CHAPTER ONE

The preoccupation has been with the quantum of surplus in agriculture, measuring it 'precisely', and prescribing means to transfer it to the state/industry, through 'Price Scissors'. Accumulation in surplus-producing agrarian economies may be understood better from the viewpoint of the social classes engaged in it, with a wider class framework than what the capital versus labour models allow.
That agricultural surplus is an important determinant of the pace of accumulation in an agrarian economy has been an enduring proposition in Economics.

In the mainstream development literature, agricultural surplus has been seen as promoting accumulation essentially in three ways. By providing capital resources to industry, which 'initially' might not have enough resources within; by providing food, the most important wage-good for industry; and, from the demand side, by providing a ready 'home market' for manufactured goods as agricultural productivity rises and agriculture sector as a whole has more to spend. The transfer of surplus from agriculture to industry could take place through manipulation of sectoral Terms of Trade against agriculture (the 'Price Scissors'), taxation of peasants' incomes, compulsory procurement of agricultural produce and/or mobilisation of their savings.

The major focus in the literature has been on extracting a capital surplus from agriculture through Price scissors which ideally ensures adequate and cheaper foodgrains as well. The idea, central in Preobrazhensky's Primitive Socialist Accumulation, and in the dualistic models in the post-war development literature, is to finance industrialisation by manipulating relative prices of food and manufactured/industrial goods. To make the agricultural producers pay more for manufactured goods, relative to their agricultural goods, thus forcing a real savings contribution from agriculture to industry. Interestingly, there has been a notable resurgence of interest in Preobrazhensky's scheme with a number of reformulations by
different scholars.

Preobrazhensky's recommendation is compelling and has a certain economic logic, but it depends crucially on peasants' market behaviour. It does not work as was pointed out by N. I. Bukharin and other participants in the Soviet debate, if farmers respond to lower prices by withholding their stocks in speculative fashion from the market or by cutting back production of food and going into other products in the long run. Indeed, contemporary developing economies' experience amply shows that peasants' market behaviour is quite complex. It is by no means obvious that the amount of food sold by the peasants, the marketed surplus, will go up with the food price. The elasticity may even be negative in the short to medium run. Only with the assumption that the elasticity of marketed surplus with respect to price is positive is it reasonable to ask how prices ought to be manipulated to make crops flow toward the city. Besides, even if it makes economic sense for an industrialising state to pay as little as possible to farmers, it may have to do so at the point of a gun and such implications were not lost on those who took over the Soviet state after the participants in the industrialisation debate were banished from the scene. As Lance Taylor puts it, Stalin's solution to Preobrazhensky's problem took a form that the nonviolent economist never thought to propose; Stalin's device was effective, and, he had the troops to make it work.

Even otherwise, the extent to which Price Scissors can be responsible for accumulation is debatable. What the empirical literature on the actual practice of development in contemporary agrarian economies has shown is that not only Preobrazhensky's price scissors can be impracticable, they are also not a good guide to whether agrarian surplus is financing industrialisation or not. Terms of Trade is not the only mechanism through which agricultural surplus could finance industrial
accumulation. Agricultural surplus could finance accumulation even if Terms of Trade favour agriculture. For, Terms of Trade favourable to agriculture may allow, at the same time, peasants to increase their consumption and savings, and possibly investments in non-agriculture. However, Terms of Trade even adverse to agriculture may leave enough scope for expansion in home market and direct investments in non-agriculture by the peasants.

The Price Scissors have tended to overplay the importance of the savings constraint of the manufacturing industry. That capital sources for industrialisation come actually from agriculture, in the sense of inter-sectoral resource flows, is a debated, unclear issue. Much less clear, in any case, than what the development literature makes it appear. Intersectoral resource flow studies are beset with technical definitions. Besides, cross-country empirical studies of industrialisation experiences suggest that in fact there is no unique pattern of net resource transfer between industry and agriculture. Most often, agriculture is neither the only nor the major source of funds for industry, suggesting that the industry, nascent or not so nascent, can grow, by and large, on its own surplus, and, possibly, by squeezing the urban industrial labour.

Former Soviet Union and Japan, the two standard cases cited for long as instances where industrialisation was financed by surplus from agriculture have themselves come to be questioned. In the case of Meiji Japan, it has been pointed out that although agriculture's net finance contribution was very high as a proportion of agricultural value added (up to 20 percent in the 1890s), it was much lower as a proportion of non-agricultural value-added, reaching a maximum of just over 8 percent during the decade immediately preceding the First World War. Net agricultural savings was only one of the sources of financing investment for the non-agricultural sector, but it
was not the only source or even the major source of financing non-agricultural investment during the critical half century of Japan's industrialisation. The same holds true for the Soviet Union during the 1920s, when investable resources to finance industrialisation were transferred from agriculture to industry by an attempt to turn the Terms of Trade against agriculture (as suggested by Preobrazhensky) and later by the collectivisation of agricultural production. It has been estimated that while there was a net resource outflow from agriculture during the First Five Year Plan period, the volume of this outflow was small compared to aggregate investment in industry. Also, it has been argued that it was food price-induced forced savings by the industrial working class that supported the Soviet investment drive of the early 1930s, in contrast to Preobrazhensky's suggestion that the Terms of Trade be shifted against agriculture to extract an investible surplus.

The evidence on China is mixed/inconclusive. Some of the more recent estimates of the intersectoral resource flow between agriculture and non-agriculture in China suggest that the net flow over the period 1952-88 was generally into, and not out of, agriculture. However, there also is a strong view that the Chinese industrialisation corresponds closely to the Preobrazhensky model; that peasants did pay for industrialisation in China, their consumption and welfare were held down by the policy of price scissors on agriculture and the investment priority for industry, and their mobility out of agriculture was restricted. However, the possibility that the sign and size of the net resource flow are sensitive to assumptions about the undistorted Terms of Trade has also been pointed out, as also the need for more empirical research to determine the relative importance of price scissors in explaining the investment rate in China, both in the pre- and post-Reform periods.
In India, since 1955-56, agriculture's net finance contribution in real terms is said to have been positive and relatively large in terms of agricultural value added, but as a proportion of the value added in non-agriculture, it reached a peak of only around 9 per cent during the early 1960s after which it declined to only 3 per cent in 1970-71\textsuperscript{21}. It has been argued that the drain of agricultural surplus up to 1963-64 led to certain imbalances which forced down industrial growth after 1965-66. And that the increasing transfer of surplus restricted the home market for industrial products in agriculture, as also agricultural investment and hence, potential agricultural growth\textsuperscript{22}.

