

**WORKING PAPER:**

**How About a UBI Funded by Levies on  
Every Way of Destroying our Heritage  
of Natural Resources?**

or

**Universal Basic Income (UBI),  
funded by steep Pigouvian taxation, as a way of  
(1) converting destitution into decent poverty,  
(2) reducing the financial anxieties of the precariat, and  
(3) promoting wise behaviour *vis à vis*  
the natural resources of the Earth**

Mark Lindley

Expanded version of a guest lecture at the University of Hyderabad,  
13 March 2020, to be published with a foreword by Herman Daly.

## ***FOREWORD***

I have read Mark Lindley's lecture with great interest. While his policy proposals are designed to fit India, a country about which I unfortunately know little, I find the logic of his proposals so compelling that I would advocate something similar for the USA. The Universal Basic Income is needed by our growing "precariat", especially with the unemployment imposed on them by the measures to contain the current coronavirus crisis. And what

more ecologically sound way is there to finance that policy than steep Pigouvian taxes? And although the present scale of population relative to the sustaining ecosystem prevents short term abundance for all, nevertheless with reasonable sharing we can surely substitute decent poverty for destitution. Professor Lindley's ideas deserve the most serious discussion.

*Herman Daly*  
23 March 2020

The lecture:

All economists ought to be alert to the fact that the subject matter of economic theory has, unlike the stuff of Newtonian physics, changed from time to time during the last few centuries.

John Maynard Keynes correctly defined the profession as follows: “Economics is a science of thinking in terms of models, joined to the art

of choosing models which are relevant to the contemporary world. It is compelled to do this [i.e. to choose *historically relevant models*] because, unlike the typical natural science, the material to which it is applied is, in too many respects, not homogeneous through time.”

In the early 1930s, a glaring economic feature of Western society was something which economic theory had declared to be impossible: the co-existence of 'equilibrium' (i.e. stable prices) together with a massive shortage of jobs for people seeking them. Keynes showed, in 1936, that the two conditions *can* co-exist in theory.

He suggested, to solve the problem of millions of folks seeking paid employment but unable to find it, that governments print up and give away to the needy poor a lot of money, so that they would, by spending it on things they need, create an increase in market demand and thereby stimulate producers to hire more labourers.

That kind of solution to that big problem in the West 85 years ago depended on two premises, both of which are clearly invalid now in the 21st century: *(1)* that capitalists wishing to ramp up production would have to hire a lot more labour (they couldn't, back then, do it mainly by just ramping up automation), and

(2) that the resulting increased rate of total consumption would cause no dangerous decrease in the capacity of the Earth to provide natural services (such as serviceable weather) and goods (such as nutritious unpoisoned substances to eat and drink, oxygen *sans* poison to breathe, and useful mineral ores) to humankind at an adequate per-capita rate.

A neo-Keynesian 'demand-side' solution to the problem of shortage of jobs is unsuitable today. The problems now of persistent massive destitution (due to excessive monetary inequality) *and* degradation of the natural environment call for a different kind of solution. One of Keynes's own insights can, however, help us find it. He said that

“the needs of human beings ... fall into two classes – those needs which are absolute in the sense that we feel them whatever the situation of our fellow human beings may be, and those which are relative in the sense that we feel them only if their satisfaction lifts us above, makes us feel superior to, our fellows”.

To have substantial unmet *absolute* economic needs is 'destitution'. All destitution is poverty, but not all poverty is destitution. There is such a thing as decent poverty (as advocated by Gandhi); and, poverty is sometimes a matter of somewhat well-off people feeling distressed (and being regarded con-

temptuously) because they can't 'keep up' materially with ostentatious neighbours; whereas destitution is inability or near-inability to meet economic needs which you have *regardless of* what your neighbours have or don't have – for instance your needs for unpoisoned food and unpoisoned fresh water and air.

The great sociologist Émile Durkheim understood that

“desires	<i>les désirs,</i>
are to some extent	<i>dans une certaine mesure, sont</i>
bound to take account of	<i>obligés de compter avec</i>
the [available] means;	<i>les moyens;</i>
what one has	<i>ce qu'on a</i>
serves as a benchmark	<i>sert en partie de point de repère</i>
for determining	<i>pour déterminer</i>
what one would like to have.	<i>ce qu'on voudrait avoir.</i>

As a result,  
the less one has,  
the less one is inclined  
to extend endlessly the  
range of one's [felt] needs.”

