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**Livelihoods, Sustainability and Capitalism: an Impossible Combination?
A Critique of the Sustainable Livelihoods Approach**

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Livelihoods, Sustainability and Capitalism: an Impossible Combination?

A Critique of the Sustainable Livelihoods Approach

RUNA SARKAR AND ANUP SINHA

1. Introduction

The role of nature in the process of economic development has been attracting a lot of attention. Systematic environmental degradation, rapid depletion of critical natural resources, loss of biodiversity and the threat of climate change are some key issues. Much of the contributions to these discussions have come from scientists, environmentalists and ecologists, and some social scientists. The economics profession has been relatively less involved, where the dominant wisdom about economic development continues to be based on efficient functioning of markets, measured by uninterrupted economic growth in material goods and services.

Modern theories of economic development beginning with the well known Lewis (1954) model are based (albeit in varying degrees) on a premise that improvements in living standards are about industrialization and its growth. The use of reproducible capital created by the application of science-based technology does not have any bounds. The rate of creation and use of new knowledge could of course vary depending on the incentives that innovators and investors face along with their perceptions of rewards. Industrialization is not only taken to be the most important feature of economic development, it is synonymous with modernization and urbanization. The agricultural sector is assumed to be a reservoir of natural resources and labour that create food to feed the urban population that works in the industrial sector. The price mechanism of the marketplace reflect economic scarcities. This signal, in turn, induces (at least partial) substitution away from scarce resources, or triggers some innovation to improve the efficiency of resource use. This mechanism is applicable not only for industrial resources but also for agricultural inputs like land and labour. As a result, land need not be a constraint for agriculture, as better irrigation technology, water extraction from bore-wells or large dams, use of chemical fertilisers and pesticides and biologically modified seeds can ensure higher productivity.

Development is looked at as a structural break from the agrarian economy. During the structural break there could arise transitional problems of livelihoods of the poor. Problems of poverty and income distribution, viewed as something that can be addressed by markets and economic policies, have been discussed quite extensively by economists (Narayan and Glinskaya 2007).

It was much later in the 1990s that serious questions began to be raised about the sustainability of the process of growth in the light of rapid depletion of exhaustible resources, the growing degradation of the natural environment and threats to the quality of life of all living species (WCED 1987). Nature as a constraint to economic growth began to be discussed more frequently (Sheppard et. al. 2009, Dasgupta 2001).

Another problem that has remained throughout the post World War II period has been that the pace of industrialization in many countries was significantly slower and much more problematic than that predicted by economic theory. The emergence of modern economic growth through the transformation of the agricultural sector remained uneven, incomplete and sporadic (Amin 1976, Frank 1978). The experience of economic growth in these developing countries (as opposed to developed countries) was, from the very beginning, marked by widespread poverty, deprivation and inequality (Ahmad et. al. 1991).

The standard response to such problems by policy makers during the 1960s 1970s and 1980s was to plan for interventions that would alleviate poverty, much of which was located in rural areas of

these economies. Such types of interventions did not have much of an impact in general – hampered by corruption or ill-designed interventions which were not appropriate to the context in which they were being implemented (Lipton 1997). The implementing agents (usually government) were in many cases singularly inefficient and uninvolved, with no incentive to ensure proper delivery. The involvement of the local people or the direct beneficiaries for whom the project was supposed to be designed was absent. Their acceptance of a project was taken for granted. This top-down approach to solving social and economic problems through planning systems came under critical scrutiny.

By the 1990s the pattern of development interventions shifted (Krugman 1994). With the collapse of the Soviet Union, there was a resurgence of faith in markets. The role and presence of non-governmental organizations (NGO) increased substantially. Their style of intervention was supposedly more people-based (bottom up), contextually designed, and the creation of jobs (or livelihoods) more sustainable in the use of ecological services. A commonly used framework (with some variants) for interventions is the well-known sustainable livelihoods approach (SLA). This framework was largely developed by researchers at the Institute of Development Studies (IDS) (Ahmed and Lipton 1997, Arce 2003, Bebbington 1999, Carney 1998, Chambers and Conway 1992) and is widely practised in tackling the lack of adequate jobs and incomes arising from the fundamental problem of inadequate or insufficient industrialization.

