The Three Tier Economy of Prout

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1. Introduction

This article is an introduction to the three tier economy of Prout, or to be more precise, to its three tier system of enterprise management. Prabhat Ranjan Sarkar, the propounder of Prout, considered the three tier system to be one of Prout's special features and we can better understand it by making comparisons to enterprise management in two economic systems that are well known to us, capitalism and communism. There are generally considered to be three ways to own and manage a business: government ownership, private ownership and cooperative ownership. Ownership is an important consideration, because whoever owns and controls the means of production generally gets the *product*. According to communist dogma, all businesses have to be government owned, and in theory the people get equal shares of the product. According to capitalist dogma all businesses have to be in private hands, and in theory product is shared in proportion to the contributions made by the persons involved.

Despite their obvious differences, capitalism and communism have three characteristics in common: (1) they are both wedded to their dogma, (2) in both there is a huge gulf between theory and actual outcomes, and (3) both produce highly centralised economies. Communism is (or was) centralised by design (Sarkar called it *state capitalism*) whereas capitalism inevitably becomes highly centralised driven by the relentless pursuit of profit. Companies must merge in order to survive, leading to fewer but ever larger companies.

During the 20th century, capitalism and communism battled for ideological supremacy and of course, it is now a matter of history that capitalism defeated communism. It is generally agreed that the demise of communism was in major part due to a grossly inefficient system of production. According to one argument, the government controlled industrial complex of the USSR was unable to respond to President Reagan's Star Wars Program and the country collapsed in the endeavour to do so¹.

Of particular interest is that in the ideological struggles of the 20th century, the cooperative system did not play a visible role. In order to understand this invisibility and in order to understand Sarkar's three tier proposal, it is helpful to review some of the history of the cooperative system.

2. The Cooperative System

The basic principles of the cooperative system were laid out in the early 19th century by the Welshman, Robert Owen (1771-1858), at a time when the British working class was reeling from the impact of the industrial revolution. Owen was a successful businessman who nevertheless believed that a company could maintain good labour relations and promote the welfare of workers while still remaining efficient. In 1800, when Owen became manager of the New Lanark mills and its 2000 workers, he introduced a system of labour negotiations which relied on reason rather than violence to achieve a result. In 1824 he went to the USA to establish a model community

¹ In the later phases of the cold war, the US adopted what became known as the *Strategy of Technology*. The idea was to overwhelm the Soviet Union's economic ability to maintain military parity. See URL 17.

called New Harmony². He returned to England in 1829 and was instrumental in establishing the cooperative movement which held its first conference in Manchester, 1831.

Owen's early views on management would be considered paternalistic by today's standards but he quickly came to promote cooperative equality and self-management. It is not often appreciated that Owen's cooperative vision was more than just factory cooperatives. He saw cooperatives as part of a broader program of urban renewal and educational reform. However, such reforms would have required government participation and thus endorsement of the cooperative principle. Despite the fact that New Lanark enjoyed great success and became widely famous in Owen's lifetime, the British government refused to embrace the cooperative model and refused to involve itself in social welfare more generally. Stretton [1999, p101] believes that this *laissez-faire* doctrine cost Britain its early industrial leadership and allowed the French, Germans and subsequently the USA to become greater industrial powers.

By contrast, 100 years later, when Japan embarked on its own industrial revolution, and spawned its own Robert Owen in the form of Muto Sanji, also a successful director of a cotton spinning business, the Japanese government was prepared to embrace Sanji's cooperative doctrine. Sanji's initial intention was only to improve his own firm but success spurred him to develop a management philosophy which linked the welfare of factory workers to the success of Japanese industry and therefore to the success of the nation as a whole. With government backing, a system developed whereby Japanese workers enjoyed security, skills training and high levels of respect in return for cooperative service. This system, although not cooperative by the contemporary definition, nevertheless served Japanese workers and the nation well until the late 20th century³.

The cooperative system did not become an ideological force in the 20th century (despite a shadow of it persisting in Japan) because cooperatives do not lend themselves easily to centralised control. Hence capitalists and communists both oppose the cooperative system. Furthermore, cooperative production cannot compete with multinational companies who have the power to impose low wages and externalise social and environmental costs. Nor do they prosper in the modern world of economic rationalism where profit and efficiency are very narrowly defined. Today however, the defects of economic rationalism are becoming more apparent and the cooperative model is once again attracting attention.

3. The Three-tier Enterprise System

Prout is first and foremost a cooperative based economy and in this respect it stands in marked contrast to both capitalism and communism. However, Sarkar has not succumbed to a 'dogma of cooperatives'. Rather he recognises (and experience has clearly demonstrated) that all three systems of business ownership are appropriate in different circumstances. Advocating a balanced and practical approach, he proposes "a three-tiered economic structure, that is, small scale privately owned businesses,

² The town still exists in Indiana. See URL 18.

³ For more on Japan's industrial revolution read chapter 11 of Stretton [1999].

medium scale cooperatives and large scale key industries managed by the immediate government." [Sarkar, 1984]

This at least, is a brief summary to convey the general idea. There remains some confusion partly because the early translations of Sarkar's works were ambiguous in crucial places and partly because he described the system over a period of years. In later years, he summarised the idea in a single sentence such as the one quoted above and it is easy to forget that the discourses of 30 years earlier provided considerable detail. One motivation behind this article is to return to the early discourses with the most recent translations that have since become available.

Important Concepts

Sarkar formally introduced Prout in 1959, but in the two preceding years he had already described many of the important concepts in *Human Society Part 1* [Sarkar, 1957] and *Problems of the Day* [Sarkar, 1958].

For our purposes the relevant part of *Human Society* is the section headed *Business People*. The context is India not long after achieving independence from Britain. The cold war is underway and India is caught between the imperial might of Britain and the socialist might of its northern neighbour, the USSR. There is much discussion within India about its economic direction - capitalism, socialism or a mixed model such as welfare capitalism? Gandhi is also in the picture with his opposition to modern technology and his promotion of small cottage industries symbolised by the spinning wheel.

Sarkar approaches the topic by stating that there are three possibilities to owning and running a business, state control, cooperative and private. He quickly rejects the wisdom of widespread nationalisation of industry. He argues that the technological complexity of the modern state makes it impossible for central bureaucrats to run and supervise all large, medium and small scale enterprises. Nationalisation is simply inefficient. Note that with this argument, Sarkar accepts the reality of the modern state with all its technological complexity and thus implicitly rejects Gandhi's anti-technology position.

Next Sarkar rejects as "unrealistic" the proposal that everything should be run as cooperatives. He observes that cooperatives must possess particular qualities if they are to be genuinely cooperative and it is not possible for all enterprises to have those qualities. Finally Sarkar strongly rejects state regulation of privately run businesses and the various mixed economic models that were popular at the time. His main argument is that private owners will always be fighting against the constraints imposed by government which will lead to black market activities, tax evasion etc. He believes that welfare capitalism is an inherently flawed concept which is more concerned to preserve the power of the capitalists than it is to promote welfare. (Elsewhere, Sarkar acknowledges Bertrand Russell's description of Nehru and colleagues as 'socialist show-boys'.)

So what does Sarkar propose? He presents his vision in the context of the Indian agrarian economy and the production of essential commodities. The dominant economic role is to be played by three kinds of cooperative: farmers' cooperatives, producers' cooperatives and consumers' cooperatives. Farmers' cooperatives, says

Sarkar, offer economies of scale, sorely needed in India where agriculture is dominated by peasants working small plots of land. Aggregating small fields will allow farmers to arrange seed more efficiently and to increase crop production by taking advantage of "proper scientific methods".

Sarkar promotes a system where the production and distribution of each individual commodity is assigned either to the public, cooperative or private sector. Only farmers' and producers' cooperatives should have the right to produce essential food, fibre, clothing and fuel, while only consumers' cooperatives should be responsible for distribution and marketing of the same. Housing materials should be manufactured and distributed by the state government (through the mechanism of *autonomous bodies*) or by large cooperatives supported by the state government. The right to manufacture medicines should be entrusted to autonomous bodies which can distribute the medicines themselves or through consumers' cooperatives. Autonomous bodies are not directly defined but appear to be statutory entities similar to public utilities.

Sarkar is explicit about the dangers of business people having a dominant role in the rural economy. He defines business people as "those who profit by trading and broking without being directly involved in production". Such people should not own arable land, nor should they act as intermediary merchants creaming off the profit. He is also opposed to the feudal-like system where peasants work hard but must deliver their harvest to a wealthy landowner.

"Almost everyone in the world today has in principle acknowledged that only genuine farmers should own arable land, and that no third party should come between them and the revenue department of the government. So it must be accepted that in the production of food, the question of ownership by non-producing business people does not arise at all." [Sarkar, 1957]

Business people should not control the distribution of food grains because when in private hands "it is absolutely impossible to stop hoarding, speculation, black marketing and adulteration in food markets." [Sarkar, 1998, p139] Nor should business people be given scope to gain control of key commodities. It is no accident that the greatest fortunes are made by those who control key commodities such as oil, steel and communications. The production and distribution of non-essential foods, non-essential housing materials and the like is the appropriate domain for private businesses.

Sarkar sums up his general attitude in the following passage:

"The less private enterprise is provided with business opportunities and the more production and distribution are carried out through cooperatives and autonomous bodies, the better. The less the government is involved with the public in the areas of production and distribution the better its relationship with them will be, and the less power the central government has in these areas the better." [Sarkar, 1998, p142] In *Human Society Part 1*, we begin to see Sarkar's vision of a cooperative economy. Other ideas appear which are to be elaborated over subsequent years, for example, the distinction between essential and non-essential goods and the importance of a decentralised economy. However there is no specific mention of the three tier economy. That concept appears for the first time in the following year in *Problems of the Day*:

"Industry, agriculture, trade and commerce - almost everything - needs to be managed, as far as possible, through cooperative organizations. For this, special facilities will have to be provided to cooperative organizations whenever necessary. Adequate safe-guards will have to be arranged, and slowly private ownership, or the system of individual management, will have to be eradicated from specific areas of agriculture, industry, trade and commerce. Only those enterprises which are difficult to manage on a cooperative basis because they are either too small, or simultaneously small and complex, can be left to individual management. Similarly, the responsibility for those enterprises which cannot be conveniently managed on a cooperative basis because they are either too large, or simultaneously large and complex, can be undertaken by the immediate state government (in the case of a federation), or by the local body (in the absence of a federation)." [Sarkar 1958, section 11].

It is clear once again, that Sarkar considers the cooperative system to be the standard means of owning and managing a business. We depart from it only when there is good reason – when efficiency and common sense tell us to. Notice that the definitions of *size* and *complexity* are with reference to some standard of cooperative practice - more on this later. The term *immediate government* will also be explained later, but for the moment think of these businesses as *public utilities* owned by and operated on behalf of the general public. Public utilities were the usual way of producing key commodities prior to the ascendancy of economic rationalism.

The language of the above passage allows us to construct a table (see Table 1) showing the operating domains of the three types of business. It should be mentioned in passing that Table 1 could not have been constructed from earlier translations of the same passage. Therefore it is important when studying Sarkar to obtain the most recent translation available.

determined by business size and complexity.					
	Complexity of the Enterprise				
Size of Enterprise	Not complex	Complex			
Too large for a coop	public utility	public utility			
Large	cooperative	public utility			
Medium	cooperative	cooperative			
Small	cooperative	private			
Too small for a coop	private	private			

Table 1

The mode of business ownership and management according to the three tier system of Prout is determined by business size and complexity.

On October 19th 1959, Sarkar added another component to the three tier enterprise system by introducing the concept of *key industries* [Sarkar, 1959]. The term is not defined directly but from context and examples, key industries are those that have a central or strategic role in the economy. Obvious contemporary examples are the oil and coal industries. While Sarkar is generally in favour of economic decentralization, key industries are the exception. These are of such importance that they require centralized planning.