*Par conséquent,  
moins on possède,  
et moins on est porté  
à étendre sans limites le  
le cercle de ses besoins.)*

(Benjamin Franklin had been likewise perceptive when he remarked that “Our eyes, although very useful, require nothing more for themselves than a pair of spectacles...; it is the eyes of others that ruin us. If all the world were blind excepting myself, I should have need neither of fine raiment, nor of palaces, nor of extravagant furnishings.”)

Please remember my terminological distinction between 'destitution' (i.e. unmet *absolute* needs) and 'poverty' (which may be tolerable if all your absolute needs are met and you are wise). I will make use of the distinction later in this lecture.

An important innovation in economic theory after Keynes was that of Robert Solow, who in the late 1950s began to put into his equations about production of commodities (goods for sale) an additional factor besides those for dollar-amounts for 'capital' things and wages.

The extra ‘factor  $A(t)$ ’ represented in a catch-all way “the cumulated effect of shifts over [historic] time” with regard to improvements “in education of the labour force” (a ‘human-capital’-type item), in technology (*Hello, automation and digitization!*), and in “all sorts of [other] things”.

There was thus a fuzzy relation between his 'Factor A' and reality, but Solow compensated for this by showing statistically that in the USA, increases in capital- and labour-expenditures (adjusted for inflation) during the years between 1909 and 1949 were far too little to explain the total increases in production.

Among Solow's many clever remarks has been that since capital investments are based on known technology, and since technology tends to improve over time, new capital investments tend to yield more productivity than former capital investments have yielded.

But what then of jobs? What if the new technology that is being invested in is a labour-cost-saving device for the capitalist?

David Ricardo, a very clever early-19th-century capitalist and the most brilliant classical economist after Adam Smith, said that an increase of wages usually has “a great effect in lowering profits”. The converse precept is that a *decrease in the wages* paid for a certain amount of production is likely to cause an *increase* in the capitalist’s profits.

Sir Arthur Lewis – famous for his ‘two-sector’ theory of ‘developing’ economies with small capitalist sectors and large ‘traditional’ ones – noted, in a probing article (1954) entitled “Economic Development with Unlimited Supplies of Labour”, that “the level of wages in capitalist sector depends on the earnings in

the subsistence sector” (i.e. in the part of the national economy, without capitalist enterprise, where people supposedly get just enough goods to ‘subsist’), and therefore “the capitalists have a direct interest in holding down the productivity of the subsistence workers” (so that in the capitalist sector, workers will labour for lower

wages than if the traditional 'subsistence-work' were enabling people to have a decent way of life materially, i.e. if they were merely poor and not destitute).

A modern term, relevant to 21st-century conditions in *both* sectors, is 'the precariat'.

(The term was introduced in 2011 by Guy Standing. He was at that time serving at a provincial British university as a Professor of Economic Security. He had previously worked for 30 years for the International Labour Organization (the ILO). He is now Professor of Development Studies at the University of London's School of Oriental and African Studies.)

The precariat consists of labourers who have no steady jobs, but only occasional 'gigs'. It is nowadays expanding fast in quite a few countries. And, we all know that millions of Indian farm hands and other more-or-less menial labourers belong to the precariat.

(For about a hundred years now, jazz and pop-music performers in the USA and in England have used the word 'gig' to mean a one-night paid engagement. About half a century ago, this linguistic usage spread to Western classical-music performers as well. It's not 'gigs' if you're a member of a symphony orchestra giving a subscribed annual series of concerts; *that's* a job; it's a gig if, for in-

stance, you deputise for an indisposed member of the orchestra for a rehearsal or just for the performance. (Would you suppose that such a practice yields better performances?) In the last quarter-century, the social impact of digitisation and automation (as aspects of Solow's 'Factor A') has, together with the spread of outsourcing, led to a far broader application of the word 'gig' as an economic term.)

The gig economy is due technologically to the widespread use of digitization for automation and for more and more outsourcing – i.e. hiring cheap deputies from outside the firm (who may thus neither know nor care about the firm) to do some of its work.

It is often claimed that 21st-century digital technology may help to create as substantial a flow of opportunities for paid employment as it helps to destroy. I think, on the contrary, that it will probably help cause a smaller portion of the citizenry than now to produce all the commodities for which there's a market.

You can read at [www.nytimes.com/2018/09/18/opinion/cut-spending-budget-cult-of-thrift.html](http://www.nytimes.com/2018/09/18/opinion/cut-spending-budget-cult-of-thrift.html)

a charming and perhaps sociologically significant newspaper article which begins and ends as follows:

“Let me tell you about the cult I have joined: the cult of thrift. The indoctrination started

gently, with a podcast here, a YouTube video there, about minimalism, debt-free living, frugality, decluttering, zero waste. ... I still have a long way to go in reducing my consumption. As my journey continues I plan to seek inspiration from people who have less than me rather than people who have more.”

