THE RURBAN REPUBLIC

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The initiative of OUR GLOBAL U supports the proliferation of autonomous and self-managing local bodies and their interdependent networking for ecological and socio-economic sustainability. Our Global U constitutes itself as an experimental forum for alternative practices in the production, dissemination and use of knowledge, making possible different modes of relating to one another and to nature other than what is confined by prevailing dominating institutions and practices. Our Global U seeks to transcend the commodification of knowledge driven by capitalist mechanisms that shape possessive individualistic selves, and hopes to bring together old and new generations of committed people working for ecological justice and socio-economic justice to articulate knowledge produced by experiences in the field, common reflections, and in particular, the wisdoms of elders, women, and communities that defend their commons and rights. Our Global U hopes to help cross-fertilize initiatives practiced by organizations and networks to foster further inter-connections, experiment with creative and equitable forms of interacting, networking, and managing the commons. Our Global U envisions a new sustainable humanity on earth.

Book Cover | Songlines | First Nations Art, Australia

In Australia, First Nations creation myths tell of a legendary totemic being who wandered over the continent in the Dreamtime, singing out the name of everything that crossed their path birds, animals, plants, rocks, waterholes and so singing the world into existence. These are called songlines. This book is a songline in itself, singing of a new world.

Contents

Prologue

Today we are living in an era where the human species is sliding down to an ecological and socio-cultural crisis. We have not been able to check the accumulation of green house gases in the atmosphere and global warming. The consequent climate change has wrought a large number of natural catastrophes such as cyclones, storms, floods, drought etc. and also engendered ever so many epidemics.

We have also failed to change the concept of progress or development from increased wealth to increased happiness. Growing inequality goes unchecked, leading to the growth of global dissatisfaction and unhappiness. This has led to increased human conflicts as well as perilous increase in the consumption of narcotics.

Capitalism demands an ever increasing production of needs - goods and services. There are limits to welfare needs. So it is forced to manufacture 'vanity' and 'defence' needs. The earth has enough resources to satisfy everyone's need but not enough to satisfy our vanity needs - greed.

Development should mean increase in the happiness of society, long and healthy life and emancipation from all forms of alienation. These are the basic elements in societal happiness. This demands wisdom to differentiate need from greed, control on one's own life - swaraj - and self-reliance. It also demands reduction in socially necessary labour

time, so that people get more leisure.

These require maintaining the health of humans and nature; ending contradiction between towns and villages, development of self-reliant rurban republics and networking them horizontally and developing productive forces to serve these requirements.

Today humans are controlled by machines and capital. This has to be made the other way round. For this Research & Development work should be directed to make 'small powerful' so that humans have control over them. Further local economies are to be strengthened. This would enable reduction in the transport of goods and the travel of humans.

Such societies which are to be linked to each other in the form of 'grand oceanic circles' will not automatically come up but are to be sown and nurtured within the wombs of the existing society. The urgent practical steps in this direction must centre around increasing local self sufficiency in essential goods and services.

Steps to be taken are (a) strengthen local economy to withstand the onslaughts of global economy; (b) deepen social control over means of production; and (c), establish a strong consumer-producer linkage.

The present world is unacceptable. It is speeding towards species extinction. It is economically unjust, ecologically unsustainable, culturally moribund and philosophically bankrupt.

The capitalistic globalisation is total. Concept of modernity has been accepted universally. Even Marx was an admirer of modernity. He had infinite faith in human beings and their capacity to solve any problem using science and technology. Of course he had some hesitation on the

ecological front, as seen in the writing about the contradiction between humans and nature and between town and village, etc. These were overlooked by the builders of the first socialist societies. Soviet Union defined its goal as overtaking USA in per capita production and consumption of goods and services. It did not attempt the building of an alternative society, based not on modernity but on humanness. So the result was not socialist human beings but modern capitalist citizens.

Unless we change from modernity to humanness, the problems of today cannot be solved. Today it is possible to realise a happier and sustainable society. We have to realise that while economically human society is advancing, the world is becoming more and more dissatisfied and so human happiness is thwarted. The concept of progress must be redefined: from the pursuit of wealth to the pursuit of happiness. That is the burden of this book.

M P Parameswaran

Section 1

The Challenge

Chapter 1

Present Predicament

Even an entire society, a nation or all simultaneously existing societies taken together, are not owners of the earth. They are its possessors, its beneficiaries and have to bequeath it in an improved state to succeeding generations as bone pates families (good heads of households).

Karl Marx, Capital Vol 38 P 754

This is one of the earliest definitions of sustainable development made more than 160 years ago. This went unnoticed. During the same period, Frederic Engels wrote, in the short essay titled *Role Played by Labour in Transition from Ape to Man:*

Let us not flatter ourselves over so much on account of our human conquests over nature. For each such conquest takes its revenge on us. Each of them it is true has in the first place the consequences on which we counted, but in the second and third places it has quite different unforeseen effects which only too often cancel out the first. The people who, in Mesopotamia, Greece, Asia Minor and elsewhere, destroyed the forests to obtain cultivable land never dreamed that they are laying the basis for the devastated

conditions of these countries, by removing along with the forests the collecting centers and reservoirs of moisture. When on the southern slopes of the mountains, the Italians of the Alps used up the fir forests so carefully cherished on the northern slopes, they had no inkling that by doing so they were cutting at the roots of the dairy industry in their region; they had still less inkling that they were thereby depriving their mountain springs of water for greater parts of the year, making it possible for these to pour still more furious flood torrents on the plains during the rainy season.....

And in fact with every day that passes, we are learning to understand these laws more correctly and getting to know both the more immediate and the more remote consequences of our interferences with the traditional course of nature. In particular, after the mighty advances of natural science in the present century, we are more and more placed in a position where we can get to know and hence to control, even the most ordinary productive activities.

These concerns expressed both by Marx and Engels went unnoticed even by Marxists, especially by the mainstream Marxists in Soviet Union and elsewhere. Nor did scientists take note of it. It was the publication of *Silent Spring* by Rachel Carson in 1962 that opened the discussion again:

There was once a town in the heart of America where all life seemed to live in harmony with its surroundings. The town lay in the midst of a checkerboard of prosperous farms, with fields of grain and hillsides of orchards where, in spring, white clouds of bloom drifted above the green fields. In autumn, oak and maple and birch set up a blaze of colour that flamed and flickered across a backdrop of pines. There, foxes barked in the hills and deer silently crossed the fields, half hidden in the mists of the fall

mornings.

Along the roads, laurel, viburnum and alder, great ferns and wildflowers delighted the traveller's eyes through much of the year. Even in winter the roadsides were places of beauty, where countless birds came to feed on the berries and on the seed heads of the dried weeds rising above the snow. The countryside was, in fact, famous for the abundance and variety of its bird life, and when the flood of migrants was pouring through in spring and fall people travelled from great distances to observe them. Others came to fish in the streams, which flowed clear and cold, out of the hills and contained shady pools where trout lay. So it had been from the days many years ago when the first settlers raised their houses, sank their wells, and built their barns.

Then a strange blight crept over the area and everything began to change. Some evil spell had settled on the community: mysterious maladies swept the flocks of chickens; the cattle and sheep sickened and died. Everywhere was a shadow of death. The farmers spoke of much illness among their families. In the town the doctors had become more and more puzzled by new kinds of sickness appearing among their patients. There had been several sudden and unexplained deaths, not only among adults but even among children, who would be stricken suddenly while at play and die within a few hours.

There was a strange illness. The birds, for example, where had they gone? Many people spoke of them, puzzled and disturbed. The feeding stations in the backyard were deserted. The few birds seen anywhere were moribund; they trembled violently and could not fly. It was a spring without voices. On the morning that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no

sound; only silence lay over the fields and woods and marsh.

On the farms the hens brooded, but no chicks hatched. The farmers complained that they were unable to raise any pigs the litters were small and the young survived only a few days. The apple trees were coming into bloom but no bees droned among the blossoms, so there was no pollination and there would be no fruit.

The roadsides, once so attractive, were now lined with browned and withered vegetation as though swept by fire. These, too, were silent, deserted by all living things. Even the streams were now lifeless. Anglers no longer visited them, for all the fish had died.

In the gutters under the eaves and between the shingles of the roofs, a white granular powder still showed a few patches; some weeks before it had fallen like snow upon the roofs and the lawns, the fields and the streams.

No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves.

(From *A Fable for Tomorrow - Ch. 1 Silent Spring*)

This town did not exist at that time, but today, several ones do exist. For example, Bhopal town in Madhya Pradesh and Padre village in Kasargode district, Kerala.

The primary focus of *Silent Spring* is the dominant and often detrimental effect that human race has on the environments that we live in. The thrust of Carson's argument was that pesticides harm the natural ecosystem. She refers to them as 'biocides' because the harm caused by them is rarely limited to only targeting pests. DDT is a prominent example, but other synthetic pesticides which are vulnerable to bioaccumulation are also scrutinised.

Carson holds the chemical industry responsible for intentionally spreading false information and accuses public officials of accepting industry claims naively. In the book which is mostly dedicated to talk about the impacts of pesticides on the natural ecosystem, there are separate chapters which are devoted to human pesticide poisoning, cancer and other illnesses caused by pesticides.

Carson predicted that the consequences would increase in the future as the targeted pests will develop resistance to the pesticides over time and the ecosystem will be weakened to fall prey to the invasive species. The book concludes with a plea for a biotic approach to control pests as an alternative for chemical pesticides. The book argues that the overuse of insecticides was counterproductive even if they caused no side effects to the environment, because the resistance to pesticides will increase the number of insects which will make pesticides useless in eliminating pests.

The USA and capitalist countries were not in a condition to heed these warnings. Having won the Second World War and having exclusive ownership to nuclear weapons, the USA deluded themselves that they had no reason to change course, though it had to engage in the much destructive Korean War. This complacency of the USA was disturbed with the detonation of atomic bomb and later hydrogen bomb by the USSR, as well as the commissioning of the world's first nuclear power station in Dubna in 1955, ahead of UK and USA. Further, the USSR sent out the first man made artificial satellite, SPUTNIK, 6 months ahead of the USA. It was the USSR that also put the first human being, Uri Gagarin, in outer space. The cold war situation initiated through arms race in the early fifties was getting transformed into real hot war situation. In 1962 the world came to the brink of a nuclear war, when the then US President John. F. Kennedy threatened direct

action in reaction to military assistance given by the USSR to Cuba. USA was unable to crush and defeat the Cuban revolution led by Fidel Castro. It was getting defeated in Vietnam too. USA went on a relentless arms race with increased nuclear tests polluting the earth. Under such conditions it was no wonder that USA and its allies could not take the warnings of Rachel Carson seriously.

However a small section of the scientific community went on to study the findings of Rachel Carson. What they found more than confirmed Rachel Carson.

U Thant, the then Secretary General of the United Nations was equally concerned. He wrote to the UN on the necessity of global action on the problems faced by human environment in 1968. Finally in 1972 the United Nations Conference on the Human Environment was convened in Stockholm.

The Stockholm Conference aimed to give the United Nations and the international community the opportunity to consider comprehensively the "problems of human environment."

The participants of the conference adopted a series of principles for the sound management of the environment including the Stockholm Declaration and Action Plan for the Human Environment and several other resolutions.

The Stockholm Declaration, which contained 26 principles, placed environmental issues at the forefront of international concerns and marked the start of a dialogue between industrialised and developing countries on the link between economic growth, the pollution of the air, water, and oceans and the wellbeing of people around the world.

26 Principles of the Stockholm Declaration:

1. Human rights must be asserted, apartheid and

colonialism condemned.

2. Natural resources must be safeguarded.

3. The Earth's capacity to produce renewable resources must be maintained.

4. Wildlife must be safeguarded.

5. Non-renewable resources must be shared and not exhausted.

6. Pollution must not exceed the environment's capacity to clean itself.

7. Damaging oceanic pollution must be prevented.

8. Development is needed to improve the environment.

9. Developing countries therefore need assistance.

10. Developing countries need reasonable prices for exports to carry out environmental management.

11. Environment policy must not hamper development.

12. Developing countries need money to develop environmental safeguards.

13. Integrated development planning is needed.

14. Rational planning should resolve conflicts between environment and development.

15. Human settlements must be planned to eliminate environmental problems.

16. Governments should plan their own appropriate population policies.

17. National institutions must plan development of states' natural resources.

18. Science and technology must be used to improve the environment.

19. Environmental education is essential.

20. Environmental research must be promoted, particularly in developing countries.

21. States may exploit their resources as they wish but must not endanger others.

22. Compensation is due to states thus endangered.

23. Each nation must establish its own standards.

24. There must be cooperation on international issues.

25. International organisations should help to improve the environment.

26. Weapons of mass destruction must be eliminated.

Subsequent years proved that the Stockholm Declaration was only wishful thinking.

The organisers of the Stockholm Conference had commissioned Barbara Ward and René Dubos to write a report on the global status of environment. This report was presented in the conference under the heading 'Only One Earth'.

The report noted that air, soil and water form a totally interdependent worldwide system or biosphere sustaining all life, transmitting all energy. They further noted that economic growth, measured by the satisfaction of both ordinary and induced material needs, has been the prime aim of national policy and a powerful solvent of social conflict. However, even within the wealthiest states, even with all the transfers of resources from richer to poorer citizens secured by tax and welfare and social insurance, “trickle down”economics do not ensure the ending of poverty at the base of society. Our collective greed can

degrade and destroy our basic sources of life in air, soil and water and our collective injustice can continue to create an intolerable imbalance between the rich and the poor and our envy and fear can unleash a nuclear holocaust.

Even before the Stockholm Conference was held, a report prepared by Donella Meadows, Dennis L Meadows, Jørgen Randers and William W. Behrens for the Club of Rome was presented at international gatherings at Moscow and Rio de Janeiro in 1971. This report was published in the form of a book titled *Limits to Growth (LTG).*

The report discussed the possibility of exponential economic and population growth with finite supply of resources, studied by computer simulation. The study used the World 3 computer model to simulate the consequence of interactions between the Earth and human systems. The model was based on the work of Jay Forrester of MIT.

The report's findings suggest that, in the absence of significant alterations in resource utilisation, it is highly likely that there will be an abrupt and unmanageable decrease in both population and industrial capacity. Subsequent research found that the global use of natural resources has been inadequately reformed since, to alter its basic predictions.

LTG provoked a wide range of responses, including criticisms almost as soon as it was published. Peter Passell and two co-authors published a 2 April 1972 article in the *New York Times* describing *LTG* as 'an empty and misleading work.' In 1973, a group of researchers at the Science Policy Research Unit at the University of Sussex concluded that simulations in *Limits to Growth* were very sensitive to a few key assumptions and that the MIT assumptions were unduly pessimistic, and the methodology, data, and projections were faulty. However, the *LTG*

team, in a paper entitled 'A Response to Sussex', described and analysed five major areas of disagreement between themselves and the Sussex authors. The team asserted that the Sussex critics applied 'micro reasoning to macro problems', and suggested that their arguments had been either misunderstood or wilfully misrepresented. They pointed out that the critics had failed to suggest any alternative model for the interaction of growth processes and resource availability. Nor had they described in precise terms the sort of social change and technological advances that they believe would accommodate current growth processes. During that period, the very idea of any worldwide constraint, as indicated in the study, was met with scepticism and opposition by the majority of economists. Critics declared that history proved the projections to be incorrect. The methodology, the conclusions, the rhetoric and the people behind the project were criticised.

Bjørn Lomborg wrote in the book *Sceptical Environmentalist* that the numbers selected by authors of LTG were biased and that in fact 'a child born today will live in a better world, will have happier childhood and longer life.'

Although its methods and premises were heavily challenged on its publication, subsequent work to validate its forecasts continue to confirm that insufficient changes have been made since 1972 to significantly alter their nature.