In this paper we provide a critical review of the SLA framework and question whether such interventions can bring about a transformation or structural break from an agrarian economy that leads to sustainable economic development. We start with a brief discussion on the SLA next, followed by a critical analysis. SLA does not invoke any particular body of economic theory in an explicit manner. However, it appears to be fairly consistent with the tenets of neoclassical economics. We provide a critique of neoclassical economics in the context of sustainability. Looking beyond neoclassical economics, we briefly review the contributions of the classical economists in the context of natural limits to economic growth. More recent contributions by Daly (1992, 1996) and Georgescu-Roegen (1971) are also discussed. The final section explores to what extent capitalism is consistent with sustainability. Does sustainability call for an entirely new debate?

2. The Sustainable Livelihoods Approach

The SLA is a comprehensive framework for development interventions. It is not a development theory but a problem solving mechanism, suitably contextualized to local conditions. Two things are worth noting about SLA. First, the entire approach does not view development as a process that unfolds through social and economic changes, but rather something that results through appropriate actions. Changes are viewed as essentially quantitative though some qualitative dimensions give the approach a normative flavour. The second aspect of SLA is in the use of the word 'sustainable'. The SLA literature admits that sustainability is a contested term and does not have any precise, accepted definition (de Haan 2000, de Haan and Zoomers 2005). The framework views sustainability in a dual sense. Sustainable livelihoods are income and employment that can be reproduced over time even in the face of unpredictable adverse shocks. The other aspect of sustainability is that in creating livelihoods for people, the local environment or ecology (natural capital) is not destroyed. The two taken together is a strong requirement, especially when viewed as intervention on a small scale – say in the context of a village or a cluster of villages.

Scoones (1998) provides a summary framework of SLA which remains a standard reference. The Department for International Development (DFID) has built its operational strategies around Scoone's framework (Solesbury 2003). It covers an extensive set of issues and includes both operational aspects of processes and measures of outcomes. The description of the framework that follows draws heavily from Scoone's paper. It consists of five interrelated stages which are shown in Figure 1 at the end of the paper.

Underlying this framework there is a pre-analytical position that rural livelihoods are inadequate in terms of income and employment. However, livelihoods can be improved with the use of resources available in the local environment. The intervention is not a top-down set of instructions from a manual, but something that evolves through the participation of the ultimate beneficiaries of development. Left to their own socio-economic devices the people would not be able to generate the change themselves. Hence there is a justification in the framework to map the possibilities of interventions.

Scoones uses the Chambers and Conway (1992) definition of a sustainable livelihood as the capabilities and assets (both material and social) that are required for a living. To be sustainable this living must be capable of exhibiting resilience in the face of shocks. The assets and their uses must not undermine the natural resource base available to the beneficiaries.

Before any intervention can be designed and made operational, the framework stresses the importance of understanding the context within which the changes in livelihood strategies are to be brought about. The context is conceived in the widest sense of the term – it includes institutions, local history and politics, socio-economic conditions and demography as well as the natural climate and agro-ecology. Once the context is set, there is a need to analyse the availability of livelihood resources which are essentially the stocks of all productive capital, starting from natural and economic capital to human and social capital. Social institutions determine the sharing and exchanging of productive capital. The task is to design (by involving local people) a new set of feasible and superior economic opportunities that would augment or alter their current portfolio of activities. If any new knowledge or skill is required, it is to be provided by the intervening agency.

The framework looks at livelihood strategies in terms of three (broad-banded) pathways through which the new opportunities can alter activity portfolios. These are changes in agricultural practices through more intensive or extensive cultivation, diversification of income earning activities, and migration away from the geography.

Finally, the framework focuses on the outcomes of the development intervention. The outcomes are categorized into two distinct but interrelated sets. The first set is described as livelihood outcomes and can be measured, or at least observed. It includes the increase in person-days of employment created, increase in income (or reduction in poverty) and an improvement in capabilities such as education, or access to health care. The second set is the sustainability indicators and a lot harder to measure or even observe in any systematic fashion. This set includes livelihood adaptation, enhancement of resilience, and creation of a sustainable (non-decreasing) natural resource base.