Economists devised in the 1860s a concept, 'marginal utility', which is useful for explaining part of why that obviously affluent lady is willing to buy less and less stuff. The marginal utility of a commodity to a consumer shopping at a given moment is the utility ('use-value') of the *next little bit* of it to him or her at that moment.

If, for instance, you are very thirsty, a glass of water is worth a lot of money to you (if you have money and can't get the water without paying), but then the 2nd, 3rd, 4th... glasses are each of less marginal utility and so you would theoretically be willing to pay only less and less for them. Abundance causes marginal utility to decline.

In the 1970s, an economist in California, Richard Easterlin, published some related data from surveys conducted in the USA for several decades, in which people had been asked to rate their levels of happiness on a scale from 1 for miserable to 10 for completely happy. The data showed (and this has

meanwhile been confirmed by analogous data from the UK and Japan) that after a national population has, thanks to capitalism, attained a certain level of material affluence, and is therefore distinctly happier than back when there was lots of destitution or near-destitution, *further* increases in material affluence don't make the people happier.

It would therefore be hardly surprising if a lot of well-off people were to join (like the lady whom I have cited) 'the cult of thrift' and of decluttering, and market-demand therefore would climb, on balance, more slowly than will productive capacity due to 21st-century technological innovations.

I do believe, however, that whether that technology may provide, on balance, more opportunities for wage labour than it disruptively destroys is unpredictable – and so too does the champion optimist, Klaus Schwab, the founder-chairman of the ‘World Economic Forum’ which meets annually in Davos. He admits that gains in employment from tech-

niques such as high-speed mobile Internet and cloud technology, artificial intelligence, robots and automation are *not* a foregone conclusion. He speaks of 'urgent challenges' not only for reskilling labourers but also for providing safety nets to help the victims get by (until some additional money may trickle down to them in the form of wages).

And, according to Yale University professor Robert Shiller (who won in 2013 the Swedish Bank's 'Nobel Prize' in economic sciences), "the job insecurity that free trade often creates" is a reason why "governments must find new ways to insure workers against the risks of a globalized market".

*The New York Times* has reported that “When the economists Anne Case and Angus Deaton first published their research on ‘deaths of despair’ five years ago, they focused on middle-aged whites [in the USA]. So many white working-class Americans in their 40s and 50s were dying of suicide, alcoholism and drug ab-use that the overall mortality rate for the age group was no longer falling.... [A]s Case

and Deaton continued digging into the data, it became clear that the grim trends didn't apply only to middle-aged whites.... [Monetary] inequality has risen more in the United States – and middle-class incomes have stagnated more severely – than in France, Germany, Japan or elsewhere. Outsourcing has become the norm.... [E]xecutives often see low-wage workers not as colleagues but as expenses.”

With regard to India, Krishna Kumar, a former director of the government's National Council of Educational Research and Training, says that “Short-term jobs are often used to cite the success of an economic policy which, in reality, is decimating work and de-skilling people. This is often done in the name of modernisation....

An automation-obsessed economy thrives [nowadays] by maintaining millions in replaceable, short-term positions involving low-skill tasks. Such jobs make it impossible for lower-income participants in the work force to gain experience and a self-identity associated with a specialised skill....”

In order for me now to describe clearly the way which I will propose – a certain kind of monetary ‘safety net’ – of mitigating the griefs of the destitute and of the precariat, I must first distinguish clearly between **income-tax**, **poll-tax**, and **negative** income- and poll-taxes.

A **poll-tax** would be a sum paid to government (maybe periodically, maybe once and for all) by every individual within reach of the government's authority, or at least by every adult resident citizen, regardless of his or her economic condition.

A **'negative poll-tax'** would consist of money being given away by government to every such individual: the same amount to each and all, rich or poor.

**Income-tax**, on the other hand, varies (as we all know) according to the economic condition of the citizen. And the same is true of '**negative income-tax**', i.e. doles to the poor or the supposedly poor.

In 1949, a famous right-wing economist, Friedrich von Hayek, while staunchly opposed to “deliberate [i.e. governmental] redistribution [of money] beyond securing a constant minimum for everybody”, said that ‘governmental services’ should include “provision of a minimum floor for people who cannot make an

adequate income in the market ... just providing, outside the market, a flat minimum for *everybody*” [my italics]. He didn’t, as far as I can tell, consider whether it should be done by means of a negative income tax or a negative poll tax; but he was pretty clear that it should be aimed to eliminate destitution only, not poverty in the broader sense; he said:

“This of course means in effect eliminating completely the social-justice aspect of it, that is, the deliberate redistribution beyond securing a constant minimum for everybody.”

