

The formation of capabilities[?]

G. Omkarnath[?]

I. INTRODUCTION

As a fresh, and at the same time complete, approach to economic development ‘capabilities’ approach can be expected to comprise three central elements:

- (a) The conception of development;
- (b) an explanation of the process of development; and
- (c) the outcomes of development and their measurement.

The elements are clearly interlocked. A conception of development as a process of expansion of people’s capabilities, by itself, is of little consequence for analysis unless accompanied by a framework for explaining that process. Similarly, measurable capabilities as outcomes of development must have reference to the underlying process. For otherwise policy cannot control the development process to modify outcomes in desired ways. Viewed against this general requirement of the approach it is evident that the present state of discourse, often drawing in non-economists, does mark a level of richness and maturity in regard to elements (a) and (c), while element (b) appears to be the least developed. Yet a satisfactory development of this latter element is critical for making the whole approach operational. The purpose of this paper is two-fold: first, to show how and why this is the case; and secondly, to propose an explanatory framework for understanding the formation of capabilities for the crucial case of the developing economy. The paper is divided into four sections. Section II offers a critique of Sen’s general and very tentative analysis of capabilities involving Walrasian modes of analysis, in particular his techniques of ‘E-mapping’ and ‘capabilities function’. An alternative framework of income generation processes informed by classical political economy and drawing upon Indian literature on agrarian markets, § outlined in Section III. Section IV is a concluding statement.

II. CRITIQUE OF SEN’S ANALYSIS OF CAPABILITIES

2.1 *Classical versus neo-classical positions*

“In economic theory the conclusions are sometimes less interesting than the route by which they are reached.”¹ Amartya Sen’s specific delineation of the concept of development has implications for the remainder of his capabilities approach, in particular analysis of formation of capabilities. It is well known that

[?] Paper presented at the 4th International Conference on the Capability Approach, University of Pavia, Italy, September 5-7, 2004.

[?] Department of Economics, University of Hyderabad, Central University P.O., Hyderabad 500 046, INDIA.

¹ Piero Sraffa, as quoted in DeVivo (2003).

his concept of development is a by-product of his long-standing critique of the utilitarian bases of neo-classical welfare economics and his attempts at their reformulation. Under scrutiny have been the supposed rational behaviour of economic agents and the concept of well-being, both arising from a utilitarian and commodity-centric foundation.² Sen's consequent attempts to revise welfare-theoretic propositions, however, lead him close to the conception of development already present in the works of political economists like Adam Smith and Marx. The latter saw development as societal transformation in general and as an expanding arena of individual freedom and choice in particular.³ Growth in the flow of material wealth, of commodities, is merely a means to that end. Despite this closeness to the classical conception of development Sen shows no inclination for adopting the distinctive approach of classical political economy to develop a theory of capabilities by which we mean an explanation of the formation of capabilities. After acknowledging the success of conventional development economics in identifying growth factors, but pointing out its failure in characterizing economic development,⁴ he returns to the conventional, Walrasian modes of analysis.

2.2 *Positive versus normative economics*

Back to the pristine world of Walras, Sen's causal analysis of capabilities follows, even if implicitly, other features standard to mainstream theory. First, he seems to maintain the conventional division of economic analysis into a predictive or 'positive' part and an evaluative or 'normative' part, the former being anterior in a sense, with the exception that his new objectively based ethics of development now replaces the old and subjective utilitarian criteria for evaluating the outcomes of economic process. Sen implicitly maintains the positive-normative division by bringing in a two-stage analysis. The first stage is concerned with the process of what he calls 'generation and security of entitlements' and the second, with 'their conversion into capabilities'.⁵ In the first stage of analysis, given a vector space of commodities, a person's endowment vector is picked and transformed into a space of entitlements or alternative bundles of commodities, rights, benefits and so on she can command. The questions asked in the second stage are: What do people achieve with their entitlements? How do entitlements translate into verifiable life-processes? These lead up to a transformation of the space of entitlements into the space of functionings or capabilities. The analytical tools deployed in the two stages of analysis are respectively, the 'entitlement mapping' and the 'capabilities function'. How precisely 'exchange entitlements' incorporate market as well as non-market institutions, rights and social security is not clear (more on this later). Sen's sequential stage-analysis may also be untenable. For example, social evaluations of 'fair' wage or 'living wage' are a necessary part of the first stage of

² See Sen (1983) for a selection of papers in the area.

