Services are the constituent parts of this sector.

A large part of these services is not produced and sold as commodity in the market and it requires a social organisation like the state to organise these activities. This becomes necessary since these activities are essential for the reproduction of the society with a certain level of skill, density and physical ability amongst members. This social need cannot be fully met within the household nor can many of these services be produced profitably as commodities on the required scale. Most of these services are generally positively correlated, in terms of size of employment, with economic development.^{29/} This is expected since economic development requires a better quality of the labour force to handle the means of production which gets continuously revolutionized. And also with economic development and rise in per capita income, better quality of life rather than greater amounts of material goods becomes increasingly in demand.

A distinctive feature of the social groups associated with this sector is that these groups lack any effective bargaining power vis-a-vis other social groups to increase their share in the total social surplus. This is due to the fact that these services, though socially necessary, can be dispensed with for a short duration without any cost to the social groups who dominate society. Those within the sector sell their services as commodities (e.g. private doctors) can

however effectively raise prices of their services and can maintain or increase their share in total social surplus. But this is not true for many others within this sector.

Unorganised Service: Individuals in a society have some elementary human needs, which can be satisfied only by services provided directly by person to person. So a part of the labour force must be engaged to provide these services to individual consumer units. Barbers, cooks, nurses, domestic servants etc. provide such services. These service workers are included in the sector we call 'unorganised services'. The term 'unorganised' is used to highlight the fact that most of the workers in this sector deal individually on individual basis with consuming households themselves without being employees of any enterprise.

With economic development and introduction of new gadgets many of the services included in this sector come to be provided within household by the household members themselves.^{30/} So there would be a fall in demand for such service workers in the course of economic development.

Previously in Indian village societies these services were provided by members of some specific castes. Still today this association between castes and these services persists to a large extent in India.

The Second Attribute: Occupational role or hierarchy defined by work organisation within an activity

So far we have considered a division of working force into various sectors of activities. We now consider a second attribute

which is the position of an individual labourer within an activity, i.e. his position in the hierarchy within the economic organisation of which he is a part. This position signifies the relations an individual enters with others participating in a single activity, which relations form a part of the production relations embracing an individual. This position is indicated by the specific role an individual plays within labour process.

In a class divided society this hierarchy within an activity is not solely determined by technical aspects of the work process defining the activity but also by social conditions of production. This hierarchy is essentially a hierarchy of control of one's labour by another. In the context of appropriation of surplus by non-producers these functions of control are mostly on behalf of the surplus appropriators. And there lies an important source of conflict between those who carry out the functions of control and those whose labour are controlled by others. The presence of this conflict justifies our use of this attribute for classification of working force. Moreover the nature of work for any individual, determines, to a large degree, his life styles and life chances. For any economic agent, the nature of work he is engaged in does not change arbitrarily over his life time and generally remains confined within a narrow spectrum of similar kinds of work. This relative rigidity of an economic agent's position and role within a determinate labour process expresses and also reinforces the inequality among classes and strata in terms of control and directive power over the process of surplus generation, extraction and appropriation in the context of society at large.

Hierarchy within any labour process gets determined mainly by two aspects of the process namely, that of control and the content of labour. The control aspect has again two ramifications - namely,

- (1) control of persons and
- (2) control over the decision making process, and the functioning of work organisation at its various levels.

The control of persons entails the functions of supervision and management of personnel. This role of supervision and management is restricted to certain categories of functionaries only. Among the rest of labourers within a work-organisation, there exists differentiation in other aspects but not in the respect of control of one's labour by another.

The control over the decision making process involves the functions of initiating an action, allocation of responsibilities to those in the lower level of hierarchy, fixing the strategic objectives of an organisation and for a given strategic objective deciding over the action necessary to realise it. The functions relating to the control of the decision making process are confined to the conception and planning stage of the labour process, while the functions relating to the control over persons extends into the stage of execution of the labour process.

By the content of labour, we are referring to some intrinsic qualities of labour, as expressed in the complexity of the job involved and also in the subject matter of the work. The complexity

of a job determines the degree to which a labourer has control over his labour and to that extent his relative independence from the control over his labour by others higher in hierarchy. The subject matters of the work are classified into two broad types - one consisting of symbols, signs and concepts and the other consisting of physical objects. In other words, this division refers to the division between mental and manual labour.

Using these two aspects (i.e. the control aspect and the content aspect) of the labour process, we distinguish the following six levels of hierarchy.

(a) Those who control, at various levels, the decision making process and determine the overall direction of a work-organisation. They are the managers.

(b) The next of the hierarchy are those possessing technical know-how who control the production process at its technical level and hence control the labour of workers below them. They are the highly skilled technicians and professionals. They are not generally concerned with the overall management of the labour process, but only with that part of it in which they possess expertise. They are said to be performing mental labour and the nature of their job is generally complex enough to enable them to retain control over their own labour to a large extent.

Examples of such labourers are, engineers, qualified accountants, doctors in large hospitals etc.

(.) The third level includes those who perform mental labour (or rather non manual labour) at much lower level of skill and expertise than the previous category. Jobs are less complex and much more in the nature of routine work but nevertheless involve dealing with signs, and symbols. The best example of this category of workers is the clerical worker.

(d) The fourth level includes those who perform skilled manual labour. It is true that any type of skilled labour requires some amount of mental work and decision making faculty but skilled manual labourers are different from the others described above in one important respect, namely their direct participation in the production process. Labourers in this category do not exercise control over other's labour to any significant extent. Since the workers in this category possess specialised skills they retain some amount of control over their own labour, subject to the overall direction of others higher in hierarchy. In a situation where labour has been alienated from the meaning of production this very fact of alienation will act as a controlling force over their labour.

(e) The next level consists of those who perform semi-skilled manual labour. These labourers generally operate with machine and their skill lies mainly in that operation. The line of division between this category and the previous one is thin and for all practical purposes we may group them together. Braverman has quite rightly argued that the "concepts of "skill", "training", "education" are themselves sufficiently vague" and if the conventional usages of the terms are accepted, then "the gap between the skilled and the

semi-skilled worker is a matter of "years" of training, while the creation of "semi skill" as against "no skill" is accomplished in "two to twelve weeks".^{31/} The distinction between these categories of workers becomes then of a purely quantitative nature without much social significance. For our purpose, what matters is the nature of control a labourer exercises over his own labour. For a skilled labourer, the actual workprocess is subject to the control of labourer himself, in a strictly technical sense. But, for a semi skilled labourer, the actual work process is controlled, to a greater or lesser degree, by an outside force, in the form of a machine. But both these labourers cannot be regarded as mere suppliers of motive force behind any work process, which is the characteristic features of the unskilled manual worker.

(f) Unskilled manual labourers who provide mainly human energy to a work-process, lie at the bottom of the hierarchy in any work-organisation. The best example of such a worker is the loader /unloader of goods.

The third attribute: Relations determined by the ownership of means of production

We now turn to our third attribute, namely ownership (legal and economic) of individual economic agents with the means of production. Ownership of the means of production may be classified into two broad types, which are not exclusive of each other.^{32/} Firstly we have, what is called legal or juridical ownership of means of production. An economic agent is said to have legal ownership over some means of production, when he has the legal right to put into socially accepted

use of the means of production and also has a legal claim to share the benefit, resulting from such a use. But this legal right needs not be comprehensive as it sounds. In fact it may turn out to be only paper right as in the case of multitude of share holders of a large corporate business enterprise. An economic agent is said to have economic ownership of some means of production when he has effective control over the uses of the means of production, though he may not enjoy any legal property - right over those means of production.

