Report

Symposium on "Growth, green growth or degrowth? New critical directions for India's sustainability"

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Summary

The purpose of this symposium was to encourage fresh and critical insights into the paradoxes of economic growth in India. It focused on the pertinence of alternative conceptions of growth in the Indian context, whether they are envisioned as green growth, ecological democracy, village economy, or degrowth. Questions like the following were addressed: Does the Indian GDP need to grow further? Is green growth an oxymoron? What are the alternatives to the growth model?

The inaugural session heard R. K. Pachauri (TERI) and Mrinalini Natesa (NISTADS), emphasising the need for more dialogues of this sort about sustainable development, technology and knowledge, and policy changes that are necessary for a balance between economic growth and ecological-social wellbeing in India. A message from Sharachchandra Lele (President, INSEE) asked that we think about the kind of environmentalism we need, and where we want to go as a society. The keynote address by Vandana Shiva emphasised the need for "sustainable degrowth" in India ("degrowth" = civilizational shift away from GDP growth addiction). The inaugural lecture by Jayati Ghosh showed that the growth of "modern India" crucially depends on the opportunities for "backward India" to grow and survive. The two lectures were thought-provoking and complementary.

Session 1 was the most traditionally "economic", with four economists (2 of whom were former members of India's Planning Commission) and one radical historian. All the economists believed in the benefits of GDP growth if complemented with other indicators or if externalities were measured well. In contrast to this, virtually all the speakers of Sessions 2 and 3 argued for a downscaling of production and consumption that increases human wellbeing and nurtures ecological systems. Mansoor Khan and Sagar Dhara stated that degrowth is not an "option"; it is something we will face in a few decades. And this is not only in India but worldwide – with the peak of most key resources like oil, coal, uranium or phosphorus for fertilizers. "Should we start now dealing with reality?" asked one panellist, "or should we wait until reality deals with us?" Kanchan Chopra argued that green growth required fundamental institutional change and goes hand in hand with "selective degrowth".

The discussants were extremely incisive, and the following discussions were very demanding with questions from academics, students, journalists and activists about meanings, processes, contents and interests or incentives for sustainable alternatives. There will be at least one book coming out of this symposium, most likely with a major university press, and more dialogues will follow.

Overall, the symposium was a success. The announced programme was scrupulously followed. The auditorium was full during both days (114 persons signed in the first day and 64 the next day) – some people did not sign in/stay because they could not find a seat. Many students (especially from TERI University) attended the symposium and interacted with the speakers. We received many positive comments from the audience during the symposium.

The symposium was sponsored by the Ford Foundation (Rs. 3.50 lakh to TERI University), the ICSSR-Northern Regional Centre (Rs.1.20 lakh to NISTADS) and INSEE (three PhD students were competitively selected in response to a call for applications, and sponsored – two by

INSEE and one by NISTADS). NISTADS has also allocated a small award of Rs. 5000 for two of the best articles published in the popular media (news papers or magazines) by Ph.D. students on any theme/part of the Symposium.

Symposium on "Growth, green growth or degrowth? New critical directions for India's sustainability"

Organized by

NISTADS and TERI University

Co-sponsored by Ford Foundation, ICSSR and INSEE

Detailed Report

1. Rationale

It has become common knowledge that GDP is a simplistic and even misleading measure for an economy's health. In fact, two-digit GDP growth is in many ways profoundly unsustainable and the "side effects" of this growth are increasingly contested at the grassroots. Yet GDP growth still holds a sacrosanct place in the decision-making arena.

Six month ago, former finance Minister P. Chidambaram said that "anything that comes in the way of growth must be stoutly opposed. And obstacles to growth must be removed. Unfortunately, we are our own enemies when it comes to growth. [...] People say we want electricity, but don't build dams across the river that runs in my district or build a thermal plant in my village. We want roads, but don't build highways or railways that will cut into my land... Development always has a price and it has to be paid" (*The Hindu*, 6 February 2014).

This quote crystallizes the many paradoxes of growth. It is as if growth was a self-propelling force, as if democracy was powerless in front of it. The quote also acknowledges that many movements belonging to what has been called the "environmentalism of the poor" are indeed fighting the impacts of growth. But is it appropriate to understand them merely as "not in my backyard" (NIMBY) movements? They may in fact be NIABY movements ("Not In Anyone's Backyard")! But what alternatives do they embody then?

In the global North, evidence shows that economic growth does not correlate with an increased life satisfaction (see Fig. 1). In the United State, the percentage of the "very happy" has even steadily decreased since 1945 while economic growth continues to take place. As Peter Victor once remarked, "Americans have been more successful decoupling GDP from happiness than in decoupling it from material and energy".

[†] GDP says nothing about the distribution of growth, about unpaid social and environmental costs, about unpaid work (e.g. domestic or voluntary), and it mixes good and bad things (e.g. a bombing attack increases GDP).

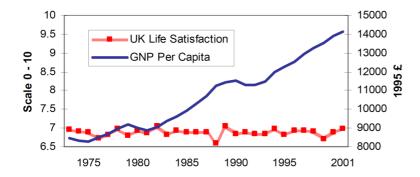


Fig. 1: Economic growth versus life-satisfaction in the UK: 1973-2001 (Jackson et al. 2004)

It seems clear by now that above a certain level, growth does not increase well-being – and may even deteriorate it. In addition, Thomas Piketty has showed that capitalist growth increases social and income inequalities along with new poverties and social exclusions.