Significantly, these country studies have raised doubts on the very validity and use of the conventional intersectoral resource flow studies, suggesting that the problems with these kind of studies may not be just methodological and definitional. The very debate about the possibility of extracting a surplus from agriculture for financing industrialisation could be false in that the proposition is almost tautological as growth process is necessarily accompanied by a differentiation in demand and increased division of labour in the economy and that will involve sectoral flows in favour of industrialisation, sooner or later. There is a wide gulf between different authors' interpretation of the optimum magnitude and direction of resource flow and the appropriate transfer mechanisms\textsuperscript{23}. Still, the point that these country studies have made fairly soundly is that the unqualified/blanket assumption that industry is constrained by the 'savings fund' may not be very realistic\textsuperscript{24}. Agriculture may provide resources, but from industry's side, it may not be a major source. Indeed, these studies have shown that even in economies where agriculture's net finance contribution has been negative, the overall savings rate has increased as a result of the rising share of industrial output in national income and the relatively fast rates of productivity growth in manufacturing\textsuperscript{25}. And, countries with a negative financial contribution of agriculture outperformed those
with a positive contribution in the task of overall savings mobilisation. That being so, it has rightly been suggested that explanation for the behaviour of the overall rates of saving and investment in these economies should be sought in factors other than those directly related to agricultural surplus mobilisation.

Industrial accumulation may proceed with alternative sources and it could be important to know those sources while addressing the question of agricultural surplus. Industrialisation may proceed, for instance, by squeezing urban proletariat. As Lance Taylor puts it, things could depend on the effectiveness of the state in coercing peasants on the one hand and the urban proletariat on the other. Urban proletariat could be squeezed through stagnating real wages. This could happen when marketed surplus is not enough and wage goods constraint operates. There is some evidence to suggest that the urban real wage did fall during some phases of industrialisation in the Former Soviet Union, even though the option of depressing the real wage of industrial workers was never considered seriously in the theoretical debate on early Soviet industrialisation. The implication is that the industrial sector itself bore part of the burden of 'financing' the cost of industrialisation. Consequently, orthodox models, cautions Bhaduri, which stipulate that the entire cost of industrialisation would be met by net resource transfer from agriculture to industry may be oversimplistic both in theory and in the light of historical experience. Byres also has pointed to this second possible source of accumulation, other than agriculture-the urban proletariat-to which the industrial bourgeoisie could resort to, in the event of the first proving recalcitrant, with the active support of any state intent upon capitalist industrialisation, via an enhanced extraction of surplus value, which would require stagnating real wages and a probable onslaught upon organised labour.
It seems that conclusions on Former Soviet Union and Japan, that industrialisation was financed by agricultural surplus in the USSR of the 1920s and 30s, and in post-Meiji Japan—the two major reference cases, most often advanced, by the Left and the Right respectively, to make the same point were drawn in haste, possibly out of ideological exigencies, given the strong ideological polarisation in the early development literature. But the treatment of the 'Western' history/experience is no better. The rich work available on the agrarian origins of industrialisation in the now developed economies of the West, especially England and other West European countries is much too sophisticated to allow conclusions the kind of which have been drawn in the development literature33. That agriculture declined in every industrialised country does not necessarily mean industrialisation built on surplus from agriculture. It is almost as if the 'development economist' has invented a history of Former Soviet Union and Japan, and of the 'West' of his own. Because it hardly matches with the good work done by historians, that continues to be ignored in the development literature34. At stake is the understanding of the agrarian origins of the (first) Industrial Revolution. At stake is the interface between Development Economics and Economic History. Development literature has been, one might say, in general, cut off from good historical work. It seems the very history is now in the process of being questioned/reinterpreted on which much of the edifice of development economics has been built. Partly, the historians themselves were wrong in their approach as they are realising now and partly he, the Development Economist, 'used' the "history" selectively and in haste35. It is important that the 'new economic historians' have not only questioned the facts, but have questioned the very way the issue of agrarian origins of industrialisation was earlier looked at36.

Apart from the questionable historical/empirical basis, and the neglect of the
alternative sources of financing industrialisation, perhaps the most serious problem with
the way the question of realisation of agrarian surpluses into industrial capital in
contemporary developing economies has been addressed, based heavily as it is on
Preobrazhensky's ideas of Price Scissors and Primitive Socialist Accumulation, is that it
is highly state-centred and is not adequate to understand the process of private capital
formation, especially from the point of view of the social classes engaged in
accumulation. Neither peasants' incentive to produce and sell nor industrialists'
incentive to invest has an adequate place in it.

There is a tendency to reduce the whole question of agrarian surpluses and
industrialisation, to a mechanical set of formulae, all to be solved nicely by the state. It is
not just that the state may not be central in the realisation of agricultural surplus into
industrial capital, even the way state is perceived as mediating between agriculture and
industry is problematic. For instance, it is not the state power that may be important in
realisation of agricultural surplus into industrial capital, even if one says nothing of the
simplistic conception of the state itself. An impression is often given as if Terms of
Trade, believed to be central in transfer of surplus from agriculture to industry, are
determined by the state power. Terms of trade favourable to agriculture are taken as a
proof that the state is weak!9

The obsession with state also means ignoring the classes/actors actually
engaged in the process of accumulation. It is pretended as if it is the state, and only the
state, that controls the flows of surplus as also the terms of exchange between
agriculture and industry. In practice, the state neither decisively controls/determines
exchange between the two sectors nor is the only major agency that mediates between
them. The state is not capable outrightly of displacing pre-existing institutions involved
in production and exchange. The very meaning of exchange relations between agriculture and industry has apparently been reduced to sectoral terms of trade, and that too determined by the state. It is a trivialisation of the complex problem of the relation between surplus generation and interests of different classes as economic agents on the scene\textsuperscript{38}.