Milton Friedman, a brilliant 20th-century right-wing economist, advocated a negative income-tax for the USA. Every head of household should, he said, have to send periodic income-reports to the government. (Diligent folks with good secondary-school training can do this.) Every household that had had, during the time

in question, income at more than a certain specified rate (analogous to the 'poverty-line' rate in India, but let me call it a 'barely-not-destitute' rate) would have to pay income-tax on all its earnings above that rate. Government would, however, pay to each household that had earned *some* wages and yet less than

enough to get it out of destitution, a certain percentage – Friedman suggested 50% – of the difference between the actual earnings and the theoretical barely-not-destitute amount for a household of that size and composition during that period.

For instance, if the barely-not-destitute level of earnings for a household during the period under consideration were reckoned to have been theoretically \$500, and yet the wages actually earned by the folks in the household during that period had totalled \$300, then the government would now pay the household \$100 in negative income-tax (50% of the difference between \$500 and \$300).

Friedman feared that a negative income-tax more generous than that would weaken the incentive to do wage labour, and that this result would be bad for the people of the USA.

(Jean Drèze expressed a somewhat similar view when some opposition-party leaders in India said, last year, that if their party were returned to national power, then government would thereafter pay to each poor household the full difference between its earnings and the poverty-line level of income. According to Jean Drèze:

“This makes no sense. For one thing, it is ... impractical – how is the government supposed to estimate this income gap, household-wise? For another, it would mean that anyone who earns less than the minimum income might as well give up working, since the government is supposed to fill [completely] the gap anyway.”)

Also notable is Friedman's opinion that negative income-tax ought to replace all other government welfare-assistance payment programs, thus leaving it to private charities to sort out details of special family conditions and to lend a helping hand accordingly. (Jean Drèze would hardly share *that* opinion.)

A negative-income-tax scheme has been implemented in the USA for the last 45 years (with mixed results which I will describe later). I imagine that implementation in India might be far too complicated, as millions of illiterate heads of households would have to send frequent income-reports to government....

Then how about a *negative poll-tax* (a simpler device, though IMHO dependent, for effective implementation in India, upon universal adhaar functioning, unlike now, smoothly for the destitute) – funded by ‘Pigouvian taxation’?

‘Pigouvian taxation’ is a blanket term for any kind of tax levied on activities deemed (by the government) to be destructive of some of the nation’s *natural material heritage* of economically useful goods and/or services (natural goods such as healthy air to breathe; natural services such as decent monsoons).

It is named after Cambridge University professor A.C. Pigou, because of the following passage from his seminal book, *The Economics of Welfare* (1920):

“Sometimes people use methods that, as against the future, cost much more than they themselves obtain. Fishing operations so conducted as to disregard breeding seasons, thus threatening certain species of fish with extinction, and farming operations so conducted as to exhaust the fertility of the soil, are instances in point....

It is the clear duty of Government, which is the trustee for unborn generations as well for its present citizens, to watch over, and, if need be, by legislative enactment to defend the exhaustible natural resources of the country from rash and reckless spoliation.”

What Pigou had in mind was levies, not for the sake of income to the government, but for the sake of nudging citizens away from behaviour dangerously destructive, in the readily foreseeable long term, to the well-being of the voting *and* non-voting citizens (for instance the as-yet-unborn citizens whom the government is pledged to serve in addition to serving the electorate).

The idea of *funding a negative poll-tax via Pigouvian taxation* occurred to me upon reading the following paragraph in Herman Daly's and Joshua Farley's textbook, *Ecological Economics: Principles and Applications* (expanded edition, 2011):

“Should we tax energy and raise its price for the sake of inducing more efficient use, or should we subsidize energy and lower its price to help the poor? One instrument (price of energy) cannot serve two independent goals (increase efficiency, reduce poverty).

We need a second instrument, say an income policy. Then we can tax energy for the sake of efficiency and distribute income (perhaps from the tax proceeds) to the poor for the sake of alleviating poverty.”