This symposium was intended to reflect on the pertinence – in the Indian context – of alternative conceptions of "economic growth", whether they are envisioned as green growth, ecological democracy, village economy, prosperity without growth, eco-socialism or degrowth.

Let us take the radical example of "degrowth". Degrowth has been called a "missile word" whose primary objective is to stimulate discussions. It does not simply advocate "negative GDP" but symbolizes a civilizational change. Degrowth has been defined as a downscaling of production and consumption that increases human wellbeing and enhances ecological conditions. It calls for a future where societies live within their ecological means, with democratic, equitable, and localized economies. In such societies, material accumulation no longer holds a prime position in the population's cultural imagination. The primacy of efficiency is substituted by a focus on sufficiency, and innovation no longer focuses on technology for selectively perceived efficiency or productivity outcomes, but concentrates on new socio-ecologically desirable arrangements. "Sharing", "simplicity", "conviviality", "care" and the "commons" are central features of how such a society might look.

Some of the degrowth ideas have been discussed and practiced in India for centuries. In the 20th century, the greatest Indian theoretician of "degrowth" was J.C. Kumarappa (1892-1960), the "green Gandhian", who developed in the 1940s and 1950s the model of the "economy of permanence". The latter was in fact a source of inspiration for some of the forefathers of the modern degrowth movement, including Ernst Schumacher and Ivan Illich. The word *Décroissance* (French for degrowth) appeared for the first time in the 1970s in different French publications (such as in a collection of articles by the great economist Nicholas Georgescu-Roegen). However, the word *Décroissance* only became an activist slogan and a social movement in France from 2001, in Italy from 2004, in Spain from 2006. The English term "degrowth" was accepted at the first Degrowth Conference in Paris in 2008, which also marked the initiation of "degrowth" as an academic research area. In this context, this symposium constituted a historical première: for the first time in the Global South, an academic conference discussed the relevance of "degrowth".

2. Content of the sessions

2.1 Keynote address and Inaugural lecture

According to **Vandana Shiva**, the growth model that we refer to today is flawed and fails to capture the realities of the world. The model externalizes all costs and therefore gives an impression of limitless growth on a limited planet. It assumes that there is no feedback system. This assumption is an anomaly considering that all living systems have feedback systems.

Gross Domestic Product (GDP) is a recent and very narrow concept. It excludes the services of the home makers, subsistence farmers, etc. and does not include any externalities. This realization has been acknowledged at times in India. For example during the time of Chipko movement and the Ganges floods in the 1970s: the government realized that the cost of disaster relief was much, much higher than revenue received from deforestation for the use of timber. Not only is the concept of GDP narrow, it is highly mechanistic as well since it assumes linear mechanic causality. Dr. Shiva demonstrated how this assumption is wrong. The world is not a machine. It is a living system where linear mechanic causalities rarely exist.

Dr Shiva noted that the chase for surplus led to the up-rise of movements such as the "Green Revolution". The Green Revolution was justified by saying it led to increase in productivity but the actual consequences have been dire. This "revolution" led to violent conflicts and increasing farmer debts. It was responsible for bringing a debilitating dependency among the farmers, encouraging the use of GMOs, and of leading to the cartelization and monopolization of seeds. This can be seen with the example of cotton cultivation in India- an example of negative externalities associated with the overarching concept of growth. What needs to be realized is that reality cannot be manipulated forever.

Broadly speaking, there are two types of externalities that are generated from GDP growth and that are not accounted for. Firstly, the disruption of ecological processes: like river flows. It needs to be noted that 95 percent of water consumption takes place in the agricultural sector, as well as 40 percent consumption of fossil fuels to sustain this model of industrial agriculture that we have adopted. Yet we see a food crisis in India. This is because what is produced is used by the farmers to pay the debt and not to consume. The ecological costs, financial costs and energy costs of industrial agriculture are exceptionally high. And this model is able to sustain on the basis of subsidies. The true costs are subsidized heavily by the governments. Secondly, the costs to society: "GDP creates poverty". This needs to be accepted. There is a very direct link between poverty and growth.

We are, at this point in time, at a watershed since these two externalities are becoming intense and very visible. Very simply put, there are two ways to make the concept of growth green i.e. to make it sustainable: (1) the internalization of externalities, (2) the need to stop

the financialisation of functions of ecological services. Example: trade in soil carbon. In organic farming, we return the living carbon. But when industries do, they dispose their waste all over (since it has some carbon credit) and the governments all over are legitimizing this spread of dead carbon.

What needs to be realized is that we can measure what the function of a machine is. We can measure what a train does; it goes from point A to B. But how can we measure the growth of a living system like a tree? A tree spreads out, branches out, creates seeds, safeguards future generations, bears fruits, etc. This is exactly the concept of growth we need to shift to. But with the development of oligarchs, public states have turned to corporate governments, and therefore, all of these externalities are ignored.