"If a particular country or district is highly industrialized, that will not help in uplifting or changing the economic standard of other parts of the world or country. Hence industry should be decentralized but key industries should be centralized. For example, the spinning industry should be centralized, and around it there should be a weaving industry run on [the basis of] decentralization principles. Even in areas where the climate is extreme, industries such as spinning can be established through artificial vaporization. This will help to create a self-supporting economic unit, which is badly needed. " [Sarkar, 19th October 1959, Jamalpur, India]

Most key industries will also be very large, so it often appears that the term is synonymous with very large scale industry. However Sarkar later made a distinction:

"There are some special types of key industries which can conveniently function as either small-scale industries or medium-scale cooperative industries. If some key industries are structured in this way, they must be under state control. Care should be taken to ensure that they are properly organized and widespread. Such key industries should never be controlled by capitalists, otherwise the interests of the people will be partially, if not fully, ignored. Moreover if they are left in the hands of capitalists, many kinds of problems will arise." [Sarkar, 1988a]

Key industries are a modification to the basic template of Table 1. When an industry is declared to be a key industry by an appropriate government authority, it comes under state control and central planning. Large scale key industry is centralized while small scale key industry is geographically distributed. This is a strategic consideration. Examples of small scale key industries might be the provision of potable water, treatment of sewage and the manufacture of ball bearings. None of these is necessarily large scale but without them modern civilisation would collapse. Factories that produced ball bearings were specially targeted in World War 2 bombing raids.

We now have two refinements to the template in Table 1. One involves the distinction between a key industry and non-key industry, the other a distinction between essential and non-essential goods and services. Note that these two distinctions are independent of one another. The former distinction is made with respect to the strategic role of an industry, while the latter distinction is with respect to what consumers normally buy. It is unlikely that ball bearings will appear in a weekly shopping list and a bakery does not rate as a strategic industry. But of course, both distinctions will vary according to the circumstances of the age. Sarkar formally introduced Prout in 1959, in the final chapters of *Idea and Ideology* [Sarkar 1959a]. He traces the rise of capitalism and also the individualistic or selfish tendency which contains the seeds of capitalism's eventual demise. He then lays out the philosophical, constitutional, legal and socio-economic justification for Prout. He introduces ideas such as the *guaranteed minimum requirements, incentives, guaranteed purchasing capacity* and the need for a *merit based* economy. He concludes with Five Fundamental Principles which are a succinct statement of the economic principles of Prout. These are later included in a set of 16 aphorisms that summarise Prout [Sarkar 1962].

Sarkar's second exposition of Prout, *Discourses on Prout* [Sarkar 1959b], includes a summary of the three tier system:

"Large-scale and small-scale industries should remain side by side. Key industries should be managed by the immediate government, because it is not possible to run them efficiently on a cooperative basis due to their complexities and hugeness. Small-scale industries should run on a cooperative basis, and the small industries which cannot be managed by cooperatives should be left to private enterprise. Thus: (1) small businesses should be left to individuals; (2) big industries should be owned by the immediate government; and (3) the industries in between the big and small industries should be run on a cooperative basis." [Sarkar 1959b, Section 3]

The three tiers of enterprise are described again in different ways over subsequent years. The wording varies on each occasion but all the important ideas were introduced by 1959. One should interpret the later summaries by returning to the original expositions.

Three Categories of Goods and Services

Something more must be said about the distinction between essential and nonessential goods and services because it is profoundly important in a Prout economy. Essentials and non-essentials are treated differently because if essential goods are in short supply, people may suffer greatly but an absence of luxuries can be tolerated, at least for a while! For example, excise taxes might be applied to luxuries but not to essential goods. And while Sarkar encourages free trade in non-essentials, everyone must be guaranteed their essentials before trading the surplus. It is morally unacceptable that malnutrition is widespread in India and yet some 80% of its wheat crop is exported to developed countries to fatten beef cattle.

In 1988, Sarkar formalized the classification of commodities by introducing a third category.

"Commodities can be divided into three categories – essential commodities such as rice, pulse, salt and clothing; demi-essential commodities such as oil and antiseptic soap; and non-essential commodities such as luxury goods. If hoarders create artificial shortages of non-essential commodities common people will not be affected, but if they accumulate essential commodities then common people will suffer tremendously. This situation can be avoided if consumers' cooperatives

purchase essential commodities directly from producers cooperatives or agricultural cooperatives." [Sarkar 1992, Ch 15]

In subsequent paragraphs, Sarkar specifies the relation between commodity type and enterprise type.

"If the distribution of essential commodities is done through consumers cooperatives, middlemen and profiteers will be eliminated. ... Demiessential commodities, which may be affected by artificial shortages causing suffering to common people, should be produced by producer cooperatives. The production of luxury goods can be left in the hands of the private sector. Essential commodities or services of a non-farming nature coming within the scope of producers' cooperatives, and which require huge capital investments, should be managed by the government. The railway system is an example. So, for the establishment of a healthy society, agricultural cooperatives, essential commodity producer cooperatives and essential commodity consumer cooperatives are a must." [Sarkar 1992, Ch 15]

A reading of the various texts suggests Table 2.

Table 2

The mode of production used to produce a commodity will in part be determined by its category, essential, demi-essential or non-essential.

Category of	Public Utility	Cooperative	Private
commodity or service			
Essential	\checkmark	\checkmark	X
Demi-essential	Х	\checkmark	Х
Non-essential	X	\checkmark	\checkmark

The Enterprise Pyramid

To place Sarkar's three-tier classification of enterprises in context, it is useful to examine the distribution of business sizes in a well developed economy such as Australia. Businesses in Australia are typically divided into four categories. By far the largest category, embracing some 82% of Australia's 1.11 million businesses (in 2002), are the micro-businesses owned by one or two people and employing few or no staff. Micro-businesses have limited resources and each produces a limited range of goods. They are price takers and have no market power (See Table 3). At the other end of the scale are huge businesses, employing more than 200 people. They dominate the market over a wide geographical range and are price setters.

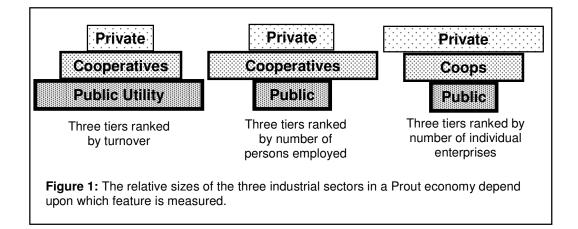
Of particular interest is that there are very few large businesses and many small ones. In fact, research has established that the distribution of business sizes is so consistent between countries and over time, that it appears to be governed by three laws [Gittens 2006]. The first law, known as the 95% rule, says that large businesses rarely exceed 5% of the total. In Australia it is less. The second law is the *pyramid law* which says that the number of businesses of a particular size is in inverse proportion to their size. The third law says that these patterns vary little over countries and over time.

Table 3

Like many other countries, business sizes in Australia follow the pyramid rule, that is, there are very many small businesses and few large ones. The term *frequency* in column 2 refers to the number of businesses in Australia. The numbers in columns 2 and 4 are obtained from the Australian Bureau of Statistics, Year Book 2002 [URL9]. Note that these ABS figures exclude public trading and general government entities and businesses in the agriculture, fishing and forestry industries.

Business Category	Frequency (number of businesses)	Number of staff per business	Total persons employed in business category	Prout category
Large	2,700 (0.24%)	>200	1.75 million	Public Utility
Medium	36,900 (3.3%)	20-199	1.80 million	Large coop
Small	167,100 (15%)	5-19	1.44 million	Small Coop
Micro	907,800 (82%)	0-4	1.74 million	Private
TOTAL	1,110,000 (100%)	-	6.73 million	-

The formal division into four categories is used in Australia to make distinctions concerning workplace regulations. It is tempting to propose that the same categories could be applied to Prout's three tiers of enterprise (see the right most column in Table 3). Micro-businesses fall into the private enterprise category, small and medium businesses fall into the cooperative category, while large businesses fall into the public utility category. Assuming that the pyramid law persists in a Proutist economy (an entirely reasonable assumption), then privately owned micro-enterprises would constitute the largest category of business.

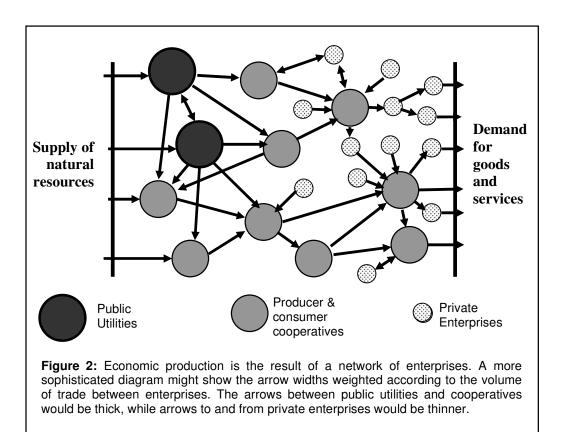


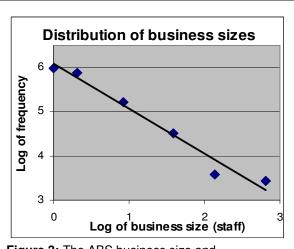
However, as shown in Table 3, the total numbers employed in the cooperative sector would far exceed those in the other sectors. And when turnover is taken as the criterion for size, then the large scale public utility sector is most likely to be dominant (Figure 1). The most meaningful of these criteria is the human one – number of persons employed. In a Prout economy, Sarkar's intention is that the majority of people would work in cooperatives. From a social and cultural perspective, cooperatives will dominate the collective psychology.

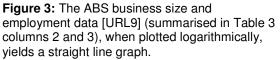
The Enterprise Network

Another way to consider the relationship between public utilities, cooperatives and private enterprises is to view economic production as a network of enterprises (Figure

2). In Sarkar's vision of economic development, cooperatives will tend to cluster geographically around sources of raw materials, which will often be extracted and processed by public utilities. In turn, private enterprises will tend to cluster around







exploiting cooperatives nonessential niche markets wherever they can. For example, a factory producing yarn might be classified as a key industry in a particular area. It would be placed near sources of cotton, wool or artificial fibres as the case may be. Cooperatives producing a variety of fabrics and clothes would be located in the vicinity of the yarn factory. Finally a fabrics industry would attract a variety of individually working artists and fashion designers, whose services would be purchased by interested cooperatives in enhancing their products and gaining a competitive edge.

The notion of a production network can be used to formalize the concept of a *key industry*. As noted above, studies in many countries have revealed that there is a surprising consistency in the pattern of business sizes. When the ABS data in table 3 are plotted using what is called a log-log plot (Figure 3), the result is close to a straight line.

Such a result is highly significant and of immediate interest to scientists, because similar distributions are found in many parts of the natural world. For example, neurons in the brain are connected such that a few neurons have many connections and many neurons have few connections. One can draw a log-log plot of the distribution and obtain a straight line just like the one shown in Figure 3. Genes within living cells regulate other genes. Most genes will regulate only a few other genes but there are a few genes with many regulatory links. The same distribution occurs on the internet. Most internet web pages have only a few links to other pages but there are a few major pages, known as *hubs* that have many links.

In general, networks of this type are called *scale free networks*⁴. They are found widely in the natural world and they have interesting properties. If we assume that large businesses also supply (that is have links with) many other businesses, then the enterprise network also appears to be scale free. Hub businesses, which are of particular importance to the integrity of the network, can be identified mathematically by the pattern of their connections. Key industries are those hubs.