Two updates to *Limits to Growth* were published in 1992 and 2004 respectively; and the third one in 2012. In 2022 two of the original *Limits to Growth* authors, Dennis Meadows and Jørgen Randers, joined 19 other contributors to produce *Limits and Beyond*.

The authors of *Limits and Beyond* came to the following conclusions:

> 1. If the present growth trends in world population, industrialisation, pollution, food production and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity.
>
> 2. It is conceptually possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realise his individual human potential.
>
> 3. If the world's people decide to strive for this second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances of success.

Jørgen Randers also published a 40-year forecast in 2012, named 2052: *A Global Forecast for the Next Forty Years*. Therein, he observed, the world population will peak in 2040 and start to come down and also the global temperature will rise by 2+ degrees. He also observed that the purpose of society is to increase total life satisfaction, and not primarily to have each person contribute to the gross domestic product.

In 1977, an Independent Commission for International Developmental Issues under the chairmanship of Willy Brandt was established to review international development issues. The Brandt Report noticed that a great chasm in standard of living exists along the North-South divide. Under these conditions, a World Commission on

Environment and Development also known as Brundtland Commission was established to examine issues relating to economic development, labour practices and environmental protection.

The findings of Brundtland Commission came out in the form of a book called *Our Common Future*. It was in this book the term 'sustainable development' was formally used. It defined it as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

Our Common Future observed that

1. Economic growth must be based on policies that sustain and expand the environmental resource base.

2. Infant mortality is falling; human life expectancy is increasing; the proportion of the world's adults who can read and write is climbing; the proportion of children going to school is rising; and global food production increases faster than the population growth.

3. At the same time, there are more hungry people in the world than ever before, and their numbers are increasing. And so is the number of illiterates.

4. The gap between rich and poor nations is widening.

5. Millions of hectares of productive land are turning into worthless deserts.

6. Millions of hectares of forests are destroyed or turned into low-grade farmland.

7. The levels of atmospheric carbon dioxide has increased which gradually causes global warming. This greenhouse effect will lead to increase in global temperature and disruption in food chains.

8. It is futile to deal with environmental problems without addressing development issues.

By this time, the Cold War existing between the two blocs was coming to an end due to the weakening of the socialist bloc. It was possible to think about global cooperation in a different manner.

In 1992, an Earth Summit was convened to discuss the scope for collaboration of the States in the field of sustainability.

The issues addressed in the Earth Summit included:

- systematic scrutiny of patterns of production
- alternative sources of energy to replace fossil fuels
- reliance on public transportation systems
- the growing usage and limited supply of water
- importance of protecting the world's oceans

The summit ended with an *Agenda 21* (for 21st century), *Rio Declaration and Forest Principles*, along with two legally binding agreements: The *Convention on Biological Diversity* and *Framework Convention on Climate Change* (UNFCCC).

During subsequent years critics pointed out that the agreements made in Rio have not been realised regarding fundamental issues such as fighting poverty and cleaning up the environment.

The Kyoto protocol, under UNFCCC, demanded that the developed countries should bring down their carbon emissions substantially so that the global Green House Gases (GHG) level is maintained at 1990 level. But today, it has increased from approximately 350 ppm to 420 ppm.

On the 50th anniversary of *The Limits to Growth,* the Club

of Rome also published *The Youth Vision on Stockholm +50* which noted that hopes and fears for our future are similar to those envisioned half a century ago.

The Youth Vision anchored its hopes on four pillars: Solidarity Among all People, Living with Nature, Equality for All and Health and Well-being for all. It stated:

Achieving these ends requires systemic change at a massive scale; the systems in which we live need to address and remove inequality from many perspectives - including intergenerational and geographical.

Rather than economic growth, we find that community focused living, education and health are appropriate metrics of the prosperity of a country. It should further be measured by its 'natural capital' like the quality of its air, soil and water; biodiversity and integrity of ecosystems and land use. Countries with functional environmental ecosystems are more resilient to the impacts of climate change and can provide higher standards of living to their inhabitants.

We need actions now, in this decade, to set our course for the next 50 years.

We envision a world in which the development of societies centres on happiness, well being and solidarity. Recognising and encouraging youth as agents of change is one way to reach that world. Our youth vision requires we all work together for a more inclusive and sustainable future.

* * * *

In order to create a new world we have to transform or destroy the old one. This is possible only through a cultural revolution, in which progress is measured not through increased production, but through increased human

happiness.

Today the universal culture is one of consumerism. It lies at the heart of most of the problems humanity faces today. Consumerism means increase in production of consumer goods. This demands an ever growing economy which is the basis of capitalism. This results in abuse and overuse of limited natural capital such as air, water, soil, minerals and biosphere. This is the cause of global warming and associated maladies.

Increase in production demands increase in capital which in consequence demands increase in inequalities. Thus while aspirations of the people are increasing, achievements of the majority are decreasing resulting in a widening gap between aspirations and achievements. The consequences are all too visible: overuse of narcotics and alcohol, criminalisation, intolerance, conflicts and wars.

A society based on consumerism cannot escape self-destruction or a species suicide. Only a system which can assure livelihood and security for the entire population and subsequent generations can escape from cultural degeneration.

Chapter 2

Situation Today

Yes, Capitalism has made a triumphant comeback! It is proceeding with a vengeance to wreck all institutions of equity and justice throughout the world. Through its organs like the WTO, the IMF, the World Bank, etc., it is twisting the arms of the governments of not only developing countries but also developed countries. Monopoly capitalism has become 'finance capitalism.' Capital is getting increasingly divorced from production, is becoming autonomous and transnational. The daily flow of capital world over is currently, of the order $ 4 trillion; about 30 to 40 times the value of the daily production of goods and services. Even the United States, the 'god's own country' of capitalism, is reeling under the kicks of footloose capital. (Michael Shuman: *Going Local*)

World over, among academics and lay people, the predominant mood is characterised by the TINA (There Is No Alternative) syndrome. But as we know, capitalism cannot go on forever. There has to be an alternative. Most of the warnings given by the Club of Rome Report are becoming true. Many natural resources are on the verge of extinction. Environmental pollution is scaling to unmanageable limits. Global warming and ozone layer

destruction are unfolding as felt realities. Energy costs are surging. Availability of drinking water and food is shrinking. The rich and the powerful try to transfer these problems on to the poor. The gap between the rich and poor nations and between the rich and the poor within any nation is increasing rapidly.

This is leading to increasing strife and tension. Human beings, group after group, are losing their behaviour patterns that helped the species to survive. They are increasingly unable to 'renegotiate' under changed circumstances, to develop and enter into new forms of social contracts.

The 'post-capitalist society' is a tentative concept of a new social contract. This will be one built upon the experience of human species till now, the world over. Its motive force will be neither 'private profit' nor 'desire for power.' 'Social good' shall be its motive force. It will be a new form of people's democracy – decentralised and participatory. Its production relations - individual, family, social and international relations - will be different both from capitalism and from socialism of the twentieth century. Nobody can work out, up to the last nuts and bolts, the final design of such a world order. It is neither desirable. All that can be attempted is to draw a tentative outline. It is only natural to expect, aspects of the teachings of Karl Marx and Mahatma Gandhi and even more ancient seers getting reflected in this outline.

Though capitalism now appears victorious, the spetcre of socialism and communism is still haunting it. The contradiction between capitalism and socialism continues to be one of the main contradictions in the world.

However, the contradiction between the developed, 'northern' imperialist countries and the developing,

'southern' neo-colonised countries have assumed far more grave dimensions than ever before. Now the colonisation is complete: economic, political and cultural. The gap between the developed and developing countries is widening at an alarming rate.

In 1960, the ratio of the average incomes of the world's richest 20 % and poorest 20 % was 30. In 1997, it became 74. The ratio of per capita incomes of the world's richest five countries and poorest five countries was only about 3 in 1820. This increased to about 12-13 in 1950 and to 35 in 1992.

The developing countries consisting of nearly 70 per cent of the world population are rapidly being emaciated. They may succumb or resist victoriously. For victory, however, they would require a new vision about the future society. Past achievements of the USSR or present 'progress' of China are not sufficient to inspire them or to show them a new course of action.

The contradiction between labour and capital though inherent and cannot be wished away is being subdued especially in the case of organised labour, through a process which can be termed as 'sharing the loot' of natural resources, and also of exploited sections of the humanity. A substantial minortiy in the developing countries too has now become part of the developed world.

Contradictions within the capitalist camp will be contained for quite some more time, so long as there is enough to loot. However, the present stage of capitalism is afflicted with yet another contradiction, between capital and production process resulting from the near total divorce of finance capital from productive capital. The predominance of speculative capital has already started playing havoc in the very same countries controlling this capital. The classic

cyclic crises of over production and recession are being replaced by erratic and unpredictable flights of foot-loose capital and consequent immiserisation of local communities.

A deeper contradiction, pointed out by Engels a century and quarter ago, the human-nature contradiction, the contradiction between exponentially increasing demand for natural resources and the limited supply of the same, is now coming to the forefront. Brought to the notice of the 'modern world' by Rachel Carson's *Silent Spring* and later by the Club of Rome reports, *Limits to Growth*, it took nearly three decades for the scientific communtiy to accept that there were real limits to natural resources and even more stringent limits to the capability of the earth to receive 'wastes.' Global warming and ozone layer depletion are now accepted. The developed nations are the main culprits. But they have categorically declared that there is no going back. The rather haughty statement by George Bush (Senior) during the 1992 Earth Summit was no empty rhetoric. The developed countries are not in a mood to limit and then reduce their consumption of natural resources and release of greenhouse gases, nuclear and chemical wastes and other hazardous products. They accuse the developing countries, the large population therein, of releasing too much wastes and consuming too much of resources. The large population of the developing countries are unnecessary to humanity and if possible should be reduced or eliminated! The message of globalisation is unmistakeable - privatise the globe for the benefit of the few.

Whether they succeed in this or not, it has serious implications. Long before the contradiction between capitalism and socialism, between capital and labour is resolved, any of the following things can happen.

i) Techno-economically viable resources get absolutely exhausted.

ii) Even before this happens, competition among militarised nations for ever dwindling resources may lead to all devastating wars including deployment of nuclear weapons.

iii) Phenomenal increase in environmental pollution and resulting vagaries of weather may lead to catastrophic calamities.

These are no longer fantasies, but objectively real threats. This, necessarily, leads us to a very important concept of communism, which has implications both for socialism and capitalism: 'from each according to his ability and to each according to his need.' Presently, these 'needs' are unqualified and are generally accepted to be continuously increasing. This is an unsustainable proposition. Science and technology can lead to phenomenal expansion of productive forces. In the present form, this will only accelerate the process of resource depletion and waste accumulation. We have to recognise and accept the fact that there are limits to 'growth' in material goods production. 'Needs' of everybody cannot be met, unless they are qualified and restricted. This does not mean that there are limits to development. We can have development without growth. Today it is just the reverse – growth without development.

Restriction demands institutions for enforcement, a state, though different from the present oppressive one. One may argue that the developing contradiction of the present epoch is the one between limited resources and unlimited needs. This cannot be resolved under capitalism because the very existence of capitalism is based on ever increasing production, exchange and consumption of goods and

services, an unrestricted manufacture of 'needs' at rates larger than the means to satisfy them. The twentieth century understanding of socialism, as an interim stage leading to communism characterised by the slogan 'to each according to his needs' too will have to be revised. The present levels of consumption of developed countries are unsustainable, those of poor developing countries are too inadequate. An intermediate and sustainable level has to be found. The contradiction between labour and capital will be resolved only through the resolution of humans–nature contradiction. This, above all, demands major changes, revolutions in culture and technology. The starting point is culture. It generates the will to change. Knowledge and skills follow. In the three H*– (Heart, Head and Hand) process, heart is the initiator.

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*The 'head, heart and hand' is a holistic approach, first put forth by Orr in 1992 and expanded by Sipos et al. (2008). The paradigm illustrates the all-encompassing nature of transformative experience and ties relational knowing and involvement to the cognitive (Head) and affective (Heart) domains.

Section 2

The Hope We share

Chapter 3

Vision of the New World

The present world is not acceptable. This neoliberal globalisation is not acceptable. A new world order is necessary. Another World is Possible. This summarises the feelings of the thousands of groups and movements that gathered in the World Social Fora held in Porto Allegre in 2001, 2002 and 2003. That the present world, the neoliberal capitalist world, is in crisis is no guarantee for the automatic emergence of a new one, the New World. It has to be consciously created.

Conscious creation presupposes the existence of a vision about the New World. But this vision could be different for different people. For many, the New World is, still, capitalism sans inequity and more even development. To others it implies a total change. Capitalism is not sustainable, its natural end will be either barbarism or total extinction. So a vision and a conscious effort to achieve The New World is to be made. However, a very large number of groups, movements and individuals are against any such overarching vision. They cannot conceive of any vision different from the socialist experiments of the 20th century. That experiment had several weaknesses. That is why it failed. A vision about a future, New World, does

not mean enforced homogeneity.

It can have and would have heterogeneity, it could be a plural world. But it would not be a fragmented world. No communtiy or nation can remain totally isolated. They would have to be mutually related. About the nature of these relations, between individuals, between communities, between humans and nature, we should have a unified understanding. Otherwise we cannot relate. This understanding may be called the 'Vision Of The New World'.

Many of us are clear and convinced about what the New World would not be or should not be, but not so clear about what it should be. What follows is a contribution towards the evolution of such an understanding. What should be the nature of relationships: human to human, nation to nation and humans to nature. Until a sufficiently large percentage of people and their movements converge towards a common understanding, neoliberal capitalism will continue to lead humanity towards barbarism and even total extinction. Convergence means multiplicity of starting points and commonality of the end point.

What follows is *one* end-point scenario and the arguments leading to it. It is not a scenario which is given, but one which is to be constructed by our actions – accounting for the past, acting in the present and envisioning for the future.

Capitalism in its present form or in any other form cannot endure long. We have not reached the 'end of history.' If humanity does not change its trajectory, it may well reach the 'end of history' – a stage of barbarism or even earlier, when there was still no homo sapiens. The present strength of capitalism is derived from mad and ruthless exploitation of natural resources, euphemistically termed 'development of productive forces.' Productive forces can develop only

through productive activities.

The essence of capitalism is production and reproduction, an ever-continuous increase in the production and exchange of goods and services. This requires continuous increase in the throughputs of materials leading to depletion of resources and accretion of waste. Increasing demand on the depleted resource base leads to increasing conflicts. Though the second half of 20th century is referred to as the 'post-war period,' it was not a warless or peaceful period. Scores and scores of declared wars – Korea, Vietnam, Faulkland, Bosnia, Afghanistan, Israel-Palestine, Kuwait, Iraq, Iran, El Salvador, Nicaragua, Chile, India-Pakistan-China, unfolded during this period. And undeclared wars, civil wars, conflicts, skirmishes, intervention, etc., have been a legion during this period. At any time during this half century, one or more wars or conflicts have been taking place on this globe. There is every possibiltiy that these never-ending 'local' wars may coalesce into an all destructive global warfare, where all are enemies of all, where there will be no winners, only losers. This is no exaggeration. The global expansion of neoliberal, imperialist capitalism is leading the world in this direction: towards destruction of human civilisation, towards barbarism, towards the end of history.

Capitalism is likely to lead humanity in this direction, further backwards – into the destruction of the entire human species and many other species. Climate change due to greenhouse gases is no longer a subject for science fiction. It is a challenge to be faced squarely today itself. Humans have to change their habits. The affluent nations have to consume much less. Most of their consumption is waste. With less than 5% of their consumption, a society can achieve comparable levels of physical and spiritual qualities of life.