The address concluded with the statement, "Health externalities of food are going to rise"; leaving with the concept of "Degrowth". Dr Shiva strongly argued for "sustainable degrowth" in India. Briefly, degrowth involves correcting the illusions of growth. It means that those living on one meal a day shift to two meals a day because we stop wasting grains on biofuels. It means that we stop chasing numbers that we call the GDP. It needs to be realized that GDP is an illusion. We need to move towards economic democracy while moving away from corporate concentration.

Jayati Ghosh started with some very essential "basics" of economic growth. Dr Ghosh presented an analysis of the Indian economy – historically, economically and politically – showing very clearly that the so-called "modern growing India" crucially depends on the "backward India". One section- the well endowed, cannot grow without the other. But since capitalism is about accumulation and growth is essential for this, it is today the only game in town. If we are concerned about the massive sections of the population that this growth needs to feed on, concerned about the environment and diverse social systems that have to be given up, then perhaps green growth is an alternative. But the search for alternatives must move beyond the capitalist system; structural inequalities must be accounted for.

India's growth story is a success story, with targeted GDP growth rates being achieved! The state's commitment to the corporate sector (facilitate and make it easy for them to invest) and the patterns of labour market segmentation are central to the Indian growth story. But the shelf-life of this strategy is over. Today the concern is not just about lack of reforms (of land, labour, public sector), but about the fact that there are social and political limits to reform, and that the state's capacity to generate credit driven bubbles may also have reached a limit. Consumption credit has gone up from a mere 4 % to over 30 % today. Dr.Ghosh discussed how in this particular phase of capitalist development, credit allows capitalism to maintain the demand despite the uninterrupted exploitation of the workforce. The methods and tools available in economics today are not enough to understand or quantify these ecological and social costs. India, as a country with a rich demographic dividend to harvest, has to acknowledge that some of our production systems create the social and ecological disorders and diseases. If we do not, the demographic dividend may turn into a ticking time-bomb. In India, as well as globally, the increasing violence against women and migrants, caste and class based segregation, and the emergence of strong aggressive leaders who push the growth agenda at all costs, pose questions about social and political sustainability.

Dr Ghosh defended a conceptualisation of development in agreement with the project of the Enlightenment, acknowledging that human rights come before Nature's rights, but that capitalism has had a devastating impact on the key resources: land, water, atmosphere, and energy. Any post-growth project can only be anti-capitalist, since it is the essence of capitalism to push for continuous expansion. What are the solutions? Is there a way out? What do we learn from the Equadorian concept of 'good living', the idea of 'relational time', alternative collective ways to reach the public? How can India ensure that there is a substantive and significant change in the consumption of the bottom half in the country? Consumption patterns and work patterns that do not disrupt ecological systems. We can and must look for an indicator that captures the policy maker's attention – an alternative to GDP as the indicator.

2.2 Session 1: Is there a need for GDP growth?

The first technical session was entitled "Does the Indian economy need to 'grow' further? Is GDP a meaningful parameter?" and was chaired by **Arun Maira**. The latter started by arguing that the world is currently stuck with the questions of measurement. In this sense, this session is about tackling a central problem of our time, which is reforming institutions — the organizations and the rules that govern them. Dr. Maira read out relevant parts to this end, from his latest book "Redesigning the Aeroplane While Flying: Reforming Institutions".

Amar Nayak emphasised the role of organisation design and the scale of an economy in the debate about economic growth or contraction. While most of us would like to work in small entities, perpetual asymmetries exist between large and small organisations and small organisations have a tendency to grow into larger ones. Describing the different design parameters of organisations and institutions, he listed the different design paths for growth of firms in competitive market economies (i.e. size, scope, technology, specialisation, management and ownership). This thesis about an optimal size and operational and social sustainability or health of an organization has been considered in economics before, but never before in a world so threatened by massive multinationals, state-owned public sector entities that are huge, and the state itself which desires scale and growth derived from scale-effects. Dr Nayak however showed that the parameters for an external competition-based industrial market economy were at odds with socio-culturally and ecologically sustainable systems that can cater to domestic markets. He also described the limitations of 'efficiency' and private property in talking about sustainability.

Ajay Dandekar focussed on the history and political economy of growth in India and said that "globailized India" is not a new phenomenon. Dr. Dandekar recalled that India entered the new era of globalization on an unequal terrain and terms. It is important to recall that different political parties have ruled India, with no change in economic policy. He classified the key actors in modern polity as: the civil society, the state and the corporates, each of which is competing for survival. Regarding the corporate sector, for example, this is by receiving enormous tax concessions from the state. He then described the push for resource mobilization in India following various shocks to the economy emanating from the 1991 Kuwait War, foreign exchange crisis, and the "liberalisation, privatisation and globalisation" reforms in the Indian economy post-1991. While natural resources were first mobilised in a centralised manner, the government had initiated the decentralisation process by enacting

the 73rd and 74th amendment to the Indian Constitution. In this process, with instruments like the PESA, the rights of the tribal community are being constantly attacked. Three future goals should be key: (1) clean water for everyone, (2) sustainable and self-sufficient food system, and (3) existence of communities that live with dignity. But the governance and economic policy instruments in the country have no scope to ensure any of these.

