

# **How Economics Forgot (And Then Rediscovered) Land**

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## **Introduction**

The emergence of sustainable development onto global, national and local policy agendas can be attributed to the clear and growing evidence of the impact of climate change, and concerns about the future scarcity of energy, resources, land and food. Furthermore, the acceptance of the need to change existing forms of economic production can be attributed to the sustained pressure since the 1960s from both environmental writers (e.g. Carson, 1962; Hardin, 1968; Lovelock, 1979) and certain economists (e.g. Boulding, 1966).

Whether it is treated as an economic, environmental, social, political or cultural resource, land is arguably right at the heart of the concept of sustainable development. Yet disputes over whether the sustainable use of land concerns its preservation as opposed to its utilisation in the most resource efficient manner lie at the heart of debates surrounding sustainable development. More importantly, the relative marginalisation of land within contemporary policy narratives concerning sustainable development (when compared to the priority attached to economic growth and social well-being) arguably replicates much of the discourse within mainstream economics whereby land is seen as an external and peripheral resource to factor into the market mechanism as opposed to placing it at the heart of the economic model (Lunn, 2006:38).

The aim of this chapter is to explore the relationship between sustainable development, land, and alternative conceptions of land within economic analysis. The narrative commences with a discussion of alternative forms of sustainable development, and the respective importance attached to different forms of capital. This is then followed by an examination of the relationship between land and humankind, and how changes in social and economic organisation have impacted upon our relationship with land. The discussion then moves on to present an overview of the treatment of land as a resource within competing economic perspectives (e.g. Pre-classical/Classical, Neoclassical, Institutional, Environmental, Ecological and Green economics). Finally, the chapter use this review of economic conceptions of land to examine the contribution of economics to perspectives on the nature and achievement of sustainable development.

## **Alternative conceptions of sustainable development and capital**

Sustainable development, in essence, may be thought of being concerned with three forms of capital: economic, social and environmental. It seeks to both redress the balance between the pursuit and consequences of economic growth and activity, and to shift our

perspective from one of short-term gains to a concern for the long-term impact of current activities upon future generations. Sustainable development as a concept also has a clear resonance with issues concerning the quality of life of individuals and holistic conceptions of social well-being.

Unfortunately, beyond this point political and academic opinion diverges markedly in relation to firstly what form of sustainable development we should be seeking to attain, and secondly how this can be best achieved. In respect of the first question, the debate can be seen as a dispute over the pursuit of strong versus weak forms of sustainable development (in some respects akin to the divide between 'dark green' and 'light green' forms of ecologism). At the core of this dispute concerns the primordial importance of economic, social and environmental capital for our very existence and notion of being. Strong sustainable development seeks to place environmental capital as the central locus around which our existence ultimately gravitates. The diversity of different forms of social existence is a product of the nature of, and changes in, the environment which we inhabit. Environmental capital is conceived as a precious and irreplaceable natural resource which cannot be rejuvenated by human effort. Economic capital, in contrast, is the facilitating mechanism which sustains the existence of societies and communities, and which contributes to the maintenance of social harmony. Economic capital therefore is seen as a subservient form of capital – and disputes amongst the advocates of strong sustainable development concern the primary positioning of environmental and social capital.

Weak sustainable development, in contrast, seeks to maintain economic capital and the pursuit of economic growth as the core component of human existence. It is only through the production of economic capital that social problems such as poverty and inequality can be tackled and redressed. Social and environmental capital are seen as subsequent concerns in relation to disputes over the merit or otherwise of a specific form of economic action. Weak sustainable development recognises that the pursuit of the types of economic activity and growth that characterised the period from the industrial revolution of the middle to late 17<sup>th</sup> century to the post oil crisis world of the 1970s and beyond cannot continue. Approaches to tackling environmental problems such as the polluter pays principle or the concept of carbon trading are direct policy embodiments of weak conceptions of sustainable development. However what this form of sustainable development seeks to achieve is the placing of social and environmental considerations or limits upon economic activity, but not at the expense of threatening the central position or goal of economic growth.