The Enterprise Life-cycle

Research is beginning to reveal many interesting parallels between national economies and biological systems. The existence of scale-free networks in both domains is just one example. Another is the pattern of business bankruptcies or dissolutions over centuries, which has similarity to the pattern of species extinctions over evolutionary time [Ormerod 2005]. It is also helpful to think of the founding and growth of a business as being a *life cycle*. Most commonly, businesses are born small, perhaps in a garage. Some succeed and grow to become multinational corporations (Apple Computing is the archetypal example) - others never get out of the garage.

To get from garage to corporation requires an enterprise to catch a technological wave and to stay on that wave. Today's convenience becomes tomorrow's necessity. Sarkar is explicit, even enthusiastic, in his support of science and technology in a Proutist economy and about the need to expand the domain of necessities as technology progresses.

"The number of items considered essential commodities should be continually and progressively revised and expanded with the changes in time, space and person. Such revisions should be made by the government and not by the board of directors of a particular cooperative.

⁴ This is a technical term to describe the connectivity structure of a certain kind of network. It is of interest because such networks occur widely in the "real-world", for example, social networks, computer networks, neural networks, gene regulatory networks and even disease transmission. In scale-free networks, a few nodes are highly connected hubs despite most nodes having few connections. This pattern of connectivity remains the same no matter how large the network. For more information see the Wikipedia entry, URL 16.

What is considered a demi-essential commodity today may be treated as an essential commodity tomorrow." [Sarkar 1992, p140]

In the Proutist enterprise environment, the same dynamics will tend to push businesses through a life-cycle. Some thought needs to be given to the important transition stages in that life cycle; the transition from private business to cooperative, from cooperative to public utility and even the transition from public utility back to cooperative when a technological wave has swept through and had its day. One way to ease a passage through these life-cycle stages would be to consider the possibility of transitional enterprises and partnerships between the different enterprise types.

Transitional Enterprise Models

Businesses have a life-cycle. A successful business will grow and, in the Proutist framework, may need to negotiate its way through the entire three tier system during its life time. But are there only three models? Why could there not be a spectrum of management models from the single owner-operator of a micro-business to the complex hierarchical management of a large scale government corporation? It would certainly be useful to have intermediate business models between the private concern and a cooperative because they are so different, not just in size but also in the psychology of their management.

One way to approach the issue of transitions is to think in terms of mixed models and partnerships. For example Sarkar's discussion of service cooperatives (see Section 7) includes doctors who pursue private practices within a cooperative framework. This is a model that already has successful parallels in Australia. The Independent Groceries Association (IGA) enables individual owners to manage grocery stores under the umbrella of a larger organisation which achieves economies of scale by sourcing and distributing supermarket items nationally. This is particularly useful in sparsely populated parts of Australia where there may not be the population to support independent consumer cooperatives. Another example, closer to the author's home, is the Praxis Cooperative in Brisbane, Australia. Its six members and associates work both as individuals and cooperatively, offering a range of professional services [URL 20].

Many franchises in a capitalist economy could operate as cooperative-private partnerships. One might even imagine a multinational franchise, such as Macdonalds, operating as a group of dispersed national cooperatives, sharing the same recipes. The critical issue is that those resources which can be purchased locally are purchased locally and that profits (whether of the cooperative or the franchises) be retained locally.

In a mixed cooperative-private model, a business registered as a cooperative would retain within it individuals who are operating their own private business. This model would work particularly well for individuals providing professional services, that is, doctors, lawyers, accountants and artists. The arrangement would preserve the spirit of cooperation but allow for individual diversity.

In the same manner, a large public utility might act as the umbrella organisation for a group of cooperatives who are jointly undertaking large scale public works. This model also exists to some extent in Australia, in the dubious form of PPPs (Public-

private partnerships). The possibility for public-cooperative partnerships (PCPs) may assume considerable importance in a Proutist economy because it could be used to decentralize a centralized key industry. We have already noted Sarkar's opposition to highly centralised industry and his support of science to achieve *economies of decentralisation*. PCPs might be the appropriate managerial structure to move in this direction.

So we now have a five tier system instead of the basic three tier system: the basic three tiers plus PCPs and cooperative-private partnerships. This is a richer way of viewing the possibilities and deals with transitional issues. Other intermediary managerial models will undoubtedly be adopted as required but we should not lose sight of the primary objectives – to ensure that everyone has their minimum requirements of life, to achieve efficient production, to decentralise production by building strong local economies.

An Expanded View of the Cooperative Sector

So far we have considered three kinds of cooperative, farmers, producers and consumers cooperatives. Subsequently Sarkar described service cooperatives and added this comment: "Besides service cooperatives, there are several other types of cooperatives which include farmers cooperatives, producers cooperatives, consumers cooperatives, banking cooperatives, housing cooperatives and family annuity cooperatives." [Sarkar 1992, p271] The last of these is not explained but clearly Sarkar envisages many types of cooperatives commensurate with the wide range of services they can provide.

Pearce [2003] divides the cooperative sector into three sub-sectors, the formal cooperative sector that we have been talking about, that is, cooperative businesses that produce goods and provide services, secondly, the voluntary sector which in Australia is called the *not for profit sector* and thirdly the informal household economy (See Figure 4).

The voluntary sector consists of cooperatively managed NGOs, charities, clubs and societies. Examples are church groups, the RSPCA, AMURT, Amnesty International, the World Wildlife Fund and Greenpeace. Such groups exist for the welfare of marginalised people and care of the environment. They survive from donations and small business activities. They are becoming increasingly important in the modern world and have a significant presence in the United Nations. Such organisations do not exist for production or profit but they are economically important because they represent self-help, where governments and big business have failed. At the local level, they attend directly to problems of unemployment, disaster relief, injustice and pollution where these arise. It is estimated that the *not-for-profit* sector in Australia contributes 4.7% to the GDP. Given their essential contribution to the productive economy and to providing people with the essentials of life, these organisations will continue to have a prominent role in a Proutist economy.

One measure of the health of a community is the degree of participation in voluntary organisations, clubs and societies. Sociologists, such as Putnam [2000], have expressed concern about the decline in club memberships since the 1970s. It is interesting to note a parallel decline over the same period in the Calvert-Henderson real economic indicators [Henderson et al, 2000].

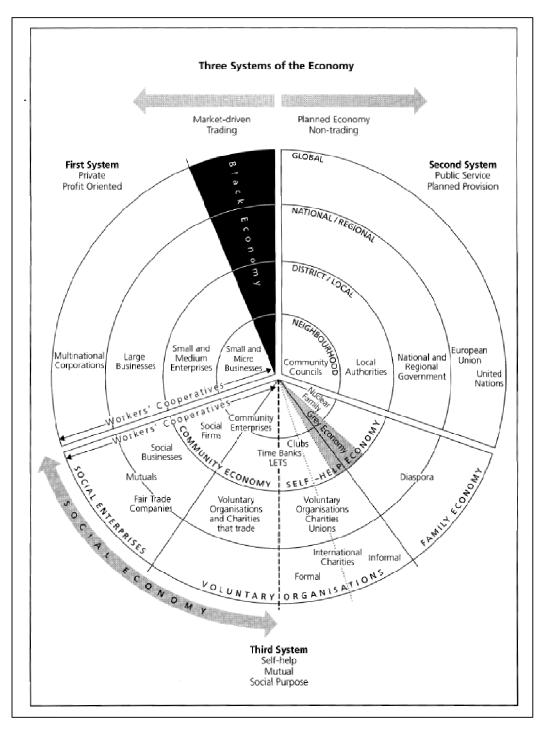


Figure 4: Diagram to illustrate the different sub-sectors of the cooperative sector of a modern capitalist economy. The cooperative sector is more sophisticated and important in a capitalist economy than is indicated simply by the number of workers' cooperatives. [from Pearce 2003]

The third component of the cooperative sector is the almost invisible but tremendously important household economy. Best estimates suggest that informal household production accounts for as much as a third of productive economic activity in Australia [Stretton 1999] and yet it is totally ignored by the formal national accounts. Such activities include care of aged parents, construction of household furniture and the myriad acts of kindness that people do for one another in daily life. It would be futile to absorb the informal household economy into the formal economy (although tax collectors would dearly like to do so!!) but the health of the formal economy ultimately depends on the smooth running of the informal household economy. Hence the importance of public parks and other public amenities that help to make family life easier.

In passing we should mention the larger informal economy. In countries such as India and Brazil, less than 25% of working age persons is employed formally in the private or public sectors. The remainder make themselves a living invisible to the collectors of statistics and taxes. It is therefore useful to make a distinction between the formal and informal economy. The latter is usually defined as that productive activity not planned or measured and therefore not incorporated within the national accounts. In particular, the informal economy escapes taxation. The informal sector includes undeclared small businesses, black market activities, criminal activity as well as the legitimate informal household production that we have already described.

4. Corporate structure and governance

There is a wealth of literature on corporate structure and regulation that would be relevant in a Prout economy. In this section we summarize some of the basic ideas, pointing out areas where the three-tier enterprise system differs from conventional practice.

Cooperative Enterprises

There are seven internationally recognised principles of cooperatives that are also embraced by Sarkar's model of the cooperative system:

- 1. Voluntary and open membership
- 2. Democratic controlled by their members
- 3. All members contribute fairly to their co-ops, which they own in common. Coops pay a limited return on the money a person invests to become member.
- 4. Autonomy and independence cooperatives are autonomous, self-help organizations controlled by their members.
- 5. Education, training and information
- 6. Cooperation among cooperatives
- 7. Concern for the local community

Besides these, Sarkar insists that successful cooperatives also depend on common motivation, strong supervision, ethical management [Sarkar 1987 p277], whole hearted acceptance by the local community and the availability of local markets [Sarkar 1998 p136]. In the Prout system, cooperatives are still subject to the discipline of the market place and if a cooperative cannot get a viable market share in its own locality, it is unlikely to get it elsewhere. Finally Sarkar notes that the cooperative system in general needs to be accepted at the government level with appropriate legislation to encourage a positive climate for cooperatives. (Recall Robert Owen's vision of government support for cooperative villages.) This includes everything from

an education system which espouses the virtues of economic cooperation to legislation that offers protection from the predatory activities of large corporations (a situation that might occur if a government were trying to introduce cooperatives into a capitalist free market economy).

The generally recognised advantages of the cooperative system include:

- There is no conflict between owners and employees because the employees are the owners. The adversarial basis of labour relations is removed. Sarkar puts it thus: "In capitalist and communist countries the mode of production is defective. In capitalist countries, labour does not work in the interest of management and management does not allow the rolling of money due to wealth concentration. In communist countries, labour does not feel one with the job and that is why there is sluggish production. The co-operative model of Prout is free from both defects."
- Workers have more incentive to work efficiently because they enjoy the benefits of their hard work.
- Cooperatives allow workers to reap the benefits of labour saving technology because automation reduces working hours but not income.
- Cooperatives offer security of employment. Workers need not live in fear of losing their jobs because they are also the owners.
- Cooperatives do not exist purely to make a profit. They have multiple goals, multiple bottom lines for example, to provide worthwhile work and to produce products that improve the quality of life of the local community.
- Cooperatives are closely linked to their communities ensuring that cooperative boards of management will make decisions that take community interests into account. For example, coops are less likely to pollute the environment because their owner-workers must live with the pollution they create! A frequent criticism of private corporations is that they are not accountable to the communities affected by their decisions.

Sarkar admits that cooperatives have failed in many countries, giving rise to doubts regarding their viability as an alternative business model:

"On the basis of the examples to date, it is not appropriate to criticize the cooperative system. This is because most countries could not evolve the indispensable conditions necessary for the success of the cooperative system. Cooperatives depend upon three main factors for their success – morality, strong supervision and the wholehearted acceptance of the masses. Wherever these three factors have been evident in whatever measure, cooperatives have achieved proportionate success.

