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*The Exploitation and Subsidization of Agriculture in
Developing and Developed Countries**

DEVELOPING COUNTRIES

So far as one can tell from the available literature, the developing areas of the world differ profoundly from the developed areas in their treatment of agriculture. In most of the less developed countries there are a vast variety of public policies and institutional arrangements that make many agricultural prices lower than they would otherwise be, and in particular often lower than the prices on the world market. In many of the poorest countries agricultural marketing boards are given a monopoly over the right to trade in the main agricultural export commodities and the growers of these commodities receive only a fraction of the price their products fetch on the world market. In some developing countries multiple exchange rates have been used to give growers of agricultural commodities a less favourable exchange rate than is accorded to exporters or importers of other products. In most developing countries the production of manufactured goods and certain other import substitutes produced in cities is heavily subsidised through tariffs and quotas. This not only raises the prices that farmers must pay for these products, but also tends to reduce the prices that they receive for their exports; restrictions on imports reduce the amount of a country's currency that is supplied to purchase foreign goods, with the result that the value of the country's currency tends to be higher than it would otherwise be and the prices in domestic currency that agricultural exporters receive are correspondingly lower. Many governments in developing countries also provide disproportionate amounts of social overhead capital in major cities and subsidise some types of consumption only in these cities.

The disadvantage of agriculture and rural areas in most developing countries is reflected not only in product prices and in explicit governmental policies, but also in many urban and rural labour markets and in the often extra-governmental and less conspicuous institutions that

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influence wages in these markets. Though I do not know of any comparable world-wide data on urban-rural or intersectoral wage differences, there appears to be virtually a consensus among observers that in most developing countries the real wage rates in the 'modern' sectors of the biggest cities are often vastly higher than they are for comparable labour in the agricultural and traditional sectors. There is important evidence for such real wage differentials in the exceptionally high unemployment rates in many of the biggest cities in the developing world. So conspicuous are the real wages differentials and the associated unemployment rates that one of the better-known models in development economics – the 'Todaro model' – is devoted to explaining how the flow of labour from rural areas to major metropolitan centres could continue in spite of the low probability of employment in the modern urban sector. W. Arthur Lewis's very famous model of 'unlimited supplies of labour' to the modern and mainly urban sectors of the developing economies also explicitly assumes a significantly higher return to comparable labour in the modern sector than is available in the traditional and mainly agricultural sector.

Though references to well-known theories cannot substitute for the systematic and comprehensive international measurements that are needed, it is doubtful that the models I have mentioned would have been so widely used and accepted if the observations of a significant urban-rural real wage differential were not shared by many students of the developing countries. Substantial real wage differentials for comparable labour and high unemployment rates in the very locations with the highest wages cannot be sustained in an entirely unconstrained and unorganised market. The unemployed and low-wage labours will, of course, have an incentive to offer to fill the jobs of the high-wage workers for somewhat less and the employers will have an incentive to accept such offers. It follows that in some sectors of many of the major cities of the underdeveloped world there must be institutions, such as collusions or cartels of relatively fortunate workers, that generate supra-competitive wage levels partly at the expense of potential entrants from the agricultural sector.

DEVELOPED COUNTRIES

In the developed countries, by contrast, agricultural interests are normally among the major beneficiaries of tariffs, quotas, price supports, and other subsidies. In those developed economies that lack comparative advantage in agriculture, such as Japan and most of the highly industrialised nations of Western Europe, the subsidisation of agriculture is quite striking, and probably far higher than the levels of subsidies to many of the principal manufacturing industries in those countries. As T. W. Schultz graphically puts it, many of these countries have carried agricultural protection nearly to the point of 'greenhouse agriculture'. Masayoshi Honma and Yujiro Hayami (1984a) have shown convincingly

that the level of nominal protection for the major agricultural commodities among the developed nations is greatest in those countries that are the least likely to have a comparative advantage in agriculture. The subsidies to agriculture are usually much less in the developed nations with a comparative advantage in agriculture, such as Australia, Canada, New Zealand and the United States, and the agricultural interests in these countries (especially in Australia and New Zealand) lose substantially from various forms of protection or subsidy to urban interests in those countries. Nonetheless, agricultural interests in these countries also conspicuously share in the society's subsidies and price-distortions. In the United States, for example, the total government subsidies to agriculture are in many years very large even in relation to total farm income. There are in addition subsidies that do not show up in the government budget. The producers of some farm products, such as fluid milk, are systematically given supra-competitive prices at the expense of consumers.