When assessing a particular activity as a livelihood, the framework stresses the importance of viewing it as a sequence of actions. That sequence would require certain kinds of capital that, in turn

would have to be acquired or traded-off against some existing stock. Another related question in this context is whether the activity is a stand-alone activity, or part of a cluster of activities that can be pursued together to gain advantages of scope. Finally, there is the issue of access to institutions and resources that is likely to be determined by economic wealth and political power. Many social institutions do not allow universal inclusion on the lines of caste or religion, and access requires greater power or wealth. The process through which the sequence of actions has to be navigated is critical for the success of outcomes. The emphasis on processes in addition to measurable outcomes makes the SLA more people-based (Leach et. al. 1999). Yet, this particular aspect makes it complex and messy. It can mean anything and everything that determines human interactions and exchanges. The institutions could vary from formal to very informal ones, and they could operate at different levels from the local to the national. Understanding the interactions of and developing processes to work with (or around) an existing set of institutions can take a long time. Scoones (1998) claims that this general framework is operationally convenient as it provides opportunities for interventions at different levels from the very micro level of a particular economic activity to bigger interventions, involving changes in agricultural practices, off-farm opportunities and migration. Hence, development is about the outcomes of appropriate interventions in the market economy.

3. Critique of the Sustainable Livelihoods Approach

Livelihoods are about living and ultimately about living well, and should be more than just acquiring assets and earning incomes (Polanyi 2001, Sen 2000). This means that people must be able to comprehend the environment in which they live and work. If necessary, they should also be able to challenge the existing rules of the game that regulate the control, distribution and transformation of resources.

The SLA is not an integrated theory of development (Small 2007, Morse et. al. 2009). By design, it has a microeconomic focus. The sum totals of these interventions do not add up to a macroeconomic picture of transformation. It merely reveals a patchwork of activities where some people and some assets are brought together.

If it is not a theory of transformation and it does not contest or question the larger social institutions that govern resource allocation and economic power, then the people-centred approach for providing more income or assets becomes a way of subtle persuasion to accept the macroeconomic situation and work within that framework to maximize individual economic returns. The capability to leverage opportunities, handle conflicts and question the rules of the game is not addressed by SLA.

It is evident from figure 1 that 'people' do not enter the scheme of things though they are supposedly at the centre of all activities from the inception of a project to its sustained flow of benefits. When dealing with people, complicated issues of power, class, caste, ethnicity, community and gender become unavoidable. These cannot be subsumed in the black box of local institutions (both formal and informal). These issues are more basic since they contribute to the configuration of power within institutions (Rowland 1997).

Our critique of SLA so far has been that it is more a corrective tool of intervention than a way of initiating any systematic transformation. It boils down to creating access to markets, making available more credit, altering the input-output mix in agriculture and changing the portfolio of activities in facilitating what could be described as a microcosmic capitalism (Herrera 2006). This

microcosmic capitalism has a number of implications. First, more often than not, these interventions are biased in favour of people who have greater endowments to begin with. Hence, over time, the local distribution of wealth and income actually worsens (Sarkar and Sinha 2015, Bateman 2010). This might weaken the overall stability and strength of the local community. The second implication is that it necessarily ignores the notion of community or collective in a very fundamental sense. The household with its own internal distributional dynamics is no longer taken to be an indivisible unit. Indeed, this is very evident from the fact that most development projects have some activity exclusively designed for women. This trend towards individualization breaks down the households into men, women and children.

Each can have different goals and interests, and pursue different livelihoods. Individual goals and household goals may differ, as may goals across households. Finally, livelihoods may change because of external opportunities, individual confidence, or new capabilities. This constant weighing of strategy against available options is done through a set of negotiations with oneself as well as with the external environment. The interventions boil down to several short term changes covering a set of individuals without any emergentdiscernible pattern.

The most important of these inconsistencies can be seen when one views the role that nature and natural capital is supposed to play in the SLA. Rather than viewing all economic activities and livelihood sources as ultimately embedded in nature, SLA views natural capital as one kind of marketable productive capital that has instrumental value in providing income. This capital can be substituted with other forms of capital, and choices can be made. This view of looking at nature as having a purely instrumental value can be problematic. An example will suffice. Land can have alternative sustainable uses. How is the use, or perhaps the mix of uses, going to be decided? Sarkar and Sinha (2015) discuss a case where the dust from quarrying for granite as an economic activity was playing havoc with a cluster of villages that was trying to integrate its natural resource base in terms of a mutually interrelated set of sustainable activities. It was a classic example of market failure - a negative externality. The solution requires looking at ecosystems as a whole rather than drawing the boundary of a project in terms of a village or a cluster of houses.

If nature and ecology has to be the basis of sustainability, then any intervention must begin by marking out the appropriate boundary. This is where the knowledge or experience of the development agency might come in useful. Otherwise, merely pointing out to existing opportunities would tantamount to an implicit assumption that the participating people are quite ignorant of their own local economy.