Pronab Sen argued that any redistribution in income to achieve egalitarian ends necessitates growth. Bringing each person's income equal to even the national per capita income would imply a consumption boom of 20%, meaning also a rise in the demand for materials. Growth is a necessity. Thus, according to Sen the problem lay not in whether to have growth, but in asking what kind of growth occurs, who is responsible for it. There will be higher environmental costs associated with growth; we need to ask what are the environmental impact of such growth and how to compensate for the ecological damages. Industrial growth is necessary – today there are 58 million non-agricultural enterprises in the country; 57.5 million of them employ less than 10 people. How do we change these? Dr Sen emphasised on conceptualising a new financial architecture that would take these questions into consideration, and not merely transplant financial systems from Western countries.

The first discussant of this session, **R. Nagaraj**, said that the limitations of GDP as a measure of an economy's health are well-known and any questions regarding it indicates, if anything, the failure of economics teachers in making these clearer. Overall however, Dr. Nagaraj defended GDP per capita as a useful parameter and advised to be more tempered before making any crude judgements against GDP. We must listen to famous economists who defend GDP and question GDP – Lewis, Wicksham, Boulding, Georgescu-Roegen, Kuznets, Morris D Morris, are a few. Dr. Nagaraj said that while the Human Development Index was a good measure of general human well-being, GDP still carried 50% weightage in the measure. According to him, GDP is a necessary but not sufficient index and the Physical Quality of Life Index (PQLI) could be seen as a useful complement. He maintained that democracy and population growth make economic growth necessary.

Sukumar Muralidharan, for his part, ended the discussion by saying that "externality is a question of distributional justice and economics has not found an answer to this and shadow prices are a "shallow concept". He referred to the questions and conceptual reformulations attempted by Pigou (including questions on rights to nature), Ricardo (who asked that the vested right to land must be diluted and social product be enhanced in every economy), J S Mill (demanding a higher law of distribution), Walras, Pareto, and others. He also restated the standard assumption of Pareto that no one is supposed to be made better off without making someone else worse off. Let us recall that economists have won the Nobel Prize for saying that externalities should not be handled (Buchanan and Coase for example). He therefore stressed the need to understand and include "externalities", curtail consumption levels and argued that wealth needs to be more equitably distributed among citizens. Planning for these are far more complex and involves diverse dimensions (social, political, ecological) compared to the purely economic dimension used currently for planning.

The Session had several questions about the nature of economics and the need for a different kind of measurement, research methods and policy advocacy to bridge the

distance between the economy, the environment and society – especially the poor and unemployed populations.

2.3 Session 2: Meaning of Green Growth

The second technical session, chaired by **Anantha K. Duraiappah**, focussed on "What should be understood as 'green growth'? How can we go beyond the current focus on 'modern green technology' as the way to reach sustainability?" The chair opened the floor to the panellists after a brief discussion on (i) how inter-linkages work in an interdependent world, (ii) the "cognitive dissonance"- continuous state of dissonance betweenvalue systems, means and ends, and (iii) new demand for education, where students ask for new economics to understand "green growth" and sustainability.

Kanchan Chopra, the first speaker, presented her views as "the why and how of green growth". She started by saying that GDP has been criticized for decades so it is not a new debate. Indeed, many economic concepts attain popularity through fancy numbers but lack solid conceptual and empirical foundations. However, the concept of "green growth" has witnessed progress from conceptualization to operationalization through policy discussions. Dr. Chopra presented the conceptual differences between degrowth and green growth. She said that green growth certainly converges with "selective degrowth". Hence, there is a need for a definition which goes beyond green GDP. However, while "large-scale degrowth" is a valid intellectual project, she argued that it is counterproductive in the real India of today. She explained in detail, citing several Indian examples, the drawbacks of the current macroeconomic approaches. She took the example of Himachal Pradesh – relying on a study by her team – as a state which is following the green growth approach (hydel power, etc.), but stressed the need for a national policy approach, since the natural resources and ecosystems are not always a part of state jurisdiction, like in the Western Ghats, which she feels must be considered as a national resource. She concluded that individual incentives must be provided for green growth, and that we have to find ways to link institutions with individuals for fostering this new approach to green growth. There is therefore a need, she argued, to revive the old foundational idea of "institutions" into more prominence and to rearticulate the federal structure via working out the financial allocation to states for green growth initiatives.

The next speaker, **Mansoor Khan**, spoke about the "end of growth as we know it", relying on his book "The Third Curve" (2013). His presentation challenged the concept of perpetual growth in light of the fact that its primary driver, oil, peaked its global reserves around 2005 and is now on a descent. He justified his argument based on energy analyses ("energetics"), which deals with energy as something real, a physical entity with limits, as against economics that deals with money which is a concept of the mind and as such has no limits. Thus, the First Curve: money (the ultimate basis of growth) follows an exponential path across time as we keep adding layers of financial innovations (ranging from simple interest to complex financial instruments) in order to make it grow more and more, an idea he calls the "Money Onion". The Second Curve: oil follows a bell curve and moves in tandem with the growth of money in the "Paradise Phase" (between 1860-1900s). But after that, the money and oil curves start diverging till the mid-2000s when we reached "peak oil" beyond which the oil