The concept of legal ownership as such needs no explanation, as long as we keep in mind that the content of various rights that legal entitlement confers on an owner varies from society to society and varies within a given society depending upon circumstances.

In the concrete case of the Indian economy, we do not consider the issue of legal vs. economic ownership to be of much importance, since separation between legal and economic ownership of the means of production has not progressed much in Indian economic enterprises.^{33/} However, we must remember that there exists a large public sector in India and the issue assumes some importance for these enterprises. In precapitalist agricultural sector also the issue may be important in a different way. An absentee landlord leasing out land to tenants is legal owner of means of production but has not the means of production in his possession. Since Agriculture remains outside the scope of our analysis and the social significance of economic ownership of means of production in public sector enterprises is not as yet very important, we shall not be considering these two aspects

of ownership differently.

Three broad categories can be distinguished by this attribute - namely (a) employers (b) employees and (c) self employed workers. We discuss them below:

(a) Employers - By employers we mean not all who effectively own means of production and get them worked by wage labourers but only those who do not work themselves and employ a certain minimum number of wage earners so that the principal part of their income is profit. There is no objective criterion for determining this minimum number which depends on the size of socially determined average enterprise.

(b) Employees - Employees are those who do not own any means of production and who earn income by selling their labour power.

(c) Self employed - The self employed workers are those who own their means of production and work themselves of production but do not employ wage labour.

Conflicts of interests existing between employers and employees are too well known to merit any discussion at this point. Conflicts would exist between employers and those who are self-employed in a situation where self-employed persons are being alienated from their means of production by competition offered by employers with access to better technology and the organised money-market. The ownership of means of production however, creates a social chasm between self employed persons and employees, since the former to preserve their property rights over their own means of production, must necessarily support the interests of property owners in general and thus come

into conflict with the general interests of property less persons. For the marginal owners of the means of production, the gulf would not be of much significance, however

The fourth attribute: Organisation of production

The fourth attribute that we employ is the form of economic organisation through which an individual economic agent participates in the division of labour within a society. The form of organisation is specified by a set of socially sanctioned rules that guide the interpersonal relations between economic agents working within a given work-organisation. Different sets of rules provide different perspectives and latitudes for actions that could be adopted by different categories of economic agents in their struggle for better social and economic conditions and also for greater social power. For example, the set of rules that guide the interpersonal relations obtained in a large private corporate enterprises is quite different from that obtained within a household business enterprises. This would in turn produce significant heterogeneity among economic agents who might occupy similar positions in terms of the other three attributes. For example, an unskilled factory worker and an unskilled construction worker employed by a labour contractor cannot be distinguished by the first three attributes. But there exists a real distinction in the class behaviour of these two categories of workers.

The forms of economic organisations are not unchanging but are always evolving and getting transformed as a result of struggles

between classes and also due to changing technical requirements of production processes.

The various forms of economic organisations that we observe at a given point of time can be classified into two broad types, the basis of classification being the social accountability and social control of the rules guiding various aspects of an economic organisation. This social accountability and control are generally imposed on an economic organisation through some enacted laws. We call these two broad types of organisation (i) corporate form of organisation (ii) non corporate form of organisation. By corporate form of an economic organisation, we are referring to those which presupposes the existence of the organisation as a separate legal entity and which ensures a certain minimum level of activity. The criterion of separate legal existence excludes household enterprises, self employed workers and those business firms which are not companies (understood in the conventional sense). Even from among companies, we exclude those which operate below a certain minimum level. This exclusion is necessary to ensure that social accountability and control which we have referred to before are enforced in reality. Our corporate sector also includes Public administration and defence and all state enterprises since the criteria for defining corporate enterprises apply to them most rigorously. All other engaged in any economic activities are included in the non corporate sector.

There are certain legal rules characterising each particular form of economic organisation - viz, the legal conditions of employment, legal rights of various categories of workers to form associations,

legal norms constraining the expansion of the organisation etc. The presence or absence of these rules are important for determining the alternatives that are left open to different categories of economic agents for realising their interests. And in fact the short term interests of these economic agents also get modified and transmuted by these rules. For example the immediate interests of unskilled construction workers retained by an individual labour contractor are not similar to those employed in a large corporate construction firm. These divergence in their immediate interests might create a cleavage among them and create obstacles to the process of formation of a single class out of them.

This completes our description of the four attributes we have chosen for classifying economic agents into meaningful social groups.

Section III

A quantitative Exercise: Classification of the Indian working population

Classification by Clark-Kuznets Methods^{34/}

The table A presents the distribution of Indian working population for four census years among the usual three broad sectors used in Clark-Kuznets types of studies. The conclusions that can be drawn from this table are quite straight-forward.

Firstly, the overwhelming majority of the working individuals continue to be engaged in the primary industries, thus indicating the predominantly agrarian nature of the economy. We need not attach

any special significance to the percentage increase in the labour force attached to primary industries between 1901 and 1951 because the size of primary industries has possibly been overestimated in 1901 due to the lack of proper demarcation between manufacturing and agricultural population. One can however, easily conclude from the table that, one principal feature of economic development, i.e. a shift of working people from primary to secondary industries has been absent in India.

Secondly, the relative size of the secondary sector has remained almost constant between 1901 and 1971, though there has been an increase in the absolute size of this sector.

Thirdly, between 1901 and 1951 there has been both an absolute and a relative decline in the number of persons attached to the tertiary sector and thereafter the tertiary sector has improved its relative position but only marginally. The decline in the tertiary sector employment, during 1901-1951 both in relative and absolute terms, has been partly due to the changes in the definition of working force employed in the two census years (i.e. 1901 and 1951) and partly due to the contraction in the employment of religious preachers and priests, domestic servants, musicians, dancers and also petty traders.^{35/} The decline of these occupations could be taken as an indicator of the changes that have been occurring in the mode of surplus utilisation in the country, but not necessarily in the mode of surplus generation.

One can therefore conclude that the figures for India does not suggest any vigorous transition from precapitalist modes of production towards the capitalist mode during the period under study, although there has been decline of certain categories of unproductive workers associated generally with the traditional form of surplus utilisation. This is about all that can be inferred about structural changes in the Indian working force from an application of the Clark-Kuznets framework to Indian data.

No studies on gradations of occupations according to their status and prestige in society has been made for India as a whole. We, therefore, do not have any basis to classify occupations according to the states and social prestige associated with them, in the way western sociologists have done and which we have discussed earlier. In the next part of this section we therefore go over to our own classification scheme.

Classification of the Indian working force by our four attributes

Tables 2A to 2E present results of the exercise in classification of the Indian working force in terms of our four attributes, specified and discussed above. It has not been possible to give figures for all the groups that may be formed by the inter section of these four attributes. What we have been able to do is to classify the economically active part of the population by each of these attributes individually, so that only the marginal figures of the desired fourfold table are obtained.

Table 2Bs give distribution of the economically active population in the different activity groups that we have defined. It can be seen from the tables that an overwhelming section of the economically active population is engaged in the Core activities for all the four census years. Between 1901 and 1951 there has been a modest increase in the relative share of persons engaged in the core activities. And this figure has remained almost constant for two subsequent census years (1961 and 1971). From table 2B.3 we can see that it was agriculture which contributed most to the increase in the percentage of persons engaged in the core sector between 1901 and 1961. Since the core sector provides for the material existence of all other sectors, a dominant core sector of constant or increasing size may be caused by economic stagnation within the core sector which is unable to generate sufficient surplus for maintaining a relatively large non core activities.^{36/} And low labour productivity within the core sector would also require a large number of labourers to maintain even a relatively low level of non core activities. If we take into account of structure of the core sector and predominance of agriculture within it, the slow progress of division of labour within the economy becomes even more clear.