Besides, different states like colonial and post colonial, and capitalist and socialist, and different state policies need to be distinguished\textsuperscript{39}. For instance, heavy industrialisation/import substitution strategy is one of the different development strategies followed in agrarian economies that carries with it the need to depend heavily on agriculture for food/wage goods as well as financial resources prompting state trading in foodgrains and other state interventions having implications for capital accumulation. By no means, this is the only strategy available and attempted. Nor by any means has it been noticably successful.

The state, its presence, strength/weakness, then, is not the most important variable mediating between agricultural surplus and industrialisation, or in the realisation of agricultural surplus, especially into private industrial capital, even though modern state is a powerful agency promoting accumulation in developing economies. To look at accumulation from state's point of view may not necessarily be the best way to understand it.

The state-centredness is largely an analytical hangover from the debates on Soviet industrialisation. It came up essentially as a prescriptory scheme for the post-colonial new nation-states to rapidly industrialise their predominantly agrarian economies. Of course, Preobrazhensky's framework was not the best for understanding
even Soviet industrialisation. Not only was he contested by fellow official economists like Bukharin who offered alternative insights, much good work by Western scholars, especially economic historians, is now available that looks at Soviet experience quite differently.\textsuperscript{10}

It needs to be emphasised that the process of accumulation is very different in typical contemporary developing economies than what it was in the Former Soviet Union. Neither Primitive Socialist Accumulation nor simple versions of Primitive Capital accumulation can adequately capture the process here. Preobrazhensky's scheme was for state accumulation. In typical developing economies state does not accumulate. It may provide for, act in favour of, and regulate private accumulation. The surplus from agriculture may be mobilised by the state but for private industry.\textsuperscript{11}

In Former Soviet Union, the distinction between industry and agriculture was synonymous with the distinction between the state sector and the private sector. Typical contemporary developing economies seem to be rather an inversion, in the sense that industry here is mostly private while agriculture highly controlled. Besides, the Soviet system was a closed one, unlike most of contemporary developing economies. The state in these economies, unlike in Former Soviet Union, is neither the sole appropriator of agricultural surplus nor the sole accumulator. Here, the state may be one of the appropriators while the surplus producing peasants, the merchants, and the artisans may be important parties in accumulation. There is, in general, a more free play of classes, with or without the intermediation of the state.

The process of accumulation in contemporary developing agrarian economies may better be seen from the standpoint of the social classes engaged in accumulation,
rather than the state, as agriculture is commercialised, its productivity increases, and accumulation in and out of agriculture intensifies.

However, conflict between capital and labour is not the only one of significance for accumulation in agrarian economies. The preoccupation so far has been with capital versus labour kind of conflicts, and with differentiation within the peasants. One does not deny the importance of either. The debates on capitalism in agriculture, however, seem to have been excessively preoccupied with peasant differentiation and on the presumed conflict between the smaller and the richer peasants, misappropriately called *kulaks*. Neither this differentiation is the dominant aspect of the empirical reality in the contemporary developing agrarian economies, nor, it seems, is it the best way to understand accumulation therein. The process of class formation in an agrarian economy as it is commercialised could be wider. Peasant differentiation, in fact, may make better sense when seen together with social differentiation as a whole in the agrarian economy.

One problem with the frameworks guided by the idea of 'primitive accumulation' and 'primitive socialistic accumulation' is the way a substantial and even dynamic sector of the economy is branded and dismissed as 'petty' commodity production. This includes both household-based peasant production and merchanting. The petty sector is not really so petty. It may neither be trivial nor necessarily transitional. With commercialisation of agriculture, it may even 'develop'. It could actually be an important arena of accumulation. The household sector could be productive and engaged in accumulation, not necessarily something at the cost of which accumulation takes place.
As a matter of historical fact, the 'sack of potatoes', has refused to be carried by the Revolutionaries and the Modernizers alike. And the 'petty traders', supposed to be swallowed by Monopoly Capital in Primitive Capital Accumulation and expected to be subsumed by the state in Preobrazhensky's Primitive Socialist Accumulation, have turned out to be a class equally 'awkward' with tendencies to overcome their pettiness rather than disappearing. Instead of starting from the (perceived) inevitability of disappearance of the peasantry, and even merchants, the focus could actually better be on the diverse ways they reproduce themselves. As a peasant economy, especially one with owner cultivation, or peasant proprietorship, is commercialised, surplus increases, and this, quite likely, sets in motion a process of capital formation in the economy. Surpluses are invested and reinvested, increasingly outside agriculture, and accumulation intensifies. Unless it is a 'forced' kind of commercialisation, and is not accompanied by increases in agricultural productivity, peasants and merchants both gain and become active parties to accumulation of surplus and capital. They could be the leading, and contending, actors in realisation of agricultural surplus into industrial capital and thus accumulation. Even though, they may grow, not always at the cost of each other. The fact that they both gain in absolute terms is itself important.

The state-centred and sectoral understanding of accumulation in agrarian economies holds agricultural surplus at the centre but treats only at the margin, and rhetorically, the very two social classes, peasants and merchants, that are directly engaged in generation and deployment of this surplus. The preoccupation with exploitation of peasants by merchants and viewing 'petty' production and trade as ephemeral, and thus inconsequential, has prevented looking at peasants and merchants as active participants in accumulation. In the conventional Marxist scheme, it is what happens to peasants, and merchants, as a result of accumulation, or as a result
of 'penetration of capitalism' that is the issue. Rather than what they do, consciously and actively, for accumulation. Actually they are perceived outside accumulation, as pre-modern/backward/pre-capitalist barriers to 'modernity'/accumulation, unwilling objects of change, meant to be cultivated with 'rural development'. As a part of the so-called petty commodity production, they are the historical actors who are believed to disappear, sooner or later, after playing their respective roles as the agrarian economy grows on capitalist lines.

Normal commercialisation is known to be capable of throwing not only a rich peasant class but a thriving merchant class as well, which could have important implications for accumulation, though it is the former, especially the richer peasants, who get almost exclusive attention in the literature. Contemporary experiences point strongly towards 'stabilising' peasantry and persisting merchant capital, as also towards diverse paths and forms of capitalism. Persistence, stratification, reproduction of peasants as a part of the petty sector has at least attracted some attention, but hardly ever merchants. Merchants are seen either having disappeared or disappearing. In reality, merchants may even accumulate, possibly leading industrialisation.