### **Land and the emergence of sustainable development onto the policy agenda**

In terms of its emergence onto the global policy agenda, the concept of sustainable development made its initial appearance at the 1972 United Nations Conference on the Human Environment in Stockholm. It was not however until the Brundtland Report (WCED,

1987), and the subsequent world summits in Rio de Janeiro and Johannesburg in 1992 and 2002 respectively that sustainable development as a global policy driver became firmly embedded within the policy discourses and agendas of global organisations and national governments. The outcome of the Rio Summit was the creation of the United Nation's negotiated blueprint for the global pursuit of sustainable development, Agenda 21.

It is our contention that the arrival of sustainable development as a key, (almost) universal, policy priority from a global to a communal level, can be attributed as much to the changing relationship between people and land, and to the 'rediscovery' of land as a valued social, cultural and environmental resource, as it can to the widening evidence on climate change and global environmental damage. As a consequence, we set out in this section of the chapter to trace the relationship between humankind and land that has existed within different eras, and to identify the factors that have operated as catalysts for the transformations in this relationship that have taken place over time. Furthermore, we suggest that the role and perception of land within wider society over time directly mirrors the presence (and subsequent absence) of land within pre-classical, classical and neoclassical economic frameworks and forms of economic analysis.

Whilst it is open to conjecture as to the extent to which primitive societies constituted a now lost form of 'ecological harmony' (see for example LeBlanc and Register, 2003), land as with many other natural resources undeniably formed a cornerstone of the social and economic existence of communities. It directly provided sustenance, was the source of wealth upon which primitive economies were constructed, and in certain instances enjoyed a deep religious and cultural significance (Malinowski, 1985). The symbiotic relationship between humans and land however quickly became transformed into one in which humankind sought to place itself beyond and above nature - and assumed a relationship with land in which nature was subservient to the needs and wishes of those that owned or worked the land (Campbell and Overton, 1991). Despite the existence of limited forms of 'common' ownership, land in a predominantly agrarian economy formed the bedrock of society not only in terms of feeding the population, but also in relation to the evolution of property rights and the stratification of society on the basis of the ownership of property and land.

It was not until the arrival in Europe of the industrial revolution in the middle of the 17<sup>th</sup> century, and the ensuing abandonment of the land by rural populations seeking new employment opportunities within the rapidly expanding cities and towns, that the relationship between humankind and the land significantly changed once again. Faced with rapidly increasing population levels, many countries at the forefront of the new industrial era in the eighteenth and nineteenth centuries quickly reached a point where domestic food production was insufficient to sustain the existing population (Trevelyan, 1967). Whilst the necessary introduction of extensive food imports did not significantly remove the

agricultural function of rural hinterlands, the physical interior of the nation state no longer enjoyed the same monopolistic value as a resource in terms of the life source of communities.

Of equal, if not greater, importance in understanding changes in societal attitudes towards land at this time was the parallel shift from the conception of land in terms of its direct production function (i.e. crops) towards valuing land in terms of (a) a location for industrial activity and manufacturing, (b) housing for the urban labour force; and (c) providing the natural resources required to sustain the industrial economy (e.g. coal, iron ore, or timber). Motivated by economic profit over social concern, industrial owners and landlords constructed housing that was built at minimum costs, provided only basic amenities for the occupants, and packed as many individuals and buildings into the smallest amount of land possible. Only 'enlightened' industrialists such as Robert Owen (New Lanark, Scotland), Titus Salt (Saltaire, Yorkshire) or the Cadbury brothers (Bourneville, Birmingham) proved notable exceptions to the rule<sup>1</sup>. Land at this time was therefore subjected to extensive and unsustainable exploitation, and the pursuit of rapid economic growth by both the state and industrialists over the social and environmental needs of society was pursued with an almost religious zeal.

Towards the end of the 19th century, however, the unacceptable social consequences of unsustainable economic growth started to be addressed by governments. Initiated by the economic necessity of having a fit labour force, and the constant public health threat posed by urban slums, governments started to intervene in order to maintain capitalism as an economic and social model<sup>2</sup>. Whilst the social component of capital did not reach parity with economic capital as a societal priority, the pressure to deliver minimum forms of social existence in terms of housing, health, education and employment forced governments to recognise the social consequences of modern industrial society.