³ Sen(1988). For an earlier statement of the classical conception of development, see Lewis (1955).

⁴ Sen(1990), for example.

⁵ Sen(1984), p.529.

his analysis because wage incomes are integral to endowments and entitlements. At the same time they must, as social evaluations, belong to the second stage of study.

2.3 *Static analysis*

Another limitation flowing from Walrasian legacy is that Sen's analysis is forced to be static. For the underlying conception of economic process is linear, 'a one-way avenue', starting from given endowments and ending with functionings.⁶ This completely leaves out of scope of analysis the formation of, and changes in, the stock and social distribution of endowments. In other words, the analysis cannot admit of feedback effects of functionings on endowments. Yet this is an issue at the center of growth process and transformation. The 'one-way avenue' view of economic process, in fact, implies that the sum of individual endowments, representing the community's aggregate resources, is essentially scarce and non-reproducible. Such a schema is impervious to dynamic processes. Furthermore, E-mappings cannot themselves be regarded as 'stable' in a modern economy. As producers seek to make available new and different commodities and to have them valorized, consumers must discover their use-values through actual consumption. The historical process of the formation of use-values is denied its place in the static schema of *given preferences* in addition to that of *given endowments*.

2.4 *Circulationist approach*

Sen's Walrasian mode of analysis may be properly regarded as circulationist, in that the production economy is never brought out in the open; it is subsumed under the exchange economy. If a person's 'exchange entitlement' is seen to depend on her endowments, trading and production possibilities and social security,⁷ the production economy with its given structure and rules of operation must mediate them all. In other words, the link between endowments and entitlements, the E-mapping, is a black box without specifying a system of production. On the other hand, if one adopts, even if implicitly, the conventional demand-supply explanation of production, one is in the unenviable position of rejecting utilitarian principles in the 'normative' part of economic theory (welfare economics) and accepting them *tout court* in general economic theory ('positive' economics).

The position in regard to the developing economy characterized by multiple modes of production is even more daunting. A simple description of the material conditions of social classes placed in different modes of production may suffice for the limited purpose of understanding their relative vulnerability to special crises such as famine, caused by supply shocks or price shifts. In the 'normal' case, however, the *nature* of exchange acquires a significance of its own. This is because different social classes relate differently to markets such that the latter are no longer a simple category. As 'markets' developed to different degrees

⁶ Sraffa(1960) draws the distinction between classical and neo-classical conceptions of the economic process.

⁷ Sen(1981).

exert an independent influence on the production economy, the feasible choices of individual participants, their exchange entitlements, are variously modified. The market is not a passive arena for simply ‘realizing’ entitlements that are generated in the production economy. An economy characterized by overlapping modes of production calls for a substantive theory of exchange. Sen, however, appears to assume that the relevant markets are all adequately formed and that people of all classes participate in them on equal terms.

In the second stage of Sen’s analysis the transition from the space of entitlements to the space of functionings is too complex to be captured by any generalized ‘capabilities function’. The conversion of entitlements into capabilities is conditioned by a host of community-specific norms, customs and belief systems none of which can be specified a priori. The cultural context of conversion of entitlements into capabilities needs to be studied in relation to concrete historical conditions. But the sterility of Walrasian modes of analysis arises precisely from their inability to admit any analysis of history.