Number of persons attached to ancillary activities has declined as a percentage of total earners between 1901 and 1961 and also between 1951-61 and 1901-51. However, between 1961 and 1971 there has been a relative increase in the number of persons engaged in ancillary activities. The trading activities which constitute the most important component of the ancillary sector, also shows a

similar trend. If we compare the number of traders in 1961 (working proprietors only) with that of 1901, we in fact, find an absolute decline in the number of traders (see table C.2). It has been generally observed in developed countries that, in their course of economic development, the ancillary activities have expanded both absolutely and relatively.^{37/} But in India, already in 1901, a large trading sector had come into existence, reflecting the underdeveloped character of the colonial economy. This left little scope for any further growth of employment in the trading sector. Within the trading sector, however, the number of hawkers and peddlars increased 22 times between 1901 and 1961 (C.2). This means that number of marginal traders with little or no capital has increased enormously. Lack of employment opportunity has probably been forcing a large number of unemployed persons to resort to sundry ancillary activities including trading so that they can eke out somehow a living for themselves.^{38/} In real terms, such workers constitute a part of the reserve army of labour force, but in a disguised form.

Two sets of activities besides the core which have improved their relative positions among the earning individuals are the organised services and public administration and defence. Within the organised services, it is the 'educational services' which has grown enormously. Between 1901 and 1961, the number of persons employed in the educational sector has increased by a factor of 12.24. Employment in activities related to Medical and Health, another component of the organised services has increased, however, only

by a factor of 4.11. The number of persons engaged in the sanitary services, the third component of our organised services, has declined by a factor of 0.64 during the same time period. The increase in the number of persons employed in the civil administration and defence has been only marginal, by a factor of 1.66 only.

It may be kept in mind that all these activities are mostly supported out of the surplus collected by the State. In the context of a slow pace of industrialization growth of these activities to the observed extent looks lopsided. This means that the state, by its deliberate policy actions, has aided the growth of some specific social strata like professionals, salaried employees etc.

One activity that is experiencing persistent decline over time, in terms of the number of persons engaged in the activity, is the ideological activity. The major components of this activity group are religious services and entertainment and cultural services. Number of persons engaged in religious services has halved between the years 1901 and 1961. During these years there has been a decline in absolute numbers of musicians, dancers etc., who are included in the entertainment and cultural services. In 19th century and earlier periods, these persons i.e. religious preachers, priests, musicians, dancers etc. were maintained by kings and landlords.^{39/} They were supported out of the surplus extracted from the peasants and very often they were also provided with the free lands, a part of the produce of which belonged to them. The decline in the number of these persons signify a decline in the number and economic and

social power of their patrons and a change in the mode of surplus utilisation within the economy. Decline of the Ideological activities does not mean that role of ideology and ideologues have waned in India. This only means that role of traditional ideologues has declined giving place to newer varieties.

The contraction of employment in the unorganised service is as expected and indicate the changing consumer tastes and habits.

So far we have discussed the changes in distribution of the Indian working force according to our first attribute. But we need to mention here some important changes that have occurred within the core sector. The core sector is evidently constituted of the primary and secondary sectors in the Clark-Kuznets classification. And we have already discussed the implication of the observed changes of distribution of the Indian working force between these constituent part of the core sector. Besides those changes, an important changes has been occurring within the manufacturing activities. We are referring here to the significant growth in factory employment which has grown, as a percentage of non-agricultural labour force from 1.30% to 7.66%. As a fraction of employment in manufacturing, it has grown from a mere 4.10% in 1901 to 21.62% in 1961. But this growth has occurred not at the expense of agricultural employment but only at the expense of artisans and independent makers and sellers. So long with a slow process of industrialisation measured only in terms of relative magnitude of manufacturing employment, there has been occurring a process of destruction of independent and petty commodity producers and artisans. On the basis of this

observation, it is possible to put forward a hypothesis that Indian bourgeoisie has not experienced any serious contradiction with the dominant agrarian classes over the issue of supply of labour to manufacturing industries since this problem of labour supply is being solved by a structural change within the existing small industrial base, by the destruction of petty commodity producers.

Table Cs give the distributions of the Indian non-agricultural working force according to our second attribute, cross classified by our first attribute. From the tables we can see that between 1901 and 1961, there has been little change in the relative magnitude of persons at various levels of hierarchy, within work-organisation. The one group which has increased its relative position within the total non-agricultural working force is the group of semi-skilled mental labourers, which includes clerks, technicians etc. But within different sectors of activities, there has been some restructuring of hierarchy, which essentially reflect the changing nature of organisation of non-agricultural production.

Within the core sector, in 1901, almost all (99.4%) of engaged persons were manual labourers (skilled, semi-skilled and unskilled). In 1961, the corresponding figure was 93.9% indicating some growth of non manual labourers within the core sector. In fact, professional and skilled mental labourers, as a percentage of total engaged persons in the core sector increased from 0.2% in 1901 to 0.6% in 1961 and semi-skilled mental labourers increased from 0.4% in 1901 to 4.0% in 1961.

In the ancillary sector, we find a reverse picture. In 1901, 95.2% of engaged persons in this sector were managers, working proprietors etc. while only 2% were manual labourers. But in 1961, 28.9% of engaged persons in this sector were manual labourers and only 63.3% of engaged persons were in the category of managers, working proprietors etc.

The above changes in the core and ancillary sector lends support to our earlier contention that within the non-agricultural part of the economy, there has been a shift of workers from traditional work organisations based on traditional technique and non-wage labour to modern work organisation based on modern techniques requiring skilled mental labourers and also based predominantly on wage labour. In other words petty commodity producers and petty traders are gradually being eliminated from the non-agricultural economy.

Table Ds show the distribution of individuals according to their nature of relationship to the means of production (our third attribute). From the table we can see that upto 1961 employers and employees together constituted a less than a third of total earners and there has been a remarkable stagnancy in the number of persons belonging to the wage labour system upto 1961. But between 1961 and 1971 there has been a sharp escalation in the number of persons belonging to the wage labour system. This has been principally due to the rise of agricultural labourers. How much of this rise has been due to redefinition of the census categories and how much due to real increase in the size of agricultural labour force

is a pertinent question and we need not stop here to get into that issue. We, however, can obviously note the straight forward fact that the wage labour system is still not the dominant mode of labour system in the Indian economy as a whole.

In table D.2 we have classified only the non-agricultural part of the economically active population, according to the system of labour involved, cross classified by the sectors of activity. It can be seen from the table that, within the wage labour system, the core sector accounted only for 8.4% of the occupied population in 1901. But it should be remembered that the unclassified section of these in the wage labour system consisted mostly of the so called 'general labourers'. Since we have decided earlier not to distribute individuals falling under this category into agricultural and non-agricultural part, it may be true that we are actually underestimating the share of the core sector in the work force participating in the wage labour system. Had we excluded the 'general labour' category in toto, then the share of the wage labour system as a whole would have gone down much, from almost 40% to 22.4% of total non-agricultural economically active population. It can be also seen from the table that in 1961, within the non-agricultural part of the economy, the wage labour system has gained predominance, and within the wage labour system, the core sector has become overwhelmingly dominant.