The shift from predominantly industrial to service based economies within the developed world which was precipitated by the oil crisis of the mid 1970s (and rapidly enhanced by subsequent technological developments and innovation), arguably marks a further transformation in the relationship between humankind and land. Whilst retaining its value as a place upon which to house key workers, land increasingly lost its productive function in terms of manufacture in favour of forming the location for service based industries. In a global era where the need for physical proximity to markets has been significantly reduced, and technology increasingly governs the spatial functionality of communities and countries,

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<sup>1</sup> The planned communities built by these industrialists were the forerunners of the Garden City Movement and the concept of New Towns within urban planning. Whilst providing a comparatively healthier physical environment to the prevailing urban slums of the time, these model communities were also an attempt to fashion a participative form of social existence in which a communal conception of social relations was underpinned by a clear moral order.

<sup>2</sup> In the UK twenty seven housing acts, including the 1875 Artisans' Dwellings Act, were passed between 1850 and 1900 in an attempt to remedy the housing conditions endured by lower working class households.

land has become less of a necessity within economic forms of production. This diminishing productive function for land, however, has been accompanied by the rediscovery by urban populations of land as an environmental and communal resource. Rural hinterlands now primarily provide a weekend leisure resource which offers urban dwellers the opportunity to escape, if all too briefly, the urban jungle which dictates their existence as economic and social beings. Despite growing evidence of the myth of the 'rural idyll' (Cloke & Little, 1997; Shucksmith, 2000), threats by both public and private developers to encroach on the countryside increasingly motivate urban as much as rural populations to protest against the loss of precious habitats<sup>3</sup>. At the local level, the need for sustainable development has been driven home by the loss of precious local resources which have a direct resonance with local communities – and a productive re-engagement with the land through urban garden movements and the increasing popularity of people growing their own food.

### **Alternative Conceptions of Land within Economics**

The conceptualization of land in conventional economics is a good example of how economists 'forgot' land as a key component within economic analysis. As with other topics in economics, the evolution of the place of land within economic theorising has generated dissent as to the extent to which land plays an important role in the well-being of our societies - and contributes to development, growth, poverty and the distribution of wealth. The role attributed to land as a factor of production has varied from occupying a central place in pre-classical and classical economics as a productive source of wealth to almost having no role within conventional economics because land is subsumed within an overall conception of capital. It is widely acknowledged that debates on sustainable development have brought land back into consideration within economics, granting it a primordial role that is arguably deserved within contemporary economics. The neglect of land, and issues surrounding well-being and sustainability, has generated both other sub-disciplines within the confines of conventional economics (e.g. land economics), as well as those existing outside the mainstream framework (e.g. ecological and green economics). What will emerge from our historical review of alternative perspectives within economics is the relevance that the conception of land amongst 'old economists' has for contemporary discourses on sustainability.

The accounts given by different schools of thought differ mainly in the nature of land as a scarce resource, determinants of rent and the qualities of land and its contribution to the wealth of different societies. In the 18<sup>th</sup> and 19<sup>th</sup> century, land was seen as a non-reproducible resource and as a fixed factor of production. Ricardo, for instance, considered

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<sup>3</sup> In the United Kingdom civic activism in the form of membership of locally as well as globally focused environmental pressure groups has been in marked contrast to declining levels of participation in the political process both in terms of electoral turnout and membership of political parties.