But the very existence of capitalism, which they believe to be the highest form of social organisation, is based on increasing wastage, on conversion of greed to need. Under capitalism, it cannot be otherwise. George Bush senior was perhaps expressing this fact when he declared 'the American way of life is non-negotiable.' It was one of the most profoundly arrogant, and even foolish statements. This non-negotiability based on mad consumerism is leading to several other phenomena, both directly and indirectly - widespread land, water and air pollution, soil degradation and erosion, deforestation and consequent changes in hydraulic cycle and local climate leading to floods and draughts, desertification, etc.

Capitalism cannot endure further, because it is founded on the fallacious notion of an autonomous, self-regulating market. Fact is, the market does not and cannot regulate itself or anything else. Those who insist that the developing countries should remove all restrictions on the market, themselves impose ever so many direct and indirect restrictions on their own markets so as to keep others out of them.

All dreams about the future will become meaningless if the affluent nations do not learn to renegotiate their economy and lifestyles and revise their value system. Who is going to teach them and how? Already, there exist in the US and other affluent countries thousands upon thousands of individuals and groups dissatisfied with the present way of living. There are many eminent personalities amongst them. If all of them do really join together on the basis of a shared broad and longterm perspective, it can become a formidable political force and also a cultural force. Here, we are making an attempt to outline the essential features of a New World Order, its economy, politics and culture and elucidate, in what way

they will be different from not only capitalism but also from the socialist experiments of the 20th century, as a basis for collective action.

When Mr. Bush proclaimed about non-negotiability he was echoing the feelings of the majority of the people in all the developed countries. However, human species has survived and expanded through negotiations, both amongst themselves and with nature. The ability to negotiate is a unique human quality. Loss of that ability will spell doom to the species. Over a millennia, human soceity has negotiated and renegotiated human-nature and human relationships several times. One of the most outstanding among the negotiations was the socialist experiment initiated in 1917 with the Great October Revolution. It lasted for seven decades, but finally collapsed. Before that, it was able to show to the world that it is possible to eradicate poverty and illiteracy, to provide everybody with food, shelter and clothing, to ensure right to earn a livelihood to everybody, to progress by leaps and bounds in science, technology, arts and sports – in short to build, almost, a paradise on earth.

However, their own concept of paradise – the Communist Society – had its critical fault lines. The slogan 'to each according to his need' was interpreted in a way that recognised no limit to needs, did not really differentiate need from greed. Such a society could never be built. There are many who argue that what they had in the USSR was 'state capitalism' or 'capitalism without capitalists' and not socialism. There are others who argue that it was not capitalism but 'state socialism.' It is not necessary to accept either of the arguments as such. The characteristic features of socialism are:

(a) There will not be a class which appropriates surplus value by virtue of their ownership of the means of

production. The entire means of production will belong to the people.

(b) This will be ensured by a state led by the working class. As far as the former exploiting classes are concerned, this will be a 'dictatorship of the proletariat,' but for the majority, it will be a broader and more basic democracy.

(c) Economic activities will be fully planned. Productive forces will grow at rates faster than in capitalism.

(d) It will not be a slave to the anarchy of the market. Importance of 'money' in the day-to-day life of the people will progressively reduce. The differences in the standards of living amongst people too will get continuously reduced.

(e) In due course, productive forces and production will rise to such levels that everybody can satisfy their needs. Classes will disappear. State, the oppressive organ for class rule, will wither away.

(f) 'The proletariat will use its political supremacy to wrest, by degrees, all capital from the bourgeoisie, to centralise all elements of production in the hands of the state, i.e. proletariat organised as ruling class' (*Communist Manifesto*).

The socialist experiment in the Soviet Union exhibited many of these characteristics, but not all and a few opposite.

(i) In the Soviet Union, there was no private ownership of the means of production, there was no capitalist and therefore, no capitalistic exploitation.

(ii) The economy was totally planned and it was not subjected to the vagaries of the market.

(iii) Productive forces and production grew at a faster

rate than in capitalist countries, at least up to 1975.

(iv) But the state, instead of becoming more and more democratic, had become more and more centralised and dictatorial.

(v) The entire economy was centrally and bureaucratically planned. Mass of the working class had no say either in the running of the individual enterprises or in the state economy. The state had become, so to speak, a super capitalist.

(vi) From amongst the party leadership and the state bureaucracy, including enterprise executives, an elite, a new ruling class, had emerged – the new capitalists.

(vii) Neither the party nor the ordinary people recognised the difference between their real needs and the perceived pseudo-needs (greed) cultivated by capitalism.

(viii) It was not possible to satisfy everybody's greed. Those in power, the new ruling class, became greedier and greedier and were ready to take recourse to any means. There was no democratic force to correct the growing corruption within. The gap between their life and the life of the bulk of the citizens increased continuously.

(ix) This alienated citizens from the Communist Party and even from the ideology of Marxism.

(x) The basic cultural change necessary to build socialism did not take place. The slogan 'to each according to his need,' is achievable only if each and everybody became wise enough to distinguish needs from greed.

Perhaps Mao realised this necessity of a new culture and the Cultural Revolution might have been an attempt in

that direction. However, in the hands of an already corrupt leadership, it became a tool for revenge. To the discerning observer, all these things were visible even in the early 60's! One can, thus, summarise the causes of the failure of the socialist experiment as:

(1) Over-centralisation and lack of democracy.
(2) Non-differentiation of needs and greed.

These were exactly the questions that were addressed by Gandhi in the early decades of the century!

Chapter 4

Gandhi & His 'Fallowers'

Reared in the tradition of India, for Gandhi economics and politics could not be separated from ethics. He considered very large enterprises, both economic and political, as inherently violent, violent against the individual. He argued for enterprises which were humane in scale, which can be controlled by humans and not *vice versa*. He did not advocate a forceful appropriation of the means of production from the existing so called owners. Instead, he advised them to consider these means of production not as their private property intended to satisfy their personal needs, but as public property entrusted to them (Trusteeship Theory) to be managed for the public good. He argued for cent per cent utilisation of the labour power available in India and argued against any machinery which would displace labour. He was not against machinery which reduced the drudgery of labour.

Regarding the economics and politics of the new society which he called *Sarvodaya Democracy* Gandhi wrote:

"In this structure composed of innumerable villages, there will be ever-widening, never-ascending circles. Life will not be a pyramid with the apex sustained by the bottom. But

it will be an oceanic circle whose centre will be the individual always ready to perish for the villages, till at last the whole life will become one life composed of individuals never aggressive in their arrogance, but ever humble, sharing the majesty of the oceanic circle of which they are integral units.

Therefore the outermost circumference will not wield power to crush the inner circle but will give strength to all within and derive its own strength from it. I may be taunted with the retort that this is all utopian and, therefore, not worth a single thought. If Euclid's points, though incapable of being drawn by human agency has an imperishable value, my picture has its own for mankind to live."

(Harijan, 28.7.1946)

It is interesting and potentially instructive to note that some observations and arguments of Marx regarding this rupture in social metabolism, if extended logically, will lead to almost identical ideas, even though in more explicit writings he was a protagonist of larger and ever larger scale, fully automated industries and limitless expansion of productive forces. While investigating agriculture and soil nutrient cycle he saw that valuable soil nutrients like nitrogen, phosphorous and potassium are taken away from the soil, transported to the cities in the form of food grains where they are consumed by humans and animals and later thrown out in the form of excreta only to pollute the environment - soil, water and air - and cause untold health problems. He observed that large industrial cities are inimical to agriculture and villages and that the only solution is to disperse industries within agricultural land. Use of chemical fertilisers may give temporary respite, but in the long run that is not the solution, Marx pointed out.

Since 1840s, the concept of metabolism has been used as a

key category in the systems theory approach to the interaction of organisms to their environment. It captures the complex bio chemical processes of metabolic exchange through which an organism (organic cell) draws upon material and energy from its environment and converts these by way of various metabolic reactions into building blocks of growth. Marx employed the concept of a 'rift' in the metabolic relation between human beings and the earth to capture the estrangement of human beings, within the capitalist society, from the natural conditions. He uses this concept also to view the antagonistic relation between town and country. In the third volume of *Capital*, he wrote:

'In London they can do nothing better with the excrement produced by 4 ½ million people than pollute the Thames with it, at monstrous expense.' Examining the Housing Question, Engels argued to re-establish an intimate connection between industrial and agricultural production together with, as uniform a distribution as possible, of the population over the whole country.

Writing about large scale industry and agriculture in Volume 1 of *Capital,* Marx observed:

"Capitalist production collects the population together in great centres and causes the urban population to achieve an ever growing preponderance... it disturbs the metabolic interaction between man and the earth, i.e., it prevents the return to the soil of its constituent elements consumed by man in the form of food and clothing, hence it hinders the operation of the eternal natural condition for the lasting fertility of the soil..."

One of the first tasks of any revolution against capitalism, Marx and Engels have time and again insisted, must be the abolition of the antagonistic division between town and country. In Part two of the *Communist Manifesto* they

insisted on the need to carry out 'a gradual abolition of the distinction between town and country by a more equitable distribution of population over the country,' a possibility that could only be achieved through the 'combination of agriculture with manufacturing industries.'

If one takes forward these arguments of Marx and Engels, one would invariably arrive at a situation which cannot be essentially different from where we would have arrived if we had carried forward Gandhi's concepts to their logical conclusion. May be we can say, a new synthesis - an 'Ecological Marxism' or a 'Gandhian Socialism.' In either case the concept of abundance, so crucial for communism, will have to be reinterpreted on the basis of wisdom to differentiate need from greed.

Gandhi's ideas were elaborated by J.C. Kumarappa (*Economy of Permanence*), E.F. Schumacher (*Small is Beautiful*), Shriman Narayan (*Towards The Gandhian Plan*). Shriman Narayan wrote in his plan document prepared for the then Janatha Party:

'All that I desire is that every citizen in India who is willing to work should be provided with employment to earn his livelihood. If electricity or even atomic energy could be used without displacing human labour and creating unemployment, I will not raise my little finger against it. I have, however, every doubt that this could be achieved in India where the main problem is to offer work to idle hands.'

However, Shriman Narayan's hope about the Janata Party was belied. 'Right to Work' was never accepted as a fundamental right in the Constitution. Nobody at national or state levels wanted to part with powers and decentralisation remained as a slogan.

For Gandhi work was not only a livelihood necessity but

also a spiritual imperative. He wrote in *Harijan*:

"Supposing a few millionaires from America came and offered to send us all our foodstuffs and implored us not to work but to permit them to give vent to their philanthropy, I would refuse point blank to accept their kind of offer... especially because it strikes at the root of the fundamental law of our being."

'Right to Work' and earn a livelihood was, to Gandhi, only an essential prerequisite for a much higher level of freedom, freedom to decide one's own present and future. Once asked, when would India be said to have attained complete independence Gandhi promptly replied:

"When the masses feel that they can improve their lot by their own effort and can shape their own destiny the way they like' - He added ' Real Swaraj will come not by acquisition of authority by a few but by the acquisition of the capacity by all to resist authority when this is abused."

Twelve days before his death Gandhi wrote, again in *Harijan*:

"True democracy cannot be worked out by 20 men sitting at the Centre. It has to be worked from below by the people of every village."

The attempts of the Kerala Sasthra Sahithya Parishat (KSSP) to strengthen the gram sabha (village assembly) through neighbourhood groups (NHGs) and citizen education programme were very much in tune with these visions of Gandhi. But that was nearly half a century later. Meanwhile, the so-called (in fact) fallowers of Gandhi, including Nehru, embarked upon a grandiose scheme of integrating western capitalism with Soviet socialism to build a new India, the result of which are eminently visible since long. No major large scale attempt, even on an experimental mode, to build a society based on Gandhi's

teachings, was made either in India or elsewhere. His teachings were not cultivated upon. They were left fallow.

Schumacher's book *'Small is Beautiful'* is quite appealing, at least by its title. Several small groups in the USA and Europe experimented with his ideas on and off. Many of the contemporary experiments in local economy, people-to-people trade, local currency, networking, etc., all have their source in his and Gandhi's ideas. They are not dead but are kicking to come out.

However in India, the motherland of Gandhi, 'small' was scoffed as 'ugly.'The large, the very large was venerated, following the success of the Soviet Union. The modernisation project of Nehru's 'Socialistic Pattern'- a happy mixture of socialist rhetoric and capitalist practice based on large and basic industries was welcomed by the upcoming Indian capitalists and bourgeoisie who required state support for infrastructure like energy, steel, roads, railways, etc. With the collapse of Soviet Union and other socialist economies, the socialist rhetoric was dropped. The starving millions of India and the billions world over were taught, with the proverbial stick in hand, about the inevitability of 'global integration,' irreversibility of 'historic progress.' It is not possible, nor even desirable, to go back either to the Soviet model or to a Gandhian model. We can go only forward. The direction and momentum of this leap forward would be decided by culture - rather a drastic change in culture, a cultural revolution.

Chapter 5

Neighbourhood Democracy

Politics of the New World

The new society can be called either decentralised or participatory democracy (obviously, democracy implies participation and participation demands decentralisation). Here, every able bodied citizen will undertake, besides activities necessary for self or family responsibilities, activities in the day-to-day management of the community.

Each citizen will have to acquire knowledge and capabilities to enable him/her to take up such responsibilities. Besides literacy and numeracy, they should acquire enough knowledge about local natural resources, science and technology, development planning and execution, administration and finance.

Democratic duty does not end in casting one's vote in favour of one candidate or another, fielded by one or another political party. Today, citizens do not have the elementary right to recall their representatives who are functioning not according to their satisfaction. It is like giving an irrevocable power of attorney for five years. The absolute sovereignty is, today, vested not with the people but their

'representatives.' In reality even this is notional. The power lies with the political party. This has to be changed. Right to recall and easy procedures to enforce this right are to be incorporated into the Constitution. Thus, it will be a new type of Participatory and Decentralised People's Democracy.

If people are to participate actively in the day-to-day management of the society, they should be aware of what is taking place, what is to be done. Their right to know and responsibility to learn, both should become fundamental.

As Gandhi and many later social activists and leaders argued, human activities should be carried out in human scales. The process of 'giantisation,' characteristic to both capitalism (First world) and socialism (Second World) has to be reversed. The present types of very large steel mills, chemical complexes, power stations, etc., ultimately are not controlled by human beings. They have a dynamics of their own and humans have become increasingly their slaves. Humans are to be liberated from this slavery.

The present power structure has to be inverted. Citizens and their small groups - neighbourhoods and village assemblies - should become sovereign. Only at that level, face-to-face democracy is possible. At larger levels of conglomeration of villages, block, district, state and nation-only representative democracy is possible. These levels should be, in the ultimate sense, responsible to citizens and their small groups, i.e., neighbourhoods. Representative democracy has to become subservient to face-to-face democracy. A new form of social contract, new constitutions will have to be worked out to manage the economics and politics of the society at the state, national and international levels.

Each country (nation) can be compared to, as Gandhiji wrote, a set of concentric circles with the neighbourhood and village at the centre encircled by various levels of conglomeration. They all lie in a horizontal plane. Each circle has its functions. These will change with time and place. The responsibilities and rights of different circles will be divided on the basis of mutual agreement.

The system we suggest here may be called, also, the concentric network model. One can envisage several levels of production organisations, starting from the neighbourhood outwards. For example if we take a village or group of villages forming a gram panchayath, as in the Indian context, one can think of production of certain goods (both primary and secondary) and services enough to meet the local consumption requirements; certain other goods and services much in excess of internal requirements, intended for export; and still certain other goods and services far short of internal requirements, necessitating imports. Bulk of the exports may not be to locations too far away, but to nearby areas. Same could be the case with imports. Similar should be how the secondary and tertiary levels of organisation are modelled.

Production of larger and larger number of goods and services will fall under the first category - just enough for internal consumption. Thus we get an expanding node network system. As technology develops, it should be possible to increase the capabilities of lesser networks in such a manner the larger networks become softer and more flexible.