Finally, we need to find out the distribution of the non-agricultural work force between organised (in our sense) and unorganised sector. Such data being not available, we have reproduced from the 1971 establishment tables the distribution of non-agricultural work force between organised and un-organised sectors. The organised sector includes here all those who are engaged in establishments employing more than ten employees. Obviously our organised sector should be a proper subset of this organised sector. It is obvious from the table 2E that even in 1971 most of the non-agricultural work force were in the unorganised sector. This implies that the classes associated with the organised sector primarily, are still numerically relatively insignificant.

Appendix I

A note on the Concept of Surplus

The notion of surplus, as we have already noted, is extremely important for the classification of activities for our purpose. So it will be worth our while to give some explanation about it.

A recent text book defines surplus as, "the volume of commodities over and above that required to support the workers who produced it." ^{1/} This notion of surplus is essentially the one that had been implicitly employed by classical political economists, starting with Smith and Ricardo. Marx essentially took up this definition but gave a completely new orientation to it.

Implicit in the above definition is the assumption that there exists a socially determined minimum level of subsistence of direct producers and surplus is what is produced above that 'minimum level'.

It has been, however, argued by Polanyi and others that there exists no absolute concept of surplus, as there does not exist any absolute 'minimum level of subsistence'. "A given quantity of goods or services' according to those authors, "would be surplus only if the society in some manner set these quantities

aside and declared them to be available for a specific purpose'.^{2/}
 These authors view surplus as a purely institutional concept and a part of the social product becomes social surplus because society names it so. Hence the question whether a particular activity can generate surplus or not has no meaning from this point of view.

Marx provided a more precise formulation of the substance and form of surplus, though only in the context of a capitalist economy. According to Marx, social produce is the sum of exchange values, which is necessary social labour materialised in commodities. Surplus exists only in the form of surplus value, which the direct producers produce over and above what is necessary to reproduce the existing conditions of production including their labour power.

This definition of surplus, or rather surplus value, however, does not say anything about how to determine whether any particular economic activity generates surplus or not. Even among the marxists there is little agreement about the status of different activities in the process of surplus generation within a capitalist economy. Marx's own standpoint has been interpreted differently by different authors.^{2/}

In the Theories of Surplus Value Marx carried out a lengthy discussion on Smith's two concepts of productive and unproductive labour. Marx there clearly rejected one definition and accepted another. According to Smith's first definition the productive labour is that "sort of labour which adds to the value of the subject upon

which it is bestowed" ^{4/} and the unproductive labour has 'no such effect". That Marx accepted this view as the correct one is evident from the numerous passages in the chapter under discussion. To quote one, - "The determinate material form of the labour, and therefore of its product, in itself has nothing to do with this distinction between productive and unproductive labour. For example, the cooks and waiters in a public hotel are productive labourers in so far as their labour is transformed into capital for the proprietor of the hotel". ^{5/} "A writer is a productive labourer not in so far as he produces ideas, but in so far as he enriches the publishers who publishes his works". ^{6/}

But Smith gave another definition of productive labour, as the labour which, "fixes and realizes itself in some particular subject or vendible commodity which lasts for some time atleast after the labour is past". ^{7/} Marx rejected this second definition of Smith by saying -, "the designation of labour as productive labour has absolutely nothing to do with the determinate content of the labour, its special utility, or the particular use value in which it manifests itself". ^{8/}

But there are cases when exchange of labour against capital does not by itself signify that labour is productive. For example, let us consider the case of merchant's capital. According to Marx, no value and hence no surplus value can be created in the process of circulation. And hence, "commercial worker produces no surplus value directly... but adds to the capitalist's income by helping

him to reduce the cost of realising surplus value, in as much as he produces partly unpaid labour".^{9/} So commercial workers should be looked upon as unproductive labour. Wage earners in banking and finance also are in the same category.

What we really want to point out is that a mere existence of capital-labour relation in any activity does not imply that labour employed in that activity is productive, in a surplus value creating sense. We need to have some prior notion about whether any value can be created in a particular activity or not. According to Marx, value is created only in production. That brings us to the question, what constitutes production. Is any thing that is produced as a commodity in an exchange economy to be regarded as production? If that is so, why cannot we take an advertising agency as producing a commodity, that is advertising copy.^{10/} In fact, there can hardly be any apriori rules to determine whether a particular economic activity is surplus generating, except in some unambiguous cases like real estate dealing. Therefore, we need to have a prior notion about this aspect of any economic activity.

We should remember that one analytical utility of the category surplus is that the volume of surplus available to an economy actually determines the growth potential of the economy under a given institutional arrangements of production. So from the point of view of development of social production, we take the prior notion that surplus is generated only in the sphere of material production.

Appendix II

Notes to tables A to Es

Data Source

The source of our data has been various census volumes. We have used mainly two census years for studying evolution of the labour force structure, namely 1901 and 1961. The choice of these two years bears no particular significance and has been dictated only by the availability of proper data. Only in these two census years, a classification of working individuals by occupation has been given. Moreover, 60 years is a moderately long period to indicate any change that has been taking place within the structure of labour force of a country.

Comparability of the data of the two census years

Between 1901 and 1961, changes had taken place in the geographical coverages and conceptual categories employed in the respective census operations. We indicate below the measures we have taken to render census figures of the two years comparable.

Geographical coverage: The geographical boundary describing India had changed between 1901 and 1961. So a direct comparison of two census figures is ruled out. In 1901, census volumes did not give a detailed classification of working individuals by occupation for each district or province and so it is not possible to directly eliminate the figures for these districts or areas which are

outside the boundary of present day Indian Union. Daniel Thorner constructed a comparable series of the working force figures for the present day India Union from 1911 to 1951, except for 1941.^{1/} He also provided a classification of the working force of the Indian Union for these four years by broad industrial divisions. We have calculated the correction factors implicit in his calculations for the changes in geographical coverage for these broad industrial divisions. Thus correction factor for an activity division, say, Agriculture for a particular year, say 1911, has been calculated in the following manner:

Correction factor for Agriculture in 1911

$$= \frac{\text{Workers in Agriculture in Daniel Thorner's series for present day Indian Union in 1911}}{\text{Workers in Agriculture for the entire India (including Burma and Pakistan) in 1911}}$$

Since no correction factor is available directly for 1901, we have taken the average of the correction factors for 1911, 1921 and 1931 as also applicable for 1901. Now applying these correction factors. We have calculated a comparable figure for each occupation for the year 1901. For any particular occupation we have used the correction factor calculated for the industrial division to which the occupation concerned belongs

Changes in the definition of 'workers': In 1901 census, we find the term 'Actual workers' which included the entire economically active population having some income of their own. In 1961, however, the

term 'worker' has been defined to include every one who was gainfully employed in some productive occupation. If some of the 'actual workers' in 1901 are excluded, the two terms become readily comparable.

The categories that should be thus excluded from the body of 'actual workers' are (i) Agricultural rent receivers (ii) Persons having disreputable occupation i.e. beggars, ragrants, prostitutes, other rent receivers etc. In our classification of activities, the later group (i.e. persons with disreputable occupation) is included in the unproductive part of the economically active population, though the term is rather unsatisfactory in its implied value judgement. However, we do not exclude agricultural rent receivers from the agricultural working force, the simple reason being that Agricultural rent receivers are as much a part of the production system obtained in agriculture as capitalist in industry is a part of the non-agrarian capitalist sector. Moreover, after the Zamindari Abolition Act very few persons would really describe themselves as pure agricultural rent receivers in 1961 and hence the so called 'unproductive occupation' would remain quite comparable between 1901 and 1961.

Construction of Tables

Table A: The entire working force for 1901, 1951, 1961 and 1971 are distributed into three broad sections, namely primary, secondary and tertiary. The working force for each year comprises the following categories.