land as 'the original and indestructible powers of soil'. Land represented a complex set of factors, and its central place within economic analysis reflected its central productive position within the real world. For the later mercantilists and physiocrats, agriculture was the only industry that could yield a net product and a surplus beyond the actual costs of production. As Hubacek and van den Berg (2006: 6) point out: "At the outset, *land* in economics covered the physical universe outside of humans. As one of the three traditional primary inputs (land, labour, and capital), land was used as an inclusive term for the natural environment, covering entities such as oceans, atmosphere or solar energy...The reason that it was called land had to do with the major concerns of predominantly agricultural societies". For the physiocrats the crucial issue was the creation of physical value and the production emanating from land that created the surplus that was termed 'net product'. Thus, if the origin of net product can be found in land, the physiocrats concluded that the rent (i.e. the price of leasing land) can be interpreted as a measure of one society's net product (Landreth, 1976). The central economic problem then becomes the allocation of land between different uses. Both Petty and Cantillon regarded land, alongside with labour, as the productive base that will ensure the necessary subsistence for workers. For instance, Cantillon (1755: page) recognizes the close relationship between land and the labour force: "The land is the source or matter from whence all wealth is produced. The labour of man is the form that produces it: the wealth in itself is nothing but the maintenance, conveniences, and superfluities of life". Whilst both Petty and Cantillon recognized the importance of land and labour in creating net output, there are significant differences between their accounts. Petty claimed that land was not a scarce resource, and that output was governed by the utilization of a given labour force and treated population as an exogenous variable (Brewer, 1992a). Cantillon, on the other hand, considered population as being endogenous (i.e. population adapts to the demand for labour), while he kept the conception of land as a scarce resource. The allocation of land between different uses (such as agricultural production and recreation for the landlord) is the key determinant of the level and composition of output, size of population, and so on (Brewer 1988, 1992a). Ultimately, for Cantillon, land was the main source of wealth creation for landowners (see Brewer, 1992b). From Petty onwards it was acknowledged that the return on land (i.e. rent) will vary according to the location and fertility of land. For Cantillon, rent depends on technology and real wages that will influence the amount of net output obtained from the land.

Discussions on rent formed a major focus of interest amongst classical economists such as Smith, Ricardo, Mill and Marx. Starting with the industrial revolution, and the ensuing structural changes in society and social class, classical economists introduced into economic analysis the third factor of production: capital. The classical economists considered that all three factors of production (land, labour and capital) contributed to the growth and wealth of a country. Adam Smith's treatment of land, rent and profits formed a primary source of

influence and debate for both classical and modern economists.<sup>4</sup> For Smith (1904[1776]) the agricultural productivity was an important component for a country's development. According to Blaug (1997), the production of land was seen by Smith as the main source of wealth and revenue in any country. Smith (1904: I.II.5) assumed that potentially all of the land within a country can be used for production, and that the types of improvements enacted on a piece of land will have an impact on the price of using this land, i.e. rent. For Smith, even unimproved land can provide rent for the landlords (1904: I.II.12). In the Smithian system, the rent of land or the price paid for the use of land is a monopoly price (I.II.5). Any improvements brought to land have (directly or indirectly) the potential to raise the real rent of land and therefore the wealth of the landlord. Owing to the immobile character of land, rent enters differently of wages and prices in the composition of prices: "High or low wages and profit, are the causes of high and low price; high or low rent is the effect of it" (Smith, 1904: I.II.8) In other words, Smith and other classical economists such as Ricardo and Mill advanced the theory that the returns to different factors of production, with the exception of land, were price-determining – an idea that was disputed by the founders of neoclassical economics. Rent was price-determined rather than price-determining. Ricardo famously said (1821[1817]: 2.15): "The value of corn is regulated by the quantity of labour bestowed on its production on that quality of land. Corn is not high because a rent is paid, but a rent is paid because corn is high". For Ricardo (1821), land was a non-reproducible and scarce resource. If land was abundant and a free good like water, air and so on, there would be no need to pay rent. Instead, we pay rent when land is not abundant (Ricardo, 1821: 2.16). If rents rise then this can be attributed to increases in levels of wealth within a country, the pressure of increasing populations, and decreases in levels of productive soil (1821: 2.16). The scarcity of land, the differences in location, and fertility of land are the primary reasons behind the Ricardian differential theory of rent. In Ricardo's theory, the supply of land was considered to be perfectly inelastic, but he also assumed that land does not shift between alternative uses of land. Thus, the payment of rents does not affect the price of agricultural products that are supplied on the market.