2.5 Choice-theoretic measurement

Given the tentative character of Sen’s analysis of formation of capabilities, and the weak foundation of ‘E-mapping’ and ‘capabilities function’, the focus of the present discourse is invariably on either the philosophy of development or measurement issues. We need not get into any discussion of the latter except to note that there is recourse here to the choice-theoretic approach to measurement.⁸

The attempted critique of Sen’s analysis has argued (i) that of the three central elements of capabilities approach, the one relating to the process of development i.e. the explanation of the formation of capabilities is the least developed; (ii) that his analysis, implicitly adopting Walrasian theory, is static, circulationist and, when it comes to measurement, choice-theoretic; and (iii) that the suggested expedients of ‘E-mapping’ and ‘capabilities function’ are not adequate to the task. In the following section we outline a framework for analyzing the formation of capabilities in the specific context of backward, agrarian economy. The framework hinges on income-generation processes of poor households and may be useful in operationalizing the capabilities approach for some of the most vulnerable groups in the world.

III. THE FORMATION OF CAPABILITIES

3.1 Introduction

An alternative framework outlined below seeks to overcome the limitations of Sen’s analysis and help operationalize the capabilities approach. Three of its main features may be noted. First, the problem of capabilities is situated in Third World poverty. By focusing on poor households of a backward economy it departs from the present universalistic tendency in the approach. This also means that the specificities of production and exchange processes in a backward economy are explicitly recognized.

⁸ Sen(1985) discusses measurement issues, in particular the capability index.

Secondly, the framework turns on the concept of ‘income generation processes’. Within the capitalist economy labour incomes are fundamentally generated in labour markets. But in a backward economy that presents a system of overlapping modes of production, annual subsistence of households must be generated out of heterogeneous forms of labour. ‘Markets’ here are more of a metaphor and exert an independent influence to constrain both accumulation and human freedom. The concept of income generation process brings to relief the production economy and, by allowing for social norms and values within the fold of production and exchange, negates the dichotomy of ‘positive’ and ‘normative’ economics. The concept gives rise to a useful distinction between primary and secondary capabilities.

Finally, the proposed framework is informed by the basic approach of classical political economy, especially by its ‘openness’ to historical time and change and by its conception of the economy as a circular process. This overcomes the dichotomy of statics and dynamics in conventional economics. Classical political economy which Sen meets at the cross roads of his conception of development but does not adopt for his analysis of capabilities, is recovered here to the extent possible and necessary.

3.2 Preliminaries

To proceed further on, we need a few definitions. The *agrarian economy* is one where the pattern and pace of accumulation is such that agriculture as an economic activity accounts for a large fraction of working population. This is regardless of whether agriculture’s share in output is correspondingly large. Similarly, manufacturing output may be large and wide-ranging but it must account for only a small fraction of total workforce. The essential condition for the economy to be called ‘agrarian’, therefore, is the overwhelming dependence of population on agriculture.⁹

The agrarian economy is deemed to be in a *normal position* when the fundamental economic processes of production, exchange and income distribution display such regularity as to render the system reproducible. In other words, the observed social and technical relations of production as well as conditions of exchange are viable and capable of reproduction. Random and transitory changes in these conditions are considered unimportant and not worthy of theoretical attention.¹⁰ Concrete historical analysis traces the movement of the agrarian economy from one normal position to another and, given the complex web of interrelations attending the movement, no formal growth model would be a substitute for such analysis.

Two basic units of study make up the agrarian economy: the *village* and the *household*. The village remains a durable socio-economic entity, defining the pattern of economic activity and opportunity, social mores and power relations between economic classes. The village as a unit of study does not depend on the myth of village self-sufficiency. In fact, the village boundaries have always been

⁹ Indian agriculture, for example, accounts for about a quarter of national output but harbours two-thirds of total population.

¹⁰ An excellent discussion of the concept of normal position is in Kurz and Salvadori(1997).

very 'porous' with respect to movement of goods and labour, both across villages and between the village and the town. The village economy is not entirely agriculture but is home for substantial non-farm economic activity. The *household*, the other basic unit, is a pool of resources, labour and non-labour. It is the collective of household, and not the individual member of the household, that is the relevant decision-making unit in regard to the purpose and manner of the use of these resources. Individuals, in so far as they appear as individuals, are *social* individuals and not atomistic rational agents as in conventional economics.