Peasants and merchants may better be seen as active, and contending, participants in accumulation rather than as reluctant 'agents' or just obstacles, especially in normally commercialising and peasant proprietor economies. The sharing of the benefits of commercialisation of agriculture between them and the nature of exchange relations between the two could be crucial for understanding the nature and pace of accumulation in such economies.

The point to be stressed is that the capital versus labour class framework is
restrictive. And the literature that looks at the surplus-producing peasants as central is misplaced in the sense that peasants are not necessarily the only class that gains out of (normal) commercialisation of agriculture. Nor can this class be studied vis-a-vis accumulation in its own right, without seeing it in relation with the neighbouring classes who might as well be benefitting from agriculture, like merchants, and could be contending parties to accumulation in the agrarian economy.

The way surplus-producing peasants have been seen as central, as entrepreneurs, actually as lacking industrial enterprise, as culturally backward, irrational/ostentatious, and even as trouble-shooters, is itself a problem. Like in India, there has been an influential view that agricultural surpluses generated by the Green Revolution have, by and large, failed to be realised into industrial capital. It is said that surplus-producing peasants/kulaks have managed to have higher prices for agricultural goods, and thus to turn Terms of Trade against industry. So the state/industry could not extract agricultural surplus. The richer peasants themselves neither invest in productive capital nor let others have it. They have irrational consumption and investment behaviour. This view, while theoretically simplistic, is based on meagre empirical work. The emergence of industrial activity in an overwhelming agrarian context is not really an entrepreneurial question. Neither peasants nor merchants, or any other social class for that matter, can be studied in isolation with regard to their investment behaviour.

The preoccupation with the quantum of surplus, on maximising it, and its transfer, at the cost of the overall context-the ways in which agriculture generates a surplus, like nature of commercialisation of agriculture, class relations, the exchange sphere-together with the assumption that industry is invariably constrained by capital, means that mere presence of a certain level of surplus is seen as enough. As if the "capitalist
farmer' was just waiting for a certain level of surplus to jump over to industry. Of course, if he does not, it is blamed on 'cultural and psychological' factors-amongsting to lack of industrial enterprise. Agriculture, trade and manufacturing industry are seen in a sequential hierarchy. Once a peasant is rich enough, he would/should strive to invest in industry. So the trader. In practice, less affluent agricultural producers/artisans or traders may be setting up (small) industries, while richer ones might happily be moving to trade and services, to point to only one possibility.

Not surprisingly, the stress on generating information on 'what is happening to the surpluses', what is the surplus-producing/rich peasant investing in, 'go and find what the Jats are doing in Punjab, Patels in Gujarat, or Kammas in Andhra Pradesh', has not yielded much. The attempts to measure surplus 'precisely' and then to chase it alongwith the surplus-producing peasant are a corollary of the whole Price Scissors centered sectoral understanding, wherein more surplus in agriculture would mean faster industrialisation, provided surplus is mobilised and disposed of efficiently, mainly by state interventions.

Much of the fuss over measuring agricultural surplus, or complaints about difficulties in measuring it, seem to be unwarranted. Some recent attempts to define agricultural surplus more 'precisely' and 'rigorously', like SAM49, have rightly been called "measurement without theory"50. The way inter-sectoral resource flow studies have defined agricultural surplus has had problems51. What has been lacking is not the precision in the concept of agricultural surplus, but an appreciation of the context. Agricultural surplus has, conventionally, been defined in relation to subsistence. That is, what is left with agricultural producers/peasants after their own consumption-surplus produce, food-whether extracted by the landlord, merchant, state, as rent, tax, or in the
market through usury or other means. The concept of agricultural surplus is better used notionally. In the present context, to convey the point that commercialisation benefits agricultural producers. And possibly other classes too, like merchants. It may manifest in increased marketed surplus, and increased market involvement, as also incomes and consumption, all measurable, capable of being operationalised.

A more meaningful class approach would also require a broader approach to understanding industrialisation in developing agrarian economies. One that instead of being obsessed with Terms of Trade between agriculture and industry, quantum of surplus, and its sectoral transfers, is willing to recognise that there is no one path to industrialisation, that agriculture could contribute to the transformation/industrialisation in different ways, and that persisting agriculture does not necessarily mean it obstructs industrialisation\textsuperscript{52}.

Thanks largely to the rich work done by the economic historians in recent years on West European industrialisation, on the first Industrial Revolution itself but especially on the `lagged' countries like France and Italy, as also on Former Soviet Union and Japan, the generalised model of the relationship between agricultural change and industrial growth stands questioned\textsuperscript{53}. The place of agriculture needs reassessment. True, the reassessment of the role of agriculture can not be seriously posited on the idea that peasants were highly efficient producers. Any reassessment depends rather on recognising that, in many areas, traditional agriculture played a very different role in the process of industrialisation from that of the productivity of labour\textsuperscript{54}. The point is that if labour productivity in agriculture remains low, labour refuses to move out quickly, it does not necessarily mean that agriculture did not contribute to industrialisation.
Persistence of apparently conservative forms like peasantry is compatible with a consistent level of economic growth and industrialisation, the common, almost axiomatic, position that the first step in a process of successful industrialisation should be the destruction of the peasantry, notwithstanding. The orthodox model is far too schematic. The dualism implicit in the traditional/modern divide is misleading if it is taken to mean that the traditional must necessarily give way to the modern for industrialisation to move forward. There could even be a symbiosis between aspects of traditional and the modern. Industrialisation itself may be better seen as more than appearance of factories and proletariat, and shrinkage of the primary sector. Besides, the persistence of a large agricultural population may not be a `deviation' from the true path of industrialisation. Despite reminders by the economic historians that the process of structural transformation is not unilinear/unitary/evolutionary, nor does it necessarily involve `revolution', take-off, spurts, and that it could be gradual, spread out, that economic growth could derive from broad clusters of changes affecting whole economies and societies, often over extended time periods, rather than from a sudden, heroic `breakthrough' pioneered by a single `leading sector'; and despite abundant criticism of now defunct Rostow's and Gerschenkron's stage theories, development literature is yet to effectively overcome the trap of evolutionary thinking.