1901:- All actual workers, corrected for the changes in coverages. Since we have applied the correction factor to each occupation individually the total of working force obtained in our calculation is not exactly equal to that obtained by Daniel Thorner. But the error (5 lakh) is negligible.

1951:- All self supporting person (except those in unproductive occupations), including the agricultural rent receivers and all earning dependents are included in the working force. All workers are included in the working force for 1961 and 1971 .

The unproductive occupations are treated separately for each year and are not included in the working force. The primary sector includes Agriculture and Fishery. The secondary sector includes construction, mining, manufacturing, transport and communication. The tertiary sector includes the rest of the working force. The details of individual industries belonging to each broad sector is discussed in the paras related to the construction of table Bs.

Table Bs: In table B's we give the distribution of working force in broad activity groups. They are described below:

Core:-1901 - In this, we have included the following categories.

i) Agriculture and fishing - which include the entire order called Agriculture and Pasture, with the following additions and subtraction. The following occupations have been added to Agriculture.

| <u>Serial No. in Census occupation list</u> | <u>Name of the occupation</u> |
|---|--|
| 79 | Fishermen and fish |
| 131 | Toddy drawers |
| 259 | Silkworm rearness and gathers |
| 349 (a) | Fitch and bark collector |
| 358 | Lack collector |
| 360 | Wax hones and forest produce collector |
| 78 | Cow and buffalo keeper |
| 83 | Collection of edible bride |
| 149 | Hay grass & fodder makers and sellers |
| 354 | Camphor gum & India rubber collector |

The following occupation are excluded from the Agriculture

| | |
|----|--|
| 57 | Clerk, bailiff and petty rent collectors |
| 58 | Director of Ag. and their staff |
| 59 | Forest officers |
| 60 | Forest rangers, guards, peons |

ii) Manufacturing - It includes all makers and sellers and factory employment.

iii) Mining

iv) Construction workers, excluding general labourers but including earth diggers etc.

v) Transport and communication workers.

1951:- The broad divisions are same as in 1901. In Agriculture we include all the agricultural rent receivers (i.e. self supporting persons and earning dependent in livelihood class IV).

The earning dependent are included in the livelihood classes describing their principal means of livelihood.

We have not tried to redistribute the earning dependents in livelihood class VIII, for which no detailed industrial classification are available.

1961 & 1971:- The same broad division in 1901 are included in core.

The entire household industries are included in core. The Agriculture consists of

- 1) Cultivators
- 2) Agricultural labourers
- 3) Division C in the distribution of persons at work other than cultivation.

The manufacturing consists of the entire division 2 & 3 and also the workers in Electricity and gas supply.

Ancillary: This includes all the workers in Trade and Commerce for all the census years. For 1961 & 1971, it also includes the group called business services.

Organised services: This includes Medical & Health, Education and Sanitary services for all the census years. For 1901 it also includes sweepers and scavengers. For later it years, it includes sanitary services and water supply.

Unorganised services: For 1901 it includes the following occupations - Indoor servants, groom, doorkeepers, cooks, water carriers, barbers, shampooes, washermen, and unspecified domestic servants and persons in non-domestic service establishments. For later years, it includes the industrial group called personal services and services by

Restaurants, Hotels etc.

State: For 1901, it includes all the workers in public force and administration and also those workers that we have excluded from Agriculture. For later years, this includes the industrial groups called public administration (including army and police.).

Ideological services: In 1901, this includes all workers in religious services and authors, editors, journalists, musicians. In later years, it includes religious and welfare services, recreational^{and} community welfare services. Unclassified occupations in 1901 includes general labourer and those actual workers who have not been classified in any of the above groups of activity. For later years, we have included all the workers who have not been included in the above 6 groups in the category called unclassified.

Unproductive occupation: In 1901, this includes distreputable occupation and persons living on non-agricultural rent, pensions, state allowances etc. For other years, this category includes persons having independent means of livelihood but not included in the category 'worker' - i.e. person of independent means and rentier, Beggars, Vagrants, Prostitutes etc.

Table Cs: In table Cs, we have classified the non-agricultural working force according to the position of working individuals in the hierarchy of the labour process, for the two years 1901 and 1961. The occupation included in each category are described below:

1901:- Skilled mental labourers include, 'superior' category of workers in factory sector. This category also included directors and managers for 1901, but we have not been able to separate them from technically qualified professional persons and hence taken the whole category to denote only the skilled mental labourers. Similarly 'superior' category in transport and communication is included here. Barrister and other qualified law workers, authors, journalists, medical practitioners (diploma holders plus non diploma holders) artists, priests, astrologers, religious mendicants, painters, sculptors, engineers, architects are included in this category.

In the semi skilled mental labourer category are included - draftsmen, technicians and all types of clerical workers, including village accountants. In the skilled and semi skilled manual labourers category are included - makers and sellers, factory workers, masons, thatchers, miners, other railway staff, cart owner and drivers, workers in dockyard, harbour and ships, workers in non-domestic service establishments and barbers, washermen, cooks, gardener. Unskilled manual labourers include porters, weighmen, earth workers and diggers, general labourers, sweepers and scavengers, shop keepers servants, peddlars and hawkers, unskilled workers in religious services and others in domestic services.

1961:- We follow almost similar classification as in 1901. However, in this year, we have been able to separate the directors, managers and working proprietors from the skilled professionals. All technicians are put in the semi-skilled mental labourer category.

Table Us: The wage labour system is defined to include all persons who either employ others as wage labourers or are employed by others as wage labourers. For 1901, we do not have any information on the number of employers or employees. So from the title of the occupations we have decided on their employment status. For some occupations, there will be no ambiguity in this method. But, we will not be able to estimate the number of employers in this method.

In 1901 the following occupational categories were included in the wage labour system.

1. Agricultural Labourers
2. Plantation Workers and managers
3. Superior and subordinate employees in factories
4. Miners
5. Construction workers
6. Railway workers
7. Tram, dockyard labourer, shipping clerks, harbour workers
8. Post Office, Telegraph workers,
9. Porters, weighmen and watchmen
10. Labour contractors
11. Clerks in Engineering offices
12. Merchant's clerks
13. Shopkeeper's servants
14. Domestic servants
15. Other law service workers
16. Workers in non-domestic service establishment
17. All worker in education
18. Scientists, Civil Engineers and Surveyors
19. All workers in public force and administration
20. Sweepers and scavengers. Rest of the actual workers except unproductive workers are included in the other labour system. For later years, we have data on employment status of workers other than those engaged in cultivation. For these years we have treated agricultural labourers as part of the wage labour system.

Table A

Sectoral Distribution of the Working
force in India

(Figures in thousands)

| Sectors | Years | | | |
|------------------------|--------------------|--------------------|--------------------|--------------------|
| | 1951 | 1957 | 1961 | 1971 |
| Primary | 78140 (67.53) | 104868 (74.22) | 138464 (73.39) | 130981 (72.57) |
| Secondary | 13964 (12.07) | 18482 (13.08) | 23207 (12.30) | 24166 (13.39) |
| Tertiary | 23612 (20.40) | 17950 (12.70) | 27005 (14.31) | 25338 (14.04) |
| Total working force | 115716 (100.00) | 141300 (100.00) | 188676 (100.00) | 180485 (100.00) |

Source: Census for different years

- Note: 1. For definition etc. see the appendix II.
2. Figures in brackets give percentage to the column totals respectively.