The SLA starts with identifying livelihoods and then looks at those which are most sustainable. The emphasis on incremental incomes, asset accumulation, linking individuals to markets and using nature to generate incomes implies that the approach is embedded within a market based economic structure, and is in no way inconsistent with mainstream (neoclassical) economic theory. We now critique this body of theory in the context of ecology-economy interactions.

4. Neoclassical Economic Theory and Environmental Management

Neoclassical economic theory is based on the logic of allocating scarce resources according to price signals from markets. The principle of analysis is based on understanding incremental (marginal) effects and local stability conditions. There are a number of problems with this approach. It was developed when the abundance of nature was taken for granted. Nature was not only a gigantic gift-hamper which one could dip into for resources (often freely available like fresh water and clean air) but also a gigantic garbage bin where the wastes created in the processes of production and consumption could be dumped without costs. Resource allocation decisions by economic agents – firms (suppliers) and households (demanders) would be on the basis of market prices. The use of marginal analysis gives the notion of an optimal size for each activity carried out by firms and households. There is an optimal production where profits are maximized; there is an optimal consumption where utility is maximized. The notion of optimality comes from acknowledging the presence of constraints imposed by the larger system where the smaller units are embedded. New firms can enter the market and old ones wind up. A similar process of growth and decay exist for households too.

However, while microeconomic units have an optimal scale of operations determining the size, the macro-economy (where the micro units are embedded) has no scale. The value of production can grow indefinitely, measured by GDP. The macro-economy is not seen as embedded in anything at all. It is the whole. Prices determine the relative proportions of resources used, and getting that correct is considered the most important problem the economy has to solve. Neoclassical theories of economic growth allow for continuous growth of GDP through capital accumulation, growth of the labour force, and technological progress. The neoclassical theory of resource allocation per se does not require economic growth, but growth is seen as a solution to the chronic economic problems a market economy throws up – poverty, unemployment, and distributional inequity. The standard analogies found in discussions on the significance of growth are – a rising tide lifts all boats, or a larger cake means the possibility of a larger slice for all. However, continuous growth has not solved the chronic problems of poverty and unemployment. It has also been claimed that as economic growth takes place and incomes increase, society learns to value natural capital as more than just being instrumental in creating flows of income (Kuznets 1955, Economist Sep 14 2013). The improvement in some measures of pollution in developed countries has often resulted simultaneously in more pollution in developing countries as the more polluting industries and technologies have shifted to lower income economies.

Neoclassical theory allows for two qualifications to this analytical vision. First, GDP is actually a value index – the product of price and quantity. The quantity could be that of a tangible product (good) or something not tangible but whose effect is useful (service). If we consider real GDP (at constant prices) growth of GDP could mean either of two things. It could represent an increase in the physical quantity of a product (say computers) or an improvement in its quality. The quality change would be implied by a reduction in material or energy intensity of production or improved performance. In the latter situation the value added of the product improves, that is, the services provided by the computer increases. Since services are embodied in someone or something for some period of time, their expansion also cannot be indefinite (Wernick et. al. 1996).

The second qualification in neoclassical economics is that economic activities have bystander effects on society (externalities) that create a wedge between private costs and benefits on the one hand, and social costs and benefits on the other. These are referred to as instances of market failure. These externalities could be things such as pollution-creating emissions or effluents that cause damage to the environment, as well as damage to human health and property. In such situations, state intervention is required in terms of taxes to incorporate marginal social costs into marginal private costs. The use of marginal analysis clearly looks for local solutions by setting the marginal damage costs of negative externalities equal to the marginal costs of abatement (Kolstad 2010, Harris 2006). Hence pollution, determined by this principle, could be positive but set at an optimal level. Scale effects are just not considered (Costanza et. al. 1997)

In short, neoclassical environmental economics does not take into account the total impact of the damaging effects of economic activity on ecology and bio-physical limits in any systematic way (Sengupta 2013). Moreover, marginal analysis is meaningful only for linear systems. Most scientists are of the opinion that ecological systems display non-linear characteristics (Rockström et. al. 2012). All damage to the environment is not reversible. Thresholds may be crossed beyond which the system tips into non-incremental change, and could also completely collapse.

There is some scepticism about GDP being an adequate measure of well-being, which has led to the use of a number of alternative measures (Kerschner 2006). When one takes into account the value of the external damages (negative externalities) caused by economic growth, there is evidence indicating that economic growth may have actually reduced well-being. Like neoclassical economics, the SLA also does not treat the ecology as a system which might limit growth.