"Take the case of Israel. Because the country is surrounded by enemies on all sides, the people are extremely aware of the need to be self-reliant. People want wholeheartedly to consolidate the national economy. Thus, they have converted arid deserts into productive agricultural land through the cooperative system.

"As this kind of mentality was never created in India, India is a classic example of the failure of the cooperative system. Indian cooperatives were not created for economic development but for the fulfilment of political interests. Under such circumstances it was impossible for the cooperative system to succeed." [Sarkar 1992]⁵

Fortunately, today we can say that there are many cooperative success stories around the world. The best examples of large scale cooperatives are to be found in Mondragon, in the Basque region of Spain [URL7]. Good examples of medium and small scale cooperatives can be found in Maleny, Australia. This small town boasts over 20 cooperatives, including a cooperative bank, food coop, waste recycling coop and several housing coops. Housing cooperatives are common in many parts of the world especially Turkey and Scandinavia.

Government Business Enterprises

Recall that in Prout's three tier economy, all key industries and all enterprises which are too big to be run conveniently as cooperatives are operated as government enterprises. Their capital is 'owned' by the public and they operate in the public interest. Public ownership is established by a statute which also defines the goals and governance of the enterprise. The enabling legislation is the responsibility of the nearest appropriate level of government, or to use Sarkar's term, the *immediate government*. For example in Australia which has a federal system, the national airline operates under federal legislation, the electricity boards operate under state legislation and many of the water and sewage authorities operate under local government. In the 1940's, 50's and 60's, prior to the era of privatisation, government business enterprises had an important role in managing natural monopolies, for example harbour and airport authorities and hospital boards. A Prout economy would certainly reverse the privatisation trend, but Sarkar is cautious of politicians having a direct business role. It is important that the legislation defining a government enterprise.

Business corporations, including those which are state owned, typically have a board of directors who represent the owners (that is, the public) and who make policy. Policy execution, on the other hand, is in the hands of one or more executive officers headed by a CEO. A major issue is the degree of government influence over policy making versus the degree of independent public control. This is determined by the enabling legislation which describes the composition of the board. The possibilities include government appointment, election by an appropriately constituted electoral college, election by the employees, election by the public, or some combination of these. Given Sarkar's preference for government to have minimal direct involvement in business, it is not surprising that he describes government enterprises as *autonomous bodies*. An autonomous body has the legal authority provided by statute but after that it operates independently of government and giving the board (and not the government) power to appoint the executive. In New Zealand before privatisation, the District Hospital Boards, the Port Authorities and the

⁵ Firdaus Ghista (*pers com*) has also alerted the author to the uncooperative behaviour of some cooperatives in India. "In Bihar today some coops grow their own crops, use the proceeds to buy up crops very cheaply from poor farmers and then sell that produce for a hefty profit to the government. The government is unable to control this type of cooperative capitalism even if it wanted to do so. How do you stop coops from becoming corporations? If the government does so, then it gives the government a loophole to interfere in the cooperative economy whenever it wants. So moral struggle in coops is something people must be psychologically prepared for."

Electricity Boards etc were elected by the general public at the same time as other local body elections. Sarkar suggests that worker's representatives, elected by the workers themselves, should also have position(s) on the board.

Once a board is established, it (or the chair person) appoints the executive officers. The officers are answerable to the board and the board is answerable to the immediate government representing the people. Executive officers may be selected from among the board members or from elsewhere but these days it is considered best practice to ensure a majority of non-executive directors [Carver 2000]. In the various organisations which he founded, Sarkar also allows for executive officers to be selected from suitably qualified persons outside the board.

Consistent with their role as public utilities, government enterprises in the Proutist model operate on the principle of *no profit and no loss*. That is, they set their prices so as to equate income with expenditure. However, this raises three questions, concerning optimum pricing, efficiency and tax revenue.

The public management of large scale industries is justified where there are unavoidable economies of scale that lead to a natural monopoly. In these circumstances, market forces would push a cooperative or private enterprise to increase profits by restricting supply. According to standard economics text books, government regulation can correct such market 'distortion' in two ways. One is to require the firm to produce to its marginal cost (marginal cost pricing) and the other is to produce to its break even point (average cost pricing). The former policy increases supply but the firm makes a loss over the long term. The latter policy ensures that the firm breaks even in the long term but there is a so-called 'deadweight loss' or inefficiency associated with lower production. Sarkar would appear to advocate for average cost pricing, since elsewhere, his notion of a rational profit requires accounting for all long term fixed costs, investment and sinking funds etc.

However, there is strong argument that public utilities should produce up to their marginal costs because they are typically producing goods that are essential for public welfare. In other words, they should maximise production and fixed costs should be met out of government expenditure. A further argument is that the products of public utilities have positive externalities which are not captured in normal cost accounting. Proutists have yet to give adequate thought to these issues. The economics literature offers other proposals as a compromise between average cost pricing and marginal cost pricing, for example [Futagami 1999].

The second issue to arise from the *no profit - no loss* principle concerns the use of profit in the capitalist system as a surrogate for efficiency and therefore as a guide for long term investment. Some might argue that removing the profit orientation of a large enterprise removes the possibility of monitoring its efficiency but this is not the case. Firstly, there are other ways of striving for efficiency and secondly, public utilities have community service goals in addition to achieving financial efficiency. This is well illustrated by a long running debate in Australia concerning the privatisation of Australia's telecommunications giant, Telstra. Opponents of privatisation argue that a privatised Telstra would cut back on its rural services which yield lower profit margins. They argue that Telstra should be considered a public utility and should be compelled to accept lower profit margins in providing rural

services. This proved to be such a potent political argument that the government delayed privatisation for many years. (Up until the privatisation era, it was accepted practice for public utilities to subsidise their rural services from more profitable urban services.)

In the absence of profit motif, public enterprises can monitor their performance according to the established 'best practice' of the day. Relevant indices might be labour productivity, capital productivity and service standards. Companies can compare themselves with other companies and with international best practice.

The third issue arising from the *no* profit – no loss principle is taxation. Tax is normally levied on profit and a well run public utility can be an excellent source of public revenue. Venezuela is funding its ambitious social programmes to reduce poverty from the profits of its state owned oil company, PDVSA. In Australia, some public utilities operate in the manner of private companies but with the government as sole or principle shareholder, which therefore reaps the dividend. At the time of writing, South-east Queensland's electricity company, Energex, runs on this model and it delivers substantial revenue to the Queensland State government. However it leaves Energex open to government interference and the State government (at the time of writing) stands accused of putting pressure on management to maximise the dividend paid to the government at the expense of maintenance and investment in infrastructure. Sarkar is clearly opposed to this model.

Prout's taxation policy is discussed by Towsey [2003] but suffice to note here that the tax mix depends more on resource taxes than on income and profit taxes. Public utilities consume a high proportion of natural resources, such as water, air, minerals, fossil fuels etc. In other words, the tax stream would come from the inputs to public utilities and not from their output. Resource taxes would not only yield revenue but also offer governments the opportunity to regulate the mix of resource consumption and thereby ameliorate environmental problems.

As a topical example, what might be the Proutist approach to reducing greenhouse gas emissions? Much argument rages over the merits of a carbon tax versus carbon trading. But it does not have to be either-or. We can learn much from two previously successful campaigns that changed public opinion and industry behaviour; the introduction of compulsory seat belts and the controls over cigarette smoking. In the face of initial strong opposition, both these campaigns were successful because both relied on a spectrum of tools, such as discriminatory taxation, incentives, regulation and education. Likewise reducing greenhouse gas emissions will require a combination of carbon taxes, carbon trading, legislation and education. In the Proutist context, a carbon tax might be applied to polluting key industries but the cooperative sector might respond better to a carbon trading scheme. The three tier enterprise system encourages more flexible policy options.

As the world becomes increasingly globalised, industries may emerge that invite management on a global scale, presumably by the United Nations or a world authority of some type. The production of fibre optic cables is a possible contemporary example, where just seven companies produce 98% of the world's requirements. However Sarkar warns against centralising industry on a global scale and always prefers to decentralise as far as is efficiently possible. Given the strategic importance

of fibre optic technology, research should be directed towards efficient production on a national or even smaller scale.

Private Enterprises

Recall that private enterprises in the Proutist model are small scale and provide nonessential goods and services. In the Indian context, Sarkar gives betel shops, tea stalls and restaurants as examples [Sarkar 1959]. Consequently there is no need for the more complex managerial apparatus of larger enterprises. Most private businesses in a Proutist economy would be family businesses or partnerships of a few people. Such enterprises would operate pretty much as small businesses do today, chasing niche markets where these arise and setting prices as high as the market permits. They might also be crucibles of entrepreneurial activity that pave the way for larger cooperative enterprises. According to capitalist theory, private businesses need only be motivated by profit but in practice most small business operators care about what they do and often continue in businesses that do not yield much profit.

Shareholding

A fundamental feature of the cooperative system is that the workers in a business are also its owners. Ownership is established by the workers purchasing shares, thereby having a personal stake in its financial success. This is the entrepreneurial or risktaking element of being involved with a cooperative. It is also standard practice to place a limit on the proportion of the total shares that may be held by any one person or group.

If non-worker shareholders exist at all, they may receive a dividend but have no say in management. "In cooperatives, voting rights should be on an individual basis and not on the basis of the number of shares a person holds." [Sarkar 1992, Section C] Furthermore, shares should return a dividend based on the "net profit earned by the enterprise", but there should be no system of preferential shares, that is shares which earn a fixed amount of interest regardless of whether the enterprise makes a loss or profit. In other words, individuals who invest in a cooperative must share the risk of its success or failure. If cooperatives were to issue profit earning or preferential shares, they would gradually become commercial enterprises. The spirit of the cooperative system would be destroyed and cooperatives would fall into the hands of commercially minded business people.

With one exception, shares should not be transferable or tradeable.

"Members who purchase shares in the cooperative should have no power or right to transfer their shares without the permission of the cooperative, but their shares may be inherited. If some cooperative members have no descendants, then their shares should pass on to their legally authorized successors who will become members of the cooperative if they are not already members." [Sarkar 1988b]

The reason for this policy is once again to prevent a concentration of share ownership in the hands of business minded people who place commercial interests above community. The following passage demonstrates how Sarkar envisages cooperatives having strong community links.

"In different countries there are different systems of inheritance, so the right of inheritance [of a deceased person's shares in a cooperative]

should be decided according to the system in vogue in a particular country. For example, in Bengal the Dáyabhága system is followed, in other places in India the Hindu Code is the established system, while in other countries other systems are practised. If this arrangement is followed, cooperative members will not need to go to court or get involved in litigation. As all members of the cooperative will be from the same vicinity or members of the same village, they will all know each other, and thus there will be little difficulty in deciding who should be the legally appointed recipient of the shares. The members of the cooperative themselves will be able to decide who can claim the right of inheritance to the shares owned by the deceased members." [Sarkar 1988b]

In order to raise capital, a cooperative would, in the first instance, turn to the cooperative banking system. Indeed, the role of cooperative banks is to build the cooperative sector. Large scale investments in infrastructure, perhaps involving government-cooperative partnerships, would be allocated funds in the government budget. Some of the financial instruments in a modern capitalist economy may be appropriate in a cooperative economy, some not. The above passages indicate that Sarkar might be opposed to cooperatives issuing tradeable bonds. However, public utilities might issue bonds if large capital investment programs were not to be entirely funded by government. But such a system would draw savings from the cooperative sector. It is clear that Proutists have yet to research finance in a developed cooperative economy.

Profit in a Prout Economy

Profit motive lies at the heart of capitalism. To quote James Killen, a former Australian cabinet minister (1975-1982), also renowned for his wit; "Anyone who does anything for anything other than profit, is either a bankrupt or a madman!" Indeed the pursuit of profit is so ingrained in the culture of modern capitalist society that we have forgotten how life might be different⁶. Sarkar argues strongly that profit motive cannot be the dominant guiding principle of a healthy socio-economic system. Instead he promotes the principle of *production for consumption*, that is, the production of what people need!