Unfortunately, I do not know of any data source of quantitative study that documents this seemingly systematic difference in the treatment of agriculture in developing and developed countries. But there appears again to be nearly a consensus among the experts. As T. W. Schultz puts it, 'the political market in a considerable number of high income countries overprices agricultural products at the expense of consumers and taxpayers. In many low-income countries the political market underprices agricultural products'. Kym Anderson and Yujiro Hayami (1986) similarly conclude that 'domestic food prices in Western Europe and Japan are often twice international levels. In many developing countries, on the other hand, agricultural prices are well below those in international markets and manufacturing is the sector protected from international competition.'

THE NUMBERS PARADOX

There is a strength in numbers. In democratic countries, the more numerous interests obviously have more votes than the less numerous. Even in non-democratic countries, the potential physical and social force of more numerous groups should, when other things are equal, give them more power than less numerous groups.

Why, then, is agriculture exploited in countries where farmers or peasants constitute the great bulk of the population, and subsidised in countries where farmers constitute only a tiny minority, often less than five per cent, of the population? This is a question that has also puzzled T. W. Schultz. Honma and Hayami (1984b) have underlined the paradox by showing that Korea and Taiwan had negative nominal rates of protection for agriculture before their rapid industrialisation began in the 1960s, but that they have by now imposed very high levels of agricultural protection. I would add that this change of policy has, of course, occurred during a period when the proportions of their populations in agriculture have

declined. Indeed, Honma and Hayami show elsewhere (1984a) with a regression analysis that in ten of the major industrialised countries nominal protection for agriculture increases as the percentage of farmers in the population declines.

The paradox that has just been described should for some purposes have been posed in a less aggregative way. The extent of price distortions varies from one urban industry to another and there are also great differences in the extent of price distortions from one agricultural commodity to another. Casual observation suggests that in urban industries and occupations as diverse as the steel industry, the taxi industry, and the learned professions of law and medicine there are unusually large distortions. In the manufacture of scientific instruments and plastics, and in the restaurant industry, I would guess, the incentives are usually less perverse. I would also guess that there is more price distortion in most countries (or at least most developed countries) in dairying than in beef production, and more in rice production than in soya beans.

Sadly, these vitally important questions about inter-industry, inter-occupational, inter-commodity and inter-group differences in the extent of perverse incentives are usually not even asked, so that the data needed to deal with them have not been collected. Eventually I should like to examine these questions of inter-market and inter-group differences in the perversity of incentives in a more detailed and disaggregated way than one can do when one merely contrasts the agricultural and non-agricultural sectors.

Nonetheless, I think there is some interest and utility in a broad comparison of agricultural and non-agricultural activities of the kind I am attempting here. This comparison is some interest to me, partly because of my farm background, and it should be of professional interest to agricultural economists. There is also, as we shall see, one important respect in which nearly all agricultural industries differ from almost all urban industries, and this makes an agricultural/non-agricultural comparison especially valuable.

IS THE EXPLOITATION OF AGRICULTURE REQUIRED FOR DEVELOPMENT?

In many circles, the resolution of the paradox I have posed will seem obvious. The developing nations wish to develop – to become economically similar to the nations that have already become prosperous. The highly developed nations devote relatively small proportions of their populations and resources to agriculture, so many believe that the developing nations should subsidise and promote industries of the types that are most prominent in the economically advanced countries, and discriminate against those industries, such as agriculture, that have become relatively minor parts of the advanced economies. Because they mainly export primary products, the developing areas are perceived to be

the hewers of wood and drawers of water for the economically advanced nations, and they naturally strive to escape from this apparently subordinate and unrewarding role.

It is instructive to compare low-income individuals who are striving to become prosperous with low-income countries that are striving to develop. There are many more individuals to observe than there are countries, and the study of individual advancement has gone on far longer than the study of the development of poor countries, which in one sense began only after the Second World War. Thus much more is known about how individuals should get ahead than about how nations should advance. So let us ask what the low-income individual would do if he approached his personal advancement in the way so many people, in rich countries and poor countries alike, advise the less developed nations to do. He would observe, for example, that rich people consume more champagne and caviare than poor people do. By analogy with the precept that developing nations should try to imitate the developed countries by having more industry and less agriculture, he would then conclude that the way to get rich was to consume more champagne and caviare!