Certain means of production could be individually owned, others collectively owned. Production and marketing can be collectively planned. Larger enterprises might be owned jointly by those who work in those enterprises and by the smaller enterprises themselves.

The entire nation can be reorganised into states, districts, blocks and panchayath. (We are using, for ease of understanding, the administrative structure familiar in India. It could be Provinces, Regions, Counties, Boroughs in other contexts.) A Panchayath will have a population of 20,000 to 30,000 and an area of 20 to 40 square kilometres. Such an area can be planned in a way as to make it self-sufficient in food, energy, healthcare, education. etc. This will form the basic State, having almost all the powers of the present States of the Indian union. The entire panchayath can be divided into 20 to 30 clusters of neighbourhoods.

The concept of Neighbourhood Democracy is new. It is conceived as a tool for transforming the politics and economy of the entire nation. This will require changes in not just the laws, but even the Constitution.

This might appear too ambitious a target to strive for. What we are arguing for, is not that such radical structural change is the necessary precondition to start interventions. That is not possible. But the direction of development has to be consciously planned against giantisation, against metropolitanisation and in favour of locally networked collectivisation. Decentralised democracy demands changes not only in political administrative spheres, but also in economic production. Trans-nationalised mega production organisations and effective decentralised democracies cannot co-exist.

A neighbourhood is a relatively homogenous group in regular face to face contact. It can be conceived as the first level collective of production and consumption. Goods and services that can be produced in such a small neighbourhood will be very few.

The adult members in the neighbourhood together form a “Neighbourhood Council”. This is the same as the

Gramasabha that Indian readers would be familiar with, but comprising of a smaller precinct. (Within shouting distance is a norm to work with, but it really will have to do with the distribution of dwelling units in the given locality.) Neighbourhood Councils can meet quite frequently and discuss matters of common interest and plan collective action of various types like production of milk, vegetables etc., and of local sanitation, drinking water, and the like.

To represent it in larger bodies like ward, panchayath, block, etc., each Neighbourhood Council may elect one woman and one man in one of its meetings. This election will be done openly and not by secret ballot because a neighbourhood can survive only with mutual trust and understanding.

The neighbourhood representatives (NR) in a ward will elect from among themselves or from other members in the ward, two ward members, one man and one woman. They form the Panchayath Council. All the NRs in a panchayath can elect two persons, the President and the Vice-President, not from among themselves but from among persons residing in the Panchayath.

The next level of organisation is Block or Assembly Constituency with a population of 2 lakhs people. A cluster of neighbourhoods, about 2 wards can be considered as the division of a constituency or Block. The NRs of each division will form the electorate of the Block / Assembly Constituency. They will elect 2 Block/Assembly Representatives (BRs) not from among themselves but from residents of the locality. The BRs will elect one President and Vice-President not from among themselves but from residents of the Block. They will also elect one man and one woman as their representatives to the State Assembly. The members of the State Assembly will elect

their Cabinet from among themselves. Half the members of the Cabinet have to be women.

About 10 Blocks will form a Parliamentary Constituency. The BR members will elect two members to the parliament not from among themselves, but from the residents of the Constituency.

At every stage, the electors can recall whom they have elected and replace them. Thus the entire system will become a permanent body and thus obviate the costly periodic elections. One may argue that this is apolitical. Not so. The critical difference is that people's will and political change is reflected through their direct democracy participation and at wider levels through their elected representatives and not party leaders.

Thus the electoral texture, reimagined in the Indian context, will be as follows:

- Neighbourhood - about 100 to 150 citizens
- Ward - 1000 to 1500 persons
- Panchayath - 20000 to 30000 persons
- Block (Assembly constituency) 8 -10 Panchayaths or about two lakhs to two and a half lakh citizens.
- Parliament: 10 to 12 blocks will be taken as a parliamentary constituency. The members of the block council will form the electorate of the parliamentary constituency.

At present in India, the Block and Assembly Constituency are not identical. This can easily be normalised. The states are widely varying in size, from 1 crore (or smaller for centrally administered areas) to 20 crore. The entire nation could be divided into 50- 60 states of 2 to 4 crore population, based on culture, geographical features, etc.

Such a division need not alter the power structure

considerably because the power of states will be reduced drastically under the new dispensation. Most of the powers will rest with the Local Self Governments - Rurban Republics.

Such an electoral system will make democracy more meaningful. People will call back representatives only if they find them not working according to their wishes. To recall a member of the panchayath, majority decision of the electors who have elected them should suffice. If some of the elected persons do not comply with the desires of the community they will have to be replaced by others. This is a very simple and zero cost process. Similarly, at all levels, those who do not comply with the desires of electorate can be recalled by the electors themselves. Thus the costly process of periodic general election will become unnecessary. All the elected bodies, panchayath to parliament, will become permanent bodies. This idea may attract the criticism that it will make political parties irrelevant. This need not be so. In a true democracy most of the real power rests with the people. The powers of any of the larger bodies like district, state and center will become limited. This is part of the withering away of the state which demands withering away of power politics.

Economics of the New World

Together with, and in many cases as prelude to the aforesaid changes in social structure and organisation, fundamental changes have to take place in the economic sphere. The economic order of the 'post-capitalist society' will have to, necessarily, be different from those of the present capitalist world or the erstwhile socialist world. True, it will have much more in common with the socialist world than with the capitalist world but it cannot certainly be a repetition of the old known socialist models.

In the 'New World' there will be a transitional phase. This phase will have market and exchange. It will have small scale private enterprises. But even these will operate, not for the maximisation of private profit but for social good. They too will be under social control. Conscious attempt will be made to make social good and private profit mutually compatible.

In this society, the purpose of production will be consumption and not exchange for the accrual of profit. The present dictatorship of the producers over the consumers will have to give way to the concept of the 'prosumer'. Instead of the alien producer dictating what citizens should consume, production planning and execution will be the mandate of the consumers, who are themselves producers - 'prosumer.'

Production enterprises should be economically, technically and ecologically sound and sustainable. Human species has achieved astounding success in transforming nature and producing the goods and services it requires, especially in the last century. But, of late, we have seen that private profit motivated application of science and technology is leading to very grave consequences. It is also seen that technologies which are viable only on large-scale production, have been generally oppressive and exploitative. So, in the 'New World,' we shall strive to develop technologies which can make small-scale production economically viable and ecologically safe, to make small 'not only beautiful but also powerful'.

The scientific and technical research and development in the past and even now, has aimed at helping large scale production to make it more economical. This results in concentration of economic and political power in fewer and fewer hands. It has not been 'value free.'

The challenges before the Science and Technology

community have predominantly been posed so far by those who have been continuously enriching themselves at the expense of the majority. Naturally, the answers they came up with helped strengthen the rich.

The 'new society' will place before the S & T community quite a different set of problems:

> How to ensure the basic necessities of life - food, clothing and shelter; health, education, recreation and rest; for all?
>
> How to make small-scale dispersed production more efficient than large-scale production?
>
> How to make local communities more and more self reliant and self sufficient?

Human habitats and locations of natural resources are not evenly distributed across the globe. They do not mutually match, either. So, transportation of goods and services cannot be avoided. However, the historical tendency has been to consciously aggravate these mismatches and consequently increase the transportation of goods and services. This has reached a run-away situation now. Even the most ordinary items of our daily consumption reach us from very faraway places, even though most of them could be locally produced. This leads to increased instabilities in production and distribution. Conscious efforts will be made to make use of local resources to meet local needs, so that the need for transportation of humans and materials can be reduced.

Of the three major sectors of economic activity, the primary sector reflects basic needs like food, clothing and shelter. There are limits to the growth for these sectors. The case with the secondary sector is different. It has no limits. It has grown exponentially. But the majority of the products

of the secondary sector are unnecessary for comfortable living.

However, its limitless expansion is necessary for the survival of capitalism. The same can be said about bulk of the tertiary sector activities. Local self sufficiency in food and other products of primary sector is one of the characteristics of the New World. Further, the subjugation of the primary sector by secondary sector will cease. Primary sector will enjoy primacy in the economy of the society.

Energy is an essential component of all production processes. One of the greatest challenges of the 21st century is to meet the increasing demands for energy without aggravating global warming. Also, conventional sources like coal, oil and gas are limited and will be exhausted sooner than later; all the more so, if the presently developing countries too, increase their level of per capita consumption to equal that of the developed countries.

Nuclear energy, considered inexhaustible and a saviour in the sixties and seventies, has proved to be one of the greatest banes to society. It is becoming increasingly clear that the only permanent and benign source of energy is the sun whose radiation can be converted to both thermal and electrical forms.

Brief for the S&T community

The scientists and technologists are today presented with three tasks, by the rich exploiting minority:

1. To strengthen and perfect weapons for human destruction (tactical, strategic, offensive and deterrent!) like nuclear bombs, missiles, chemical agents, biological agents, etc. They are supported by the largest section of the secondary sector, the Military Industrial Complex.

2. To expand indefinitely the already frightening array of consumer goods, most of them having no welfare value, though may have exchange and even use values. This will redouble the exploitation of already dangerously dwindling stock of non-renewable natural resources.

3. Today, one of the frontier areas of research is artificial intelligence. Basically, this is encouraged in order to control the behaviour pattern of humans. To make them accept the existing path of development.

The exploited and impoverished majority, at whose expense the scientists carry out their research and development activities, have to stand up and say: no, this is not what you should be doing. Society wants you to do different things. The scientists, as responsible citizens, should stand up and say 'No' to their present masters. Our agenda will be different. We shall concentrate our R&D work predominantly in the following five subject areas:

- How to collect, concentrate and convert solar energy into more useful forms of thermal and electrical energy. How to store it, in a decentralised and dispersed manner, at cost levels that are far more cheaper than what presently they are.
- How to extract useful metals and other materials from highly diluted sources, like ordinary soil and sea water, using only the solar energy.
- How to convert the present and future wastes into harmless and preferably, useful materials.
- How to combat and reverse the globally deleterious effects of forest destruction and atmospheric pollution. Artificial intelligence should be so designed in order to make people clearly differentiate need from greed.
- How to combat the impacts of global warming and resource depletion on human society. This requires a new

understanding of need and greed.

Yes, the entire agenda for science and technology for the new world will be different from those of the first, second or even third worlds!

Towards a new cultural awakening

All this may look utopian. Yes, it is. Utopian is not a dirty word. 'Grand Dream' is not a dirty concept. We should have the courage to dream about an 'Alternative World.' The present one is not the only possible one. The present path is towards more or less certain destruction or at least to barbarism or extinction of the species. This is not the only available choice. We have to cut open new paths. Towards a New Socialist Society based on Participatory Democracy. Decentralised Peoples Democracy and New Socialist Solar Democracy are both valid descriptions of the new society.

Drastic changes in politics and economics cannot even be initiated unless these ideas grip the imagination of a sizeable number of people, unless there is a cultural awakening. They can be materially realised only with substantial changes in the economics, politics and culture of society. Here below is one conspicuous aspect of culture that must be engaged with, to move forward. The larger realm of culture is ingrained, but not dealt with explicitly in this book.

The question of gender and sexuality

One of the most unfortunate things that have happened during the course of history, especially since the advent of private property, is the oppressive gender divide. Women, who form half of human species, have been cornered into a role, which is not necessarily biology dependent. They are oppressed, both within the family and outside. The list of cruelties towards them is long. A major objective of the

new society should be to put to an end to this cruelty, to ensure that the status of women as dignified human beings is equal with men. And beyond that, to a feminisation of politics, economics and culture.

Self preservation and procreation are the two fundamental characteristics of every life form. The family, whether in animals or humans, came out of this necessity. In human beings family is an important element in social organisation. Therein the children are cared for and brought up to the age of self reliance. This used to be 8-10 years among the tribal people. It increased to 18 years for modern society.

Within the family the mother has to play a crucial role of feeding and petting child. And the mother is an initial teacher. All the other functions such as washing and cleaning the child and accessing to means of livelihood are the responsibility of the father also. A child that grows up within an atmosphere of parental affection is more likely to be able to grow into an adult who is happy and sociable. All these things are well known.

But the family though necessary from social point of view has become an oppressive jail for the woman. This is all the more so, for nuclear families. In certain tribal and other communities polyandry and polygamy were common. The ascendance of the nuclear family system gave rise to the linking of morality with sex. In fact sex is a biological necessity like food and does not have anything moral or immoral in it. Humans are biologically polygamous and polyandrous. Linkage of private property with family and the division of labour within the family gave rise to the present situation.

Today the category of transgender is increasing in importance. They are viewed as inferior beings. As far as humans are concerned, sexual desire is only a small part

of their mental makeup. So once we break down the bondage between sexuality and morality, the present attitude of the society to transgenders will automatically change.

One of the most common crimes reported are abuse of women by men. An abused woman is considered as a fallen one. Many men refuse to marry them. Only the woman is considered fallen but not the man who abuses her. Society has to change its views on sexual morality. It has to accept that both men and women are likely to enter in to poly sexuality because, in truth, it is a natural instinct. Artificial restriction to sex is the main cause leading to violence against women.

A family is not necessarily bound by sex. It also has an emotional element in it, including, the pleasure of companionship and rearing children. Of course this may not be applicable to all. A third element in the family is intellectual. People who have got similar ideas and capabilities want the company of each other.

Today the men are particular about the 'faithfulness' of their wives, because they want to ensure 'their' offsprings only inherit their wealth. In the tribal society where there is no private property the question of its inheritance did not arise. So they were not particular about the fatherhood.

So the cultural prerequisites for women to assume their agency are:

- abolition of the present arrangement on inheritance
- the delinking of sex from morality and family.

Chapter 6

Need and Greed
Concept of Development in the New World

Real needs of the humans are numerous and varied. Still they are limited. But their desires - greed - are not limited. They desire everything that exists in the world. They would imagine things currently not existing and desire to have them too. Efforts to satisfy 'these imagined needs' have been the prime motive force of human development. But we have to realise that physical resources available on this earth are limited. They may be sufficient to satisfy the genuine needs of all, but not the greed of even a limited minority. We should have the wisdom to differentiate needs from greed.

Human progress will have to be redefined. Increasing production and consumption of goods and services shall not be construed as progress. Human progress is something more fundamental. It can be considered as consisting of two essential components, the Physical Quality of Life (PQL) and the Spiritual Quality of Life (SQL). The word 'spiritual' is used to include moral, cultural and ethical

elements, in short everything non-material.

Physical Quality of Life may be defined in terms of three parameters:

1. Biological Quality: high life expectation at birth and low lifetime integrated morbidity are the basic elements in this. Contributing factors are: low crude death rate, low infant mortality, child mortality and maternal mortality rates, low birth rate and fertility rate, low levels of malnutrition, etc.

2. Human Liberation: increased freedom from the merely animal aspects of existence such as search for food and species procreation; increased availability of time for genuinely human cultural activities.

3. Sustainability: 'Liberation from animal aspects of life' is presently being attained at the expense of nature, depleting limited natural resources at alarmingly rapid rates. This is not sustainable for long. True human development should enable the species to survive indefinitely. This is rather axiomatic. There may be people who would ask: what is wrong if human species get extinct in a hundred or less number of years? If the species get extinct we are not there to grieve over it. There is no counter argument to this except that one of the biological instincts of any life form is to survive and to expand. This would demand the use of natural resources in a fully renewable manner.

Spiritual Quality of Life too can be defined in terms of three elements:

1. Social Quality indicated by a continuous reduction in suicide rate, in murder and crime rates, in the rate of consumption of alcohol and narcotics, reduction in expenditure on police and military, reduction in child labour, reduction in violence on women, etc.

2. Cultural Quality, indicated by high literacy, high average levels of education, high reading rates, increasing participation in cultural and sports activities, etc.