curve follows a steady declining trend. Thus, we reach the "Growth Trap": the idea that money has to grow irrespective of the decline of the resources that go behind it, leading to the final phase where growth as a concept fails, but is pushed further to infinity by financial drivers alone. It is here that we need to start thinking of the possibility of "shrinkage" or "degrowth". Mr Khan pointed out that other curves as indicators of the planet's health also follow an exponential path: species extinction, fishery exploitation, ozone depletion and loss of tropical rainforest, to name a few. The Earth is dying, suffering from a "cancer" for "growth for the sake of growth is the ideology of a cancer cell" (quoting Edward Abbey). And so we have the "Third Curve", where the human use of, largely solar, energy moves in a narrow band of values at a sustainable level. So we have the option of a slow, gradual descent by transitioning to a sustainable economy (that is, degrowth), or to crash down abruptly, since growth, for energetic reasons, will be soon over.

Rohan D'Souza followed him in the same vein dubbing growth as the "Ghost in the Machine" and noting how the idea of growth has many roots starting from the early 1900s to the "high world of growth" with modern economics, monetary values, generalized market, prices and the rational man with animal spirit. Dr. D'Souza also grouped the concepts of abundance, lifestyle vs. livelihoods, life as the ownership of things, getting more from less, opportunities and choices without satisfaction, and wants as the endless celebration of self, all of this under the banner of the "seductions of growth". He identified the driver of growth in not just ideas but also constituencies like the middle class who is today "designed" to work in order to spend, laying special emphasis on consumerism and also on debt being the point of extreme vulnerability of the middle class. This is, he concludes, how growth "eats its own children": the constituency that spurs growth ends up being the most vulnerable to it.

The first discussant of the session, **Suneel Pandey** pitched in the idea of dropping one R from the 3-R concept of "Reduce, Reuse, Recycle". He argued that "Recycling" defeats the purpose of the other two R's since setting up businesses to recycle meant increasing consumption to produce more. In the Indian context, he pointed out how we have traditionally "reused" extensively due to want of resources but we have failed to decrease the gap in our ability to "reduce" waste, especially with rapid urbanization and the fact that the market always ideally likes us to change the product more than we would like to due to the rapid pace of technology. Thus, he advocated the need to address waste management in a more holistic manner in the education system rather than training to look at only end-of-pipe solutions. He ended with the idea of "closing the loop" through a circular rather than a linear thinking since the purpose of "reducing" implies less generation which requires an entire shift from our standard way of thinking.

Following him, the second discussant of the session, **Gopal Krishna**, engaged the audience with thought-provoking questions about the political (i.e. non-economic!) nature of growth. He flagged the issues of organizational legitimacy and asked whether the Companies Act of India (2013) will promote any alternative development model, considering that the funding of political parties by corporations has status-quo intentions. He urged economists to provide real rather than verbal responses, as economists are too often trying to sound sensitive to the environment by using abstract mathematical and statistical tools, denying the physical and biological aspects of ecological systems their very existence. The world

must wake up to these 'approved beliefs" or "innocent frauds"- the discipline has no understanding of the environment.

The session ended with a very animated discussion, when the floor was opened for questions. The panellists were questioned about a broad range of topics, starting from whether humans only have selfish genes or do they actually worry about collective self-preservation, to the practicalities of and ideal process for going from a minority to majority with the degrowth concept. The Session affirmed the key purpose of the Symposium – the need for more dialogue. It highlighted

- (i) That we are "in the system" (Morpheus- as quoted by Dr. D'Souza) and it is a shrinking system (Khan's third curve), where growth and green growth come up as social and psychological disorders or questions of cognitive dissonance (as pointed out by the Chair), which most certainly and essentially takes the debate out of the realms of economics and into the realm of politics and psychology.
- (ii) That we drive the system with new layers of the "money onion", new institutions (established by those who want to maintain control), new instrumental laws, through increasing debt as part of the 'financialization' of the system.
- (iii) That within the system, implementable solutions and problem formulations that suit these implementable solutions are being discussed but no fundamental changes are proposed in the system. The revised 3Rs or new centre-state relationships in India, or new financial and fiscal incentives for environmental protection, may help. But they will not change the system or arrest the fall.

2.4 Session 3: Alternatives to Green Growth

The third technical session on "What are the alternatives to the growth model? Couldn't 'prosperity without growth' become a rallying slogan for myriads of grassroots alternatives that are already present?" was chaired by **Ramaswamy Iyer**. The Chair set the stage for the session by arguing that green growth is an oxymoron – that growth may at most be "light brown". According to him, the damage to ecosystems from anthropogenic factors is so immense that to reduce the overall damage to the planet, slowing down growth rates is not enough – thus degrowth is a persuasive idea. In line with this, Mr. Iyer said (an approximate quote): "I don't want India to be a super-power or an economic World Leader. I couldn't care less! What I want is India to be a sharing, caring, nurturing and sustainable place, with a civilization that ensures an average standard of living for everyone".