3.3 *Income generation processes*

Economic class differentiation in the village economy has been identified in various ways, but for our purpose a two-fold classification of households would suffice. First, there are households whose activities are fundamentally geared to earning an annual subsistence for the household. These include landless labour, petty landholders including tenants, households with traditional caste callings, crafts-persons, petty traders, the urban underclass and so on. A common characteristic is their poor asset-base and a uniform objective function, namely eking out a livelihood for the entire household, comprising both working and non-working members, over an annual cycle. A sub-class of these households may be chronically deficit, in that they are never able to make both ends meet without incurring debts, while others may be able to just break even over good and bad years. Second, there are households who do generate a surplus over and above their annual subsistence. This category includes a wide range of households, from small landholders under favourable agro-economic conditions and capitalist tenants to middle and large farmers, their common yardstick being their ability to generate a positive surplus out of farming. The two classes of households may be conveniently called, respectively, as *subsistence* households and '*surplus*' households. It is with the income generating processes of the more numerous subsistence households that we are mainly concerned with. But it must be noted that, with class relations thus identified, income generation processes of these households can be understood only in relation to the surplus households.

A significant feature marking the income generation processes of a subsistence household in the agrarian economy is that they not only involve *multiple activities* but also very often represent *diverse categories of work*. A household needs to combine many activities, say, farm labour with non-farm work of some kind, or with working up own or leased piece of land, over an annual cycle. This is because of the seasonally punctuated character of agriculture, time-specificity of labour inputs in farm operations and the important place that family labour occupies in a regime of small scale agriculture, all of which go to frustrate the development of a deep and continuous market for farm labour. An active market for hired labour in agriculture is therefore confined to peak operations of transplantation and harvesting.

Multiplicity of activity per se raises no hard analytical problem. Even in mature industrial economies, workers shift jobs as they are regularly hired and fired or they do 'moonlighting' or have more than one part-time job, especially in economic downturn. What complicates analysis in our case is that the different

things that members of a subsistence household do over the year represent different categories of work. For example, the time that one spends working up own piece of land or grazing own buffalo and the time one spends working for another farmer for wages are two distinct and heterogeneous forms of labour. They arise from different sets of social relations of production. An immediate consequence of this is for measurement. In the case just cited the two activities, representing as they do heterogeneous categories of work, cannot be added hour-to-hour or dollar-to-dollar. Nor is it legitimate to classify households into groups like 'cultivators' and 'agricultural labour' as pragmatic economic statisticians are wont to do on the ground that the one or the other activity accounts for greater share of time spent or income earned. Suppose that farming accounts for 90 per cent of total annual income of the household and hired labour, 10 per cent. The household cannot be classified as a 'cultivator' household because in the absence of hired labour, the critical annual subsistence of the household is threatened. Hired labour as a source of income, then, has the same analytical status as farming and there is no alternative to describing the entire structure of livelihood of the household. Other distinct forms of labour that enter into the survival mechanisms include, besides casual non-farm labour under a bewildering variety of contracts, female labour, child labour and seasonal migration— all in the hired labour segment. Activities on 'own account' include, besides tenancy, petty production, crafts, petty trade and personal and community services, often based on caste callings. The domineering as well as overlapping presence of 'self-employment' in the agrarian economy presents a fundamental problem of conceptualization that appears to permeate other categories such as output, employment, income and savings.

What this implies is that for the agrarian economy as a whole there is a *system of overlapping modes of subsistence*. In other words, there is no sector of the economy called 'self-employed' sector separate from 'wage-labour' sector – the well-known case of dualism – in which case the order of analytical and accounting problems would be different. Distinct modes of subsistence in the present case inhere in the annual subsistence of the same household and often in the individual members of the same household. The system of overlapping (or interpenetrating) modes of subsistence implies straight away the under-formation of labour market. In political economy terms the system militates against the development of universal wage-labour (or commodification of labour power), an essential feature of capitalism. Now, in the absence of productive absorption of labour in manufacturing sector, petty landholders must make most out of their parcels of land for subsistence and therefore an active market in land cannot develop either. Hence the mutually reinforcing under-formation of labour and land markets.¹¹