3. Participatory Quality: Human beings do not like to live on charity. Work is an essential need for them. Increased participation of each and every citizen in the economic and political activities of the society is imperative for human satisfaction. 'Employment' is not only an economic necessity, but also a spiritual necessity. Same is the case for participatory democracy - it is not merely a political demand, it is a spiritual demand too.

However one question needs to be answered. We speak of a cultural revolution before an economic revolution. How to begin the cultural revolution? For this we should have an economic revolution to make society capable of thinking about a cultural revolution. But this should not immobilise us, stuck in the proverbial chicken and egg story. As a transition stage we have to think of building small and experimental societies with the features that we envisage in a later society.

There are both in developing and developed countries hundreds of groups and individuals whose vision about the future are more or less similar, or even identical, but still only partial. Some are interested in environment, some in gender issues, some in education, etc., and often only in one aspect of them - to save a particular species, to protect a particular tree, to fight plastics and so on. One of the first things to be done is the development of a shared and broad holistic vision.

Today, there exists an ideological vacuum or perhaps, an ideological 'fish bazaar' - thousands and tens of thousands whispering, shouting, canvassing, and trying to sell their vision. Many of them are sceptical about 'grand narratives,'

'overarching theories,' and 'holistic visions.' While concrete action will have to take into account concrete issues, concerted action requires a shared view of the future and an agreed understanding of inter-relationships. Without such a vision and such an understanding, we cannot contest the all too powerful consumerist vision of the capitalist society. The new vision cannot emanate from the revelations of a single brilliant leader or messiah. It should evolve through the collective efforts of many.

Such collective efforts on the ideological theoretical plane on a global scale would have been almost impossible half a century ago. Thanks to the communication and information technology revolution, it is today much easier. The present research on Artificial Intelligence can be directed towards this. It can be used in a revolutionary manner, to share and develop 'subversive' ideas and programmes. One can initiate a really massive ideology reconstruction programme on a global scale involving hundreds and even thousands of participants through digital communication devises and platforms. There is no gainsaying the fact that the democratisation of such spaces, efforts to retain them as digital commons and to innovate on new and socially responsible communication platforms should engage our attention. The common language will have to be English, into which and from which local language versions can always be made. Whenever possible, occasional face-to-face meetings and discussions can be held. The entire process may take a few years - a global effort using Head, Heart and Hands.

Section 3

Building blocks of the Rurban Republic

Chapter 7

Fundamentals of Integrated Local Planning

Tending the wounds of soil and water

We can start an economic transformation locally by measures to heal the wounds of soil and water, the two important natural resources. This can be done locally in small areas and it can be shown that such healing will result in increased social happiness of the society concerned. For example, a settlement of 20,000 to 30,000 in population and 30 to 40 sq. kilometres in area can be made fully self-reliant in all its basic needs, through improving soil health and assuring availability of water. The improvement of soil health, meaning thereby improving its chemical, biological, and structural elements, can be done locally without being affected by global happenings. This can be done by ploughing back all the biomass that is generated in the area into the soil in the form of dung and compost.

Availability of water at the right place, at the right time and in right quantity is to be ensured. Solar pumps can be used to draw ground water, but meticulous and consistent

measures to recharge groundwater is a prerequisite.

Such an experiment can be tried out in a settlement successfully; a settlement which can produce yearly about 10000 tons of milk, 4000 tons of vegetables and 10,000 tons of tubers, plus other products. The value of this at the rate of 55,000 rupees per ton for milk, 30,000 rupees per ton for vegetables, and 15,000 rupees per ton for tubers (tapioca), comes to rupees 830 million. The number of people involved in these enterprises will be about 2500. Thus the productivity per person will be about 3 lakhs per year. They can be given a monthly salary of 12,000 rupees together with other benefits. Such a system is workable economically and ecologically and will bring down the disparities in consumption levels. This will increase the physical quality of life (PQL) of the members of the society. If this can be demonstrated in practice, the thinking of people can be changed and such a change will be the starting point of a cultural revolution.

The social organisation will be, ultimately, governed by the way in which the society produces its means of sustenance and progress. We have, from the experience world over, learned that private profit motivated, competitive production organisations have led to unjust, unstable and run away societies. We have also seen that centrally planned economies as existed in the Soviet Union and Eastern Europe have sooner or later degenerated. The self sufficient village model advocated by Gandhiji, Kumarappa and others did not strike roots.

In the ancient times we had the villages which were somewhat self sufficient in food (full self sufficiency never existed except in much larger areas), but had to depend upon a larger village for implements and much larger village or small towns for still other goods or necessities. Gradually this dependency network widened and

ultimately had become global. The dependency of even the smallest village on far off urban centres not just in one's own country but also in far off countries registered continuous increase. Human beings in these villages are no longer masters of their own life. We should aim to reinstate the power of people on their own lives.

It is ironical that people are seriously discussing the lack of sufficiency of our planet earth, about the possibility of trans-planetary resource movements, etc. This is all absurd; mathematically and philosophically absurd. Every human being will have a stock of unsatisfied desires. It is futile to try to satisfy all of them. Self sufficiency is to be understood in terms of functional requirements - both physical-biological and spiritual-cultural. India is a country of continental dimensions. It has got within itself almost everything to be self sufficient. It does not mean that it needs to or can shut itself off from the rest of the world, but it definitely means that India can be more than hundred percent self-reliant, that its relationship with other countries can be fully on an equal footing. Even the sub units of India, the different states, can become more self sufficient than they are today. In the process it may become expedient to reorganize states and districts, break them up, and regroup those according to cultural-ethnical affinities and agro climatic and ecological specificities. It may become necessary not only to arrest the cancerous growth of metropolitan cities, but to positively depopulate it. All these are possible.

Based on these understandings we shall try to conceive a production system towards which we may like to move. The framework within which such a system should be conceived can be expressed in the following manner.

(i) Universal participation

(ii) Built-in checks and balances to prevent cancerous growth of systems to run away and unstable situations.

(iii) A combination of individual and collective ownership of means of production.

(iv) Efficient and sustainable use of natural resources.

Chapter 8

Fundamentals of Integrated Local Planning

What the People's Plan Campaign of Kerala failed to grasp

In the State of Kerala, India, a major experiment known as Sustainable, Participatory Panchayat-Level Development Planning (PLDP) was conducted. This experiment was carried out by the Integrated Rural Technology Centre (IRTC) of the People's Science Organization called Kerala Sasthra Sahithya Parishad (KSSP). The KSSP has a long history of work on rural development.

In 1975-1977, it had established rural science fora in about 600 panchayats. The forum consisted of the majority of the scientific and technical persons in the village. Its objective was to study the natural and human resources available within the village, formulate integrated development plans and help implement them. This was too big an agenda for a village science forum to undertake. The KSSP was basically an organization for science popularisation and was not equipped to give leadership to implement such an agenda. For this purpose, the KSSP

established a separate institution with the help of the Department of Science and Technology, Government of India, named Integrated Rural Technology Centre (IRTC).

One of the earliest projects undertaken by this institution was called Panchayat Resource Mapping, in which about 100 volunteers from each village and a team of scientists from Centre for Earth Science Studies, Centre for Development Studies, Center for Water Resources Development and Management as well as scientists from various departments participated. Later, in the early 1990's a socio-economic survey of the village/panchayath was done in one Panchayat (Kalliasseri). The thematic maps prepared under the resource mapping exercise and the data of the socio-economic survey were combined and an integrated development plan was prepared. The PLDP project aimed to prepare such development plans for more villages. However, the state government got very excited and wanted to extend this to the whole state. Such an expansion was premature. The People's Plan Campaign inaugurated by the State Government showed up this weakness. It never understood that holistic planning requires a deeper understanding of the various systems and their inter connections.

Panchayats, blocks or districts have no cultural or physiographical basis in Kerala. The state has a cultural identity. Physiographically, it is part of the West Coast of India extending up to Goa. There is a lot of similarity in the natural resource base of this entire stretch. The Kerala-Karnataka-Tamil Nadu boundaries are only cultural. While the coastal land, midland, highland topography is common to the entire stretch from Kanyakumari to Goa, it can be divided into a number of mutually exclusive river basins and watersheds. For a large number of economic activities watershed becomes a natural unit. Each river basin can

be divided into a number of constituent smaller order watersheds, each one of which can be taken up as a unit for economic activity. Thus culture, topography and hydrology become decisive factors in selecting areas for micro-planning.

Integrated local area planning demands proper assessment of:

1.The natural resources of the area, as well as an idea of human resources.

2.The demand for various goods and services in the area under consideration and proximate localities.

3. The extent of export possible and desirable to far-off areas within and outside the country.

4. The likelihood and necessity of imports and local competition.

5. Nature of goods and services requiring enhanced production.

6. Extent of existing market that can be displaced by new production, creation of new market due to increase in consumption.

7. Gaps in existing skills which are to be bridged.

Integrated development planning presumes integration of natural resources taking into account sustainability, human resources including skills, and organisational resources so as to set in motion the entire labour power, increase the production of goods and services to match the requirements, and ensure equitable distribution through altered control over resources and organisation of production.

Food, clothing, shelter, health, education, recreation and rest - these are the basic needs of every human being. The

ultimate objective of all planning is to ensure all these to more and more people.

In the early days of human history, all the requirements were met locally, very locally. Over millennia and centuries division of work became finer and finer. Each group, each locality began to produce those commodities for which that group or locality had the 'maximum economic advantage.' This developed ultimately into the present global division of labour. Apart from the distributive injustice resulting from such a division of labour, it has caused ever increasing transportation of raw materials, finished products and human beings. It has resulted in the cancerous growth of cities and its inhuman slums. It has caused the decimation of the countryside, the destruction of forests and biodiversity. All these are undesirable. They become inevitable due to advancement of technology of a particular kind which demands very large scales of production. This is leading to global tensions, threats of mutual destruction and irreversible environmental changes. If we can reverse the present extreme division of labour to some extent, if we can produce the basic necessities of life locally (size of 'local' decreasing continuously) many problems can be solved. Use of locally available solar energy and raw materials, and development of technologies which will make small not only beautiful but also more efficient and powerful, ensuring small-scale production is economically more attractive - all these can go a long way to arrest the march of humanity towards self destruction.

Chapter 9

Fundamentals of Integrated Local Planning

Demystifying Capital - The case for Local Currency

It is important that the Rurban Republics try out new institutional structures like totally worker-owned enterprises. Limitations of state ownership are obvious from experience of both socialist countries and of India. Social ownership of the means of production cannot be guaranteed by state ownership. One may think of contract ownership - for a definite period, 10 or 20 years, without right of inheritance to anybody. One may also think of ceiling for such ownership. Within such ceilings and conditions, competition on more level grounds could be realised.

Rurban planning will also call for new and holistic understanding of the concept of 'capital.' Capital is required to procure land, to construct buildings, to purchase machinery, to maintain inventories of raw materials and finished products, to pay salaries, electricity and other bills, etc. Usually this is required in the form of rupees or dollars,

the shortage of which prevents the assembly of the above factors. But rupees and dollars are mere 'promissory notes.' It is the credibility of the government or the bank which issues these 'promissory notes' that makes them 'legal' or accepted tender. A uniqueness of this 'promissory note' is that it does not carry any interest. Nobody demands or can demand interest from the Reserve Bank of India, for keeping its promissory note for any length of time. In personal promissory notes, interests are usually mentioned or at least implied. It is not difficult to imagine 'local legal tenders' where the promissory notes are signed by the participants in the venture. There are several experiments on local or alternative currency the world over. One can also think of a mix of local or limited currency and state currency. It can be tried in a collective of twenty or thirty thousand persons consisting of peasants, agricultural labourers, construction workers, doctors, nurses, panchayat and government employees, advocates, bank and insurance employees, carpenters, masons, electricians, plumbers, traders, fisher folk, persons employed in dairy, poultry, piggery, etc. - a collective offering within themselves for a vast array of goods and services. The larger the number and greater the diversity, the higher will be the percentage of goods and services that can be exchanged within the collective using local currency. This can be further strengthened by constantly enlarging local production and reducing the necessity of exchange outside the collective, say the panchayat.

This is not such a wild idea. In fact, something of this sort has been in vogue in Kerala. The one, two and five-rupee notes, which were in circulation in Kerala for a long time were so soiled, mutilated and glued up that they would not be accepted anywhere else in India. It was not because it had the signature of the Reserve Bank Governor that

people accepted them. In fact, even the Reserve Bank now does not accept them for exchange with new notes. They were in circulation because each one is confident that it will be accepted by others in the society, that they can exchange them for goods and services. True, everybody is confident that if necessary at the end, the Reserve Bank Governor will honour it, though nobody is testing it. In the villages of Kerala, especially in the north there was yet another form of social tender (not legal tender) circulating in the form of exchange customs like *Payat, Kuries*, etc. So, limited local currency is not at all a wild idea.

Quite some years ago there was a proposal to float a new currency, the 'Industrial Rupee' - which was to have only a limited circulation within the state and central government undertakings like Bharat Heavy Electricals, Steel Authority of India Limited, Coal India, National Thermal Power Corporation, Oil and Natural Gas Commission, State Electricity Boards, etc. This was to be used only for exchange of materials and services within themselves. The national currency requirement can be limited to wages of employees and a limited quantity of materials and services obtained from outside the group. This system was not appreciated or accepted, perhaps, because it would have made ‘kickbacks’ and other ‘operations’ difficult. The state governments and even local governments can institute such local currency systems which are, in fact, only book adjustments. The trillion dollars-per-day global finance capital business is, in fact, an extreme case of this. Neither dollars, nor shares, nor goods are physically moved. Only computer entries change!

In Kerala, for instance, if the state government decides to buy from and sell to essentially internal enterprises - both public and private - and departments like the Public Works,

the Water Authority, the Health, the Education, the Electricity Board, etc. using a Kerala Industrial Rupee, one can solve, to some extent, the problem of capital.

There are several arguments against such a concept. First, that it is difficult, almost impossible to produce locally most of the goods required, even agricultural products. Second, a protected local market will lead to continuous depression in quality, in their attempt to increase profit. But the fact is that most of the goods required can be, actually, manufactured locally. Further, the quality of packaged and foreign goods is largely an illusion created by high pressure advertisements. People can be sensitised towards local goods and local economy. Many goods such as soaps, detergents, toothpastes, perfumes, herbal medicines, etc., can be manufactured locally, besides milk, vegetables, fruits, cattle-feed, jams, pickles, etc.

The ultimate objective of all these is to put into productive use larger and larger share of the available socially zero cost local labour. This would lead to increased production as well as increased purchasing power. Besides individual or collective private enterprises one could think of locally incorporated limited stock companies with shares restricted to local inhabitants, local self-government initiated enterprises, etc. These would require a number of new procedures:

1. Ensure transparency through exchange of information; inform people about well managed enterprises; protect the rights of consumers.

2.Publish yearly quantitative and analytical status reports on the panchayat, indicating income and expenditure, economic progress, etc. Ensure that these are fully truthful. One can make use of 50-100 indicators arrived at through public debate to measure progress.

3. At block and district levels, set up one, two or more comparatively larger enterprises to produce goods which cannot be produced in small enough scale to cater to the needs of only one panchayat. The service area of some of them could be a block or a district. They may, in a limited manner, take recourse to export also. One has to consider the fact that the larger and farther the service area, the lesser is the people's control.

4. Delinking or increased self-sufficiency does not mean total isolation or autarky. It only means that the value of labour power and deployment of labour will be decided internally and not at the instance of international pressures. Exchange of commodities and services will still take place though at a much reduced level and on the local society's own terms.

5. Embark on a massive public education programme about the economics, politics and ethics of such an attempt to build a new society. Also educate people on such cardinal concepts like environment and cleanliness, prevention of pollution, recycling of resources, reliance on locally available raw materials, wisdom to differentiate greed from needs, etc.