Ashish Kothari presented the ingredients of "radical ecological democracy" – a project that intends to go to the roots (hence the word "radical") of quiet, positive initiatives taken in villages and towns across India to make fundamental transformation in local governance and economic systems in order to foster sustainability. Such transformations would include four key factors: (1) a "new politics" via local self-governance initiatives, reforms to democratic processes and ecoregional decision making; (2) a new economy of permanence by undertaking village reconstruction and being mindful of eco-planetary limits (as discussed by Kumarappa and Rosa Luxemburg and others); (3) taking initiatives that are based on social justice and equity as opposed to caste, gender, ethnic, religious or class discrimination; and

(4) transforming ways of learning about nature and democratising innovation and research and development activities. As an example of new politics, Mr Kothari presented the example of Mendha Lekha, a village, where community-based management has been very successful. Regarding the economy of permanence, he reminded the audience that traditional village economies were largely involved in producing local products like handicrafts. But with the machine cloth coming, many handicrafts lost their value and need now to be revived. This will not only revive the industry but also improve the livelihood of rural people who otherwise have to come to urban areas for work. Here, Mr Kothari gave an example of Jharcraft – craft works done by people of Jharkhand which is a big success. In addition, he also stressed the concept of demonetisation. Money today has conquered the lives of people and stands above virtually all other social relations. This needs to be changed. Societal attributes like caring, sharing, and local exchange systems need to be rebuilt. This can only happen if people think beyond money. Regarding the third social justice ingredient, Mr Kothari cited the example of a village in Andhra Pradesh where with the help of DDS (a NGO), local Dalit women are organizing themselves. These women farmers have claimed land rights and are practising organic agriculture. Presently, they run a community grain bank to help other farmers, a parallel "public distribution system", and an organic restaurant. As for the learning aspects, Mr Kothari argued that the current education system does not teach about nature. It mainly focuses on how to earn money. Remaining connected with nature and understanding the links is crucial. There are some institutions who are taking initiatives along those lines such as the Adivasi Academy in Gujarat and Bija Vidyapeeth in Uttarakhand. From a policy perspective, Mr Kothari stressed the idea of ecoregional planning which means planning development goals according to the ecological context of the region. There is no single formula which can be replicated to entire country but only eco- and socio-specific solutions.

Sagar Dhara described how the move from biomass to fossil fuels has caused two tilting points: that of peak oil, an energy crunch and possible global collapse, and that of climate change. He spoke of two ideologies that sustain such a system: privatisation of energy and anthropocentrism. With privatisation, the accrual of energy surplus fell into private hands even as the real surplus is achieved by sunlight in photosynthesis and fossil fuels. He said that degrowth is "written on the wall" and defines it as the realisation of energy use levels that are driven by harvesting the energy received from sun. There are no options for a sustainable world, unless the North reduces consumption. We need to ask "how" this "Power Down" is possible – for the North and for us, the global South. A just system of distribution of energy use is also desired: a move towards an "ecosocialism" may be the only answer. But there must willingness among politicians and concerned academics and activists to take up these ideas, search for appropriate solutions.

Aditya Nigam proposed to venture beyond productivism and to define modern capitalism as a system characterized by "planned obsolescence". According to this model, the mass production of waste is not a by-product but a part of the growth strategy. Short lifespan of products and fast-changing fashion concern range from virtually everything from clothing to cars. Planned obsolescence makes waste production integral to the system. Disposal of waste involves power structures. An entire population may itself be turned into waste either as slavery and indentured workers; disposing off concerns of indigenous peoples affected by the production processes is part of the game. Maintaining a large informal workforce and

remaining unaccountable to society and the environment are thereby necessary. The desire within the economy today, to convert the informal workforce and property into formal bourgeoisie property is misplaced – it will only add to the problem. The tragedy of 20^{th} century socialism is that it took part in and played the game in the same terms as capitalism. Dr Nigam called for a "Copernican revolution" where the non-payment of ecological services so typical of the capitalist system is replaced by a perspective that views such costs as debt. He also called for broader participation in the decision-making of those private companies whose decisions affect large groups of stakeholders.

The first discussant was **Sudha Vasan** who, posed three theoretical-cum-reality checks to all the panellists (i) Going back to villages, ecologically sound farming and so on are fine as solutions – but are we conscious of the various inequalities that exist in villages? (ii) How does one choose among the multiple alternatives that are sprouting all over in the country today? Are there a eco-socialist principles or a theoretical framework that can help? (iii) The 'System problem" seems to focus only on consumption – what happens to production problems? The organization of production and the relationship between production and consumption are critical issues – the ways in which we transform our ecosystems are embedded in the ways, modes and means we use for production. The scale question is a case that we need to address. Among the solutions or models proposed, we can speak of Lok Swaraj – but we must remember that Indian society is highly undemocratic. Some concerns from an anthropological perspective are about the feasibility of direct democracy, or radical ecological democracy – we must go back to Gandhi, Nehru and Ambedkar – ask how they saw these issues of modern communities, questions of valorising labour.

Nandan Nawn highlighted the need to identify or build institutions that can play a role in the transformation process and also act as mediators to achieve the objective of equity. The institutional questions are central to our understanding of agro-ecological and ecological boundaries, efforts to plan and enable progressive change in these bio-physical and sociopolitical systems. He pointed out that the existence of failures in cases where an "economy of permanence" was sought to be built, and the problem of scaling up, raise questions about the role of the state. If issues are only context-specific, it implies that the state has no role in the process. How will molecular socialism work in our aspirational Indian society?