A fact inimical politically to such a strategy is that taxpayers do tend to vote against political parties proposing to increase tax rates. It seems to me conceivable, however, that three motivations functioning together:

(1) 'ecological fear' of 'Angry Mother Nature' (though of course planet Earth isn't really angry with us, but only indifferent),

(2) 'social fear' of the 21st-century destitute and potentially-destitute precariat behaving like the proletariat did a hundred years ago in some countries, and

(3) natural human love for humankind –  
those three together might induce a large part of  
the taxpaying Great Indian Middle Class to join  
with the poor in voting for a political party that  
promises to help fund a weekly or fortnightly  
negative poll tax by means of Pigouvian taxation.

I would suggest (if consulted, but there's no need for that; India can find her way without me) negative-poll-tax payouts high enough to enable the formerly destitute to bear properly their share of the indirect effects of steep Pigouvian taxation. Higher prices (due to that slant in GST) on certain commodities might motivate the poor *and* the lower-middle-class folks to consume *carefully*

such commodities as, for instance, electricity and fuels.

(It is for Indians to consider whether steep Pigouvian taxation might be, *per se*, good for the nation in the long run, given its economic vulnerability to exhaustion of aquifers, destructive weather aggravated by climate change, urban lakes (as well as precious forests) catching fire, etc.

Among the rich citizens, those who oppose the idea may point out that every kind of GST tends to impair growth of GDP (which they presume is eternally beneficial). Some rich folks may uphold *that* argument for an underlying personal reason: they want as little as possible of their own wealth to be shared with citizens who aren't their own children.)

It seems to me likely that in India, hefty negative-poll-tax payouts could amount to, say, 10% of GDP. This guess is related roughly to the fact that in the *Economic Survey 2016-17*, the chapter entitled “Universal Basic Income: A Conversation With and Within the Mahatma” offers for discussion a scheme of unconditional

but not universal payouts (only people certified as 'poor' would get them) estimated by the author of the survey, Arvind Subramanian, as likely to cost some 5% of India's officially acknowledged GDP. My guess is twice that.

To finance via Pigouvian taxation a substantial rate of Universal Basic Income (i.e. periodic negative poll tax; 'UBI' is the accepted abbreviation) would not only be geologically wise, but also would provide a more humane kind of trickle-down than the dodgy kind depicted in *laissez-faire* ideology, i.e. the idea that government should let capitalists do as they please.

(FOOTNOTE: The French phrase “*laissez-faire*” means “Let [them] do [it].”)

In the USA, UBI would probably be more humane than the currently implemented negative-income-tax provision for mitigating poverty.

There has existed in the USA since 1973 a governmental *Earned Income-Tax Credit* subsidy (EITC) to poor folks earning low wages and supporting one or more younger dependents in the same household. The details have been tweaked again and again since 1973, but the general idea is that in each case

the amount of the EITC raises the labourer's income to a certain level which depends in part on how much wage-labour he (or she) has done in a given period and in part on whether there is just one or more than one dependent child in the household.

A Harvard University economics professor, Maximilian Kasy, posted in November 2018 at [http://filesforprogress.org/pdfs/UBI\\_EITC\\_Kasy\\_DFP\\_Working\\_Paper.pdf](http://filesforprogress.org/pdfs/UBI_EITC_Kasy_DFP_Working_Paper.pdf) an account of “Why a Universal Basic Income Is Better Than Subsidies of Low-Wage Work”.

There is good evidence that EITC does *(a)* incentivize people to engage in wage-labour, *(b)* reduce dependency on other kinds of government handout, and *(c)* tend to cause improvement in the health and educational outcomes of children in the labourers' families. And, it is reckoned to have lifted some 6½ million people in the USA above the official poverty line there.

Prof. Kasy argues, however, that a UBI scheme could yield equally good results while also eliminating some unfortunate side-effects of EITC:

(a) As the amount of market demand for labour in the USA is in fact limited (most saliently during recessions), incentivizing some wage earners to labour *for longer hours* tends to reduce the number of available jobs. If, for instance, a service-sector employee works overtime in order to increase her EITC credit, then her boss needn't hire an additional labourer to cover those hours.

*(b)* Research has shown that in the 1990s, one effect of subsidizing low-wage labour via the EITC was to decrease pressure on employers to offer a living wage to their employees. EITC has thus been, in effect, a subsidy *to employers* – whereas a UBI would increase the bargaining power of labourers; and indeed Prof. Kasey argues that

(c) UBI would reduce the coercive power which employers *and* low-wage labourers who happen to be abusive to their sexual partners hold over economically more marginalized people. Not only the low-wage labourers but also the survivors of domestic violence would, with UBI, have an increased ability to walk away from exploitative situations.