Since knowledge about personal affairs is less ideological and based on more experience than popular knowledge of development economics, everyone knows that imitating the behaviour patterns of the rich is not the best way to become rich. Almost everyone realises that it would be better to note what those low-income people who became rich did when they were becoming rich; it is better to take note of the hard work, the investments in education and other assets, and the profitable innovations (often in combination with good luck) that enabled some individuals to earn a lot of money. Similarly, developing nations ought to examine what the now developed nations did when they first began to develop economically.

There is not enough space to go into this here, but I believe that a careful examination of the economic history of the developed nations shows that the discouragement and exploitation of agriculture is by no means the way to bring about economic development. Indeed, our knowledge of economic history and economic theory is already sufficient, in my opinion, to show that the notion that the developing nations can best develop by protecting heavy industry and discriminating against agriculture and primary production is one of the most onerous burdens that the millions of poor people in the developing nations have to bear. But that is another story that I have told elsewhere and must not repeat here (Olson 1982, 1984).

AGRICULTURE IN PRE-INDUSTRIAL EUROPE

Beliefs are realities even when they are illusions. Thus the belief that the exploitation of agriculture and the subsidisation of industry is necessary for economic development, even if it is (as I claim) wrong, may still help to explain agricultural policy in developing countries. So long as the

governments of developing countries, and the foreign advisors and intellectual élites that influence them, believe that the underpricing of agricultural products is necessary for economic development, this belief can influence public policy. Though my main explanation of the discrimination against agriculture in the developing countries is quite different, I think that the prevailing belief that the protection of manufactures at the expense of agriculture is good for economic development is part of the explanation. But not the largest part, as we can see when we look at policy toward industry and agriculture in western Europe (and especially in Britain) in pre-industrial times. When these presently developed nations were undeveloped, pre-industrial areas, they did not have any plans or policies to bring about what we would today call economic development. They did not think sustained and substantial increases in income per caput were possible. What some historians call the 'idea of progress' was largely still in the future. It was usually taken for granted that the overwhelming majority of the people in every country would always remain poor. Malthus's apparent demonstration that this must be so, because of population pressure and the finite supply of land, was promptly and widely accepted. The British in the late eighteenth century not only had no plans to promote an industrial revolution, they did not even really understand that one was going on: it was the 1880s before Arnold Toynbee even coined the phrase 'industrial revolution'. Thus any promotion of industry at the expense of agriculture in pre-industrial Britain and in the rest of Western Europe at this time could not possibly be explained as due to any belief that this was necessary for economic development.

The institutions and government policies in Britain and the rest of Europe before the industrial revolution definitely and strongly overpriced many industrial goods and commercial services and underpriced many agricultural products. This is evident not only from modern work in economic history, but also from the testimony of one of the most observant economists of all time: Adam Smith.

The government of towns corporate was altogether in the hands of traders and artificers; and it was in the manifest interest of every particular class of them, to prevent the market from being overstocked, as they commonly express it, with their own particular species of industry, which is in reality to keep it always understocked ... In their dealings with the country they were all great gainers ... Whatever regulations ... tend to increase those wages and profits beyond what they would otherwise be, tend to enable the town to purchase, with a smaller quantity of its labour, the produce of a greater quantity of the labour of the country. They give the traders and artificers of the town an advantage over the landlords, farmers, and labourers in the country, and break down the natural equality which would otherwise take place in the commerce which is carried on between them ... The industry that is carried on in towns is ... more advantageous than that which is carried on in the country ... In every country of Europe we find, at

least, a hundred people who have acquired great fortunes ... for every one who has done so by ... raising of rude produce by the improvement and cultivation of land (Bk. I, Ch. X, Pt. II).

The whole emphasis of the mercantilistic policies of the national governments, as well as the guild rules of the towns, was to encourage profit from commerce and manufactures at the expense of agriculture and unskilled workers.

There is a striking similarity between the pro-urban policies of the European nations (and, for that matter, Japan) before the industrial revolution in Britain and those of the developing nations that are at a somewhat similar level of economic development today. The pro-urban and anti-rural policies of pre-industrial countries of Europe could not possibly be explained by any desire to imitate the patterns in more developed countries, for there were no such countries, nor by any beliefs that that would promote sustained growth in incomes per caput, for no such sustained growth was thought possible. The underpricing of most agricultural products in most poor countries must accordingly be explained by the inherent characteristics of poor or developing societies.¹

COLLECTIVE ACTION

How do the inherent characteristics of low-income societies, whether those in the developing areas today or in Europe before the industrial revolution, generate a tendency to underprice agricultural products and overprice certain industrial products? And how does this tendency disappear as a country becomes developed? And does it sometimes even lead to a reverse tendency in developed countries without a comparative advantage in agriculture?