2.5. Media Panel:

Though the last session of the two day Symposium, the Media Panel was the most vociferous and dynamic. The panel was chaired by **B. G. Verghese**, who emphasised that people need jobs, and jobs are available only if we use resources. Western environmentalism was not for us, developing countries with millions who need work and wages.

The panel began with **Vipul Mudgal**, who berated the organizers for including a media panel at the very end of the Symposium – "what is the purpose" he asked? While the need for dialogue and discussion is important, the space and the key issues to be discussed are lost if a media panel is included as a mere legitimization exercise at this last minute. (The organizers clarified why this session was included as the concluding session, and reported that they had contacted all the major media houses and many journalists, none of them replied to emails or even phone calls.)

Shalini Bhutani, lawyer and environmental activist, spoke about the ways in which information and public involvement are crucial to understand and counter some of the economic and trade decisions which have lasting negative ecological (perhaps irreversible) impacts. One major example is the Seeds Bill 2004 – there is a dire need today to bring back and revitalise the "publicness" in these issues. The ICAR, a registered Society turned Government Department (DARE) now (in 2013) has created its own registered private company. Ms. Bhutani reminded the audience that the mass media is tutored.

Sharmila Sinha, environmental educator and environmentalist, requested that academics and policy makers pay more attention to how the young journalists reporting on environment and development are groomed. Not all media is pessimistic — the environmental coverage is increasing in national and vernacular media. We need to ask ourselves how we can communicate with and be part of the concerns of the youth today. Surely there are young Indians who want a clean, healthy and sustainable economy — which is possible only if we have clean and healthy ecosystems.

Latha Jishnu, senior editor at Down to Earth, addressed the concerns that a magazine like DtE has been facing, in analysing some of the environment vs. development questions, when there are limited number of academics, politicians and activists who are willing to engage in the debate. How do we then address emerging communication exercises launched by the state or right wing political parties? There is a need to take stock of why the mainstream media reports in this fashion on crucial resource extraction or development displacement issues- perhaps people do not want to read about all that. Is there scope to organize a learning and exchange forum where mainstream media and environmental and developmental actors can meet, and talk to each other?

T. V. Padma, former Chief of SciDev.Net, India and Asia (the reporting and analysis of issues central to science and development), spoke about the need to maintain the space for dialogue. Why is it that here, in this panel today, there are only journalists or media people who are already converted, and sympathetic to the environmental questions? Where is the mainstream media? TV, radio, news papers? This might also mean that they are no longer in the forefront of these new churnings and debates. Perhaps the social media and increasing use of twitter and other internet based communication systems is what will take these debates further.

Archita Bhatta, the web design and management officer with DBT, spoke about her experiences working on ecological questions with various organizations in India. One of the key issues she felt was poorly understood and addressed was how the media itself frames the environmental issues. There have been attempts to always frame it as an environment vs. development issue, as a socio-ecological and cultural issue, as a mere ownership and access issue, and so on. When we read a particular journalist or media person we know this is as far as they will take it. How can we change these?

The Chair, **Mr. Verghese** concluded by reminding the organizers and the audience that India can not afford to indulge in such debates – people need jobs, incomes, and health care and education. Environmental protection or conservation will not help. Only growth can provide these jobs.

3. Outcome

The immediate outcome of the Symposium is an edited book, with chapters written by the panellists, as well as with a few authors who could not attend the Symposium. We are in the process of contacting publishing houses, starting with major university presses. A tentative title for our book is "Post-growth thinking in India" and we are currently awaiting confirmation from the publisher.

Another immediate outcome is capacity development and outreach. As part of INSEE's commitment to building research capacities in the interface between the economy, ecology and society, Ph.D. students have been asked to submit a report or commentary piece on any theme of the Symposium or about the entire Symposium that they have published in popular media (news papers, magazines) or academic journals (EPW, IEJ, IJAE, etc.) to the organizers, by January 31st 2015, latest. This request has been formally sent to the three students sponsored (2 students, D.Ramdas and Roshan Pradhan by INSEE and 1 student Surbhi Joshi by NISTADS) for the Symposium and a few other (like students from ATREE, TERI University, Shiv Nadar University, and JNU) students who participated in the Symposium.

The short to medium term outcomes are building linkages with and mobilizing research capacities among academics, environmentalists, policy makers and politicians working on a range of questions about the economy, society and ecology. Various kinds of policy frameworks, databases, theoretical, conceptual and methodological changes, capacities, and communication skills are necessary for these outcomes.

4. Concluding remarks

We decided to organize this symposium because we had the feeling that the fundamentals of economic growth were not being discussed enough. This is not only true of India but also globally. "Growth" is one of those terms – like "development" – that everybody uses but it is rarely defined in exact terms, in the meanings or relationships associated. Are we talking about growth in well-being? growth in democracy? growth in sustainability? or growth in GDP? To us, as organizers, it appeared that in the current Era of the Anthropocene – characterized by multidimensional crises – there is an urgent need to reiterate the basic questions about growth:

- Does the Indian economy need to "grow" further? How much more? How?
- Is green growth an oxymoron?
- What are the alternatives to growth?