The systemic limits that could be imposed by physical constraints or even the possibility of a zero growth society (stationary state) have been extensively discussed by the earlier classical economists from Adam Smith to David Ricardo and John Stuart Mill. Other economists like Malthus and Marx looked at the instability of the macro-economy with roots in physical and institutional limits. Some modern economists like Daly and Georgescu-Roegen have analysed the biophysical and social constraints to growth more deeply. We turn to a brief discussion on their understanding of these limits and the possibility of a stationary state.

5. The stationary state – some classical and some modern views

The classical economists starting from Adam Smith were the first to analyse the emerging economic system of industrial capitalism. They were all of the opinion that economic growth, though desirable for creating the 'wealth of nations' (and individuals), could not continue indefinitely. The process would be constrained by something natural, like the availability of fertile land, leading to the culmination of growth. The concept of the stationary state has multiple interpretations. For some it is an outcome of economic processes and becomes a state of reality – an ontological stationary state. Another is an analytical construct – like an initial equilibrium from where the process of growth can begin. The stationary state has also been interpreted as something normative, desirable from a social-ethical point of view (Anderson 2012, Boulding 1973, Heilbroner 1999, Whynacht 2011).

Adam Smith (1801) and David Ricardo (1871) both argued about the inevitability of a stationary state premised on the ultimate scarcity of land as a non-reproducible input. The advent of the stationary state could be deferred by technological advances or till the opportunities for international trade

were exhausted. The mechanism through which the stationary state was attained was different for Smith and Ricardo, but in both cases, profitable opportunities for investment would diminish. Growth was something transient. The actual level of wealth in a stationary state need not be low, although Smith warned of its “dullness” (Smith 1801, p 123). The stationary state, using modern ecological terminology, is where the economy has reached its carrying capacity.

John Stuart Mill advocated the stationary state not so much as ontological in nature, but as something that was desirable from a normative point of view. Constrained by the availability of fertile land, market capitalism left to its own devices, would lead to poverty and low living standards. To avoid this inevitability, he advocated the conscious choice by society of a stationary state where there was adequate and equitably distributed wealth and income. Mill stated that:

“.. a well paid and affluent body of labourers: no enormous fortunes, except what were earned and accumulated during a single life time: but a much larger body of persons than at present, not only exempt from coarser toils, but with sufficient leisure, both physical and mental, from mechanical details, to cultivate freely the graces of life, and afford examples of them to the classes less favourably circumstanced for their growth. This condition of society, so greatly preferable to the present, is not only perfectly compatible with the stationary state, but, it would seem, more naturally allied with that state than with any other.” (Mill 1888: 454)

Malthus (1993) claimed that a stationary state was not possible, but cyclical movements in living conditions would make capitalism unstable. The driving constraint was again the paucity of fertile land. His argument was built on the premise that food supply would grow in an arithmetic progression. However, as economic progress (higher incomes) occurred population would grow in a geometric progression. Hence the demand for food would inevitably outstrip supply leading to a crisis of famine, pestilence and even war. This would lead to a correction in population growth and force demand to match supply. This was a repetitive process leading to a series of cyclical corrections. Human society would chronically overshoot its carrying capacity.

Marx, though aware of the adverse effect industrial capitalism would have on nature and the environment, did not believe that that would be the short-term reason for the instability of capitalism. The social institutions of capitalism and its own internal economic logic would lead to repeated crisis from a falling rate of profit. His idea of an economy exhibiting simple reproduction is the closest to a stationary state where there is no net accumulation or growth taking place. It is simply an analytical device (Marx 1976). However, Marx had a distinctly different view of nature and its relationship with human-beings.

Before we wind up our discussion of the stationary state it is useful to briefly review the positions held by two twentieth century economists in drawing our attention to the essentiality of nature in determining economic outcomes – Georgescu-Roegen and Herman Daly.