We have already noted the disturbing contradiction between the fecundity of capitalism and the poverty which accompanies it. A combination of competition and the blind pursuit of profit concentrates business ownership to the point where most production is captured by a relatively few people who produce only that which yields *them* maximum profit. Basic necessities are therefore neglected even as luxuries become cheaper. Sarkar argues that replacing the profit motive by a *consumption motive* will remove this defect. Indeed the *production for consumption* motive lies at the heart of a cooperative economy just as profit motive is the heart of capitalism.

Of course profit and loss accounting exists in a Proutist economy because profits are an incentive to work and accounting is required, amongst other reasons, to determine a just distribution of profit. Sarkar promotes the idea of a *rational profit*. A well run

⁶ Adam Smith, in Wealth of Nations, acknowledged the importance of cooperation within an economy; it was the subsequent Neoclassical (neoliberal) approach which narrowed and distorted economic thought. (Alanna Hartzog, *pers com*)

business, he says, should be able to add a mark-up of 15% after all costs, sinking funds etc have been taken into account.

"A rational profit is about 15%. This amount or part of it will be distributed amongst those who manufactured the machines. This will be their incentive. As they get more incentive, workers will try to manufacture more machines. This is not the case in state capitalism [Sarkar's terminology for communism as practised in the USSR] because workers get fixed incentives which become part of their salary. Incentives should encourage greater work and better quality work, so they should be directly linked to production. When this system is adopted, the *per capita* income and the standard of living of the workers will automatically increase." [Sarkar 1980, p69]

A 15% mark-up will not enable people to get rich fast, but it will promote productivity and a steady accumulation of wealth in the community. Note that from a macroeconomic point of view, a 15% mark-up for each individual firm will lead to an approximately 70%-30% split (between wages and profit) of total output from the entire business sector. This comes about because firms within a chain of production are adding a mark-up to the mark-ups of prior firms in the chain [Stretton 1999, p427]. A 30% profit share of gross business output is fairly typical for a modern economy. A 15% mark-up is rational because it leads to a balanced income distribution between secure income (wages) and incentive income (bonuses and dividends). The crucial issue, of course, is that in a capitalist economy, the major portion of profit goes to a few majority shareholders who constitute a small proportion of the population. In an economy dominated by cooperatives, the 30% profit share is distributed to the owners of cooperatives who are the workers themselves. In other words, the cooperative system leads to a more equitable distribution of wealth. In the case of workers in public utilities, Sarkar advocates bonus systems and non-financial rewards.

Efficiency and Multi-lateral Accounting

The issue of profit leads naturally to a consideration of efficiency and the systems of accounting used to determine profit and loss. Efficiency is an important criterion by which we measure the success of many human endeavours, not just business. Efficiency is a ratio – outputs divided by inputs or benefits divided by costs. Efficient businesses usually yield larger profits, hence the usefulness of profit as a means (but not the only means) to monitor economic efficiency. Capitalism prides itself on being an extremely efficient system to allocate resources and to build wealth. In truth, it is a very inefficient system as evidenced by the poverty and environmental pollution that accompany it. From a theoretical point of view, the inefficiencies of capitalism can be traced to a market mechanism that is unable to signal the true short and long term costs of the traded goods and services. This problem is compounded by accounting systems that are concerned only with financial costs and ignore so-called external costs which typically emerge over the longer term. In fact the competitive pursuit of profit encourages businesses to externalise as many costs as possible and to think only in the short term. For example, it is estimated that US corporate profits in 2000 amounted to \$500 billion, but the unaccounted external costs associated with producing that profit amounted to \$2,500 billion. These costs, which included diseases associated with air pollution, cancers induced by work place conditions, environmental clean-ups and so on, did not appear as costs in corporate balance sheets

but rather were paid by taxpayers or victims. See the website [URL4] for more detail of this analysis.

Measures of efficiency and therefore of profit very much depend upon what one decides to count as costs and benefits. And this depends on the state of scientific knowledge and the relative political power of stakeholders. Thus measures of efficiency are highly political and intensely contested. Of course this will remain the case in a Proutist economy, but the principles of Prout clearly indicate a commitment to incorporating a broad range of factors in the balance sheet, for example, intellectual, social, emotional and spiritual resources. Is it possible to account for such a diverse range of resources in an efficient way, thinking for the future as well as the present? Yes! In fact several exciting initiatives have already been adopted by businesses and local governments around the world.

A widely adopted initiative is known as *triple bottom line accounting*. It attempts to make hidden costs explicit by having three parallel balance sheets that account for the financial, social and environmental effects of a business. The balance sheet identifies known benefits and costs to all stakeholders, including workers, local community, nation and the environment [Pearce, 2003, Chapter 11].

It is worth mentioning a recent surge of interest in a *fourth bottom line* concerned with the ethical dimension of economic activity. Very few companies have an ethical audit of their board decisions [Garret 2003, Cruver 2003]. As noted already, Sarkar is insistent that successful cooperatives are dependent on a high ethical standard of management [Sarkar 1987, p277]. The ethical bottom line has come under the spotlight following the bankruptcies of high flying companies such as Enron and WorldCom. According to Wong [2002] Enron was brought down by its paucity of social-spiritual capital:

"Enron's senior management failed to maintain a relationship of openness and trust with employees. ... Senior management cared more about selfenrichment than the needs of employees. They showed little regard for meaning and ethics beyond the bottom line. ... Enron's deficiency in social-spiritual capital proved to be fatal!" [Wong 2002]

We can expect the number of accounting dimensions to increase over coming decades as we become more aware of the multiple social, environmental and ethical consequences of our economic activity - hence the open-ended term, *multi-lateral accounting*.

5. Regulation

Legislative Support

In a modern economy, the different enterprise types require legislative support, that is, acts of parliament which lay out basic principles of governance and broad parameters of what can and cannot be done using that enterprise structure. In the case of public utilities, each typically has a dedicated act of parliament, or statute, which lays out the social purpose of the enterprise, its governance and the nature of its link to the executive branch of government.

The legislative support for cooperatives in Australia is weak and varies from state to state, reflecting the weakness of the sector in general. For example, it used to be that a cooperative could not be formed in Queensland without the active involvement of 25 persons. That number has since been reduced because it was an unnecessary impediment. An interesting new development in Australia is the emergence of national cooperatives [URL12] that operate in several states and therefore do not come under the umbrella of any one state's legislation. To respond to this need, the federal, state and territory government have agreed to adopt a national scheme for cooperative legislation. Of interest is that a cooperative can be formed with a minimum of five people, which is the boundary (in the Australian system of business classification – see Table 3) between a micro-enterprise and a small enterprise.

As noted at the end of section 3, there is a spectrum of enterprise possibilities and those which are selected as relevant for a particular country require acts of parliament to support them.

Regulatory Authorities

The success of the three-tier enterprise system depends on two kinds of decision; firstly which goods are essential, demi-essential and non-essential and secondly, how to demarcate the enterprise types. These are qualitatively different kinds of decision. The former deals directly with people's quality of life and therefore properly belongs to the legislative branch of government, that is, to the elected representatives of the people.

Decisions about enterprise demarcation will require expert legal and economic knowledge. How large can a private business become before cooperative management is appropriate? And, in the case of an essential commodity, how to choose between a cooperative or key industry as the best mode of management? Such decisions should be the province of a dedicated regulatory authority, not dissimilar to Australia's existing competition authority known as the ACCC (Australian Competition and Consumer Commission). It would also resolve disputes, for example, when a private enterprise industry (in the small complex category of Table 1) claims that it can produce an essential commodity more efficiently than a cooperative.

It might be worth reiterating why we even care about such considerations. We care because the *way* in which goods and services are produced is as important as *what* is produced. The way goods and services are produced affects the efficiency with which we use scarce resources; it affects our economic security and ultimately our quality of life.

According to Sarkar, decisions about enterprise demarcation "should be based on the principles of self-reliance, maximum utilization, rational distribution, decentralization, rationalization and progressive increases in the standard of living of all peoples." [Sarkar, 1984, under the heading *100% Employment for Local People*] These principles interact in complex ways but nevertheless we attempt a brief introduction to each of them.

Principle of self-reliance

The principle of self-reliance or self-sufficiency is concerned primarily with social, political and economic security. Countries which import many of their essential foods and medicines are vulnerable to foreign pressure. Brazil in the early 2000's contemplated abandoning its free trade agreement with the USA until the latter threatened to withhold supplies of insulin. Brazil discovered that it did not produce this essential medicine.

As usually defined in the Proutist literature, the principle of self-reliance refers to the ability of a country or local community to produce its own minimum requirements of life, namely basic foods, clothing, housing, education and health care. However, in "Economic Self-sufficiency for Bengal" [Sarkar, 1992, Part 6 p295] Sarkar clearly extends the concept to include the production of cash crops and manufactured goods to be traded for semi- and non-essential commodities. In other words, self-sufficiency includes the ability to maintain a balance of trade, as well as the ability to produce one's minimum essential requirements.

Such is the importance of self-reliance that Sarkar advocates the establishment of key industries even if it is not immediately efficient to do so. We have already had the example of establishing a spinning industry using artificial vaporization in regions where climate is unsuitable for crops. Why? Because textiles and clothing are an essential requirement but a secure weaving industry can only be established if local yarn is available. In these cases, the spinning industry would be considered a key industry and given appropriate support even though purely economic considerations might support importation of cotton.

Principles of maximum utilization and rational distribution

Businesses must manage the coming together of the *factors of production* - labour, space, raw materials, tools, machinery, capital etc. The managerial process itself must satisfy some measure of efficiency. The principle of *maximum utilisation* implies that the number of managers and their degree of involvement should be sufficient but not excessive. The principle of *rational distribution* implies that the managerial style will depend upon the technology and degree of automation. In short, the pursuit of efficient management will frequently suggest the business category.

Principle of rationalization

In its broadest sense, rationalization is any reorganization of a company's operations to increase efficiency – but by what definition of efficiency? In recent times, the term has become associated with the ideology of *economic rationalism*, where efficiency is very narrowly defined. We interpret the principle here to mean the adoption of new technology to achieve broader efficiency goals, such as increased output, shorter working hours, safer and more interesting work. We note in passing that Prout does not support automation where it leads to unemployment. But in this discussion we assume a cooperative economy where automation gives scope for decreasing work hours without decreasing income, because the rewards of increased labour productivity are distributed to the owner-workers.

Most usually, rationalisation is intended to take advantage of economies of scale, leading to larger enterprises and increased managerial requirement. Assuming that economies of scale motivate a cooperative to expand, at what point is it advantageous to convert to a public utility? At least three factors come to mind. (1) Cooperatives are community based enterprises and ideally they adopt *appropriate technology*, that is, *technology which, for a given level of output, maximises the use of locally available resources.* In a Proutist economy, the geographical area known as a *block* defines a cooperative's community and a *block* has a population of around 100,000 persons – about the same size as the average local government body in Australia. For a typical cooperative, the *block* would be its major source of labour, raw materials, finance and of course the market for its product. The linking of cooperatives to *blocks* having a particular population immediately sets some constraints on the maximum size of a cooperative. If a cooperative outgrows its community and its technology can no longer remain *appropriate* by the above definition, then converting to a public utility may be the best solution.

(2) Within a *block*, cooperatives compete for market share. They extend their market indirectly by trading with coops in other *blocks*. If economies of scale cause cooperatives to merge with one another, the point will come where a large coop can exert undue influence on the local price by restricting supply. Placing upper limits on the size of a cooperative is the equivalent to anti-monopoly legislation. If splitting a large coop cannot be justified, then forming a public utility may be the only option.