Peasants clinging to land and their refusal to join the factory proletariat may not be `irrational. The persistence of agriculture/peasantry could rather point to the complexities of the social structure-to the `ground rules' and `culture of production' in a given society-that may be shaping nature and pace of industrialisation therein. Unless a broader approach to industrialisation is employed-one which takes into account, not only factories and machinery, but also the less immediately obvious social and cultural changes among sectors of the population-important changes will remain unnoticed.
Persisting peasantry may be compatible with industrialisation not only because such agriculture can itself be profitable, but also because the kind of industry that develops may not require extraordinarily high levels of capital investment\textsuperscript{64}. As it is, the industry side is seldom looked into in detail while dealing with the question of realisation of agrarian surpluses into industrial capital.

The shift of labour from agriculture, so central in literature on industrial transition in agrarian economies, could depend not just on the magnitude of the surplus labour in agriculture and the relative size of the industrial sector but on the kind of industry that exists in a given situation, on the nature and needs of the existing industry\textsuperscript{65}. In fact, so could the shift of capital from agriculture to industry, as hinted above. What can be important is how the `initial conditions' are defined/specified. To say that initially industry lacks capital and thus needs it, and that agriculture will provide it, is not enough\textsuperscript{66}. Usually, it is just assumed that industry hardly exists to begin with\textsuperscript{67}. That might have been so in USSR of 1920s. But in typical contemporary developing economies, often a reasonably developed private industrial sector, not just `petty' industry, already exists, and has its own momentum. Much could depend on the nature and needs of this industry. So exists a commercial sector when agriculture is commercialised. However, the commercial sector has hardly had a place in two-sectoral agriculture-industry models.

The simple agriculture-industry dichotomy can not capture all the details that structural transformation involves. Much economic activity takes place in service sectors, which do not clearly fit into either agriculture or industry. Much of industry, for example, may be organised along artisanal, `subsistence' lines, while agriculture may
be highly capitalistic. As Lance Taylor says candidly, it is solely for reasons of mathematical convenience, most such stories are told with comparative statics in a model of two sectors. Connections among sectors through a changing input-output matrix make a neat production bifurcation impossible to sustain in the long run\textsuperscript{8}.

Often the beginnings of manufacturing in an agrarian economy have little to do with agriculture. By the time agriculture is commercialised and generates surplus capital, a reasonable structure of industrial/manufacturing production is already there. Besides, when small-scale industrial production emerges in an overwhelmingly agrarian society, it is not necessary that small-scale industry is the first/leading/dominant form of industrial capital/production that appears\textsuperscript{69}. Moreover, it could not just be the petti-ness or otherwise, the level at which non-agricultural activity, particularly manufacturing industry, exists that may be important, but the kind of presence that commercial and manufacturing sectors have when agricultural growth/commercialisation takes place.

Changes within non-agriculture, technical, organisational or other, independent of changes in agriculture, particularly the state of commerce and industry in the economy, when commercialisation of agriculture takes place, needs more detailed specification. As said above, it is not enough to state/assume that industry lacks/needs capital that agriculture may provide. The point is that it is as important to specify/understand non-agriculture/industry, and even commerce, that exists in the agrarian economy as it is to specify/understand agriculture. At least some more reasonable assumptions could be made, rather than pretending that not much was happening in non-agriculture/commerce/industry. That is what static models do. The assumed centrality of agrarian processes creates the impression as if critical changes take place within agriculture and misses the relative presence/dynamics of non-agriculture, including
trade, petty production and manufacturing.

As mentioned before, the Soviet case was that of state accumulation. Industry was treated as one anonymous/given sector. Agriculture was seen as a major source of surplus to finance it. The focus was on what obstructed/prevented agriculture from generating and releasing the surplus. There is little reason the industrial sector in typical contemporary developing agrarian economies, most of which is actually private, and is reasonably developed, and an understanding of which is precisely at stake, should be treated as given.

The existing manufacturing industry, for example, could be export-oriented. It could be small-scale rather than big capital-intensive factories. It could be more in need of skilled labour than the army of unskilled labour. It could be more interested in serving the quality end of the market. Just as it is possible that industrialisation may be financed primarily by cheap labour or by squeezing the urban proletariat, profitability can be higher in nascent manufacturing sector than in agriculture, generating surpluses from within, making it imperative to consider alternative sources by which industry may finance itself, including its own surplus, even as agriculture generates a surplus. The fact that other sectors have surplus of their own does not mean they have nothing to do with agriculture, or have less to do with agriculture, it means they could be differently related to agriculture/accumulation.

Commercialisation of, and capitalism in, agriculture may have very important implications for industrialisation. But the process of accumulation within non-agriculture - commercial sphere and industry - and the way they may be connected with agriculture/agricultural surplus, needs better articulation in theory and greater attention.
in empirical work.

NOTES

1. From Physiocrats to Classicals to the present day Development Economists. While the Physiocrats provided the first macro-economic analysis of the relationship between the level of agricultural surplus, which they regarded as the only (domestic) source of investible resources, and the level of aggregate economic activity through their Tableau Economique, amongst the classicals, Ricardo had emphasised supply-side factors, while Malthus' argument was based on the belief that cheap food would reduce economic activity from the demand side by curtailing landlords' spending (See Bharadwaj, 1987; Morrison, 1990; and Storm, 1992, p24). In development literature, the basic work in this regard remains that of Lewis (1954), Ranis and Fie (1961), Schultz (1968), Dobb (1968), Kaldor (1967), Kalecki (1976), Mellor (1976), and Ishikawa (1967), emphasising different demand and supply side dimensions.