(John Ruskin remarked, in *Unto This Last* (1860; this was his book on economics which was to have a profound effect on Gandhi in 1904) that the social power of lots of money in one person's pocket depends on its lack in someone else's pocket. UBI would curtail that power and relieve distress.

Here are two examples of coercion exercised by corporations over their hourly-wage labourers in the USA: Walmart prohibits its 1.4 million such labourers from committing “time theft” by making casual remarks to each other. Oxfam reported in 2016 that labourers at the four largest poultry companies were routinely denied bathroom breaks; some would wear adult diapers; others would urinate on themselves in order to avoid retribution from their supervisors.)

*(d)* UBI would, *in effect*, fairly compensate child-care and elder-care work, which is largely done by women and which mostly goes unrewarded in the current wage-based system.

I would add that *(e)* UBI would also fairly compensate the vast amount of unpaid work of pre-sorting waste that is going to have to be done in the 21st century in order to mitigate the rates of deadly pollution of the natural environment (history shows that once all kinds of waste from economic activities are mixed

together, it becomes extremely costly to treat suitably the various different kinds of stuff in it), and *(f)* UBI entails lower bureaucratic cost than does negative income-tax, because the documentation is simpler. To get a UBI payment, you would have to document that you exist, are a citizen and are present in the nation, and the

bureaucrat would have to check to see that there is no record of your having yet been given the payment in question, whereas to get a negative-income-tax payment, you would have to document *also* how much income from the market you have received during a certain period.

(It might be wise to give UBI only to people who are at least, say, three or four years old, so as to avoid nudging destitute couples to engender a baby every year in order to get more payments in the hope that children are 'cheaper by the dozen' to raise.)

UBI funded by Pigouvian taxation in India would be like a sugar-coated bitter pill to *taxpayers*. The bitter economic medicine would be higher commodity prices due to the various kinds of Pigouvian taxation; the sweet part would be compounded of

(*a*) some degree of relief from ‘ecological fear’, (*b*) relief, or at least hope of relief, from the ‘social fear’ of bloody Revolution, (*c*) indiscriminate brotherly love (competing with fascist tendencies), and (*d*) the fact that Pigouvian-slanted excise and sales taxes would be indirect rather than direct like personal income taxes.

Would UBI promote laziness? In a five-year 'Basic Income Pilot Project' in rural Madhya Pradesh which was initiated in 2010 by SEWA and UNICEF, it was found that receipt of an unconditional basic income amounting to about 1/3rd of the official 'poverty-line' level of income had the following results:

- increase in gainful employment, especially in own-account work on small farms;
- increased spending, by small and subsistence farmers, on agricultural inputs (resulting in better agricultural yield and improved food security);

- improved nutrition (entailing a significant reduction in the proportion of malnourished female children in the villages that received the cash grants);
- reduced incidence of illness (*An ounce of prevention is worth a pound of cure!*);

- more regular medical treatment (*A stitch in time saves nine!*) and implementation of medical prescriptions;
- improved school attendance and greater household expenditure on schooling of the family's children;

- no increase in alcohol consumption (and indeed there was reduction of alcohol intake in the tribal village where one of the probes was conducted); and, as one would expect,
- a significant reduction in indebtedness (*Bad for the money lenders!*) and a significant increase in savings.

(A 13-minute video report can be accessed by googling “sewa basic income video”.)

However, the fact that those lucky poor folks behaved generally well doesn't tell us how people given enough UBI to shield them *entirely* from destitution would behave.

‘Partial UBI’ is the technical term for a negative poll-tax providing (as in that UNICEF-SEWA experiment) only *some* of the rate of income needed to lift an utterly destitute individual up to the level of humble poverty.

Résumés of current such experiments in various parts of the world are accessible at *<https://basicincome.org/news>* and in papers delivered annually at a World Congress of the Basic Income Earth Network (BIEN) which is held in a different country each year.

(I believe that even though Gandhi said he would not “tolerate the idea of giving a free meal to a healthy person who has not worked for it in some honest way”, he might have advocated at least a partial UBI for 21st-century India, had he known about the 21st-century circumstances that have caused UBI to be probed in so many recent discussions and socio-economic experiments. In order to be entitled to getting fed at Sabarmati Ashram, each able-bodied member of the ashram was obliged (by Gandhi) do some physical work every day. But none of that work had to be wage

labour (i.e. paid for with money); nor did the total daily amount of work have to be enough to match, in terms of wage labour, the full market-value of the food received. He said: “Everyone [at the Ashram] is expected to perform sufficient body labour [i.e. physical work] in order to entitle him [or her] to it [i.e. to the food served there]. It is not therefore necessary to *earn one’s living* [my italics] by bread labour, taking the word ‘living’ in its broader sense. But everyone must perform *some* [my italics] useful body labour.”