Georgescu-Roegen (1971), drawing upon the laws of physics, argued that unlimited growth of physical goods in the economy would be impossible. He invoked the first two laws of thermodynamics to elaborate his position. Energy and matter cannot be created or destroyed. Our planetary system is closed with solar energy flows being the only thing that enters. The energy is available in low entropy as solar flows and terrestrial stocks in the form of renewable and non-renewable resources. The non-renewable resources of low entropy are absolutely limited, such as

minerals and oils. The renewable resources can be harvested but have a limited rate of use if renewal is to be ensured. Solar energy is theoretically unlimited but there are limits given the patterns of its availability on earth. Economic activities of human societies are not creating anything basically new, but transforming matter with the use of energy from low entropy to high entropy commodities and finally into even higher entropy wastes. Energy is also transformed during these processes and part of the ability of the transformed energy to do work is lost. The second law of thermodynamics states that entropy increases or remains constant in natural processes. For irreversible processes, the entropy of the system increases.

Modern technology has been dependent on the depletion of natural capital and the creation of stress on ecosystems with newly produced goods for which there are no natural cycles of biodegradation. Georgescu-Roegen's analysis of the implications of modern technology and human progress influenced Herman Daly (1992, 1996) to come up with his idea of a modern stationary state.

Daly argued that an ontological stationary state could result from the complete degradation of the natural environment. Daly, like Mill, treated sustainability as an ethical choice which could not be left to the market. Moreover, if material growth could not continue indefinitely, a sustainable state of affairs would have to be a stationary state. Such a state could come about only by the help of specific environmental policies which recognized the biophysical limits within which the economy functioned. Daly envisioned the stationary state as a steady state, which could accommodate change. "There is continuous renewal by death and birth, depreciation and production, as well as qualitative improvement in the stocks of both people and artefacts." (Daly 1996: 31) Technical progress was possible, which would essentially increase the durability and reparability of goods and resources. In the steady stationary state the throughput (resources and production) or per capita resource use would have to be ecologically sustainable and also be sufficient for a 'good life'. Two things are worth noting in this context. The sufficiency aspect of a good life is a relative concept and must reflect a conscious choice made by society. Neither ecological sustainability nor the sufficiency of the 'good life' can be left to market forces. The second thing worth noting is the fact that the stationary state is not defined as a zero rate of GDP growth. Rather, it is characterized by the constancy of the throughput of the economy.

Daly therefore breaks from the classical vision of a stationary state. He explicitly recognizes two limits within which the economic system must function- biophysical and social. Biophysical limits are formed from a finitude of resources, the laws of entropy, and interdependence of ecological systems. The social limits are set based on society's choices regarding the extent of growth at the cost of depleting natural capital, encroaching on the habitat space for other species and reduced quality of life. Finally Daly questions the desirability of growth focussed entirely on self-interest and material consumption. He calls it the "corrosive effects on moral standards" (Daly 1992: 230).

Just as issues of social choice and ethics do not throw up exact answers, biophysical limits are also not precisely known. The Stockholm Resilience Centre identifies nine key earth system processes which are being altered by human activity (Rockstrom et. al. 2009). For each there is a tipping point, beyond which catastrophic change might occur. None of these can be estimated with accuracy but overall safe zones can be delineated, within which human activities must be constrained.

Summing up, the classical economists were correct in pointing out natural and social limits to growth. In today's world we have a much more nuanced understanding of staying within biophysical limits while ensuring a sufficiently good life for current and future generations. A sustainable system has to be defined first and choices about livelihoods would emerge from such a system. Beginning with livelihoods and then trying to ensure their sustainability would create a rift with the desired stationary state.

Healing the Metabolic Rift

The choice of a stationary state involves taking a particular ethical position on the rights of future generations of all living things (Balakrishnan et. al. 2003). Is capitalism capable of addressing this issue (O'Connor 1994)? Capitalism is based on private property, voluntary market transactions and individual choices that maximize certain self-centred goals like profit or utility. By its very character it seeks to attain power over nature – to create commodities for profit (Liodakis 2010). Of the classical economists, Marx was perhaps closest in identifying this inability of capitalism to address the problem of sustainable development. This aspect of Marx's (and Engels' (1940)) discussions on the human-nature interrelationships is less known as compared to capital-labour interrelationships (Parsons 1977). Some recent works have brought many of these issues to the fore. (Foster 1999, 2000, 2002, Foster et. al. 2010, Burkett 1999, 2005)

For Marx, the history of human societies is a movement from an undifferentiated unity with nature to a stage of alienation (Marx 1964) from physical nature and from their own true nature. Marx (1967: 505-507) wrote:

“Philosophically, the approach that capitalism takes to the environment, and the attitude it forces us to adopt, is one of separation and alienation. As a species we were forcibly cut off from the land, separated from nature, and alienated from co-evolving with it. Capitalist production... disturbs the metabolic interaction between man and the earth, i.e. prevents the return to the soil of its constituent elements consumed by man in the form of food and clothing; it therefore violates the conditions necessary to lasting fertility of the soil..... Moreover, all progress in capitalist agriculture is a progress in the art, not only of robbing the worker, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress towards ruining the more long-lasting sources of that fertility.”