6. Formation of local economy groups such as the self-help groups, the panchayat development society, micro enterprises etc. The panchayat itself may take the initiative for this so that the concepts can be widely debated in all the neighbourhood groups.

One can think of a number of such unconventional concepts. But they will not evolve and mature spontaneously. They are to be consciously engendered and nurtured. And this cannot happen at the conceptual level alone. Experimentation has to go with it. Theory and practice should go hand in hand.

Chapter 10

Fundamentals of Integrated Local Planning

Reimagining Securtiy

In a meeting of the community leaders of a Panchayat in Kerala, a question was posed: 'If you are asked to express the overarching single problem of your panchayat in one word, what would that be?' 'Employment' - the reply was instantaneous. In another panchayat, when the same question was put, the reply was 'security.' This panchayat was sitting on a volcano of communal tensions. The former panchayat was a predominantly agricultural one, with a large number of educated unemployed youth. Agriculture offered no long term economic 'security', they have known from bitter experience. So in effect, both wanted 'security.'

Humans are highly security conscious. They are not satisfied with the immediate gratification of basic needs like food, clothing, shelter, healthcare, education, recreation and rest. Even an assurance that they can have all these, all the time is not good enough for them. They want such an assurance for their children and their grandchildren, too. In a society where each individual has to take care of herself/himself, the only way one can secure

one's children's and grandchildren's future is by amassing wealth. True, the poor and very poor are more concerned about the present than the future. But the moment the present is taken care of, concerns about the future will surface. If a society can offer full security for its citizens, their children and grandchildren, then there is no compulsion to amass wealth.

Any talk about security without attempting to differentiate need from greed is futile. A greedy society can neither be secure nor is it sustainable. We have to redefine development, both from the point of view of security and sustainability in terms of human satisfaction and joy. We have to reject the simple, consumption or choice based definition of development. We have to differentiate between the satisfaction of simple material-biological needs, which are limited and the spiritual-cultural needs, which can be satisfied at ever rising levels.

The question before us is this: how far can a local society with myriads of direct and indirect bondages with the larger nation and also with the global community dominated by imperialism, plan for social security and sustainable development? Quite a lot depends on the nature of the society. If it accepts that a minority of 5-10 per cent have got the right to live like Europeans or Americans, with unlimited consumption, then there is no scope for sustainability or security. Equity is a determining element.

And beyond equity, what is the perspective of the local society about its own long term development? Consumerist or humanist? Does the society distinguish need from greed? Does the society have an assessment of basic physical needs (food, clothing, shelter, healthcare and even education) and also cultural needs - recreation and rest?

Take the case of a state like Kerala. It is possible to conceive of guaranteeing total and long-term security in the state

as a whole. Even in a panchayat within it, partial security can be offered. The most important factor is a change in the mindset: an understanding that a cooperative and caring society offers much longer term and reliable security than amassed wealth or position of power in a mutually suspicious, competitive and individualistic society. If one builds on the belief that we are irrevocably tied to the global society and that our freedom lies not in our hands but in the hands of the national government and international bodies, then what we build would be a weak and insecure edifice. There are enough feasible technical solutions to poverty eradication, but without optimism and self confidence they cannot be attempted. Without the heart (will), the head and the hand are useless.

Section 4

Summing up

Chapter 11

Grand Oceanic Circles:
A Gobal Network of Horizontally Linked, Self Reliant Rurban Republics

We live in an era of globalised and aggressive neoliberal capitalism. Every day trillions of dollars wheeze around this world destabilising the economy of one part or another. These instabilities can get amplified and affect the entire world. Nobody, even communities living in remote jungles, is free from these. Over decades, one can see a continuous increase in the frequency and amplitude of these instability waves. A feeling that we are moving to a disastrous crisis is gathering strength.

This results from a number of observations and experiences: resources are getting depleted; pollution load has gone beyond tolerance limits; greenhouse gas concentration in the atmosphere has crossed the tipping point of 400 ppm CO_2 equivalent. Major indicators of global warming and climate change such as increase in frequency and intensity of events like cyclones and storms are manifest. Increasing loss of soil health world across, shrinking of glaciers; melting of polar ice cap; increasing scarcity of fresh water; increasing conflicts for control over

resources; growth of individualism and loss of collectivism etc. are manifest. All these can lead to some form of 'species madness' if we do not take preventive action. In a world over stocked with weapons of mass destruction such madness can lead to barbarism or even species extinction.

More than a hundred years ago Rosa Luxumberg had written that "the natural end of capitalism is 'barbarism' and not socialism. Eric Hobsbaum had concluded his book *The Age of Extremes* with a warning that if we do not change our ways the result will be 'total darkness'. The Club of Rome Report of 1972, *Limits to Growth*, carried out a simulation study, based on system theory, of the future of humans if it continues to move along its historical trajectory. The results were frightening. Some time by the second half of twenty first century the per capita food availability will begin to come down drastically, death rate will increase, population will come down sharply - a collapse of human civilization. Even if we find new resources and develop better technologies the picture does not change. The only way to avoid this collapse is to change over to a sustainable development trajectory, from the present one of exponential growth. Almost all economists and politicians of both capitalist camp and socialist camp violently opposed this conclusion. They argued that humans are capable of solving all problems of development.

Five decades have gone by. In the meantime the authors of *Limits to Growth* repeated their studies twice again, in 1992 and 2002. They got the same picture in spite of all the decisions taken at the Earth Summit and later at Kyoto. Business has been going on the usual ways. A study done at Melbourne University in 2014 showed that the world has been moving very closely along the Business As Usual path depicted in the report. More elaborate studies conducted later confirmed that, after all, the authors of

Limits to Growth were right. Even those economists who opposed it in 1972 agreed to this.

Today the entire human society lives under capitalism or under its influence. Growth of capital is its life. For this, it has to continuously increase production and exchange of commodities. A large share of the income that reaches the rich gets converted to Capital - there are limits to their consumption. Those goods that reach the poor are immediately consumed. They do not get converted into Capital. Thus Capital growth demands that a larger share of the social product should reach the rich, thus, increase inequity. *Capitalism leads to increasing inequality within countries and between countries.*

Production of commodities requires assemblage of raw materials and labour power at one place. Locations of their availability are distributed. Raw materials and humans are to be transported to the place of production. The products are to be transported back to the distributed locations of consumption. With increasing scales of production, both increase. Both 'Commodity-Miles' and 'Socially Necessary Passenger- Miles' have been increasing. In spite of fantastic development in productive forces, neither the socially necessary labour time nor travel time has come down. Humans are increasingly becoming slaves of the system, they are getting increasingly alienated. *Forced alienation is inseparable from capitalism.*

Production needs energy. Fossil fuels form the major source. They produce carbon dioxide and other green house gases. Nuclear power produces radioactive waste. A thousand megawatt nuclear station produces every day radioactive material equal to what is released by the Hiroshima bomb. This is what we are passing on to the next generation. Production of goods and services leads to other hazardous wastes too. *Capitalism destroys the future*

of humanity.

There are limits to human needs. For capitalism to survive it has to constantly 'manufacture needs', in other words greed. This is the cardinal role of the media. Low life products, fast obsoleteness, throw away culture, infinite varieties of vanity goods, permanent state of conflict, leading to the necessity of increasing production of weapons and escalating defence expenditure, the growth of the 'under world', etc. are all outcomes of this necessity of capitalism. *Capitalism has to manufacture pseudo needs.*

Finally, in the present times capital itself has become a commodity. Trade in capital shares today far outstrips trade in physical commodities. Capital has lost its connection with production. It has become a commodity for speculation. Capitalists have no more any control over speculative capital. The crash in the real estate industry in the USA during 2006-2008 is a typical example. It gave a rude shock to the global economy from which it has not yet recovered. Current stage of *capitalism is respectfully called finance capitalism and more scientifically called casino capitalism.*

On contradictions

Main stream Marxists speak of four contradictions deciding the forward march of the society:

1. An epochal contradiction between capitalism and socialism. This is a far deeper concept than that between 'socialist' countries and 'capitalist' countries.

2. Contradiction between capital and labour, between social production and private appropriation of products, within each country.

3. Contradiction between capital and capital resulting from

competition and the need to survive, leading to mutual conflicts.

4. Contradiction between imperial powers and colony countries or today between the industrially advanced countries and the developing countries.

These four contradictions are still operative. Resolution of the epochal contradiction between capitalism and socialism or rather communism is a long drawn out process. It cannot take place in one single revolution through the capture of state power. The concept of an advanced vanguard of the working class leading a revolution, capturing State power and building socialism from top to bottom, has been proved false from the experience of the socialist experiments of the 20th century. In fact this was against Marx's understanding of the genesis of a new society. According to him, the new society has to germinate within the wombs of the old society, grow within it and burst open the old society. Seeds of socialist societies are to be sown within capitalist societies, nurtured and multiplied. When the number and strength of such 'socialistic' societies become large enough, a transition takes place. *Capitalism is global. It cannot be replaced by socialism in nations.*

The contradiction between capital and labour exists very much even now. However the militancy of 'organised' labour has turned itself into share-grabbing in most of the countries. The degeneration of American trade union movement, the American Labour Federation, had been poignantly depicted in Jack London's famous novel *Iron Heel*- they share the loot of the capitalist who loots public natural resources. This leads us to another contradiction, pointed out by Marx and Engels earlier, but totally neglected by later mainstream Marxists: the contradiction between capital and nature. Engels wrote in the famous essay on the *Role of Labour in the Transition from Ape to*

Man that 'for every victory of man over nature, it has taken its revenge'. Marx wrote that 'we, all of us put together, are not owners of this Earth, but only its beneficiaries and are bound to pass it on to coming generations in better conditions'. Capital, he observed, degrades both the humans and the nutrients in its mad rush for profit. However even Marx could not have foreseen the pace at which this degradation has taken place.

Today the focal and decisive contradiction is that between Capital and Nature. As pointed out in the Club of Rome Report, we may not get time to resolve any of the above four contradictions before the contradiction between Capital and Nature leads us to a crisis, into barbarism or even species extinction. The situation was grave enough to demand an all out search for a way out. The 1992 Earth Summit at Rio de Janeiro was a starting point of such an enquiry. However the pious decisions taken at Rio or later at Kyoto, Copenhagen or Paris were not adhered to by any country. USA was never a partner to any of these decisions. George Bush, senior boycotted Rio meeting and declared that the 'American Way of Life Is Non-negotiable'. There were sceptical ecologists like Bjorn Loomborg who argued that the environmentalists are exaggerating and even lying, that there is no crisis, that if we go along the existing trajectory of development, children born today will have a healthier and happier life. The present President of USA, Mr. Trump, holds the same opinion. It is ironical to note that even those who believe that there is a danger awaiting us are unable to change their course. The fact, however, is that they cannot by themselves change from the course of capitalism. Unless the seeds of a new society germinates and grows within, it will not change.

Human society is in need of a new 'Grand Narrative'. Shouting from roof tops that socialism is the alternative

will not take us forward. The word connotes, today, only what happened in the 20th century in the name of socialism. We have to redefine Socialism for the 21st century. Marta Harneckar, Michael Lebbovitz, Michael Albert and many more, are attempting to do so. The former President of Venezuela, Hugo Chavez, wanted to build a 21st century, Bolivarian Socialist State in Venezuela. None of them had thought about the fundamental nature of capital-nature contradiction. Chavez or his advisers could not think about de-urbanizing Caracas, of dispersing industries into villages, or resolving the difference between towns and villages. They have not been able to free themselves from the glamour of affluence. Herein comes the relevance of Gandhi.

Gandhi

Capitalism has to be replaced by a new, sustainable society in order to resolve the Human (Capital) - Nature contradiction. This requires the acceptance of Need and Greed as two separate categories, which the conventional Marxists find difficult to digest. Defining greed demands defining several other categories like welfare value, vanity value, destructive value, physical quality of life, spiritual quality of life, happiness etc. It was Gandhi who declared that this earth has enough to satisfy everyone's need but not their greed. Gandhi valued personal freedom more than anything else. His concept of freedom, Swaraj or self rule, is very much similar to Marx's concept of 'emancipation'. He argued that the machines or the system should not rule over the individual but the other way round. Gandhi conceived human society as an organic network of horizontally linked self reliant village republics. The following long quotation from *Harijan*, 28-7-1946 make his ideas clear:

Independence should begin at the bottom. Thus every

village will be a republic or panchayath having full powers. It follows, therefore, that every village has to be self sufficient and capable of managing its affairs even to the extent of defending itself against the whole world. It will be trained and prepared to perish in the attempt to defend itself against any onslaught from without.

Thus ultimately it is the individual who is the unit. This does not exclude dependence on any willing help from neighbours or from the world. It will be free and voluntary play of mutual forces. Such a society is necessarily highly cultured in which every man and woman knows what he or she wants and, what more, knows that no one should want anything that others cannot have with equal amount of labour.

In this structure composed of innumerable villages, there will be ever widening, never ascending circles. Life will not be a pyramid with the apex sustained by the bottom. But it will be an oceanic circle whose centre will be the individual, always ready to perish for the village, the latter ready to perish for the circle of villages until at last the whole becomes one life composed of individuals, never aggressive in their arrogance, but ever humble, sharing the beauty of oceanic circles of which they are integral units.

Therefore the outermost circle will not wield powers to crush the inner circles, but will give strength to all within and derive its own strength from it. I may be taunted with the retort that all this is utopian and therefore not worth a single thought. If Euclid's points, though incapable of being drawn by human agency, have imperishable value, my picture has its own for mankind to live. Let India live for this picture though never realizable in its completeness. We must have a proper picture of what we want before we can have something approaching it. If there ever is to

be a republic of every village in India, then I claim verily for my picture in which the last is equal to the first or, in other words, no one is to be the first, and none the last.

The Communist society of fully emancipated individuals which Marx dreamt of too is a utopia. The two have very much in common. Majority of Gandhi's colleagues were, however, enamoured by modernism of the west. Modernisation meant, for them, industries and metropolitan cities. Villages were considered ugly and weak, cities beautiful and strong. Village Panchayaths are apologies to the Republics that Gandhi envisioned.

Human species evolved as collectives and not as individuals. Today individuals are considered supreme. A sort of collective or species madness of individualism has set in. Unless treated, it can lead the species to extinction. The Gandhian model was never tried out seriously. Several aspects of the model were and are being tried out, here and there but has never been able to take roots. The Gandhian model has to be reinterpreted in the present, as also socialism.

Any new society, as noted earlier, has to germinate within the old society, grow against odds and prove its superiority. The seed has to be 'sown'. If it grows healthily in large enough number of locations, it will spread further and ultimately replace the old society. A new grand narrative, a new steering wheel for the new society is required. The steering wheel of capitalism is to be substituted with one of humanism. Capitalism steers the world towards ever increasing production of goods and services - GNP of nations - leading to a possible eco-economic catastrophe, whereas humanism steers it to ever increasing Global Human Happiness (GHH). The new society will be characterised by,

- Wisdom to differentiate need from greed

- Increasing equity, diversity, tolerance, sustainability, social leisure and quality of life or happiness.

This new world will be a horizontally networked federation of Self-reliant Rurban Republics. 'Rurban', because it will be neither a rural village solely doing only agriculture nor an urban town having no agriculture but only industries. Such a rurban structure had been suggested by Karl Marx in the *Communist Manifesto*: combination of agriculture with manufacturing industries; gradual abolition of the distinction between the town and country, by a more equitable distribution of population over the country. This is required to mend the rupture that has taken place in soil metabolism and to ensure continuous and cyclic flow of soil nutrients.

Gandhi declared, also, that for humans to be happy, they shall not become slaves of machines, but the other way round. In other words, the productive forces shall not determine human relations, but human relations should guide the growth of productive forces. In the present society, development of productive forces is directed purposefully to accelerate the growth of capital, to increase concentration of power and to destroy opponents. Instead, new productive forces are to be consciously developed to help cooperative and non hierarchical production relations and decentralised production.