If GDP growth is a misleading measure for an economy's health, why is it still so widely used? It appears that GDP growth is not just a neutral measure. It embodies a way of organising society based on the idea that increasing market-based exchanges best reflects the needs of a given society. Many panellists questioned this basic assumption, not just technically but

also in its socio-political implications. There is a failure, including among the progressive political parties in India, to come up with new responses that are not articulated around the imperative of GDP growth. Among the key conclusions, we note the following:

- In many ways, when we talk about the environment and social equity, GDP growth creates more problems than it solves. New indicators are badly needed.
- The concept of "degrowth" is relevant to many contemporary debates in India, in particular to the imminent peak of most key resources. Green growth can go hand in hand with selective degrowth.
- Alternatives are already out there and should be encouraged, especially in the rural
 world but not only. Right now in India, there are thousands of grassroots alternatives
 struggling against the "collateral damages" of growth. These may be the seeds for a
 new "post-growth economy".

These areas need more research and are linked to broader issues such as: what are real social needs as opposed to mere illusions? What is westernization, modernisation, as opposed to self-identity? What degree of globalization do we need instead of self-reliance? If self reliance also leads to production processes that displace and disrupt communities and ecosystems, is there an answer? These are clearly topics for future symposiums and further dialogues.

Annexure 1: Full Programme

Friday 12 September

9:00-... Registration
9:15-10:00 Inaugural Session

Welcome - Shailly Kedia (TERI)

Introduction and relevance of the symposium:

- Rajendra K. Pachauri (TERI, TERI University, IPCC)
- Mrinalini Natesa (CSIR-NISTADS)
- 10:00-11:00 "Ecology and Growth" Keynote address by Vandana Shiva (Navdanya)
- 11:00-11:15 Symposium design and expectations, vote of thanks *Julien-F. Gerber (TERI University) & Rajeswari S. Raina (CSIR-NISTADS)*
- 11:15-11:45 Tea break
- 11:45-13:00 "Indian economy and the economics of growth" Inaugural Lecture by Jayati Ghosh (Centre for Economic Studies and Planning, JNU)

Chair: Kanchan Chopra (TERI University, Institute of Economic Growth)

13:00-14:00 Lunch

14:00-15:30 Technical session I: Does the Indian economy need to "grow" further? Is GDP a meaningful parameter?

Chair: Arun Maira (former member Planning Commission)

Pronab Sen (International Growth Centre)

Amar KJR Nayak (National Centre for Sustainable Community Systems)

Ajay Dandekar (Shiv Nadar University)

15:30-16:00 Tea break

16:00-17:00 Technical session I: contd.

Discussants: R. Nagaraj (Indira Gandhi Institute of Development Research) and Sukumar Muralidharan (Indian Institute of Advanced Study)

18.30-... Dinner at TERI 5th floor – hosted by CSIR-NISTADS and TERI University

Saturday 13 September

9:30-... Registration

10:00-11.30 Technical session II: What should be understood as "green growth"? How can we go beyond the current focus on "modern green technologies" as the way to reach sustainability?

Chair: Anantha K. Duraiappah (Mahatma Gandhi Institute of Education for Peace and Sustainable Development)

Kanchan Chopra (TERI University, Institute of Economic Growth) Mansoor Khan (independent researcher, filmmaker, engineer) Rohan D'Souza (Shiv Nadar University)

11.30-12.00 Tea break

12.00-13.00 Technical session II: contd.

Discussants: Suneel Pandey (TERI) and Gopal Krishna (ToxicsWatch Alliance)

13:00-14:00 Lunch

14:00-15:30 Technical session III: What are the alternatives to the growth model? Couldn't "prosperity without growth" become a rallying slogan for myriads of grassroots alternatives that are already present?

Chair: Ramaswamy Iyer (Centre for Policy Research)

Ashish Kothari (Kalpavriksh)

Sagar Dhara (Cernana Foundation)

Aditya Nigam (Centre for the Study of Developing Societies)

15:30-16:00 Tea break

16:00-17:00 Technical session III: contd.

Discussants: Sudha Vasan (Delhi University) and Nandan Nawn (TERI University)

17:00-18:00 Media Panel with T.V. Padma, V. Mudgal, S. Sinha, L. Jishnu, S. Bhutani Chair: *B. G. Verghese (Centre for Policy Research)*

18:00-18:05 Vote of thanks – Rajeswari S. Raina (CSIR-NISTADS)

Annexure 2: Some moments



The audience on September 12, 2014



Rajeswari Raina and the media panel



The panel of Session 1: R. Nagaraj, S. Muralidharan, A. Maira, P. Sen, A. Nayak, A. Dandekar



Vandana Shiva (keynote)



Gopal Krishna, Mansoor Khan and Rohan D'Souza



Jayati Ghosh (keynote) and Kanchan Chopra



Inaugural address by R.K. Pachauri



Ramaswamy Iyer and Sagar Dhara



J.-F. Gerber



Ashish Kothari