In this paper I have tried, in accordance with normal scientific procedure, to offer mainly new conceptions and information, and not merely repeat what has already been said in my previous publications. Unfortunately, this means that readers of this paper who have no acquaintance with my books on *The Logic of Collective Action* (Harvard U.P., 1965) and the *The Rise and Decline of Nations* (Yale U.P., 1982) will learn about only a small part of my argument. My explanation of the great differences in the treatment of agriculture in the developing and developed nations is, in large part, derived from these two books. Neither of these books deals with the differences in agricultural policies and institutions in societies at different levels of development, but the theories that are presented in them are the main source of my explanation of these differences.

My explanation begins with the difficulty of collective action, especially for large groups. Suppose any group of firms, workers, or farmers should strive to act collectively to lobby for a tariff, price support, tax loophole, or any other legislation that favours them, or act collectively in the marketplace to restrict supply and thus obtain a

supra-competitive price or wage. The benefits of the favourable legislation or the monopoly prices or wages would automatically go to everyone in the relevant industry, occupation, or category, whether or not they had borne any of the costs of the lobbying or the output restriction. It follows that in sufficiently large groups, the benefits of collective action offer no inducement to individuals to engage in collective action – they would get the benefits of any such action whether or not they participated in it, and any typical individual's contribution would have no significant impact. Thus some large groups with common interests, such as the consumers, the taxpayers, the unemployed, and the poor are not organised in any society.

By contrast, the large firms in a concentrated manufacturing industry, where the numbers are small enough so that each firm will get a significant share of the benefit of collective action in the interest of the industry, will usually be able to make a bargain to engage in collective action without exceptional difficulty. In rare cases, the landholdings in a country will be so concentrated that the landowners will also be a small group that can organise fairly readily. Large groups will be able to organise for collective action only when they can work out special 'selective incentives' that punish or reward individuals in the group that would benefit from collective action, if they do or do not support the action. The most conspicuous example of a selective incentive in the compulsory membership and coercive picket lines of labour unions, but all large groups that are able to organise for sustained collective action have analogous, if often very subtle, selective incentives that mainly account for their membership.

There are often particularly interesting examples of this is the agricultural sectors of the developed economies. In the United States, for example, most of the membership of the major farm organisations arises because membership dues are 'checked off' from the patronage dividends of farm co-operatives or added to the premiums of mutual insurance companies associated with the farm organisation. Various tax advantages given to co-operatives and various complementarities between farm organisations and certain types of business organisations can make such arrangements viable even in highly competitive environments. Sometimes farm co-operatives themselves will, in effect, function as lobbying organisations as well as firms.

Because collective action by large groups is inherently difficult to organise, it will emerge only slowly and in favourable conditions. It turns out, for reasons that are explained elsewhere, that most organisations for collective action have incentives to strive to obtain more of society's output for their own clients through distributional struggle, rather than to produce useful outputs themselves, and to persevere in distributional struggle even when the costs to society are very large in relation to the amounts that are won in distributional struggle. In this they are fundamentally different from firms, individuals, and democratic governments in environments free of lobbying organisations. This helps to

explain why long-stable societies that have had time to accumulate many of these organisations, such as Great Britain, have in recent times been growing less rapidly than expected. It also helps to explain the economic miracles in Germany, Japan, and Italy after the Second World War, for totalitarian governments and occupying armies had eliminated or transformed most organisations for collective action.

COLLECTIVE INACTION IN RURAL AREAS OF POOR SOCIETIES

What are the favourable conditions that are needed before collective action by large groups is likely to emerge? Clearly organising requires that people communicate with and sometimes meet one another. The success of private cartelisation or collusion will depend on the costs of insuring that all members adhere to the collusive agreement. Thus collective action by large groups will be less likely the higher the costs of transportation and communication. These costs depend on such things as distance, the technology of transportation and communication, and the degree of literacy. Private cartelisation will be dependent not only upon the numbers that must combine, but also upon the distances that picket lines or other forms of collusive enforcement must cover. Since organising large groups for collective action takes a lot of time even in favourable circumstances, the likelihood that large groups will be organised also depends on the frequency with which organisations are destroyed by the upheavals and repression that are common in unstable societies.