Although land was given primary focus by classical political economists, other natural agents have been considered as having a productive potential, such as solar power, wind, water and sea, etc. John Stuart Mill (1909[1848]), in the same vein as other political economists, considered land as being different of other factors of production in its limited capacity to increase: "It is also evident that the quantity of produce capable of being raised on any given piece of land is not indefinite. The limited quantity of land, and limited productiveness of it, are the real limits to the increase of production" (I.12.1). Given the limited productive power of soil, the rent (i.e. the surplus paid by farmer to the landlord

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<sup>4</sup> Brewer (1995) has argued against different positions expressed concerning Smith's theory of profit and rent as being inconsistent (such as Hollander 1980) or having the same substance as Ricardo's theory (see Samuelson, 1978, 1980) and maintained that Smith's theorizing on profit and rent is consistent and based on the assumption of an open economy.

once other costs have been paid) has a monopoly price nature as well in Mill's *Principles*. The fertility of land and the vicinity to markets are the two main reasons that determine a certain level of rent.

As Landreth (1976: 305-306) points out the Ricardian view on rent remained unchanged until the arrival of Marshall. The following passage is illustrative of the recognition of the complexity of issues surrounding land and rent by Marshall: "While the rent of land, when viewed from the perspective of the whole economy, was price-determined and therefore not a cost of production, from the perspective of the individual farmer or firm, rent was a cost of production and therefore price-determining. The farmer who wants to rent land to grow oats must pay a price sufficient to keep the land from alternative uses" (ibidem).

After Smith, the attack against the role of land as a unique means of production came from various sources. With the development of industry, capitalists and industrialists replaced landowners as the dominant class, and the discipline of economics became focused towards industry. This shifting position was further enhanced by the expansion of colonial empires, particularly in the case of Britain. The scarcity of land at home was compensated by the vast tracts of land abroad that came under productive control of European nations.

The 1870s witnessed the marginal revolution, and the founding of neoclassical economics. The path-breaking work of the marginalists involved three distinct traditions:

1. The utilitarian-hedonistic theory founded by Jevons and continued by Edgeworth and Walras;
2. The general equilibrium school led by Walras and Pareto;
3. The Austrian approach founded by Menger;

As Dow (1985: 50) notes, the marginalist school did not become part of the orthodoxy until the turn of the century. Neoclassical economic theory provided a shift in the focus of microeconomic theory with the use of differential calculus, mathematical economics and simultaneous relative price determination. The precise nature of the marginalist revolution is controversial; suffice to say mathematical economics developed with the work of Walras, Edgeworth, and Pareto. This mathematical precision gave rise to a whole analytical apparatus which was applied to consumer and choice theory, indifference curves, exchange theory, etc. After the Second World War, economics continued to be more and more dominated by formalism and mathematics. During this period the main issue became the allocation of land in terms of prices and market signals. Gowdy and Hubacek (2000:22) state, "the basic premise underpinning neoclassical economic theory is that economic agents are driven by self-interest, which translates into utility maximizing or profit maximizing behaviour. Private production decisions, such as the allocation of natural

resources or labour between alternative uses, are made with the objective of profit maximization subject to constraints imposed by prevailing technology and governmental policies. Just as land has been reduced to a form of fungible capital, so too has labour" (see also Hubacek and van den Berg, 2006).

The reasons for the neglect of land within neoclassical economics has generated some controversy amongst economic commentators. Whether it has been as the result of a deliberate attempt to subsume land within capital for different reasons (see Stigler 1941; Gaffney 2008), or the fact that "the burial of land is thus not inherent in neoclassical economics, but is a historical development that can be reversed" (Foldvary, 2008: 89), land - as a factor of production - has been eliminated gradually from the function of economic growth. Foldvary (2008), for instance, argues that not all neoclassical economists have neglected land, pointing out that at the outset of the marginal analysis, economists like Gossen, Walras and Pareto paid attention to land, and the issue has been furthermore related to aspects of social policy and poverty. More recent members of the neoclassical group such as Solow (1993) made a point out of the idea of substitutability between natural capital (as an exhaustible resource) and man-made capital (as renewable resources): "If it is very easy to substitute other factors for natural resources, then there is, in principle 'no problem'. The world can, in effect, get along without natural resources. Exhaustion is an event not a catastrophe....If, on the other hand, output per unit of resources is effectively bounded – cannot exceed some upper limit of productivity which is, in turn, not too far from where we are now – then catastrophe is unavoidable...Fortunately, what little evidence there is suggests that there is quite a lot of substitutability between exhaustible resources and renewable or reproducible resources..." (Solow [1993- p.74], quoted in Gowdy and Hubacek 2000)