Table B.1

Distribution of Economically Active Population in various activity groups in 1901, 1951, 1961 and 1971

(Figures in lakhs)

| Activity groups | Year | | | |
|----------------------------------|------|------|------|------|
| | 1901 | 1951 | 1961 | 1971 |
| Core | 921 | 7104 | 1617 | 1551 |
| Ancillary | 62 | 68 | 78 | 89 |
| Necessary services | 10 | 15 | 29 | 45 |
| Personal services | 41 | 30 | 42 | 44 |
| Civil Administration and Defence | 20 | 22 | 34 | 50 |
| Ideological services | 12 | 9 | 8 | 7 |
| Unclassified | 86 | 65 | 79 | 19 |
| Sub total | 1152 | 1413 | 1887 | 1805 |
| Unproductive | 22 | 10 | 30 | 33 |
| All Total | 1174 | 1423 | 1917 | 1838 |

Source: Census volumes for respective years

Notes : For the method of construction see the accompanying text and appendix II.

Table B.2

Distribution of economically Active Population
in various activity groups in 1901,
1951, 1961 and 1971

(in percentage)

| Activity groups | Years | | | |
|-------------------------------------|--------|--------|--------|--------|
| | 1901 | 1951 | 1961 | 1971 |
| Core | 78.45 | 84.61 | 84.35 | 84.38 |
| Ancillary | 5.28 | 4.78 | 4.07 | 4.84 |
| Necessary services | 0.85 | 1.05 | 1.51 | 2.45 |
| Personal services | 3.49 | 2.11 | 2.19 | 2.39 |
| Civil Administration and Defence | 1.70 | 1.55 | 1.77 | 2.72 |
| Ideological services | 1.02 | 0.63 | 0.42 | 0.38 |
| Unclassified | 7.32 | 4.57 | 4.12 | 1.03 |
| Sub total | 98.11 | 99.30 | 89.43 | 98.19 |
| Unproductive | 1.89 | 0.70 | 1.57 | 1.81 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Same as in B.1

Note : For the method of construction see the accompanying text and appendix II.

Table B.3

Industrial distribution of working force in India in 1901 and 1961

(Figures in thousands)

| Industrial categories | Year | | Growth factor | Percentage of working force in 1901 | Percentage of working force in 1961 |
|--|--------|--------|---------------|-------------------------------------|-------------------------------------|
| | 1901 | 1961 | | | |
| 1. Total population | 238175 | 438937 | 1.84 | | |
| 2. Working force | 115716 | 188676 | 1.63 | | |
| 3. Agriculture & fishing | 78051 | 137546 | 1.76 | 67.45 | 72.90 |
| 4. Mining | 89 | 918 | 10.31 | 0.08 | 0.49 |
| 5. Manufacturing and repairs | 11997 | 18127 | 1.49 | 10.37 | 9.61 |
| 6. Construction | 853 | 2060 | 2.41 | 0.74 | 1.09 |
| 7. Trade and Commerce | 6150 | 7654 | 1.24 | 5.32 | 4.11 |
| 8. Civil Administration & Defence | 2045 | 3394 | 1.66 | 1.77 | 1.80 |
| 9. Education | 141 | 1811 | 12.84 | 0.13 | 0.96 |
| 10. Medical and Health | 157 | 645 | 4.11 | 0.13 | 0.34 |
| 11. Services by domestic servants (cools etc.) | 1820 | 1555 | 0.85 | 1.57 | 0.82 |
| 12. Services of barbers, hair dressers washmen | 2231 | 1820 | 0.81 | 1.93 | 0.96 |
| 13. Legal services | 55 | 134 | 2.44 | 0.05 | 0.67 |
| 14. Entertainment services | 265 | 292 | 1.10 | 0.03 | 0.15 |
| 15. Non domestic establishments like restaurants, eating houses, boarding etc. | 30 | 805 | 26.83 | 0.03 | 0.43 |
| 16. Transport and communication | 1114 | 3020 | 2.71 | 0.96 | 1.60 |
| 17. Sanitary services | 642 | 411 | 0.64 | 0.55 | 0.22 |
| 18. Religious services | 885 | 448 | 0.51 | 0.76 | 0.47 |
| 19. Other including those without having any specified occupation | 9178 | 8036 | 0.88 | 7.93 | 4.26 |

Source : Same as in B.1
 Note : As in table B.1

Growth factor = $\frac{1961 \text{ figure}}{1901 \text{ figure}}$

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Table C.1

Distribution of non-agricultural working force by broad occupational characteristics and activity groups

(Figures in thousands)

| Sl. No. | Broad occupational categories | Year | | | | | | | |
|---------|--|-----------------|------|-----------|------------------|----------------|-----------|-----------------|------------------|
| | | 1961 | | | Total | 1961 | | | |
| | | Activity group | | | | Activity group | | | |
| Core | Ancillary | Other non-cores | Core | Ancillary | Other non-cores | Core | Ancillary | Other non-cores | |
| 1. | Working proprietors, directors, managers, etc. | a. | 5856 | n.a | 5856 (16.13) | 357 | 4819 | 1575 | 6551 (13.70) |
| 2. | Skilled mental labourers | 51 | - | 1130 | 1181 (3.25) | 145 | 16 | 1288 | 1449 (2.94) |
| 3. | Semi-skilled mental labourers | 79 | 171 | 802 | 1052 (2.90) | 931 | 573 | 3102 | 4606 (9.35) |
| 4. | Skilled and semi skilled manual labourers | 12035 | - | 1930 | 14765 (40.67) | 18705 | 156 | 112 | 19981 (40.55) |
| 5. | Unskilled manual labourers | 8937 | 123 | 4392 | 13452 (37.05) | 3255 | 2047 | 11190 | 16492 (33.47) |
| | Total | 21902 | 6150 | 8254 | 36306 (100.0) | 23393 | 7611 | 18275 | 49279 (100.0) |

Source: Same as in table B.1

Note 1. Figures in brackets give percentage to the column total.
For details see the appendix.

Table C.2

Mental and Manual labourers as percentage of non-agricultural economically active population in 1901 and 1961

(Figures in percentage)

| Types of labour | Year | |
|---------------------|--------|--------|
| | 1901 | 1961 |
| 1. Mental labourers | 6.13 | 11.67 |
| 2. Manual labourers | 76.98 | 75.47 |
| 3. Unclassified | 16.89 | 12.86 |
| 4. Total | 100.00 | 100.00 |

Source: Census 1901 and 1961

Note : For details see the text in appendix II.

Table C.3

Growth of some selected occupation in India between 1901 & 1961

(Figures in thousands)

| Name of the occupation | 1901 | 1961 | Growth factor |
|--|------|------|---------------|
| 1. Traders (working proprietors only) | 5438 | 4689 | 0.9 |
| 2. Peddlers and hawkers | 36 | 800 | 22.22 |
| 3. Skilled Mental labourers | | | |
| a) Doctors | 92 | 242 | 2.6 |
| b) Engineers, Scientists, architects etc. | 7 | 388 | 55.4 |
| c) Lawyers, Barrister etc. | 16 | 67 | 4.2 |
| d) Artists, authors, editors, journalists | 216 | 193 | 0.9 |
| e) Teachers | 139 | 1582 | 11.4 |
| 4. Clerical workers | 859 | 1934 | 2.3 |
| 5. Religious preachers etc. | 750 | 392 | 0.5 |
| 6. Science and Engineering technicians | 5 | 60 | 12.0 |
| 7. Health service, technical workers including nurses, midwives etc. | 64 | 323 | 5.0 |
| 8. Manual labourer | | | |
| a) Factory workers | 492 | 3918 | 8.0 |
| b) Artisans | 2449 | 2273 | 0.8 |
| c) construction workers, including general labourers in 1901 | 853 | 1304 | 1.5 |
| d) Sweeper and scavengers | 679 | 802 | 1.2 |
| e) Domestic servants | 1820 | 1533 | 0.8 |

Source: Same as in table B.1 Growth factor = $\frac{1961 \text{ figure}}{1901 \text{ figure}}$

Table D.1

Distribution of economically active population
according to modes of labour involved
(percentage)

| Year | Wage Labour system | Other Labour system | Outside any Labour system | Total |
|------|--------------------|---------------------|---------------------------|--------|
| 1961 | 25.88 | 71.82 | 2.30 | 100.00 |
| 1951 | 29.46 | 69.58 | 0.96 | 100.00 |
| 1961 | 29.20 | 68.53 | 2.27 | 100.00 |
| 1971 | 42.94 | 53.28 | 3.78 | 100.00 |

Source: Census for different years

Note: 1. See the text and appendix II.