2. Two meanings of agricultural surplus are commonly implied in development literature. Agricultural surplus in the sense of financial/capital resources; and agricultural surplus as food surplus, usually measured as the marketed surplus. "If there is one factor to be singled out as the fundamental limiting factor upon the pace of development, then I suggest that it is the marketable surplus of agriculture; this rather than the total product, or the productivity, of agriculture in general" (Dobb, 1968, p78, emphasis original)

3. Of course, there could be contradictions between different 'contributions' of agriculture. That is, between capital contribution, food/wage good contribution and the 'home market' contribution (see Myint, 1975). For example, if 'home market' has to develop and provide an incentive to industry, agricultural producers must gain. Prolonged Price scissors against agriculture may stifle 'home market' and affect accumulation adversely. It has been argued in India's case (see Mundie, 1985). Further, some economies may initially need food more than surplus capital from agriculture. In principle, industrial sectors in different economies may differ in terms of their need for capital, food, and home market. Somehow, the capital aspect has received more attention in the literature. In practice, in many contemporary developing economies, state investments/interventions in agriculture were guided more by food considerations than extracting capital resources from agriculture to finance industry. It may not be for nothing that the food markets are going to be the last ones to be liberalised (See Raikes, 1993). According to Bhaduri, supply side - marketed surplus and labour - have been given more attention (Bhaduri, 1993).

Besides, as Ishikawa (1967) argued it is possible that agriculture draws surpluses from other sectors, in the initial stages, rather than the other way round. If agriculture has to be made able to contribute surplus capital, resources may first have to be pumped into agriculture, rather than the other way round. Experiences of contemporary developing economies tend to support this.

4. The strategy Preobrazhensky proposed to rapidly industrialise Soviet Union of the 1920s, what he called Primitive Socialist Accumulation, by analogy with Marx's primary or primitive accumulation, has been quite popular in development literature after Preobrazhensky's New Economics, originally published in 1926, was published in English in 1965. The basic idea was that to industrialise Soviet Union, especially to build capacity-expanding heavy industry a large increase in investment was required, which would have to be financed by squeezing agriculture, 'the private sector', as the industrial sector, the 'socialised
non-agricultural sector, was too small to finance from within, more so because of political isolation of the country which prevented the possibility of making it up by foreign sources, and limited scope for agricultural exports to finance imports (See Bottomore 1983, p389-90). One could sense a ring in this argument of the import substitution, heavy industrialisation policies pursued in many post-war developing countries.

The time around which Preobrazhensky was sort of resurrected in the mid-sixties by the English translation of his writings was the prime time for the dualistic models. Apparently, Preobrazhensky had anticipated the dualism models of the post-war period and in particular their emphasis on intersectoral resource transfers, several decades before the original Lewis paper in 1954 (Storm 1992, p26).

5. Sah and Stiglitz (1984), for instance, who treat Preobrazhensky's idea that the terms of trade should be turned against agriculture as a problem in optimal taxation by manipulations of Lagrangian functions to find optimal tax rates for the peasantry and using a Bergsonian social welfare function and a given social value of marginal investment (see Storm, 1992, p27). They vindicate Preobrazhensky's proposition of primitive socialist accumulation, but according to them, this is possible only by squeezing the industrial workers (ibid). Mitra (1977) is another important extension of Preobrazhensky's model. He adapted it to the Indian situation and introduced a private industrial sector and foreign trade. See also Hornby's (1968).


7. ibid.

8. ibid.

9. ibid.

10. ibid. Though there are doubts too to the extent agricultural surplus financed industry in the former Soviet Union.

11. Often, misleading generalisations have been derived. See Sheng, 1993.

12. For example, Mundie & Ohkawa 1979, Ishikawa 1967, 1987 on Japan; Lee 1971 on Taiwan; Karshenas 1988 on Iran; and Ishikawa op cit on China. See Karshenas 1989 for a comparative view. He points out that excepting Japan and Taiwan, the net finance contribution of agriculture to non-agriculture in the rest of the above mentioned countries has in fact been negative (Karshenas 1989, p93). See also Bhaduri, 1993.

13. Ellman, 1975 had also suggested that.


15. The contribution of agriculture to the spurt in the Japanese industrial growth after the Meiji restoration, mainly seen through land taxes, has been questioned, among others, by Quisbing and Taylor (1986), Ranis (1959), Landes (1965). See also Mundie 1985 and Mody 1981b. It has been pointed out that the regressive tax structure was not confined to the agricultural sector, but was a more general feature. Increasing reliance on the indirect taxation of mass consumer goods ensured that the urban consumer was also squeezed. The transfer of resources was then possibly not so much from agriculture to non-agriculture, but rather from the small peasant and the urban consumer to the government and perhaps also to the rural elite (Mody, 1981b, p9). See Kaoru Sugihara, 1996 for challenging the unilinear and Euro-centred traditional histriography on Japan. See also Nakamura 1983; Smith 1988; and Hayami


17. ibid.


19. See Knight, 1995. According to him, 'in the presence of forced deliveries and rationing, even Preobrazhensky's contested second proposition—that urban workers need not suffer as a result of the price scissors—appeared to be supported. Not only future generations but probably also current industrial workers benefited from the policy of forcing down prices and forcing up supplies of food to the market' (Knight, p134).

20. ibid, p133.


22. ibid.

23. See Karshenas 1989, p1. According to Karshenas, net intersectoral resource flows, central to the savings dominated models of growth can not be regarded as a policy instrument as such, but rather as an intermediate target which helps in the assessment of the degree of efficiency of resource use in agriculture. Successful technological progress in agriculture which leads to growing productivity of labour in the sector may automatically increase the savings contribution of agriculture to economic growth, taking place through the private financial institutions (Karshenas, 1989, p95). He concludes that the significance of the intersectoral resource transfers does not derive from the contribution they make to savings mobilisation, as classically emphasised by the savings driven models of growth. It is rather the way the patterns and processes of intersectoral resource flows intertwine with the transformations in the structure of employment and income to bring about a sustained process of balanced growth which is of crucial importance. Factors which determine the efficiency of resource use in agriculture, the success or failure in the diffusion of new biochemical revolution and the linkages between growth of agricultural productivity and the creation of non-farm employment seem to be the key elements in this process (ibid p97).

24. See Corner (1996, p135) for suggesting that it is possible that nature of industry is such that it does not require extraordinary high levels of capital investments. Dobb also had reservations on the way a 'savings fund' is seen as a bottleneck in industrialisation in agrarian economies. See Dobb, 1968, p72-73.


27. Rate of savings in agriculture is not necessarily lower than in industry. Besides, savings from agriculture may be invested in agriculture or even in industry (Storm, 1992, p30).