Parallel to the focus on the relationship between land and capital, a group of economists including Karl Marx, Henry George and Vilfredo Pareto expressed interest in the social significance of land. All three discussed the link between land possession, enrichment and poverty. For Marx, rent is a surplus that is a product of society's power and not of soil, and he was concerned with how landowners and their power has affected the distribution of income in society. In *Progress and Poverty*, George is the last American political economist who granted a central role to land in his economic outlook: "Land, labor, and capital are the factors of production. The term land includes all natural opportunities or forces...But when we consider the origin and natural sequence of things, this order is reversed; and capital instead of first is last;...labor can be exerted only upon land, and it is from land that the matter which it transmutes into wealth must be drawn." (1912[1879]: III.1.29 to III.1.31). Not only is land the original condition for the existence of production, but George considers that capital is not a necessary factor of production. The land value and rent are not the consequences of the level of productivity of land or its utility. Rather, it is the capacity of

yielding rent that gives value to land (George, 1912, book 3, ch.2: III.II.4). For George the markets of land function badly as they keep the 'best lands' from their highest uses, creating artificial scarcity for three reasons: the practice of holding the land for speculative purposes, the trend amongst rich landowners to keep important parts of their properties for recreation and lastly, the practice of under-using land in function of the level of taxation. These practices contribute to a volatility of prices of land which in turn decreases production and depresses wages, consumption, and ultimately the economy. Behind George's analysis rests a focus on minimizing the bad effects of land markets, and of the induced effects on welfare and poverty. Since land values and land location are artificially created at a social level, George believed that it would be just to appropriate these values through taxation in the public interest. In a similar fashion to Marx, George was preoccupied with the unjust enrichment coming from the ownership of land and how the state can use this aspect to contribute to their financing through land taxation.

Despite the absence of a central focus upon land within neoclassical economics, it is necessary to recognize that land enjoys a central position within specific economic sub-disciplines e.g. land economics, agricultural economics, spatial and urban economics. According to Ely (1926:297), "Land economics is that division of economics, theoretical and applied, which is concerned with the land as an economic concept and with the economic relations which grow out of land as property". Land economics can be seen as a synthesis between neoclassical and institutional economics, but clearly arose out of dissatisfaction with the treatment of land within classical and neoclassical economic analysis. Hibbard (1926:285) states "some of our economists with great cleverness have in recent years undertaken to explain away the advisability of treating land separately from capital... Even so the land question continues to appear in a form and manner quite distinct from that of capital in general. It is fruitless to contend that land and capital are one and the same thing in the face of recent developments in the farming sections of this country". Arising out of the concern with the vicinity of markets and more specifically the earlier works of von Thünen (1966[1826]), spatial and urban economics has developed into a specific concern with the spatial dimensions of market location and the factors required to sustain market efficiency in terms of the supply of resources, goods and labour. The optimum spatial distribution of markets and the land that supports the resources and populations upon which such markets depends was further developed by the concept of central place theory advanced by Christaller (1966) and Lösch (1940).