2. "outside any labour system" include unproductive occupation only.

Table D.2

Distribution of Non-agricultural work force
by activity groups and system of labour
involved
(figures in thousands)

| Activity groups | Year | | | |
|----------------------|--------------------|---------------------|--------------------|---------------------|
| | 1961 | | 1961 | |
| | Wage labour system | Other labour system | Wage labour system | Other labour system |
| Core | 1242 (8.82) | 12836 | 11026 (73.27) | 4022 |
| Ancillary | 258 (4.20) | 5892 | 2928 (37.90) | 4797 |
| State | 2048 (100.0) | - | 3391 (99.91) | 3 |
| Organised services | 843 (82.32) | 141 | 2484 (86.64) | 383 |
| Unorganised services | 1820 (44.29) | 2289 | 2214 (50.79) | 2145 |
| Ideological services | 135 (12.26) | 966 | 531 (40.08) | 394 |
| Unclassified | 8375 (98.18) | 755 | 1352 (17.41) | 6415 |
| Total | 14721 (39.79) | 22279 | 23926 (56.85) | 18159 |

Source : Same as in B.1. For details see the appendix II.

Note: 1. Wage labour system includes employers and employees.

2. Other labour system includes self employed and family workers.

3. Figures in brackets refer to percentage of row totals for respective years.

Table E

Distribution of non-agricultural work force
between organised and unorganised sector in
different industries year 1971

(Figures in lakhs)

| Name of the Industry | Organised sector | Unorganised sector | Share of the unorganised sector (percentage) |
|---|------------------|--------------------|--|
| 1. Mining and quarrying | 0.75 | 7.82 | 91.2 |
| 2. Manufacturing and repair | 56.04 | 113.19 | 66.9 |
| 3. Electrical, gas and water | 1.70 | 3.50 | 67.3 |
| 4. Construction | 0.62 | 20.89 | 97.1 |
| 5. Trade and commerce | 13.64 | 86.99 | 86.4 |
| 6. Transport, storage and communication | 7.77 | 48.94 | 86.3 |
| 7. Services | 42.76 | 89.39 | 67.6 |
| Total | 132.28 | 370.72 | 73.7 |

Source: Census 1971 Established tables.

Note: Organised sector includes all those who are working in establishments employing more than 10 people

Foot Notes

- 1/ For a review of the literature see the article by Robert W.Hodge & Paul M.Siegel: "The measurement of social class" in International Encyclopedia of the Social Sciences (ed.) by David C.Sills: The Macmillan Company & The Free Press, 1968.
- 2/ The most important among these studies are: Colin Clark: Conditions of Economic Progress, 3rd Ed., Macmillan, London, 1957.
 Simon Kuznets: "Quantitative Aspects of the Economic Growth of Nations II, Industrial Distribution of National Product and Labour Force", Economic Development and Cultural Change (July 1957 supplement),
 :Six Lectures on Economic Growth, Glencoe, Free Press, 1959.
 Chenery H.E.: Patterns of Industrial Growth, American Economic Review, September, 1960.
- 3/ See Simon Kuznets: Economic Growth of Nations, Harvard University Press, 1971, p.201.
- 4/ Marx used two expressions "division of Labour in manufacture" and "division of labour in society". Division of labour in society refers to the "tying down of Individuals to a particular calling" whereas division of labour in manufacture refers to the division of work process resulting in a particular commodity to a number of sub processes requiring employment of different individuals. (See Marx: Capital, Volume 1, Moscow edn. 1965, p.350-359). We are using the terms technical and social division of labour with a different connotation. While by the technical division of labour we understand the division of labour that are technically determined and as such transcends institutional boundaries, by social division of labour we understand that aspect of division of labour which are institution specific.
 In reality these two divisions are always intertwined with each other. See Adolfo Carchedi: On the Economic Identification of Social classes, Routledge & Kegan Paul (Direct Edn) London 1977 P.58
- 5/ For a discussion of changes of such service industries in respect of U.S. economy see the article by David Weintraub and Harry Magdoff: "The service industries in relation to employment trends" in Econometrica, Vol.8, October, 1940, p.289-311.

- 6/ This happens as the productivity in the commodity handling functions of the distributive trades increase much more slowly than in the commodity producing industries, see Weintraub & Magdoff: *ibid.*, p.297.
- See also George J. Stigler: *Trends in Employment in the Service Industries*, Princeton, 1956.
- 7/ See George J. Stigler: *ibid.*, and also R.R. Bauer and E.S. Yamey: "Economic Progress and Occupational Distribution" *Economic Journal*, Vol.59 (December 1951), p.629-31.
- 8/ In the early phase of capitalism, however, there was a spurt in the number of domestic servants. In Britain, for example, the "domestic servants increased as a percentage of the total labour force throughout nineteenth century whereas, proportionally and absolutely they have declined in the twentieth" - vide C.M. Cipolla (ed.) *The Fontana Economic History of Europe*, Vol.3, p.383.
- In Charles Booth's study of occupational structure of Britain, there does not emerge such a clear trend, but there is definitely an absolute amount of growth in the number of domestic servants and the percentage increase in comparable to the percentage increase in the total labour force - See Charles Booth's article in *Journal of Statistical Society*, England, June 1866, p.414.
- 9/ For the methodology involved see Paul K. Hatt: "Occupation and Social Stratification": *American Journal of Sociology*, Vol.55, No.6 (May 1950), p.533-543.
- For a general review see: Carlo L. Lastraucchi: "The status of occupational Research", *American Sociological Review*, Vol.11, No.1, (February 1946), p.78-84.
- For, an actual illustration of this method See Warner W. Lloyd (ed.): *Democracy in Jonesville*, New York, Harper & Row, 1949.
- For an excellent critique of these studies see Lipset SM & R. Bendix: "Social Status and Social Structure", *British Journal of Sociology*, Vol.2 (1951)
- 10/ Quoted in G.D.H. Cole: *Studies in class structure*, Routledge & Kegan Paul, London, 1964, p.55-56.
- 11/ *ibid.*, p.57
- 12/ Alba M. Edwards: *Comparative occupational statistics for the United States (16th census, 1940)*, Washington, D.C., 1943.