29. 'this is politically understandable in so far as the urban working class provided the main political base of the Russian revolution' (Bhaduri, 1993, p157)

31. ibid.


35. Notice, however, the humility of the early development literature, that seems to have been lost somewhere on the way, and replaced by a self-righteous arrogance, in what Dobb had to say on the problems of industrialisation in agricultural countries, 'I shall be generalising from what I know of European countries-especially from the experience of the USSR during the last quarter of a century, I am aware that such generalisations may require modification when applied to countries of Asia, about which I have no special knowledge. I am even prepared for you to tell me that they have little or no application to the Indian situation.' (Dobb, 1968, p71). Ishikawa had also cautioned that the initial conditions limiting the economic development of the contemporary developing countries differ significantly in a number of respects from those of the presently developed countries in their past development stage. Such differences tend in net result to make the course of contemporary economic development much more difficult than was previously the case. The experience of past economic development, or the economic development formulae summarized on its basis, may not serve as a lesson to the contemporary developing countries for overcoming these difficulties (Ishikawa (1967, p i)

36. Economic Historian's approach to, and understanding of, the relationships between changes in agriculture and the broader process of modern economic growth has undergone important changes in recent years. It is being realised that production and productivity have been overstressed. That was one way of looking at growth. And that was not the best way (see Berg, 1991). As a result, a new perspective is emerging that has necessitated looking at hitherto unmentioned variables and at existing ones in a different light, shifting the focus, among other things, to commerce/exchange sphere, the role of new markets, fashion, design, technology and product differentiation (ibid). See also Mathias and Davies, 1996.

37. See especially Ashok Mitra on Terms of Trade and Class Relations (Mitra, 1977)

38. Two-sectoral-two class models look at exchange in a very narrow way. Besides, there is this tendency to see trade/exchange/circulation as less important than production. The exchange sphere is treated in detail in chapter 3.

39. In fact, socialist experience itself has been quite varied. Former Soviet Union, China under Mao and later, and Vietnam, for instance.


41. It is an inversion in the sense that in Preobrazhensky's scheme, surplus was to go to state industry from private agriculture. But in typical contemporary agrarian economies, industry is private while agriculture is heavily controlled by the state, through administered prices, compulsory procurement, restrictions on movement of grains, among other things.

42. This point is taken up in detail in the next chapter.
Urban subsistence sector, mainly including trade, has particularly been ignored. What could be more important is the changes that 'petty' production undergoes (and the way it is related with the process of accumulation and with commercialisation of agriculture) with commercialisation and capitalisation rather than the rhetoric that it is conservative and will vanish with the growth of capitalism. See Evers, 1987; and Bernstein, 1988. For tenacity of petty commodity production under socialist state farms, see Scott, 1986, p31.

Shanin (1972) called the Russian peasantry an Awkward Class as it defied Marxist expectations in its economic and political behaviour before as well as after the Bolshevik revolution of 1917. The phrase has become popular to convey peasants' capacity to embarrass social theorists and political movement leaders in the contemporary developing economies. Barbara Harriss (1990) has referred to the merchants in agrarian economies as another 'awkward' class.

The 'awkward'/unpredictable' behaviour of these two social classes could be a testimony more to the 'simplicity' of the theories that ascribe simplicity and homogeneity to them. It could be the point of view of the modernizer-industrializer state/developer/planner that made these classes look simple and marginal but turn out problematical/awkward.

Normal commercialisation is meant to be seen in contrast to "forced commercialisation". The latter, as defined by Bhaduri, denotes a situation where peasants' participation in the market is involuntary. They are forced into the market, to appropriate their surplus, by the landlord-merchant-moneylender combine. The domain of exchange is restricted to "paddy for paddy" as peasants enter the market twice in a year, once to sell paddy and later to buy the same, albeit at worse terms. I denote normal commercialisation as a situation where peasants come to the market voluntarily, their participation is actually two-way as they sell agricultural produce as well as buy more and diverse kind of non-agricultural goods from the market, the terms are reasonable making it possible for peasants to gain too from their market participation.

One, of course, may think of forced commercialisation in another sense. In the sense of state forcing peasants to grow certain crops, in certain quantities, and sell at certain prices. This is how commercialisation of agriculture under colonialism has been typically understood.

See Satish Mishra, for instance, on the emergence of rich peasants and growth of mercantile capital in the late nineteenth century Maharashtra and Punjab, reminding that the rich peasant school while analysing the impact of rapid commercialisation on the rich peasantry, ignores the effect of commercialisation on merchants and their capital (Mishra 1982, 1981).


Morisson and Thorbecke, 1990.

See Danielson, 1994, p48-50. It is difficult to see, says Danielson, how Morisson and Thorbecke's method throws any light on the role of surplus, or for that matter the agriculture sector, in the process of economic growth. 'Their method does not seem to aid an understanding of the relations between economic expansion and surplus formation. It is difficult to understand patterns of growth and stagnation from a surplus point of view by using a SAM. SAM, of course, may be quite useful for other purposes, like planning or simulation exercises'.

Mainly trade surplus and the savings surplus. See Mundie 1981. See also Morisson and Thorbecke, 1990.
That successful industrialisation is compatible with persisting agriculture, that it does not necessarily need destruction of peasantry/disappearance of the petty sector, and that there is more than one way of transition from an agricultural to an industrial economy and from rural to urban society has been convincingly argued in recent interpretations of industrialisation in the 'lagged' West European countries like France and Italy. See Corner, 1996; and Heywood 1996.

Corner, 1996, p137.

says Corner, 1996. Not suprisingly, he adds, as traditionally, peasants and industrialisation have been thought to be poor bedfellows. The peasant mentality, usually depicted as closed and conservative, more disposed to subsistence farming than to consumption through spending, is considered to square badly with concepts of market, enterprise and risk (Corner, 1996, p130).