In our review of the treatment of land within economic discourse, and especially in the context of our focus upon sustainable development, it is necessary to conclude with what we seek to term as the 'rediscovery' of land (along with other natural resources) by economists. The concern with externalities that initially emerged within the field of welfare economics (e.g. Pareto, (1964[1896])); Pigou 1912, 1920) gave rise in the early 1960s to

the emergence of environmental economics (Pearce, 2002). Using a neoclassical framework, environmental economics has as a central concept the optimal allocation of resources. Faced with the availability of scarce resources, the environmental economist seeks to arrive at a market allocation that optimizes the use of resources (and minimizes the existence of negative external costs e.g. environmental degradation, pollution). Other characteristics of environmental economics are the use of analytical tools to discuss sustainable growth, the use of cost-benefit analysis, short to medium term focus, and the development of ahistorical and aspatial theoretical models (van den Berg, 2000). Whilst environmental economics seeks to distinguish natural capital (resources, environment, and nature) from economic capital, it replicates the neoclassical position of subsuming land within the concept of economic capital. In the case of green or ecological economics<sup>5</sup>, the attempts of many environmental economists to improve the mathematical modelling of environmental issues – and hence to stay firmly rooted within the orbit of mainstream economics – proved the catalyst for numerous scholars to seek the establishment of an alternative economics of the environment. Thus, the birth of green economics was influenced by the inability of environmental economics to move beyond the status of a sub-discipline within the neoclassical paradigm (Spash, 1999). This new green economics was to be characterized by a normative concern for nature, justice and democracy, and a methodological standpoint which sought to return humankind and human activity to its rightful position as being part of, rather than sitting above, nature (Anderson, 2006; Lawson, 2006). Both ecological and green economics centre upon the need to preserve ecosystems and their constituent components as separate critical entities. The emphasis upon the pursuit of environmental and social justice within green economics echoes the social significance of land identified by classical economists such as Marx, George and Pareto.

### **Sustainability, Economic Conceptions of Land, and Sustainable Development Policy**

The narrative above has identified the varying degrees of prominence that land has enjoyed within different economic perspectives and sub-disciplines over time. An examination of the different arguments advanced by economists concerning the treatment of land within economic frameworks has undeniably been influenced by the social and economic circumstances and developments that they have witnessed. The separate status accorded to land by the Pre-classical and Classical economists (such as Smith and Ricardo) reflects the predominant position of agriculture as a source of wealth within the nature and structure of the economies of their time. Industrialisation and urbanisation brought along a different role for land within the economic landscapes of societies, and this has been reflected in the decision by later Neo-classical economists to subsume land within an overall

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<sup>5</sup> Whilst green economists give a greater emphasis to the pursuit of social justice (Kennet & Heinemann, 2006), and ecological economists place greater emphasis upon the protection of natural resources (Anderson, 2006), they share a common interdisciplinary and pluralistic vision to integrate within economic analysis ideas drawn from ecology and other social sciences. This places them in stark contrast to the traditional economic focus of environmental economics.

conception of capital. Equally, the growing threat upon the preservation of scarce land and the competing demands placed upon it within increasingly populated societies has clearly created a contemporary intellectual environment that has hastened the development initially of environmental economics, and the subsequent emergence of a counter position in the form of ecological and green economics.

What then is the link between economic conceptions of land and sustainable development? We identified above the distinction that can be drawn between strong and weak conceptions of sustainable development. Strong sustainable development seeks to place non-renewable sources at the centre of the social existence equation, whereas weak sustainable development seeks to place social and environmental limits on the primary objective of economic growth. In this context, strong sustainable development sees land as a non-renewable economic, social and environmental resource which once beyond replenishment constitutes a significant loss to society. Consequently there needs to be a very strong argument based upon essential necessity (or the absence of a viable alternative outcome) for transforming non-developed land into productive land. In contrast, weak sustainable development seeks to utilise land in a more environmentally and socially responsible manner - but where the central question more often becomes one concerning the type of economic production that should take place upon a specific area of land rather than whether this land should be placed into production.

In Table One (overleaf), we have summarised the position of the different economic perspectives and sub-disciplines reviewed within this chapter in respect of (a) their position on the relationship between land and capital; (b) the function of land within economic analysis; and (c) how their position on these first two issues relates to the pursuit of strong and sustainable development. In developing this table we are seeking to highlight the main fault lines along which the distinctions between different economic perspectives run in respect of land and capital, and the link between conceptions of land and sustainable development. The table should therefore be seen as a heuristic device rather than any attempt to convey a non-existent degree of homogeneity within different economic perspectives in relation to either land, capital or sustainable development. Within different economic perspectives and sub-disciplines there are inevitably differing opinions. However, it is possible to identify underlying core principles or methodological focuses that enable the identification of a specific recurring voice within economic disciplines and the attribution of individual writers to specific schools of thought (Negru, 2005).