In the process of knowing and controlling nature, new knowledge (and technologies) is created, both about the physical world and the human sciences. Marx indicated that this stage of alienation is only a transitory phase. Capitalism represents this transitory phase of alienation (Ollman 1971). In the process (possibly as unintended consequences) it creates extensive long term damage to the natural environment (Kolbert 2006). By the time of the industrial revolution nature came to be considered as a set of dead things for our use, and inferior life forms to be dominated. Despite the gigantic strides in knowledge, Engels (1908: 27) observed: “... (it) has also left us as legacy the habit of observing natural objects and processes in isolation, apart from their connection with the vast whole; of observing them in repose, not in motion, as constraints, not as essentially variables; in their death, not in their life.”

This was the stage where according to Polanyi (2001) private property was created out of things natural – the great fictitious commodities of the capitalist system – land, labour and money. The first

two were completely naturally available in nature and the process of individuation of land and “free labour” is the product of capitalism. Money was the great commodity created with no intrinsic value, but critically important in binding together all private property and transactions between them through the omnipresent cash-nexus.

Marx observes in Capital Volume III what is actually a definition of sustainability:

“From the standpoint of a higher socio-economic formation, the private property of particular individuals in the earth will appear just as absurd as the private property of one man in other men. Even an entire society, a nation, or all simultaneously existing societies taken together, are not owners of the earth, they are simply its possessors, its beneficiaries, and have to bequeath it in an improved state to succeeding generations, as *bonipatresfamilias* (good heads of households).” (quoted in Foster 2009: 181)

Thus, there would have to be a return to nature but not in the undifferentiated unity of prehistory, but with a more sophisticated, differentiated understanding of nature and about our own selves. For Marx and Engels, the core element of their ecological critique of capitalism was what they referred to as the ‘metabolic rift’ capitalism had with nature. It was not something that technology aggravated or ameliorated. It was the intrinsic feature of the relationship.

The notion that capitalism is essentially hostile to the environment is well established (Swyngedouw 2007). Can global capitalism of the early twenty first century break that hostility and transform itself by redefining its relationship with nature? There are certain features of global capitalism that appear to inhibit human ability to reconcile with nature (Jones 2011, Williams 2010, Sheppard et. al. 2009). First, the sheer rapidity of change in technology and knowledge leaves society unable to see beyond the incremental changes to understand their broader impact. Second, there is a reliance on market forces to address environmental externalities at the local level (Heynen and Robbins 2005). The third feature is the shifting of actual power from the arena of national and local politics to big business (Korten 1995). Nation states are repeatedly taken by surprise due to unanticipated market disturbances from abroad, that create a fundamental uncertainty about the course and content of economic outcomes. An implication of this has been the gradual disengagement of the state as a source of insurance against individual failure or ill fortune. It is the individual and not society that chooses, and the consequences of those choices are borne fully by him. It is the individual’s responsibility to resolve complex problems that affect his everyday life.

Overall, these features have led to the complete collapse of planning as an institution and also as a way of thinking about long term outcomes and possibilities. Instead of comprehensive planning, development intervention (focussing on outcomes that cannot be achieved by the free market) is carried out as a collection of ad hoc projects that do not add up to a coherent whole. The SLA is an example of such an exercise. It defines activities without defining feasible scales. It equates incremental outcomes with sustainable benefits. People’s participation in development must move beyond designing schemes to raising more fundamental questions on human-nature relationships. Nature and society cannot be seen as confronting one another. They are created together and evolve together (Williams 2010, O’Connor 1986). Human history and natural history are two sides of the same story.