Because farmers and peasants are obviously spread out over more space than people in urban industries, their capacity to organise will be particularly dependent on the costs of communication and transportation. In rural areas of low-income societies without dense, modern networks of transportation and communication, such as Europe before the industrial revolution or many developing countries now, sustained large-scale collective action is normally impossible.² This is especially true if the society is politically unstable, as most developing societies are. The small number of firms in manufacturing or major urban activities will, on the other hand, often be able to organise even in the pre-modern economy, because of the advantages of small numbers and proximity to each other in cities. Thus my argument predicts that some urban industries and occupations in the pre-modern economy will be organised to lobby and collude, and that the goods and services they sell will be overpriced, and that main agricultural industries will by contrast not be organised and their outputs by comparison will be underpriced.

AGRICULTURAL POLICY IN DEVELOPED SOCIETIES

As transportation, communication, and the levels of education improve and the political system becomes stable, the great difficulties of collective

action will be overcome even in the rural areas. Thus farmers will be among the groups that are organised for collective action. Farmers in such societies will be among the beneficiaries of tariffs and government subsidies. Private cartelisation, such as that proposed by the National Farmers Organization in the United States, will remain impractical because of the distances that picket lines or other forms of cartel enforcement must cover. But those highly developed societies, like Japan and most of the countries of Western Europe, that have relatively little good land in relation to the size of their populations, will not have comparative advantage in agriculture. It will therefore be possible to support agriculture in a major way in such societies with tariffs and quotas. The social costs of the overpriced agricultural products that result from this protection will be far less conspicuous than the social costs of open subsidies from the public treasury or compulsory measures to keep productive land idle. Thus countries with a pattern of comparative advantage that leads them to export manufactured products and to import farm products may on average greatly overprice agricultural products in comparison with manufactures.

When the present argument is elaborated it can help to explain differences in the degree of subsidisation or exploitation across different farm commodities and across different urban products. That is, it will allow a more disaggregated analysis of the kind I argued was needed, earlier in this paper. Unfortunately, the inevitable limitations on the length of papers for these meetings make it impossible for me to go into this here. I have, however, been invited to give a comparable address to the annual meeting of the American Agricultural Economics Association in the United States. That address will be a sequel to the present paper, and will go into these matters. If the present paper is read along with that paper and the two books from which my argument is derived, it should be clearer and more persuasive. It would, I hope, then also persuade some agricultural economists that this is a line of inquiry that is worthy of their own research attention. If so, my own initial efforts should happily be supplanted in due course by more precise and informed analyses.

NOTES

¹Some readers may wonder whether the famous English 'Corn Laws' that were repealed in the 1840s call my generalisation into question. This matter is analysed in note 2, below.

²When the landowning interest in a country is so concentrated that a relatively small number of families owns a substantial proportion of the land, my argument about the lesser difficulties of organisation in small groups implies that there can be considerable collective action on behalf of agriculture even in pre-industrial countries. Thus 'landed oligarchies' in these countries sometimes succeed in getting policies favourable to agriculture. There is, for example, some evidence of small group action on behalf of agriculture in Prussia and in some Latin American countries in the nineteenth century. To some extent, the landowning aristocracy in Great Britain has in previous centuries also offset the tendency toward mercantilistic policies, and it was a relatively small group with

a disproportionate share of political power. Adam Smith was nonetheless right on balance in giving the name 'mercantilism' to the policies of Britain and most other European governments. It is sometimes supposed that the English 'Corn Laws', – made so famous by the controversy over their repeal, indicated that agricultural interests were especially favoured in Britain until the 1840s. This supposition is not, in my opinion, correct. The main reason is that Britain was not in typical years a grain importer until about the 1770s, so that the import duties on grain had little effect. There were also bounties on grain exports in years of relatively low prices; but exports were prohibited and import duties and bounties suspended in years of relatively high prices. Thus before 1815 the English Corn Laws are generally believed to have had only a small effect on prices, and in years of dearth that effect favoured consumers. After about 1815, the growth of population and income because of the industrial revolution made Britain a substantial importer of grain and this unanticipated change made the corn laws far more favourable to agriculture than they would otherwise have been. Urban interests then gave a high priority to the repeal of these laws and they were in due course abolished. (I am grateful to John Wallis and Adolph Weber for most helpful criticisms on this point, but they are not responsible for my interpretation.)

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