Global Human Happiness

Gross or Global Human Happiness (GHH) is a concept different from GNP and Human Development Index. Nobody wants to be unhappy. Everybody wants to be happy. However, happiness is considered as a subjective concept and it was difficult to define it socially. Here we suggest one simple way to quantitatively define 'social happiness'. Three essential prerequisites for individual and

social happiness are:

- Long life and low morbidity,
- Freedom to be self
- Assuring this to one's children and all succeeding generations - sustainability.

All these are measurable in numbers and any society can find out whether it is progressing or not, in time and in comparison with other societies, as a result of its planned activities. Ecological footprint can be taken as a good yardstick for sustainability. None of these can be enlarged indefinitely without reducing others. GHH can approach asymptotically to a limiting value; it cannot grow exponentially.

A self reliant society has to produce all goods and services required to ensure health and to increase life expectancy and reduce morbidity. It should refrain from producing such goods and services which can lead to the opposite situation. Secondly it should be able to produce these goods and services with least amount of labour and in a sustainable way.

Goods and services have three types of value: welfare value, vanity value and destruction value. There are limits to the demand for welfare values. No such limit exists to the other two values. Since capitalism cannot survive without a continuous increase in production and exchange of goods and services it has to produce larger and larger amount of vanity and destructive goods and services. This naturally increases social labour time and reduces social leisure or freedom of all to do what they want to do - to be themselves. The new society will not waste its time and natural resources in the production of goods which don't have any welfare value. Majority of goods and services advertised in the media belong to this category.

Today humans are very much dependent on goods produced at places hundreds and thousands kilometres away from them and they have absolutely no control over them. These goods are to be hauled over very long distances. Global ton-kilometres of goods transport is increasing. The producers and the consumers are total strangers to each other. In an increasingly self reliant society more and more goods will be produced and consumed locally. Productive forces will be consciously developed to accelerate this process. For this, a large program to pool technologies available the world over, to assimilate them and to develop appropriate local skills to utilise them has to be initiated. With this, local employment - within walking or cycling distance - will increase and necessity of long distance travel for livelihood purposes will come down. Necessity of private motor vehicles too will come down. Comfortable public vehicles can be made available cheaply. On the whole, society will spend lesser time and money on travel necessitated by livelihood concerns. Social leisure will increase, thus enhancing social happiness.

In these societies, education and health care will no longer be commodities to be purchased by individuals at a price, high or low. Primary Health Centres will be well equipped hospitals, capable of handling most of the cases. It will be their responsibility to transfer the patients, if necessary, to more equipped and specialised hospitals. All health care will be free for everybody. Enough social resources will be set apart for this.

In this new society, knowledge is no longer a commodity. Commodity transaction is a 'one minus one' activity. The buyer gains the commodity, the seller loses it. This is not the case with knowledge. Those who give do not lose, but only gain, because every action of giving knowledge

involves an element of learning too. Those who receive too gain. Thus it becomes a 'one plus one' transaction. Education in such a community cannot be a commodity to be purchased in the market.

The currently existing unjustifiably large inequalities in the value of labour - 1:100 or more - will be reduced to 1:3 or even lesser, through consensus and, if necessary, through friendly persuasion. Social inequalities based on caste or creed, language or nationality too will come down progressively and finally vanish.

Structural Details

The physical size and population of a Rurban Republic will vary from place to place and region to region. A typical Rurban Republic in the state of Kerala, India, one of the most thickly populated areas in the world, can have an area of 25 to 50 sq.km and a population of 20,000 to 30,000, divided into a number of wards. The existing administrative boundaries can be re-fixed on a watershed basis. Each RR may have several micro watersheds. Each such watershed can be divided into neighbourhoods of 30 to 40 proximate houses, that are able to assemble within a short time. This is the basic unit of direct democracy in which every citizen participates. Each citizen will have to be a member of one, two or more development committees such as education, energy, cleanliness, health, roads, social security, culture, water management etc. In democracy every citizen has to participate in running the society.

Majority of development activities will be planned and executed by the Watershed Development Council - WDC. Each neighbourhood will, as far as possible, unanimously, or if not possible, through open election, select/elect two spokespersons - one male and one female. All the

spokespersons in the watershed together will form the General Council of the WDC. Any neighbourhood can, at any time, recall and replace any of its spokespersons. The General Council of the WDC will select/elect from within themselves 10 to 12 Executive Members besides a President, a Vice-President and a Secretary to form the Executive Committee of the WDC to lead the various activities planned by the General Council. There will be a number of subcommittees and each member will become a member of one or another sub-committee. These sub committees can co opt outside experts if necessary. General Council of the WDC will select/elect from among the citizens of the watershed, outside themselves one pair of spokespersons. Each cluster of neighbourhoods having a population of about 2,000 will elect a pair of spokespersons to form the Executive body of the Rurban Republic or Local Self Government. They will elect/select also, a President, Vice-president and a Secretary, as Executive Heads of the LSG.

Such an LSG is a Rurban Republic. This forms the first formal circle of the Grand Oceanic Circle Model of Gandhi. Within it are hundreds of neighbourhoods and thousands of families and individuals. The RR will be much more self sufficient than what they are today. It will be almost self sufficient in food, in energy and to a lesser degree in health care, in education etc. It will be economically self reliant but not fully, materially self-sufficient. For many things it will have to depend on outer circles. The first outer circle will consist of a cluster of RRs, including present small towns. This may be equivalent to the present Community Development Blocks in India with boundaries re-adjusted to conform to the next higher order watershed. Economically and materially this circle helps the inner circles in areas which require larger scale and higher expertise such as in education, in health care, in energy, in

selected industries etc. These enterprises will be managed by companies owned by the RRs in the cluster. This principle of smaller units controlling larger ones, consumers controlling production, is to be extended to all the outer circles such as districts, states, country and all countries. Nations, without aggressive nationalism, will be redefined on the basis of language, culture, agro-climatic factors and ecology.

This is the vision of *socialism of the 21st century* - a grand network of self-reliant sovereign Rurban Republics, with nations sans 'nationalism' restructured on the basis of language, culture and natural agro-climatic features. It is evident that we cannot begin to act from the outer circle and progress inwards and construct such a new world. That demands a global revolution first while the inner circles are not yet ready for such a change. That will fail as we have seen in the experiments in socialism during the 20th century. We have to begin from the innermost circle, the Rurban Republic.

Section 5

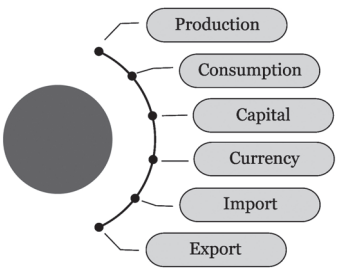
Nuts and Bolts

Appendices

Appendix 1

Rurban Planning
– *A Kerala Blueprint*

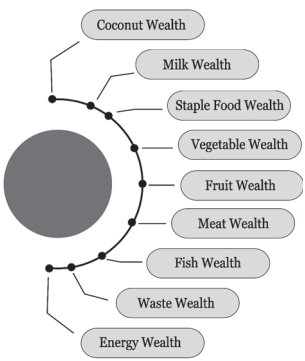
We can conceive the economy of an area as a total system with elements of production, consumption, capital, currency, import & export.



Production

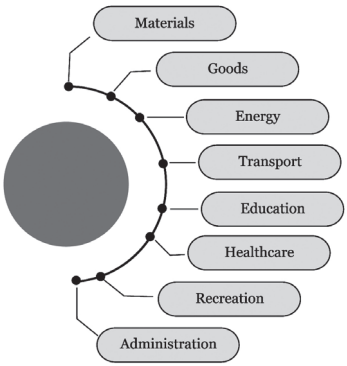
The production system consists of several sub systems. The social production can be broken up into several interconnected systems.

For example:-



Coconut Wealth *Kera Soubhagya*
Milk Wealth *Ksheera Soubhagya*
Staple Food Wealth *Anna Soubhagya*
Vegetable Wealth *Haritha Soubhagya*
Fruit Wealth *Phala Soubhagya*
Meat Wealth *Mamsa Soubhagya*
Fish Wealth *Maslya Soubhagya*
Waste Wealth *Malinya Soubhagya*
Energy Wealth *Oorja Soubhagya etc*
(A few of these will be detailed later in this chapter.)

Consumption



The consumption system consists of materials, goods, energy, transport, education, healthcare, recreation, administration, etc.

Savings

The savings / capital system consists of unconsumed material goods, such as machinery, raw materials etc. as well as bank deposits.

Currency

The currency system consists of all negotiable instruments such as currency, shares, credit transactions and a regulatory system to enforce these.

Import/Export

Imports & exports consist of consumer goods and machinery as well as services and raw materials.

Production Sub Systems:

Coconut Wealth - *Kera Soubhagya*

In Kerala, the most important crops are coconut, rubber, paddy, areca nut, tapioca and banana. For example, an average Kerala rurban will have an area of 2500 hectares and 30,000 population. This might consist of about 650 hectares of coconut, 450 hectares of rubber, 200 hectares of paddy, about 100 hectares of areca nut, and 100 hectares of banana and about 60 hectares of tapioca. With the current productivities and prices, the average value of the products will come to:

1. Coconut : 650 hectares x 200 coconut trees/hectare x 40 nuts per year per tree x Rs.20 per nut= Rs.104 million
2. Rubber : 450 hectares x 1.4 tons/hectare x Rs.1.5 lakhs/ton = Rs. 94.5 million
3. Paddy : 200 hectares x 3 tons /hectare x Rs. 30000/ ton = Rs.18 million
4. Areca nut : 100 hectare x 1 ton/hectare x Rs.3.2 lakhs/ ton = Rs.32 million
5. Banana : 100 hectares x 9 ton/hectare x Rs. 30000/ ton = Rs.27 million
6. Tapioca : 60 hectares x 40 tons/hectare x Rs.15000/ ton =Rs. 36 million

Total : Rs.337.5 million

This is the present situation.

One can have a big dream related to coconut production and utilisation. This dream can be called Kera Soubhagya. Coconut is an important economic crop in Kerala occupying about 40% of the cultivated area. However its contribution to the production is only about 20%. Productivtiy is etxremely low. The average current productivity is about 40 nuts per year per plant. It is possible to raise the yield up to 120 nuts per year. This demands cutting down of low yielding trees, raising up and planting of high yielding varieties and also tending them scientifically. The whole of coconut industry can be divided into several operations, like:

1. Cutting down low yielding trees and separating timber and fire wood.
2. Transportation of timber to processing industries and of fire wood to biomass burning thermal plants.
3. Selection of high yielding 'mother' plants. Raising and planting of seedlings and tending them till they start yielding.
4. Harvesting
5. Collection of excess nuts from owners and transporting them to coconut industry complexes.
6. De-husking and de-fibering of husk to enable coir industry and also composting industry.
7. Tapping *Neera* and plucking of tender coconuts.

The present economy of coconut can fetch about 104 million rupees. Almost the entire economy is local in character without any inputs from outside.

Now, if we consciously intervene in the system, without any material input from outside the system, we can more than double the production. The total area of cultivation

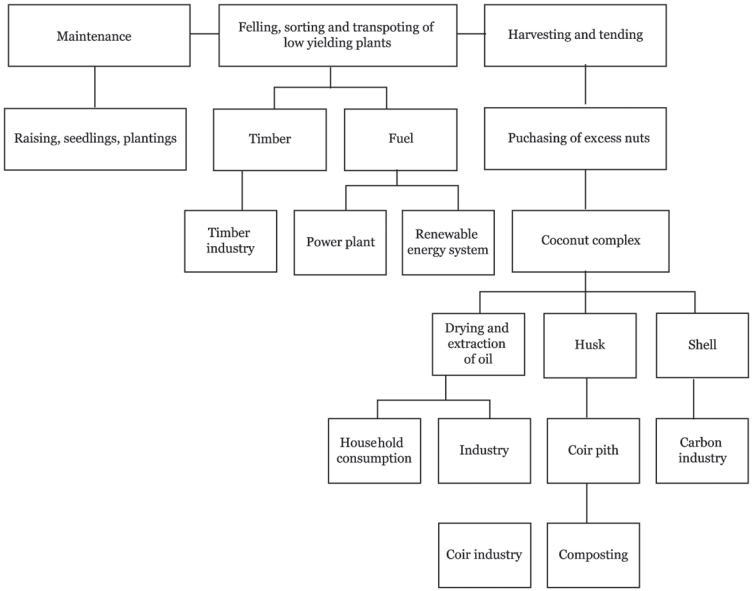
can be brought down to 400 hectares and all the plants yielding less than 80 nuts will be replaced with higher yielding plants in a period of 20 years. Thus the total production of nuts will be increased to (400 hectares x 200 trees x 120 nuts = 9.6 million) valued at 192 million rupees.

Cutting down 8000 trees per year will lead to increase of the production of timber to rupees 24 million. The value of husk will be increased to rupees 28.8 million.

Further, if 1000 plants are set apart for *neera* production, it will produce 80,000 litres of *neera* valued at rupees 8 million (100 rupees per litre). Thus the total economic value will be increased to about 252 million rupees from the existing value of 104 million rupees. Such an intervention is possible without any external hindrance. Only the rurban government has to promote it.

Cutting down of low yielding plants will not bring down the total production conspicuously. However 70% of the land released by cutting down these trees can yield vegetables worth up to Rs. 36 million and through replantation of high yielding coconut trees in the rest of the area can yield ultimately up to 12 lakhs nuts per year valued at Rs. 24 million.

The coconut economy can be depicted as below.

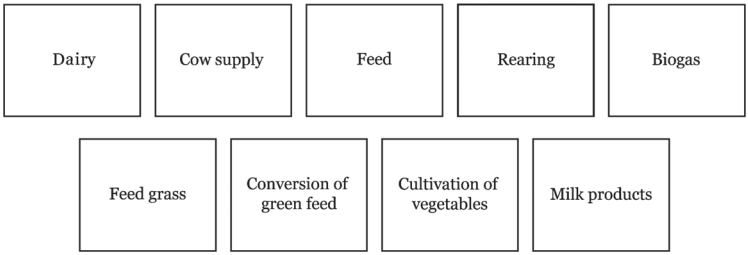


Milk Wealth - *Ksheera Soubhagya*

Though milk production is an important component of the economy, there is no organised production of feed.

An average Kerala rurban today produces about 1.4 million ltires of milk per year valued at Rs.70 million. An average panchayath consumes about 2.8 million litres of milk per year. At the rate of 50 rupees per litre, the value of this will come to 70 million rupees. Of this, 50% will be external input in the form of feed and animals. The net internal production will be only rupees 35 million. Now, if we make all the feed internally and breed all the animals internally, the whole picture changes.

The altered milk production system is depicted in the figure below.



The main components of this system are:

1.The dairy – producing milk and caring cows

2.Supply system for fresh cows

3. Feed for both lactating cows and dry cows

4. A system of rearing of local cows as well as running the dairy for dung production

5. Biogas production

6. Feed grass production using effluent and urine

7. Conversion of green feed into solid feed

8. Cultivation of vegetables using excess fertigants

9. Milk products

The entire rurban area can be divided into about 30 to 40 clusters each having about 200 households. This will be roughly equivalent to the current wards or about 8 to 10 contiguous neighbourhoods. Such a cluster will require about 150 litres per day of milk currently and about 250 litres potentially. We can start with 2 dairies each having about 12 milking cows, each dairy yielding an average of 100 litres per day. This will require an annual supply of 12 lactating cows per dairy. The number of dry cows to be reared for this will be 6 to 8. Each unit will have about 20

grown up cows. The annual feed requirement of a cow will be about 15 tons, of which 5 tons will be green feed and the rest will be converted into solid feed or silage. For this purpose, besides fodder grass, we will cultivate cow peas, maize, gliricidia, azolla as well as subabul. This will be enriched by coconut oil-cake.