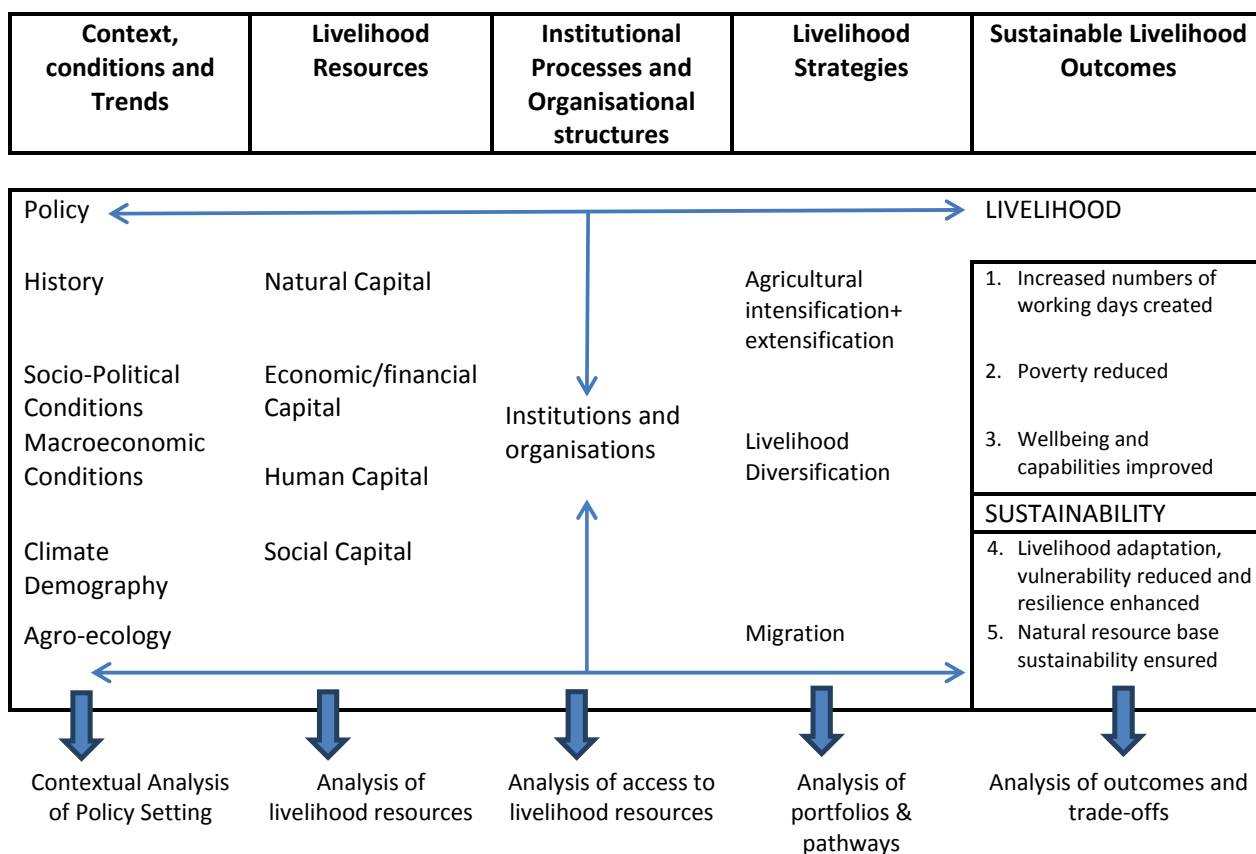
Like all histories, human beings create their environmental history too, but often not under conditions of their own choice. It is conditioned by what is handed down to a generation from its predecessor. Human beings being part of nature create and transform it. Nature is not something static (Harvey 1993). Neither is human knowledge nor social living. But the change in today's world comes swiftly and unpredictably.

“The suddenness of the blows, their irregularity, their nasty ability to appear from any direction – all makes them unpredictable, and us defenceless. As long as dangers remain eminently free-floating, freakish and frivolous, we are sitting targets – there is pretty little we can do to prevent them. Such hopelessness is frightening. Uncertainty means fear. No wonder we dream again and again of a world with no accidents. A regular world. A predictable world.” (Bauman 2007: 94)

In patching up the scars of capitalism's devastation over nature and people, the SLA can be seen as trying to contain a transient, uncertain world of vulnerability and shocks that move the marginalised people in and out of poverty.

Has capitalism reached a stage where this uncertainty of swift unrelated changes is becoming the new permanent? Or can the power of human agency create a new nature (or different natures) where the local contextual history of people *living with nature* is fully consistent with a big history of the world? This big history, no doubt, would have to include all creatures and the worlds they create for themselves.

Figure 1: Scoones’s Framework of the Sustainable Livelihoods Approach



Source: Adapted from Scoones, I. 1998 'Sustainable Rural Livelihoods: A Framework for Analysis'. IDS Working Paper. Brighton: Institute of Development Studies.

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