(3) The persons working in a cooperative are also a community. Larger cooperatives in Mondragon, Spain, have reported difficulty in maintaining cooperative integrity when the number of workers exceeds about 500. In this regard, it is interesting to note a recent report by the Queensland Education Department (Australia) that when primary schools exceed a size of about 500 students, it becomes difficult for the students to feel a sense of school community. One of the defining characteristics of a cooperative is that all workers have a sense of personal responsibility for the final product and for the quality of the work place. When a company becomes very large, a major shift in management style becomes necessary, not just to handle complexity, but also to maintain a sense of personal responsibility. This is achieved by shifting to hierarchical systems of management, where personal responsibility revolves around one's team or department within the company.

Principle of decentralization

In today's world, we take it for granted that companies must search for economies of scale if they are to survive under competition. In our discussion of the principle of rationalization, we noted that an expanding cooperative in a Proutist economy would eventually come up against the boundaries of its community, more formally the *block* in which it resides. For the capitalist, such a restriction is an intolerable frustration. Nothing should be allowed to stand in the way of the search for profit. In the Proutist economy however, value is given to economic security. An appropriately decentralized economy offers local people control over their resources, and over how their community develops. They are not subject to blackmail by large companies who threaten to move elsewhere if workers do not accept lower wages.

Capitalist society is so driven by the need to chase economies of scale that most of our scientific and technological research is devoted to meeting that objective. But the research impulse could just as well be steered towards *economies of decentralization*. Economic decentralization is probably the most significant strategic feature of a

Proutist economy. It motivates economic planning, scientific research and collective psychology.⁷

Key industries are usually large scale, capital intensive and difficult to decentralise. However, Sarkar recognises many "adverse effects of industrial centralisation" and encourages attempts to decentralise key industry as far as is consistent with principles of efficiency.

"Normally only very large-scale key industries should be centralised instead of decentralised. But industries which cannot be readily decentralised today may be decentralised in the future due to changing circumstances. At that time the decentralisation of key industries must be implemented." [Sarkar 1992, p227]

Advocates of free-markets, deregulation and globalisation dismiss the importance of a decentralised, community oriented economy. They might derisively refer to the failure of Mao Tse-Tung's slogan to have an 'an iron foundry in every backyard'. Sarkar is not advocating this kind of irrational decentralisation. Rather he advocates decentralisation driven by the desire for economic security and made possible by scientific research.

"As far as possible, the establishment, operation and distribution of all industries should be done at *block* level. Only when this cannot be done should industries be organised at a higher level. Obviously, industries such as iron and steel factories cannot function in every village, block and district, so they should function in a larger area." [Sarkar 1992, p226]

Principle of progressive increase in the minimum standard of living

It is obvious from the foregoing discussion that there will be tensions between the various principles when deciding how an industry is best managed. Efficiency may suggest public utility management, but economic security may favour cooperative management. Both calculations will depend on what criteria are taken into account. The ultimate arbiter in these cases is another principle, *the endeavor to progressively increase the standard of living for everyone*. This endeavor is the driving force of a Prout economy and finds its justification in human psychology. Years of work with no apparent improvement in one's circumstances have a depressing effect on the individual and society. Stagnancy of this kind was a causal factor in the collapse of

⁷ Firdaus Ghista (*pers com*) has offered the author an interesting historical perspective on the origins of the centralised national economy. He cites Braudel's Civilization and Capitalism, 15th-18th Centuries (The Wheels of Commerce vol2) for the argument that economic centralization and imperialism go hand in hand. "In medieval France, there were a number of kingdoms/dukedoms such as Bordeaux, Provence, etc. Each of these kingdoms had their own economies, market networks. These economies were not very developed and not very centralized. They were largely based on geography and were in a sense bioregional. As a result of the struggle between the monarchs and nobles, some of these economies, like Bordeaux, became regionally centralized. During the age of *absolutism*, the economy of France became more and more centralized to feed the growing imperialism of Louis XIV. After the Revolution this centralization accelerated as the new government broke up the provincial structure and created smaller geometrical divisions that had no relationship to geography or market networks. This was essentially the destruction of the provincial economies by the national economy (i.e. the economy of elite Parisian merchants). The entire infrastructure was then developed to enable all these provinces to feed the Parisian hub. In our time these national hubs now feed global hubs like London, Tokyo, Amsterdam and New York. So the process of Prout is to reverse this flow of capitalist centralization of moving from the global market to the national and from the national to the bioregional."

communism. There are three parts to this principle; 1) an index to measure the standard of living, 2) an increase in the index over time and 3) that the index should increase for everyone. This principle has many ramifications but here we are only interested in its bearing on enterprise management. There are two levels of concern, the microeconomic and the macroeconomic.

At the microeconomic level, work should be safe, healthy and interesting. But just as important, it should be socially useful and personally meaningful. Decisions about the mode of management for an industry must consider such factors. The bigger the enterprise, the more likely it is that workers become cogs in a machine. The great advantage of cooperative management is that it enables workers to feel at one with their job.

At the macro-economic level, a variety of indices are becoming available to measure the different components of quality of life. According to economic rationalists, increasing per capita GDP is said to be evidence of an increasing quality of life. This assertion is wrong on two counts. First, per capita GDP is an average figure that hides great inequality of incomes and inequality of access to the minimum requirements of life. Secondly, GDP measures any kind of economic activity whether it contributes to quality of life or not. Military spending, policing, surveillance and the like, contribute magnificently to GDP, but the circumstances which make them necessary suggest something is wrong with our quality of life.

An exciting range of new economic indicators has been developed by the Calvert-Henderson group [Henderson, 2000] These include literacy rates, school dropout rates, infant mortality, nutritional indices, cholesterol levels, average calorie intake, water quality, sanitation standards, access to telecommunications, access to affordable housing, tests for various types of intelligence, the status of women and minorities, pollution levels and natural resource depletion. Friends of the Earth have an interactive web site [URL1] which demonstrates how different combinations of socioeconomic indicators can be combined into a single index. The Kingdom of Bhutan is the first nation to have formally adopted a new economic indicator known as the *happiness indicator*. The innovation has reportedly attracted the attention of the UK Treasury! [Desty 2004]

The way in which large scale businesses are managed impacts directly on standard of living indices. For example, consider a privately owned telecommunications enterprise. As the business grows, its sphere of operations will eventually encompass both rural and urban areas. Rural areas are the least profitable, so the easiest way to increase profits is to cut rural services. GDP might increase but the standard of living for some has declined. The same company operating as a public utility would subsidize rural services with its more efficient urban services because its enabling legislation (an expression of public will) requires it to do so. GDP increases (perhaps not as much) but the standard of living in rural communities also increases.

The Audit Compartment of Government

The *separation of powers* is a fundamental principle of democratic societies. It emerged out of a 2000 year struggle in Europe to establish the humanist ideal, that is, to put human dignity and worth above the dictates of kings, queens and tyrants. Sarkar expresses grave concerns about the gradual erosion of the separation of powers in the

20th century. He goes further and suggests that, in addition to the *legislature*, the *executive* and the *judiciary*, there should a fourth branch of government, the *audit branch* [Sarkar 1961]. In simplest terms, the role of the legislature is to decide what to do, the role of the executive is to do it and, in Sarkar's proposal, the role of the audit branch would be *to ensure they have done it*. The audit branch would not have any role in preparing the budget because this is a policy matter that remains the preserve of the legislature.

In keeping with the notion of triple bottom line accounting, the audit branch of government might also be responsible for a country's social and environmental auditing. That is, it would subsume the bureau of statistics, calculate economic indices, measures of welfare, etc. It would monitor the degree of self-sufficiency of local government areas (*blocks*) and report to the legislature when it becomes apparent that there is an unhealthy draining of wealth from one block to another. In the environmental area, it would monitor the hydrological cycle, soil erosion and greenhouse gas emissions. A separate audit branch of government would have several advantages, such as, to reduce the scope for corruption in dealing with public funds and to prevent politicians from redefining *quality of life* indices to suit their own agendas⁸.

Competition and cooperation

One of the seven international principles of cooperatives is cooperation among *cooperatives.* And yet at the same time, cooperatives are subject to the discipline of the market place. If a cooperative does not produce good quality products, consumers will seek other suppliers. This raises the interesting synergy of cooperation and competition. Australia has a competition watch dog whose job, in theory at least, is to ensure fair and efficient competition. There are many instances, especially with very large corporations, where competition does not make sense. A classic example is competition which leads to a proliferation of competing protocols and standards in telecommunications and computing. To avoid such non-productive competition (the fierce war between Betamax and VHS for video format dominance is a classic example), large businesses cooperate. Finding the right balance of competition and cooperation, that is both rational and serves the interests of consumers, is probably a never ending struggle. It may turn out to be helpful to study the synergy of cooperation and competition in the natural world. (See for example the section on Patterns of Competition and Co-operation in Nature and Society, page 167 of David Holmgren's treatise on permaculture [Holmgren 2002].)

Worker's Organisations and Unions

Traditional trade unions sometimes have difficulty coming to terms with the cooperative model. A case in point is a long running dispute in Italy, where cooperatives form an important sector of the Italian economy. There are estimated to be some 40,000 cooperatives in Italy, which of course give work to many times more people. Most of these workers are not employees in the traditional sense but rather *working partners*. As they combine features of a partner in a commercial company (some sort of entrepreneurship) with those of an employee (the fact of earning a wage), working partners are at the centre of an important fight between trade unions

⁸ The U.S. Government Accountability Office (GAO), the investigative arm of Congress, fulfils some of these audit functions [URL 19].

and cooperative associations. To simplify greatly, the question is whether the working partner should be considered more of a 'partner', and therefore bear the risks of economic activity, or more of a 'worker' and hence be fully protected by industry-wide collective agreements.

Unfortunately this debate takes place against the backdrop of the long historical struggle between workers and bosses who see their interests as antagonistic. And indeed they usually are in a capitalist society! Cooperatives do not fit conveniently into the polarised world of labour versus capital. For more detail on the Italian debate see [URL10]. In fact, as the Italian author comments, trade unions around the world promote many cooperative initiatives, mainly in relation to social cooperatives. The *working partner* dispute exposes an ideological tension between unions and cooperatives - two worlds that actually have many cultural and practical connections, despite their differences.

Sarkar accepts the view that workers should organise unions where they see the necessity. He does not, however, address the issue of the relationship between unions and cooperatives. The easiest interpretation is that trade unions are primarily relevant to the large government run enterprises. And in these, Sarkar also advocates worker representatives elected to the boards of directors.

In the case of cooperatives, many of them will employ workers from different social classes. It is quite easy to imagine a scenario where better educated upper middle class workers become entrenched in better paid management positions and the differential wage between managers and non-managers increases excessively. Sarkar accepts that intellectual and managerial skills should be adequately rewarded but he also insists that there should be some maximum ratio between the lowest paid and the highest paid. Indeed most existing cooperatives have such a maximum ratio, but it is interesting to note that the managers of the Mondragon cooperatives have attempted to increase that ratio from 1:3 to 1:10 as they have become more successful.

The lesson appears to be that there will always be a need for regulatory authorities to monitor working conditions in all enterprises, whether private, cooperative or public. Furthermore, workers organisations will be helpful to guard against class exploitation within cooperatives, and they could also take the role of guilds and trade associations to assist in the dissemination of new technology and to ensure a uniformity of quality standards through an industry. However, care should also be taken that trade unions do not undermine the cooperative spirit. It will probably take some time for the appropriate balance to emerge.