The strongest link between the concept of sustainable development, land and economic production can be found within ecological and green economics. This branch of economic analysis stands apart from other perspectives because of its direct attempts to reconfigure

**Table One: Alternative conceptions of land, capital and sustainable development within competing economic perspectives and sub-disciplines**

<b>Economic perspective:</b>	<b>Land and capital:</b>	<b>Place of land within economic analysis:</b>	<b>Link to sustainable development:</b>
Pre-classical	Land as a separate factor of production	Land as main source of wealth	Strong sustainability in respect of land use – but exploitation of other natural resources acceptable within model of economic growth
Classical	Land and capital as two distinct factors of production	Land supplemented with labour and capital in creation of wealth	Strong sustainability in respect of land use – but exploitation of other natural resources acceptable within model of economic growth
Neoclassical	Initially land as distinct factor of production  Subsequently land subsumed within capital	Allocation of land is made via prices and market signals.  Land considered of marginal importance in explaining economic growth	Sustainability in terms of social and environmental capital excluded from economic model.
Land economics	Land and capital as two distinct factors of production	Economic relationship between individuals shaped by land	Strong sustainability
Spatial/urban economics	Land in contrast to capital is an immobile factor of production	Economic behaviour shaped by relative location of land to markets	Strong sustainability – but dependent upon compensation of lost environmental capital in one area with sacrifice of economic capital in other localities (may therefore produce non sustainable communities in areas in which economic growth is concentrated).
Environmental	Land subsumed within economic capital	Land as part of economic capital treated as separate entity to natural capital	Weak sustainability
Ecological/Green economics	Land and capital as two distinct factors of production	Land as irreplaceable and non renewable resource	Strong sustainability

the prevailing economic model from one in which economic markets are designed to yield maximum economic growth and profit to a form of socio-economic existence in which resource utilisation and preservation becomes the primary centripetal force. Land as a scarce and non-renewable resource therefore occupies along with other forms of natural capital a central place within the focus of economic analysis. Ecological and green economics also seek to distance themselves from environmental economic based conceptions of sustainability by re-establishing the separation between land and other forms of capital. In this respect, ecological and green economics share a common heritage with Pre-classical and Classical economics (along with land economics). However treating land as a separate form of capital is not the same as shifting resource utilisation rather than profit maximisation to the centre of economic frameworks. Within the Pre-classical and Classical economic world, land constituted the primary source of the wealth of a nation. As such, however, this did not preclude the exploitation of land (and possible long-term degradation of land as a resource). We would therefore conclude that strong sustainability exists in respect of land utilisation within the discourse of Smith and other economists of the time, but that this form of strong sustainability is different to that of the type advocated by ecological and green economists. This is primarily because respect for land as a source of economic wealth did not seek to replace economic growth and profitability as the unifying and *raison d'être* of economic activity.

## Conclusion

In this chapter we have sought to explore the factors that have given rise to the establishment, loss, and then subsequent rediscovery of land as a key component within economic frameworks and analyses. We have also traced the socio-economic developments over time that has seen the ebb and flow of land as a vital resource within human consciousness. Land at different times has enjoyed political, economic, social, spiritual and cultural significance, and in many respects green and ecological perspectives within economics can be seen as an attempt to re-establish these dimensions of land within the mindset of economists – and to free land from a subservient component of a collective view of capital within mainstream economics. The rediscovery of land within economics has been brought about both by (a) philosophical, methodological and ideological debates within economic schools of thought; and (b) by the emergence of sustainable development as a key global and core policy driver. Sustainable development may not yet have achieved its objective of raising social and environmental capital to the same level as economic capital in the mindsets of governments, corporations, industrialists and individual citizens. It has however served as a reminder of the importance of land as an essential resource both within the real world and as a key component within discourses on economics.

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