Gandhi admitted that the 'bread labour' which he himself did (usually by spinning) was of less economic value than the food he ate, and that he himself was thus being fed to some extent charitably: he didn't earn all of his own daily bread. Do you think he would insist that no such charity should be accorded to destitutes under our 21st-century macro-economic condition of an *insufficient total* amount of opportunities for wage labour?)

Here is a big question: Would poor folks unburdened or less burdened with wage labour tend instinctively to do more *unpaid* work?

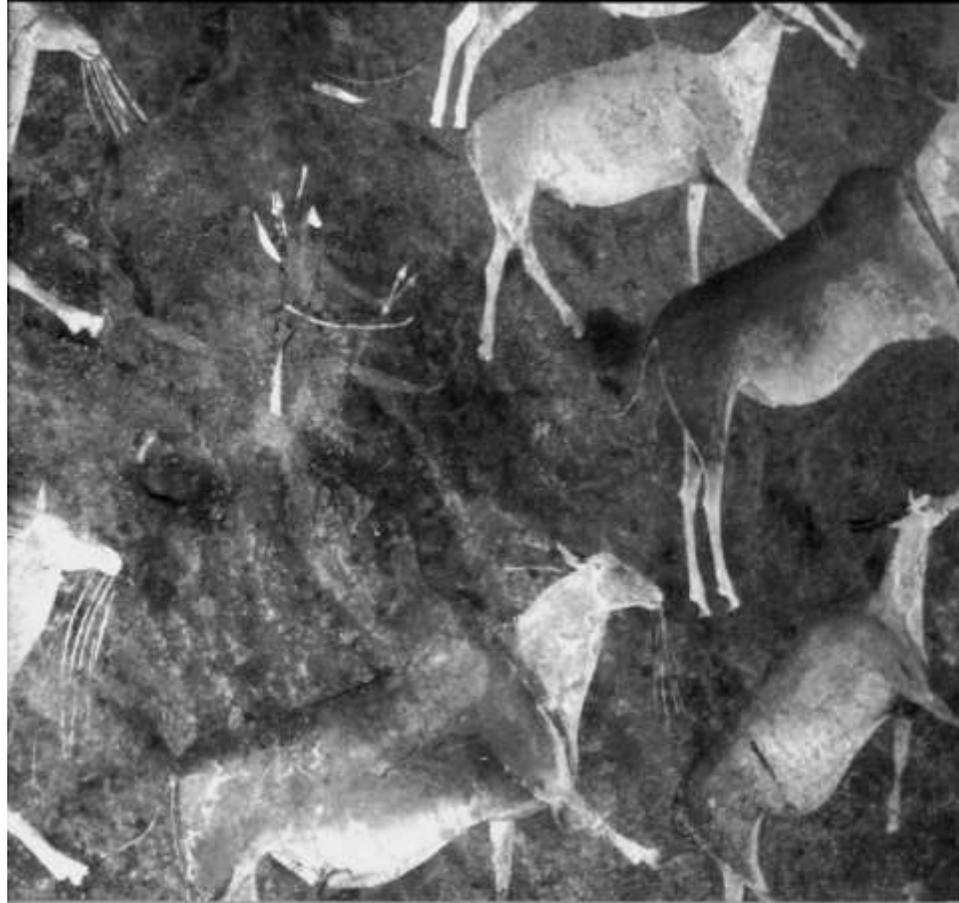
If you ponder the clear historical fact that Homo Sapiens got food, for a lot longer than 150,000 years, mainly by unpaid-for hunting and gathering, but only less than 10,000 years ago began to go in for urbanisation with its

large-scale dependence on agriculture, transportation and money, you may become inclined to suppose that the instinct to cooperate in unpaid work (as for instance in primitive hunting) is even deeper than the instinctual basis for market economics.

Two first-rate 21st-century economists have developed this argument in a book entitled *A Cooperative Species: Human Reciprocity and Its Evolution* (2011). A black-and-white version of the cover is on the next page. (It includes a reproduction of a prehistoric cave painting.)