6. The Rural Sector

The Corporate Conquest of Farming

Agriculture in under-developed countries has long been problematic, but as we enter the 21st century even agriculture in developed countries has reached a critical juncture. The combination of climate change, rising energy costs and exposure to unfair competition in the name of 'free trade' has rendered the traditional family farm unviable. The family or owner operated farm is rapidly giving way to *corporate agriculture*, that is, large scale farming dominated by a few corporations able to command large scale investment funds. The Australian government is promoting corporate agriculture as the way of the future, arguing that family farms no longer have the economies of scale to survive in a globalised world. Large multi-national corporations have long dominated the production of inputs to farming and also the distribution of farm output but until recently, the actual farming itself had mostly remained in the hands of small family businesses.

The corporate conquest of farming will have hugely important consequences. A particularly worrying feature is that the agri-corporates see themselves first as financial investment managers and only second as farmers. Yet they are now the largest holders of prime agricultural land in Australia and by contracting out the actual farming, they still determine what is planted and where. One of Australia's largest agri-corporates, Primary Yield [URL13], describes itself as follows:

"Primary Yield is an investment manager specialising in the agricultural sector. For investors and advisors looking to build a well diversified portfolio, Primary Yield offers simple access to a range of quality agribusiness investments managed by industry leading specialists in sectors participating in strong global markets."

The *yield* in Primary Yield is not bushels per acre but cents in the dollar - with the disturbing consequence that farming will inevitably become embroiled in speculative take-over battles, as one agri-corporate attempts to swallow up another.

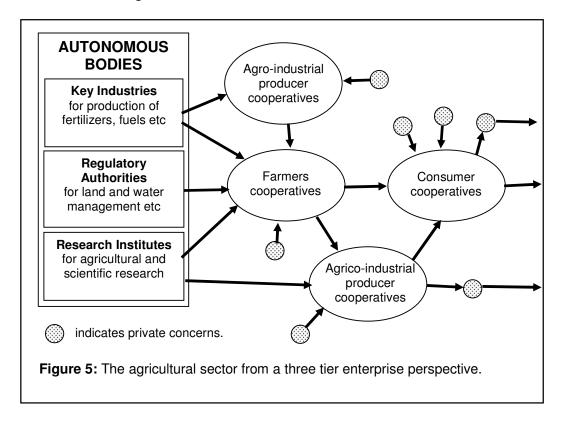
Needless to say many Australian farmers are disturbed by the shift to corporate agriculture. They use terms such as *corporate feudalism* to describe emerging trends in the rural economy [Masters 2007], where arable land is farmed by a class of essentially powerless 'serfs' but owned by a class of aristocrats (powerful corporations) who also reap the product. The term is ironic, since it also describes the reality of farming in third world countries, despite the great difference in technology and scale. Sarkar is adamant in his rejection of the feudal nature of agriculture in India.

A Cooperative Rural Sector

Sarkar accepts that farming must be viewed as an industry and subject to the same criteria of efficiency as required for manufacturing industries. However he insists that farms must be owned and managed by the farmers themselves and that in order to achieve the required economies of scale, farming is best organised cooperatively. Sarkar envisions the rural economy as dominated by a variety of cooperatives, primarily farmers' cooperatives, producers' cooperatives and consumers' cooperatives. The first are engaged in primary production. The second are of two kinds: agro-industries which produce tractors, hoes and other commodities required to grow food and fibre and agrico-industries which value-add by processing and refining farm output. Consumers' cooperatives are responsible for distribution, marketing and sale of agricultural produce. Sarkar also refers to farmers-cumproducers cooperatives which both grow and value-add. Public utilities would supply key raw materials requiring large scale infrastructure for their production and distribution, for example fertilizer, irrigation water and fuel. Privately owned small businesses would provide specialised agronomic and veterinary services and of course specialty foods and gourmet items (Figure 5).

Cooperatives are nothing new in the world's rural economies. Indeed in the 19th century and well into the 20th century, farmer owned cooperatives dominated the processing and distribution of agricultural produce. It is only in the last 20 years with the emergence of economic rationalism, that private corporations made concerted efforts to take over rural cooperatives in a process known as *demutualisation*. Farmers allowed this to happen partly because they were not able to stand against the power of large corporations and partly because they were no longer aware of the advantages that lead them to form cooperatives in the first place.

Sarkar's proposal might be described as the *remutualisation* of the rural economy, with the difference that the actual farming is also mutualised. Farming cooperatively, says Sarkar, offers many advantages. First and foremost, it offers economies of scale and therefore financial stability. Farmers will be able to invest in the latest machinery and take advantage of the latest scientific and technological developments. Financial stability will lead to a second advantage – farmers will enjoy an enviable life-style! Automation will reduce hard physical labour and allow time for intellectual, artistic and spiritual activities. A third important consequence, is that farming will be planned over a larger areas of land and therefore achieve more effective management of water, soil erosion, drainage etc.



Sarkar would wholeheartedly support the following observation of Colin Tudge: "... once we start to think seriously about the fate of cities, and environmental stress in general, and human employment and dignity – we see that for the foreseeable future, and probably forever, the economies and physical structure of the world must be primarily agrarian. In the current crude, unexamined dogma, 'development' and 'progress' mean urbanization. The primary requirement, in absolute contrast, is to make agrarian living agreeable. It can be. It's just that at present, all the world's most powerful forces are against it." [Tudge 2005, p368].

This does not mean that a majority of people would be 'toiling in the fields'. It does mean that the economy and culture of a region would be securely grounded in the ecological dynamics of its landscape. In Sarkar's view, a healthy well developed society would have about 25% to 30% of its active work force engaged directly in agriculture. This compares with 80% in underdeveloped countries and 5% in what Sarkar calls over-developed countries such as Australia and the USA. A strong cooperative sector is required to make agrarian living agreeable. However, Sarkar warns against the hasty formation of farmers' cooperatives.

"... it is not wise to suddenly hand over all land to cooperative management because cooperatives evolve out of the collective labour and wisdom of a community. The community must develop an integrated economic environment, common economic needs and a ready market for its cooperatively produced goods. Unless these three factors work together, an enterprise cannot be called a cooperative." [Sarkar 1992, p113]

Even worse would be any attempt to impose the cooperative system on an unwilling rural population. This would inevitably lead to failure, as was the case when the Soviet Union attempted to imposed collective farming.

"The leaders of the Soviet Union were ignorant of the collective psychology of the people, so they tried to impose collective farming by force. This produced severe famines and massive civil unrest. While trying to cope with these problems, the administration resorted to brute force instead of adopting psychological measures, and as a result they annihilated many people." [Sarkar 1992, p115]

Those attempting to establish a Proutistic economy, says Sarkar, "will never go against the spirit of a country and cause its ruin."

Sarkar's Four Phase Program for a Cooperative Rural Economy

Sarkar proposes a four phase program for the introduction of farming cooperatives.

Phase One: In the first phase, *uneconomic* farms, that is, those where the market price of the produce is less than the cost of production, including all capital, labour and machinery costs, would be encouraged to join a farmers' cooperative. The contributing farmer(s) would still retain title to their land. 50% of the net profit would go to the land owners (in proportion to the productivity of their contributed land) and 50% to the labourers (in proportion to their net wage). The advantage of cooperative management at this stage is an increase in production because uneconomic land holdings become economic. Economies of scale are achieved in the more efficient provision of irrigation, use of machinery and land management practice. In this phase, there is no point in attempting to include economic holdings. Parallel to the formation of farming cooperatives would be the formation of agri- and agrico-cooperatives to

generate local demand for farm produce and to provide employment within the local community.

Phase Two: In the second phase, farmers owning economic holdings would be invited to join the cooperative system but this phase begins only after all non-economic holdings have been consolidated. Profit in farmers' cooperatives is now divided 25% to land owners and 75% to labour. Land owners would still enjoy two income sources, one from their labour, the other from their land contribution.

Phase Three: In this phase, there would be rational redistribution of land. Rational means that farm boundaries would be adjusted to landscape management requirements and that farm sizes would be sufficient to support a family. This policy implies, although Sarkar does not explicitly state it, that individual farmers will be responsible for particular areas of land, but that they work cooperatively with their neighbours. There is now, no distinction between labourer and landowner. All members own the land through their cooperative and consequently 100% of profit is shared in proportion to contribution of members labour.

While one of the advantages of a farmers' cooperative is economies of scale, the farms should not be too large:

"In this phase, it will be easy to establish big cooperatives with the extensive application of science, but these cooperatives will not be anything like the huge collective farms of the Soviet Union or China. If cooperatives are allowed to become extremely large, it will be difficult to utilize natural resources efficiently and this will lead to complications in the sphere of production. One of the main defects of the collective farms in socialist countries is their unmanageable size." [Sarkar 1982b]

The ultimate size and composition of the cooperatives, says Sarkar, should be determined by the farmers themselves.

Phase Four: Sarkar notes that the establishment of a cooperative rural sector will not happen overnight. Indeed he implies that it may take many years for a culture of thinking cooperatively to gradually permeate society. This process is what sociologists would refer to as the accumulation of *social capital*. The final phase will be characterised by no conflict over the ownership of land, by full employment and by an agreeable rural life-style. Sarkar places great stress on the notion of a balanced economy, in which neither too many, nor too few people depend directly on agriculture. Some undeveloped countries have as many as 80% of people engaged in agriculture while some developed western countries have as few as 5%. Sarkar believes that a healthy economy will have some 25-30% of its workforce engaged directly in agriculture. This figure can only be achieved when agrarian life has indeed become agreeable! It is probably true to say that few of us in a highly centralised and industrialised capitalist society can appreciate such a vision.

The most important feature of Sarkar's rural development programme is that it works from bottom up. It proceeds at the pace which farmers and rural communities are willing to embrace the cooperative system. When cooperatives are pushed from the top with little psychological preparation, the outcome must be uncertain. Venezuela and Bolivia make an interesting comparison. President Chavez in Venezuela is creating cooperatives and communal councils from top-down. In Bolivia, by contrast, cooperatives are arising out of a people's movement, bottom-up. If Chavez loses power the entire Venezuelan cooperative program would likely fall apart. In Bolivia, political leaders are almost irrelevant because their cooperative movements have been built by local communities who offer ultimatums to politicians. One reason for the difference is that Bolivia's movement has indigenous roots, with a culture quite different from traditional Latin-American culture.

7. The Service Sector

In this section we describe the application of the three-tier enterprise system to the structure of two service industries, health and finance. Sarkar defines a service cooperative as "a subtle type of cooperative coming within the arena of cultural cooperatives." Into this category he includes the work of intellectuals and artists. But he gives as an example, the formation of physicians' service cooperatives. The reader may like to extend the application of the three-tier enterprise concept to other sectors, such as education, media and communications.

The Health Sector

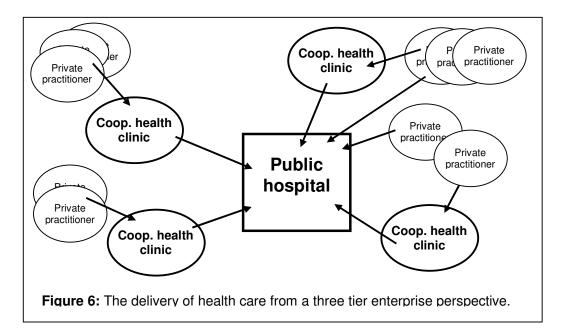
Health services constitute a significant part of a modern economy and consume a large portion of its resources. Consequently delivery of health services must be subject to principles of efficiency, decentralisation etc as described in the previous section.