3.3.1 Interpenetration of agrarian markets

A phenomenon closely associated with overlapping modes of subsistence--and one that is extremely important from the standpoint of formation of capabilities--is interpenetration of agrarian markets. This is better known in the

¹¹ On this see Bharadwaj(1985). Reprinted in Bharadwaj(1994).

literature as ‘interlinked markets’, so called because the terms of contracts in two or more agrarian markets are interlocked such that the feasible choices of the weaker party to the transaction are *ex ante* severely constrained.¹² The phenomenon brings out the play of power relations between subsistence households and surplus households (see above). For example, in a tenancy contract, the lessor may stipulate that the lessee would work for him during harvest season at pre-set wages when it may be hard to get hired labour, so that the lessee’s opportunity of getting higher wages in the regular market is pre-empted. Or the contract, written or oral, might stipulate that the lessee would sell the harvest at a pre-determined price to the lessor so that the tenant is placed at a disadvantage. Similarly, a credit contract may make the loan conditional upon prior commitment of labour services, or the contract may be otherwise based on usurious interest rates such that the borrower is led into a debt trap. A considerable amount of child labour in Indian agriculture originates this way. The interlinked market transactions together mean a loss of dignity and freedom for the subsistence households and an attractive ‘pre-capitalist’ mode of surplus extraction for the surplus households. Thus the arena exchange (‘markets’), far from being a neutral institution to churn out ‘exchange entitlements’ on uniform terms, itself becomes a fertile ground for exploitation of subsistence households. By the same token, interlinked markets constrain productive accumulation by the surplus households who double as moneylenders, traders and so on in the agrarian economy. Usury, indebtedness and servitude are the order for the subsistence households, while surpluses thus extracted leak away into luxury consumption, urban trade, illegal activities and control of political institutions by the rural oligarchy.

3.4 Consequences for analysis, measurement and policy

Several consequences arise for capability analysis from the framework of income generation processes. The first and foremost capability the poor strive for, and upon which all other functionings/capabilities must necessarily depend, is to ensure an annual subsistence for the household. *Income capability* is therefore their *primary capability*; the security and exercise of other capabilities such as ‘being literate’ and ‘being healthy’ are secondary to it. There can be no absolute and fixed standard about what the subsistence should be. It is, as the old political economists well recognized, shaped by ‘historical’ and ‘moral’ elements and is liable to change as these elements change.

Second, the very pursuit of income capability as the primary capability (or what amounts to the human right to livelihood) appears to undermine other valuable freedoms and functionings of the subsistence household. Since the poor cannot raise their entire subsistence from labour ‘markets’ (see above) they turn to combine variegated forms of labour. Given their weak bargaining position in the ‘markets’ for land, credit and other inputs they become subject to a variety of ways of commercial exploitation. The end result of this may be the actual earning of subsistence, but along the way there is much loss of opportunity and freedom, as our analysis of interlinked transactions has shown. Thus attachment of their

¹² A seminal contribution to this literature is Bharadwaj(1974).

own labour services or those of their children, debt-bondage (because the poor have no access to institutional credit), restrictions on the sale of harvest, exposure to production risks (because there are no insurance markets to cover them) are only some examples of the undermining of opportunity, freedom and dignity.

Third, the lack of recognition of the specificities of income generation processes also explains why even well meaning legislation to protect the poor is frustrated in actual implementation. Statutes on minimum wages in agriculture are ineffective because wages in casual farm labour markets are entirely determined by seasonal fluctuations in demand and not by the cost of subsistence. The latter requires that the labour market be temporally continuous and deep. Whatever minimum wage the law fixes one finds that the wages in slack season are far below and in peak season, far above the minimum. Similarly, legislations against usury, bonded labour and child labour do not work because they ignore the structure of livelihood of the poor and what it entails in terms of social relations of production. Income generation processes that exist on the ground also explain why it is very hard to design food-for-work programmes in a large country like India where widely differing crop calendars, crop regimes and prior commitments of labour both inside and outside the village prevail.