# A Cooperative Species

HUMAN RECIPROCITY AND ITS EVOLUTION



SAMUEL BOWLES & HERBERT GINTIS

Another first-rate economist, Richard Layard, has described as follows a cleverly controlled psychological experiment carried out in the 1980s: “Edward Deci gave puzzles to two groups of students. One group he paid for each correct solution, the other he did not. After time was up, both groups were allowed go on working. The unpaid group did much more extra work –

owing to their intrinsic interest in the exercise. But for the group that had been paid, the external motivation [i.e. the monetary payments] had [evidently] reduced the internal motivation that would [presumably] otherwise have existed. They did [only] half as much additional work on the puzzles.”

By extending this lecture for another hour, I could prove that it is not yet known to what extent poor folks unburdened or less burdened (thanks to a complete or partial UBI) with wage labour would tend instinctively to do more *unpaid* work.

A founding father of academic sociology, Ferdinand Tönnies, said (in 1887) that whenever human wills are not mutually antagonistic but are, instead, 'positive', there is a social 'bond', and in that case:

“The relationship itself,  
and therefore  
the [resulting] bond, is  
conceived of  
either as  
[a] real and organic  
[form of] life

*Das Verhältnis selber,  
und also  
die Verbindung, wird  
entweder als  
realisches und organische  
Leben  
begriffen*

[and] this [conception] is	– <i>dies ist</i>
the essence of	<i>das Wesen der</i>
<b>Community,</b>	<i>Gemeinschaft,</i>
or else as	<i>oder als</i>
[a] mental and mechanical	<i>ideelle und mechanische</i>
construction,	<i>Bildung</i>
[and] this is the concept	– <i>dies ist der Begriff</i>
of <b>Society</b> ....”	<i>der Gesellschaft....</i>

Would you consider it reasonable to suppose that “real and organic cooperation” is more deeply instinctive than cooperation via “mental and mechanical constructions”?

But of course mere suppositions won't suffice. The proof is in the pudding. Some additional 'small-is-beautiful' experimental puddings should, IMHO, be baked before going big-time with UBI.

An effect to be on the lookout for at that latter (big-time) stage would be that enabling all the destitutes in India to buy their absolute commodity needs might, via the demand-side of the famous economic “Law of Supply and Demand”, increase the rate at which prices of basic foods rise faster than prices of luxuries.

(My feeling about that is: So be it;  
agriculture could make good use of  
more income from the market.)

And meanwhile, enabling all the adult female destitutes to buy *their* absolute commodity needs might well, via the supply-side of that same Law, cause the prices of prostitutes' services to soar....

Dr. Mark Lindley is an ecological economist, a Gandhi scholar and an historian of Western classical music. Born in Washington DC in 1937, he has taught at City University of New York, Columbia University, Washington University, University of London, Oxford University, University of Regensburg, University of Zaragoza, Istanbul Technical University, Boğaziçi University (also in Istanbul), Chinese University of Hong Kong, University of Hyderabad (as University Chair Professor in the School of Economics), Gokhale Institute for Politics and Economics (which published in 2013 his *Modern Economics as a Would-Be Science*), University of Kerala, and Dr. Babasaheb Ambedkar Marathwada University. His recently published books have included *Five Lectures on Money* (University of Kerala, 2019), *Gustav Le Bon (1841-1931)*, *Ferdinand Tönnies (1855-1936)* and *Mahatma Gandhi (1869-1948) as Modern Psychologists* (Mahatma Gandhi Mission, 2019) and *Gandhi on Health* (Gandhi Research Foundation, 2nd edition 2019). He serves now as an unpaid 'Professor of Eminence' at the MGM University in Aurangabad.

Herman Daly is an emeritus professor at the University of Maryland's School of Public Policy and remains today, as he has been for several decades, a preëminent master in the field of ecological economics. Born in 1938 in Houston (Texas), he earned in 1967 a doctorate in economics at Vanderbilt University under Nicholas Georgescu-Roegen. The titles of a few of his many publications hint at the scope of his concerns as an economist: "On Economics as a Life Science" (1968, in the *Journal of Political Economy*); "Thermodynamic and Economic concepts as related to Resource-Use Policies" (1986, in the journal *Land Economics*); "Allocation, Distribution, and Scale: Towards an Economics that is Efficient, Just, and Sustainable" (1992, in the journal *Ecological Economics*, which he had co-founded); *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future* (1990 and several later versions including one in Chinese in 2014); and *Ecological Economics: Principles and Applications* (2004, 2nd edition 2011, Japanese version 2014). From 1988 to 1994 he served as the Senior Economist in the "Environment Department" of the World Bank and, as such, helped to develop policy guidelines related to sustainable development; but, the policies actually implemented by the Bank were woefully inferior to the ones he urged. Since then he has received quite a few prestigious awards.