"Doctors should start service cooperatives. These cooperatives may also be called "physicians' service cooperatives". Suppose a doctor is not able to open his or her own practice, he or she may form a service cooperative with five or ten other doctors. Such a cooperative is an intellectual service cooperative. Doctors who have little capital and cannot afford to establish their own practices can also work in this type of cooperative. Such a system will solve the unemployment problem of doctors. In addition, doctors can start research through these cooperatives, although a doctor's job is ninety-nine percent practical and hardly one percent theoretical." [Sarkar 1992, p271]

It seems natural to adopt the three-tier system to structure the provision of health services through hospitals, clinics and private practitioners (Figure 6). A public hospital would be a large institution typically with several hundred staff and managed as they usually are today by a government body of some kind. Cooperative clinics and hospitals would offer a wide range of standard and specialty services under the same roof but would not offer the high tech diagnostic services of a major hospital (e.g. MRI). Finally, private practitioners would offer a variety of health services and premium services such as home visits.

With regard to the provision of medicines, Sarkar argues that the right to manufacture medicines should be entrusted to autonomous bodies, while their distribution can be through the same autonomous bodies or through consumer cooperatives [Sarkar, 1998, p141].

It is interesting to note that with the advent of *economic rationalism*, hospitals in the Australian state of Queensland, have employed managers at a greater rate than nurses, so that some hospitals now employ more managers than nurses. Despite this, Queensland hospitals continue to be plagued by crisis. Doctors are scarce, nursing is more stressful than ever and hospitals are overcrowded. When business people run hospitals, efficiency apparently comes at considerable cost!



In most developed countries, health care is funded partly by government and partly by personal health insurance. Sarkar does not discuss this contentious issue, other than to insist that everyone must be guaranteed their minimum health requirements. The issue has been discussed briefly in Towsey [2003] who observes that "there is a common perception that government involvement in public insurance promotes equity while non-government insurance schemes are economically more efficient." He then proposes a mixed health funding scheme:

"There is an important distinction in Prout between the *minimum required* allocation of a commodity or service and the additional *amenity* component which makes life easier but is not essential. In the case of health care, the Australian government makes the same distinction. The government provides essential health services, while private insurers cover *optional extras* such as doctor of choice, massage and optometry. This arrangement or something like it, seems elegant. In a Proutist system, government would have a constitutional obligation to ensure that everyone gets the minimum health care services so it should be given the necessary powers to achieve this goal, thereby taking care of the equity objective. Cooperative health insurance companies could provide cover for the additional health amenities that become desirable as a community becomes more wealthy." [Towsey 2003, p6]

Given the expensive medical technology currently available to save lives, this apparantly elegant solution hides extremely difficult policy decisions - what is a minimum health requirement and what is an amenity? A workable health policy is yet another area requiring attention from Proutists.

The Financial Sector

"It is patent that in our days not alone is wealth accumulated, but immense power and despotic economic domination is concentrated in the hands of a few This power becomes particularly irresistible when exercised by those who, because they hold and control money, are able also to govern credit and determine its allotment, for that reason supplying so to speak, the lifeblood to the entire economic body, and grasping, as it were, in their hands the very soul of production, so that no one dare breath against their will."

Pope Pius XI Encyclical "Quadragesimo Anno".

Sarkar would probably have appreciated the intensity of language used by Pius XI. His response would have been to insist that the banking system should not be in the hands of private individuals "because past experience has shown that managers who are dishonest business people have seldom protected the hard earned savings of ordinary depositors. Many have profited by illegally or recklessly investing the bank's money; their activities have also ruined many middle-class families." [Sarkar, 1998, p142] As if to prove his point, in recent years the United States has witnessed the Savings and Loans scandals, Enron, WorldCom and the sub-prime mortgage meltdown, to mention just the big ones. In Australia we have had the collapse of HIH. Each of these calamities wiped out the life savings of many families. They were caused in each case by a few dishonest and reckless managers.

In a Proutist economy, the central bank would be an *autonomous body* at arms length from political interference. In fact the current practice of an independent central bank, whose operations are defined by statute, appears to be entirely appropriate. The problem is that the banking system to be regulated is in private hands and managed to serve the selfish interests of comparatively few private interests. In a Proutist economy, the banking system would be a combination of large scale banks, operating as key industries on a *no profit no loss* basis, and community scale cooperative banks or credit unions.

A widespread system of cooperative banks and credit unions would decentralise money allocation decisions. Cooperative banks build local prosperity because they keep money circulating within the local community rather than letting it bleed to outside investors. To reap this advantage, it is necessary to ensure that the majority of a credit union's funds are borrowed from and lent within their *block* or community. Prout's three-tier system would place an upper limit on the expansion of individual credit unions, thereby preventing any one institution gaining disproportionate power. The profits of cooperative banks would be distributed to shareholders, the majority of whom would be employees and customers living within the same *block*. There is an increasing number of innovations in the field of community banking, for example micro-credit [URL5] and the interest free loans of the JAK banks in Sweden [URL6]. These innovations deserve the opportunity to achieve success, but within the constraints of cooperative management and service to community.

Broking and advisory services are appropriate roles for the private and cooperative sectors, depending on the scale of the service provided. Sarkar refers to *family annuity cooperatives* which appear to provide special types of superannuation and insurance services. Presumably they would operate in conjunction with other cooperatives to provide workers with pension-saving schemes. Conceivably payments to annuity trusts could become compulsory, just like superannuation payments are today. This suggests that community savings, especially retirement savings, may well become an important source of capital for new cooperative enterprises in a cooperative economy.

The financial sector, even in an established Proutist economy, will always require careful regulation to guard against unscrupulous activity. A cardinal rule for policy makers is that a regulatory authority should always be independent from the actual providers of the regulated products and services. It is an obvious rule born out of centuries of experience. Yet it is a rule that is blatantly broken even today in the financial sector of Australia's economy. Trading in shares and securities is regulated in Australia by the Australian Securities Exchange (ASX)⁹. While the ASX regulates other companies listed on the ASX, it cannot regulate itself, and is instead regulated by a statutory authority, the Australian Securities and Investments Commission (ASIC). That may appear safe but the problem is that the ASX is also a for-profit company with a duty to maximise returns to its shareholders. So while the regulatory role of the ASX is to supervise securities trading, it also stands to profit from the increased volume of that trading. It now appears that the ASX has compromised its regulatory role by promoting dubious investment products and hedge fund activity. This has contributed to share market instability and, worse still, to the use of superannuation savings for high risk investments [Ferguson, 2008]. One is reminded again of Sarkar's warning about financiers recklessly investing the savings of middleclass families, thereby bringing about their ruin.

To conclude, financial management will always be about walking a tightrope - it should enable entrepreneurs to respond to perceived opportunities but without giving the selfish minded of them a chance to rort the system. The larger goal is to ensure financial security into the future.

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⁹ The ASX was formed from the merger of the Australian Stock Exchange and the Sydney Futures Exchange in December 2006.

References

- Carver, John (2000) A Theory of Corporate Governance finding a new balance for boards and their CEOs. URL3
- Cruver, Brian (2003) Enron anatomy of greed. Pub Arrow Book.
- Desty, Amos (2004) The New Wealth of Nations Does Bhutan have a better way to measure national progress? American Scientist, Nov-Dec p513.
- Ferguson, Adele, (2008) *Traders Plunder Super*, The Australian, February16-17, 2008, page 1.
- Futagami, Koichi (1999) *The Range of the Public Sector and Efficiency*. Financial Review, **52**, pp1-13. URL14.
- Garratt, Bob (2003) Thin on Top. Pub Nicholas-Brealey Publishers.
- Gittens, Ross (2006) *Few are Great, Many are Small*. The Age, Melbourne, Australia 23-08-2006.
- Henderson et al. (2000) Calvert-Henderson Quality of Life Indicators: A new tool for assessing national trends. Editors: Hazel Henderson, Jon Lickerman, and Patrice Flynn. See also URL8.
- Holmgren, David (2002) *Permaculture: Principles and Pathways Beyond Sustainability*, pub. Holmgren Design Services.
- Masters, Chris (2007) *Treechange*, Four Corners, ABC Television, Australia. Transcript online at [URL 15]
- Ormerod, Paul (2005) *Why Most Things Fail: Evolution, Extinction and Economics.* Pub: Faber and Faber. ISBN 0-571-22012-6
- Pearce, John (2003) Social Enterprise in Anytown. Pub Calouste Gulbenkian Foundation.
- Putnam, Robert D. (2000) Bowling Alone: The Collapse and Revival of American Community. New York: Simon & Schuster.
- Sarkar, P. R. (1957) Human Society Part 1, AM Publications.
- Sarkar, P. R. (1958) *Problem of the Day* (26th Jan, Bhagalpur), republished in [Sarkar 1992].
- Sarkar, P. R. (1959a) Idea and Ideology. AM Publications.
- Sarkar, P. R. (1959b) *Discourses on Prout*. AM Publications, 6th electronic edition of *The Works of P.R. Sarkar*.
- Sarkar, P. R. (1961) Compartmentalized Democracy. Prout in a Nutshell XIV, part 7.
- Sarkar, P. R. (1962) Ananda Sutram. AM Publications. Revised English Edition 1984.
- Sarkar, P. R. (1980) Prout in a Nutshell. Part 18, AM Publications.
- Sarkar, P. R. (1982a) The Liberation of Intellect. AM Publications.
- Sarkar, P. R. (1982b) Farmers' Cooperatives. [In Sarkar 1992, p125]
- Sarkar, P. R. (1984) Socio-economic Movements. Part 9 of A Few Problems Solved. 6th electronic edition of The Works of P.R. Sarkar.
- Sarkar, P. R. (1986) Quadri-dimensional Economy. [In Sarkar 1992, pp40]
- Sarkar, P. R. (1987) *Human Society Part 2*, AM Publications, Retranslated 3rd Edition.
- Sarkar, P. R. (1988a) Socio-economic Decentralisation [In Sarkar 1992, pp226]
- Sarkar, P. R. (1988b) *Cooperatives* [In Sarkar 1992]
- Sarkar, P. R. (1992) Proutist Economics Discourses on Economic Liberation, AM Publications.

- Sarkar, P. R. (1998) *Human Society Part 1*, AM Publications, 4th Edition. First edition published 1959 in Bengali.
- Stretton, Hugh. (1999) Economics A New Introduction. Pluto Press: London.
- Towsey, M. (2003) Tax in a Proutist Economy, Prout Institute of Australia.
- Tudge, Colin (2005) The Secret Life of Trees, Penguin Books, ISBN-13: 978-0-141-01293-3.
- Wong, Paul (2002) Lessons from the Enron Debacle: Corporate Culture Matters! URL2
- URL1 <http://www.foe.co.uk /campaigns/sustainable_development/progress/>
- URL2 <http://www.meaning.ca/articles/print/lessons_from_enron.htm>
- URL3 <http://www.carvergovernance.com/pg-corp.htm>
- URL4 <http://www.endgame.org/endgame.html>
- URL5 <http://www.planetfinance.org/PlaNetFinance>
- URL6 <http://www.jak.se/>
- URL7 <http://www.mondragon.mcc.es>
- URL8 <http://www.flynnresearch.com/calvert.htm>
- URL9 <http://www.yprl.vic.gov.au/
 - cdroms/yearbook2002/cd/wcd00002/wcd00281.htm>
- URL10 <http://www.eurofound.europa.eu/eiro/1997/08/feature/it9708210f.html>
- URL11 <http://abc.net.au/catalyst/stories/s2038245.htm>
- URL12 <http://www.coopdevelopment.org.au/natlinks.html>
- URL13 <http://www.primaryyield.com.au>
- URL14 <http://www.mof.go.jp/english/f_review/fr52e.htm#futagami>
- URL15 < http://www.abc.net.au/4corners/content/2007/s1892893.htm>
- URL 16 < http://en.wikipedia.org/wiki/Scale-free_network>
- URL 17 <<u>http://en.wikipedia.org/wiki/Strategy_of_Technology</u>>
- URL 18 < http://en.wikipedia.org/wiki/New_Harmony%2C_Indiana
- URL 19 <<u>http://www.gao.gov/</u>>
- URL 20 <<u>http://www.communitypraxis.org/</u>>