Fourth, the framework of income generation processes for analyzing capabilities requires that the former be observed systematically across representative villages and urban agglomerations and over time. This approach alone can afford us adequate and reliable observational bases to understand the structure, variety and changes in income generation processes. Such databases must be generated from specifically designed surveys. Reliance on conventional censuses and surveys in Third World countries is futile for two reasons. First, the basic motivation of these censuses and surveys is often to provide benchmarks for the 'unorganized' sectors of the economy to compute national income accounts. Second, they are invariably based on commodity-centric concepts and definitions appropriate for capitalist mode of production. The unemployment and poverty (consumer expenditure) surveys in India are a case in point.

From the standpoint of present analysis the Human Development Index (HDI) of the United Nations Development Programme (UNDP), inspired by Sen, is flawed in substantive ways. The index itself is based on *outcomes* of development without even an implicit reference to the *process* that generates these outcomes. This leads not only to an arbitrary selection of indicators of human development but also to their symmetric treatment ignoring their mutual interdependence. As noted, the income, literacy and health indicators cannot be treated as being independent of each other. The extent of attached labour and child labour, the sources, terms and reasons of borrowing, the nature of tenancy contracts and farm wage systems have a better story to tell us about capabilities, actual and potential, of rural households than per capita GDP, gross enrolment ratios and life expectancy at birth. In fact, the former define a useful set of 'process' indicators of human development useful for the policymaker, rather than the conventional 'outcome' indicators of HDI.

Finally, policies aimed at the expansion of people's capabilities, i.e. human development, would gain by paying adequate attention to income

generation processes. This helps the state pursue institutional engineering appropriate for stabilizing and transforming livelihood of the poor and eschew one-sided attention to budgetary allocations for social sectors. Policies must allow the poor to gain control over the instruments of production – e.g. land, water, credit, and local democratic institutions -- rather than meet the problems of poverty and unemployment at the consumption end.

IV. CONCLUSION

We shall not attempt to summarize the discussion except to note that the capabilities approach to development is at a critical stage of its development in that a credible explanation of the formation of capabilities for major types of economies is yet to come. The framework of income generation processes offered here, it is hoped, goes some way in filling the gap with reference to subsistence households in the agrarian economy. The task is clearly different from that of characterization, ethical evaluation and measurement of the *outcomes* of development.

References

- Bharadwaj, Krishna (1974) *Production conditions in Indian agriculture*. Cambridge: Cambridge University Press.
- Bharadwaj, Krishna (1985) 'A view on commercialization in Indian agriculture and the development of capitalism', *Journal of Peasant Studies*, 12 (4), July, pp.7-25. Reprinted in Bharadwaj (1994).
- Bharadwaj, Krishna (1994) *Accumulation, exchange and development* – Essays on the Indian economy. New Delhi: Sage.
- DeVivo (2003) 'Sraffa's path to *Production of commodities by means of commodities*', *Contributions to Political Economy*, vol.22. pp.1-25.
- Kurz, H.D. and Salvadori, N. (1997) *Theory of production – A long period analysis*. Cambridge: Cambridge University Press.
- Lewis, W.Arthur (1955) *The theory of economic growth*. London: George Allen & Unwin. Appendix, 'Is economic growth desirable?'
- Sen, Amartya (1981) *Poverty and famines: An essay on entitlement and deprivation*. Oxford: Oxford University Press.
- Sen, Amartya (1983) *Choice, welfare and measurement*. Delhi: Oxford University Press.
- Sen, Amartya (1984) *Resources, values and development*. Delhi: Oxford University Press.
- Sen, Amartya (1985) *Commodities and capabilities*. Amsterdam: North Holland.
- Sen, Amartya (1988) 'The concept of development', in H. Chenery and T.N. Srinivasan (eds) *Handbook of development economics*, v.1. Elsevier Science Publishers.
- Sen, Amartya (1990) 'Development as capability expansion', in Keith Griffin and

John Knight (eds) *Human development and international development strategy for the 1990s*. London: Macmillan.
Sraffa, Peiro (1960) *Production of commodities by means of commodities*.
Cambridge: Cambridge University Press. Appendix.