Corner blames the British paradigm for the pervasive view that the persistence of the large agricultural sector would function as a brake on industrial progress (p136). He argues that while in the British case, economic growth seems to have been in part dependent on the speed with which the relative agricultural population fell, thus opening the way to very high levels of labour productivity in the sector, in France, for example, the retention of labour in agriculture does not appear to have had the expected disastrous consequences for national per capita income. It may be, of course, adds he, that French manufacturing was held back by the slow rate of agrarian change and that equivalent per capita incomes were achieved despite, rather than because of, support received from the primary sector. But this has really still to be demonstrated (p134). It is not at all self-evident that French industry—much less factory based than British—could have absorbed with benefit a much higher rate of exodus from the land (ibid).

Corner, 1996, p137.

The Italian case suggests that there is - for a very long period - an effective symbiosis between aspects of traditional and modern, particularly in rural areas, and that the specificity of the Italian case is constituted principally by this' (ibid)

Factory-based highly capitalist industrialisation is neither the most desirable nor inevitable. Often the view that industrialisation is based exclusively on factory and urban proletariat and the maintenance of a high percentage of the population in agriculture is automatically taken to be a cause of slow growth. Paul Corner, in case of Italy, argues that this perspective of identification of modern economic growth exclusively with the development of large-scale high-technology industries and the rapid shrinkage of the primary sector fails to take adequate account of broader developments that, over the longer term create economic growth. Focussing on the role of peasant farms and peasant families in economic growth, he argues that, in Italy as in France, agriculture may have played a more substantial and significant contribution than is recognised (see Mathias and Davies, 1996, p9-10). Manchester and Birmingham are bad masters, he reminds, if they continue to impose a view of industrialisation based exclusively on factory and urban proletariat. The social and behavioural consequences on sharecropping families of diffused rural industry, based on the exploitation of rural labour, seem to have been very different from those assumed by the 'classic' model of British industrialisation, in which the maintenance of a high percentage of the population in agriculture would automatically be taken to be a cause of slow growth (Corner, 1996, p144). The conventional passages from agriculture to industry, from peasant to proletarian worker, from country to town, were far less clear cut than in Britain—when they occurred at all, and often they did not. Indeed, the characteristic of large sections of the rural population is precisely the extent to which—despite increasing involvement in manufacturing—they avoided making those passages (ibid. p137-38). The precocious marginalisation of the primary sector was certainly central to the 'peculiarity' of
Britain's pattern of industrialisation and economic growth (Mathias and Davies, 1996, p5)


60. Mathias and Davies, 1996, p5. There has been a growing conviction among economic historians that the 'classic' picture of the British Industrial Revolution is in need of fairly drastic revision. Indeed, the Industrial Revolution is no longer what it was. Recent quantitative evidence has turned it from an age of 'widespread ingenuity' to one of steady but unspectacular growth (Berg, 1991, p173). The very metaphor of 'revolution' has come to be questioned. It is being recognised that the transformation of an agrarian economy to an industrial one is not necessarily a Revolution/sudden spurt/take-off. Not only that the acceleration in the trend rate of growth during the British industrial revolution was more modest and gradual than was widely believed in the heady days of the "take-off" literature (see Corner, p133), it is now quite widely accepted that the term 'revolution' is misplaced in the case of both agriculture and industry if-as has often been the case-it is taken to suggest cataclysmic change. The way the phrase has been used has led to the belief in the apparent need for sudden, discontinuous economic change as the necessary prerequisite of a modern industrialised economy, whereas 'in fact, gradual industrialisation has been the norm, explosive growth the exception (see Corner p132-33). See Wrigley, 1988 also.

61. Rostow, 1985; Gerschenkron, 1962. The all-important implicit assumption in the earlier development literature that industrial revolution should be based on agricultural revolution, and that to attempt the first without the second was to get off to a very bad start indeed, is being questioned (Corner, 1996, p132). It is now being realised that different autonomous modes of growth could contribute to transformation of an agrarian to an industrial economy.

62. It has been well-argued that in France, a 'lagged' case, wherein agriculture/small farms persisted far too long, agriculture did not really put breaks on industrialisation. Rather it could be seen as an instance where agriculture contributed to industrialisation differently and industrialisation/ transformation was governed by more important 'ground rules'/culture of production', as by the specific needs of the emerging industry.

In France, in agriculture as in industry, Heywood argues, small-scale enterprise was the norm in the French economy, and was neither inefficient nor unproductive. Small peasant farms were particularly well suited to engage in a range of different agricultural, commercial and industrial activities in ways that enabled them to adapt with great flexibility to changing opportunities and conditions (Mathias and Davies, 1996, p8-9). 'There was an alternative pattern of growth marked by a specifically French 'culture of production' that favoured small enterprise in industry and agriculture, and the capacity to respond and adapt in ways that avoided dramatic surges while sustaining steady increases in production and wealth' (ibid, p9). 'What the crisis of the 1880s revealed in the starkest of terms was the deep-seated desire in french society for security and stability. Change on the land and in the workshops was quite in order, but it would have to proceed according to certain ground rules. The French, in other words, had their own particular "culture of production"' (Heywood, p125)

63. Corner, 1996, p144.

64. ibid, p135. In France, 'the small, artisan workshop was more the norm than the exception; it produced relatively high-value goods, which required less capital for mechanisation and which felt much less the constrictions imposed by the limited market for products' (ibid. Thus 'the different industrial mix in France and Britain ensured-not that there was no net transfer of capital between sectors in France, which there must have been-but that the level of this transfer was very different. This in turn determined that agriculture had very different roles in the two countries in the process of industrialisation' (ibid).
65. 'the tendency in France was to assemble an elite of specialists in the workshops, rather than an army of unskilled labourers' (Heywood, 1996, p122)

66. The nature of the existing industrial activity itself needs better specification.

67. 'Most theoretical models start out when a modern industrial sector just begins to form in an overwhelmingly subsistence economy; these models ask how the two sectors interact and develop over time', Talyor, 1980, p164.


69. Some of the earliest industries that appeared in the Princely states in India under state patronage were neither small nor had much to do with agriculture or agricultural surplus.

70. As in France, the industry was inclined to specialise at the quality end of the market, incorporating a maximum of skilled labour. On this basis, it had some success in developing new branches and exporting its products. Hence, besides the big battalions of workers in the coal mines and the textile mills, there were the myriad small workshops of the Paris luxury trades or the metalworking industry (Heywood, 1996, p 125).

71. The cheapness may come from through 'forced savings' in case of state-sponsored industrialisation.