- 13/ Moser, C.A. & J.R.Hall: "The Social grading of occupation" in D.V. Glass (ed.), *Social Mobility in Britain*, New York, The Free Press, 1954, pp.29-50
- 14/ For a detailed methodological statement of such approach see Lloyd Warner, Marchia Meeker & Kenneth Eccles: *Social Class in America* (Chicago: Science Research Associates, 1949). Most of these studies are based on opinion research survey, carried out by National Opinion Research Center, United States.
- 15/ Recently Prazeworski et.al have used a multi-dimensional approach to study the evolution of class structure in France with the French Census data: See Adam Frazeworski, B.R.Rubin and E.Underhill: 'Evolution of the Class structure of France 1901-1968' in *Economic Development and Cultural Change*, Vol.28 (July 1980), p.701-724.
- 16/ A classic description of the development of a class of free wages labourers by disbanding the feudal system of production in Agriculture can be found in Marx: *Capital*, Vol.1, Chapter 26 on, "The so-called Primitive Accumulation". See also Maurice Lobb: *Studies in the Development of Capitalism*, Routledge and Kegan Paul Ltd., 1963, p.221-254.
- 17/ See the discussion on the criteria involved in segregating services from other goods producing activities in T.P. Hall: "On goods and services" in Review of Income and Wealth, December 1977, No.4, p.315-318.
- 18/ Quoted from Paul Studenski: *The Income of Nations, Part Two Theory and Methodology*, New York, University Press, New York, p.25
- 19/ *ibid.*, p.25
- 20/ For an interesting discussion on the concept of economy itself see, Maurice Godelier: *Rationality and Irrationality in Economics*, New Left Books, London, 1972, p.251-257.
- 21/ The subject of relation of production in Indian agriculture has been debated in the pages of *Economic and Political Weekly*, Bombay. For a detailed bibliography see Abhijit Sen: "Market failure and control of labour power: towards an explanation of 'structure' and change in Indian agriculture" Part 1 & 2, Cambridge Journal of Economics, 1981, Vol.5, No.3 and 4.

- 22/ For an explanation of the relatively large ancillary in underdeveloped countries in the same vein see Surinder K.Mehta: "A comparative Analysis of the Industrial structure of the Urban Labour Force of Burma and the United States" - Economic Development and Cultural Change, Vol.9, January 1961, p.164-179.
- See also Simon Rotenberg: "Note on 'Economic Progress and occupational distribution'", The Review of Economics and Statistics, Vol.35 (May 1953), p.168.
- 23/ Bauer F.T. & Yamey B.S. (op.cit.), p.744-46.
- 24/ Thus Marx has written, "The independent and predominant development of capital as merchant's capital is tantamount to the non-subjection of production to capital and hence to capital developing on the basis of an alien social mode of production which is also independent of it. The independent development of merchant's capital, therefore, stands in inverse proportion to the general economic development of society" (Capital, Vol.3, Moscow, 1974, p.327-28)
- 25/ For role of army in third world countries see Crouch H: The Army and Politics in Indonesia: Cornell University Press, 1978 and Gavin Kennedy: The Military in the Third World (New York: Charles Scibner 1974).
- 26/ For a highly abstract treatment of the concept of ideology see L.Althusser: "Ideology and Ideological State Apparatuses" in Lenin and philosophy and other Essays, London, 1971. See also Joe McCarney: The Real World of Ideology: Harvester Press, 1980.
- 27/ About the class basis of different educational policies see Bill Williamson: Education Social Structure and Development, Macmillan, London, 1979.
- 28/ For the role of religion as an ideological weapon in class struggle see R.H.Tawney: Religion and the rise of Capitalism, Harmondsworth, Penguin (paper back). and also see Donald E.Smith (ed.): Religion, politics and Social Change in the Third World, The Free Press, New York, 1971. For a materialist interpretation of the Indian religious tradition and culture. See D.D. Kosambi: Myth and Reality, Popular Prakashan, Bombay, 1962.

- 29/ See Weintraub & Magdceff (op.cit.), p.305-307 and also George J.Stigler (op.cit.), Table 3, page 6.
- 30/ For a short history of the changing structure of the domestic service see, the 1st chapter in A.M.Mehta: The Domestic Servant Class, popular Book Depot, Bombay, 1960.
- 31/ Quoted from Harry Braverman: Labour and Monopoly Capital, Social Scientist Press, Trivandrum, 1979, p.431
- 32/ For a theoretical treatment of the two types of ownership in a capitalist economy see Charles Bettelheim: Economic Calculations and Forms of Property, Routledge and Kegan Paul (Direct edn.), 1976, p.73-75.
- 33/ The idea of separation of ownership and control in large U.S. Corporations was first proposed by A.A.Berle and G.Means: "The Modern Corporation and Private Property" Macmillan, New York, 1967. But recently M.Zeitlin has questioned whether even in U.S. such a separation is really a matter of that significances: see M.Zeitlin "Corporate Ownership and control: The Large Corporations and the Capitalist Class" in the American Journal of Sociology, Volume 79, No.5, March.
- 34/ Our estimates give only broad indications and there are number of studies giving the industrial distribution of work force: See, B.R.Kalra: "A Note on Working Force Estimates 1901-61" Appendix I of Census of India 1961, Paper No.1, 1962, p.789.414. J.Krishnamurty: "Secular Change in the occupational structure of the Indian Union 1901-61" in the Indian Economic and Social History Review, Vol.2, No.1, January 1975. Some of the problems in estimating the work Force with the Indian data has been discussed in R.Chattopadhyay: "De-industrialisation in India Re-considered" in Economic and Political Weekly, March 22, 1975, p.523-531.
- 35/ See the table C.3
- 36/ Kuznet has thus written "Thus low per capita product is associated with low productivity in most sectors, but particularly in agriculture; with a large proportion of the labour force attached to agriculture and required to feed the population, with a dominance of small individual enterprises, not only in farming and handicrafts, but also in transport, finance, and other services" from Simon Kuznets: Post War Economic Growth, Four Lectures, Harvard University Press, 1964, p.8-9.

- 37/ See Weintraub & Magdoft (op.cit.)
- 38/ For a discussion of the so-called marginalised labour Force pursuing all sorts of tertiary activities for a meagre livelihood, See A.G. Quijano: "The marginal pole of the economy and the marginalised labour force" in Economy and Society, Vol.3, 1974, p.393-420.
- 39/ According to Irfan Habib, the bulk of the official land grants in Mughal periods were given to so-called 'men of learning' and religious devotees. See Irfan Habib, Agrarian systems of Mughal India, Chapter 8 on Revenue grants.

Foot Notes to Appendix I

- 1/ Quoted from Joan Robinson and John Eatwell: An Introduction to Modern Economics, Tata McGraw Hill, New Delhi, 1974, p.14.
- 2/ Quoted from Harry W Pearson: "The Economy has no surplus" in Karl Polanyi (ed) Trade and Market in the Early Empires, The Free Press, 1957 (p.322-326).
See also the critique of Pearson's position in Marvin Harris: "The Economy has no surplus?" in American Anthropologist, Vol.61, April 1959, p.185-199.
- 3/ For a review of the debate see E.K.Hunt: "The categories of productive and Unproductive Labour in Marxist Economic Theory" in Science and Society, Vol.43, p.310-324.
- 4/ Quoted from Adam Smith: The Wealth of Nations, Every Man's Library, London, 1964, p.294-295.
- 5/ From Marx's Theories of Surplus value, Progress publishers, Moscow, 1969, p.159.
- 6/ *ibid.*, p.158
- 7/ Smith (*op.cit.*), p.295
- 8/ Capital, Vol.3, p.300
- 10/ See Hunt (*op.cit.*) p.321. Marx himself says in Results of the Immediate Process of Production" as far as the question of productive labour is concerned... The nature of these (produced) objects is quite immaterial" in Hunt (*loc.cit.*).

Foot Notes to Appendix II

- 1/ See Daniel Thorner and Alice Thorner: Census of India (1961),
Project, Indian Statistical Institute, Bombay Branch (mimeo),
1960.