A hectare of land can produce either 250 tons of grass or 20 tons of solid feed equivalents. To grow 5 tons of green fodder we require 10 cents of land. To grow silage/solid feed we require another 20 cents. The total land requirement to rear one cow is about 30 cents. To rear 20 cows, 600 cents will be required. Thus for the entire cluster of 200 households, the land required will be 1200 cents or 4.8 hectares. And for the entire panchayath, it will be 150 hectares. This can be found from the land released by cutting down coconut trees.

The production of the dung produced annually per dairy of 20 animals will be about 200 tons and urine will be about 100 tons. For production of feed, at the rate of 250 tons per hectare, we will require about 120 tons of dung and about 50 tons of urine. The rest can be used for vegetable production with an application of 30 tons of dung and 20 tons of urine. There is enough to cultivate 6 hectares which can produce a minimum of 60 tons of vegetables. The entire panchayath will require about 120 hectares of land to cultivate these vegetables. This too can be found.

These do not require any input from outside the area. However, cow sheds, machinery etc. and medicine will have to come from outside. For one dairy unit of 100 litres per day, we require sheds of about 1500 sq. ft, at the rate of rupees 1200 per sq.ft. This comes to rupees 20 lakh. The machinery for agricultural operations and for dairy may come to rupees 5 lakhs. The entire panchayath can have one veterinary service unit.

The entire milk will be distributed from the "udder to kitchen" mode. The entire milking will be done by machines. Milking will be done before 5 am and taken to the consumer before 6 am in bottles. The farthest distance will be less than one kilomtere. The distribution will be done by a group of 4 people, who will also distribute dung slurry to the biogas plants and take back the output. They will be also trained to install and service biogas plants. Biogas plants will be installed in about 30 households in a cluster of 100 households. Alternatively biogas can be made in a plant centrally and distributed to the consumers in cylinders as Compressed Bio Gas. (CBG)

The economy of one dairy unit:

Income

Income in milk sale – 2.19 million rupees
Income from biogas sales - 0.36 million rupees
Income from vegetables – 0.9 million rupees
Total annual income = 3.45 million rupees

Expenditure

Interest in depreciation @ 10% - 0 .3 million rupees
Veterinary service – 0.2 million rupees
Salary of employees – 2.4 million rupees
Total expenditure – 2.9 million rupees

The milk economy can be doubled simply by producing all the feed internally and also organising it scientifically.

Staple food Wealth - *Anna Soubhagya*

The most important thing to be assured is food securtiy. Rice is the traditional cereal of Keralites. However, it can never produce enough rice. The total demand is 40-45 lakh tonnes per year, of which it produces only 5 lakh tonnes per year. So, in order to become self-reliant in food the only way is to go for alternative food crops. One such crop

is tapioca. It can produce not less than 50 tonnes of tapioca per hectare per year. To produce tapioca in food value of 40 lakh tonnes of rice, we would need to cultivate tapioca in 2.5 lakh hectares of land. This means we need to cultivate tapioca in 200-300 hectares in each rurban. Currently only 60,000 hectares are cultivated across Kerala. The rest 2 lakh hectares can be found from existing fallow lands and the land released by cutting down low yielding coconut trees. Thus, the Staple Food Wealth portion of the economy has the following elements.

Improving productivtiy of existing paddy fields by water & soil management

Increasing cultivation of tapioca from present 0.6 lakh hectares to more than 2.5 lakh hectares.

Staple Food Wealth

Vegetable Wealth - *Haritha Sowbhagya*

At the rate of 100g vegetables per person per day, the total annual requirement of 30,000 people will be 1000 tons per year. Currently, most of the rurban area produce only half of this. So, to become self-sufficient in vegetables, the rurban needs to double its production. To obtain about 500 tonnes of vegetables additionally, we may require 40 hectares of land and the needed water. Fertilizers for this can be found through dung & urine from Milk Wealth- *Ksheera Soubhagya*.

Vegetable Wealth

Fruit Wealth - *Phala Soubhagya*

Though Kerala produces large quantities of fruits like banana, mango, jack fruit, bread fruit, pineapple and papaya, there is no integrated plan especially for value added production of fruits. One can plan a definite production target for banana, pineapple and papaya. For mango and jackfruit a survey needs to be made of the varieties available and their uses. For example, mango can be classified as pickling mangoes, juice mangoes & table mangoes. Jackfruit can be classified as vegetables, fruit and value added products. A panchayath can plan, say 30 hectares of banana plantation and another 30 hectares of papaya + pineapple. A panchayath can also plan, as bio-diversification, cultivation of a few hectares of jackfruit and mango trees.

Fruit Wealth

Meat and Fish Wealth - *Mamsa/Matsya Soubhagya*

Expansion of Milk Wealth programme involves almost doubling of animals. This gives increasing input to the beef industry. So also does the Goatery. The panchayath can be self sufficient in beef, pork and mutton. The panchayath consumes 400-500 tons fish per year. With intensive cultivation the productivity of fish per hectare of water body can be as high as 100-150 tons per hectare per year. Assuming a lesser value of 50 tons per hectare per year we can produce 500 tons of fish from 10 hectares of water body. Cultivation of fish demands availability of seedlings and food, both of which are not available in sufficient quantities in Kerala. Intensive cultivation demands

constant circulation of water which requires energy.

Meat and Fish Wealth

The scope of apiculture, mushroom culture, rearing of non milking cows for dung production, goatery, piggery, rabbit rearing, etc., are significant in the local economy but its detailing is kept outside the purview of the indicative models discussed here.

Wealth from Waste - *Malinya Soubhagya*

What! Is waste a blessing? Yes it is, if put in a proper place. A heap of dung is a waste in your drawing room, but a fertiliser in the field. So is the case with kitchen waste, agro waste etc. A piece of nail, a bit of copper wire or a damaged aluminium vessel too are thrown away as waste, but if collected and taken to recycling plants that too is not a waste. Waste can be classified as bio-degradable waste, metallic waste, plastic waste, construction waste, rubber, old clothes etc. Each of these can be used and refurbished to economic gain. All bio-degradable waste like kitchen waste, market waste, hotel and canteen waste and agro waste like fallen leaves, loppings etc. can be converted into valuable compost and can be ploughed back into the soil to improve its structure and fertiltiy. It also fixes the carbon in the soil as humus and so makes waste management a carbon negative operation. A significiant portion of plastics can be recycled and reused. So also is the case with metals. Another category of waste is called e-waste and the last category is the toxic waste from hospitals etc. Each of these categories of waste has specific method to manage. All solid bio-degradable waste can be converted into compost. All animal waste including dung and urine can be converted

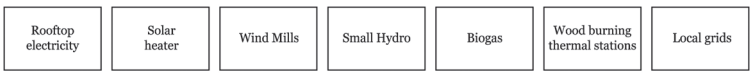
into biogas and fertigants.

Wealth from Waste

Energy Wealth - *Oorja Soubhagya*

Oorja soubhagya is a program to convert all the energy used in the rurban area to green energy. This involves conversion of all eletcrical energy into green energy through rooftop solar eletcrification, household solar thermal water heaters, biogas and wind energy as well as micro hydel stations.

Energy Wealth



Consumption

Consumption includes material and goods which has to be replaced once consumed, as well as services.

Consumption

Private Consumption	Public Services
Consumables(Food etc.) Durable Consumables (Fridge etc.) Permanent assets (House etc.) Public assets (Road etc.)	Transport Housing Health Education Recreation Management

Consumables: Food and other items like medicine, eletcricity, clothing, communications, travel and entertainment, all these fall under perishable consumables.

Durable Consumables: Household gadgets and vehicles

Permanent assets: House

Public assets: Roads & bridges, building, dams, canals, bore wells, lift irrigation etc. power stations and distribution systems.

Transport: Public transportation (road, rail, etc.) including vehicles.

Housing: Housing schemes; institutional buildings;

Health: Public Health Centres; Hospitals; Medicines; Medical Equipment's, Salaries, etc.

Education: Government and aided schools, managerial services, educational training.

Recreation: Cinemas, theatres and auditoriums, public parks and stadiums.

Management: Police, Administration, Legal.

Capital

All permanent assets created plus cash balance make up the capital or savings.

Currency

Taxes, treasury, banks

Import / Export

Goods and services

All this comes under the category of production economy. In the same sector we have got industrial production and repairing, maintenance of equipment, etc. The rurban area can have one or two units in each category of agro industries like :

- milk and milk products

- food, dried food, jam, squash etc.
- pickles
- curry powder
- ready to eat food
- household repairs
- gadget repairing
- IT services
- House cleaning services
- Home nursing, etc.

It would be important to establish a rurban centre for skill development and entrepreneurship training. This centre will prepare a library of potentially possible enterprises in the Panchayath. This centre will train the potential entrepreneurs aspiring to start new enterprises. It will also provide all the technical and managerial services to existing enterprises. It will provide hand holding for project approval and all government related liaison that an enterprise would need.

In any rurban area there is scope for a few hundred new enterprises. To conceive them in a holistic manner we can think of a Panchayath Development Company. The enterprises in the Panchayath can themselves be the main stakeholders of the company.

Practically, none of these will be affected by the vagaries of global markets or stock exchanges. One need not have to wait for de-globalisation and de-liberalisation or a social revolution to better the living conditions of the people. Both production and consumption are internal. What is required is optimism, based on facts and figures, the realisation that no government can save us unless we ourselves wish to do so, the boldness to jump into the stream, the understanding that a total approach is required and that partial efforts

are likely to fail.

This is not to deny the limitations imposed by liberalisation and the World Trade Organisation. What is implied here is that their impact on the livelihood activities at the lowest end of the spectrum is comparatively weak, provided we take recourse to strengthen the local economy.

Appendix 2

Outline for Building A Rurban Republic in Kerala

The Prospects of Madakkathara

The Kerala Sastra Sahitya Parishad (KSSP) is a People's Science Movement working in Kerala for the past 62 years under the banner of 'Science For Social Revolution'. What follows below is the essence distilled from KSSP's experience in enterprise building and promoting in a locality.

Madakkathara is a semi urban or rurban area adjoining Trissur Municipal Corporation in Trissur district in Kerala. At present it has a population of 24,500 and an area of 2500 ha. Two decades ago the Integrated Rural Technology Centre, the R&D wing of the Kerala Sastra Sahitya Parishad had conducted an Action Research Project named 'Panchayath Level Development Planning With People's Participation' in this panchayath. One highlight of the program was a five day long 'Collective Dreaming Session.' About 60 activists and academics residing in the panchayath (the Kerala Agricultural Universtiy is situated in this panchayath) participated in this 'collective dreaming'. They dreamed on steps required to make their panchayath a veritable paradise on this earth. However, they could not realise even a fraction of their dreams because they had to rely on politicians who were over powered by 'politicking.'

In 2024, half a dozen of those who participated in the first dreaming session, having been convinced of the dire necessity of 'seeding socialism' of a new type, sat together for months to prepare a multi-stage multi-front action plan for the same. The first step was to prepare the outline of a mutually consistent economic development plan satisfying conditions of increasing equity, quality of life, plurality and tolerance, self-reliance and sustainability. What follows is the result of this exercise.

1. The strategy conceived essentially consisted of a) strengthening local economy, especially in primary and secondary sectors, b) strengthening self reliance and self sufficiency, particularly in food, water and energy and c) self imposed change in consumption pattern-substitution of corporate products with local products.

2. The next strategic step is to carry out a large number of Focus Group Discussions to convince the general public about the feasibiltiy and necessity of changing the profit oriented development trajectory of capitalism to a social happiness oriented trajectory of humanism/ socialism. The questions raised in these discussions will help fine-tune the proposed action plan.

3. One important step is to close the cyber gaps, to make every one cyber literate and proficient and cyber connected. The second step is to take control over trade by establishing a People's Marketing Federation, to link local producers and traders with consumers. They studied Alternative Trading Systems attempted in other parts of the world, like Alternative or Local Currency of Chiapas, Local Exchange and Trading Systems in Great Britain, Hours system in Ithaca, etc. The entire population being cyber literate, they finally settled for an improved version of the bullet board system of accounting as in the U.K. Both national currency and local 'pass-book' currency will be in

use. The third step is production planning- Ensuring food, water, energy and livelihood security for all is the primary objective. Activities contemplated for this will be described in detail later.

4. Proactive intervention in the classrooms will be initiated from the very beginning. Teachers will be trained to transact the curriculum in a life-related, environment-oriented, activity-based and child-centered manner, imparting to them skills and values of equity, diversity, tolerance, democracy and above all sustainability. The students will be helped to internalise the truth that most of the goods advertised in the media - electronic and print has no welfare value, that they do not help improve their health or longevtiy, that they satisfy only our vanity and they make development unsustainable.

5. Beside agricultural products, they need several industrial products. Some of them, especially agro-industrial products - are already produced locally. These micro enterprises will be strengthened and brought under co-operatives, their production increased to satisfy the needs of the people, and several new ones will be started in a planned way in which producers, traders and consumers are all partners. They prepared, with the help of experts, DPRs for a large number of enterprises in industrial and other sectors. The general principle will be: *consumers control production*.

6. A Green Technology Centre to service these enterprises and to set up new ones will be established. 'Produce Local, Buy Local, Consume Local' will be the central slogan. Branded products of national and multi-national corporations will be boycotted, as far as possible. Things which require larger scales of production will be produced at the next level.

Primary Sector Plans

The current land use in the Rurban is given below.

Total area	2500 ha
Forest	600 ha
Non agricultural use	450 ha
Agriculture	1450 ha
Coconut	600 ha
Rubber	300 ha
Paddy	200 ha
Areca nut	80 ha
Vegetable	80 ha
Banana	80 ha
Others	110 ha

The Rurban had, five decades ago, 300 ha of regular paddy fields (double cropped) and 150 ha of single-crop fields on the fringes of garden land - a total of 750 ha of cropped area of paddy. From the middle of the eighties they began to convert the garden land (*myaal* or *palliyal*) first to coconut and later to rubber which rapidly spread upwards into areas with non descript trees. Rubber now occupies 300 ha. Paddy fields on the fringe of garden land were filled in and got converted to garden land. Several roads were built criss-crossing paddy fields. Housing plots (real estate) grew up on both sides (ribbon development) and fields were lost.

Still there remained about 200 ha of original paddy fields, distributed in several 'paddy sheds'- *elas*. However, a good part of it is either left fallow or cropped only once a year or used for tapioca or banana cultivation. The high level ponds of paddy fields, which never used to dry up, now dry up by December. Winter crop of paddy has become too risky, no question of summer crop. Wells on the fringe line began to dry up earlier than before, leading to shortage of even

drinking water.

Reduction in rainfall cannot be the reason for the shortage they are experiencing even in years of good monsoon. Neither could it be excessive surface run off during monsoon. There is lesser flow in streams and rivers even during monsoon. After several rounds of discussions and studies they zeroed on one cause: change in land use pattern at hill slopes - the advent of rubber with very high evapotranspiration rates. One hectare of rubber requires up to 20,000 cu.m of water, sufficient to support 3 hectares of paddy fields or tapioca. Rubber plantations will not permit any infiltration of monsoon water. No ground water recharge takes place. No wonder that wells are drying up.

They made some simple calculations: one hectare of rubber plantation gives 1.5 tons of rubber valued at Rs 240,000. One cubic meter of water gives rubber worth 12 rupees. One hectare can easily give 40 tons of tapioca valued at Rs.600,000. One cubic meter of water gives forty rupees worth of products. They realized that what they are doing is astoundingly foolish. They decided to slaughter tap the rubber within two to three years, clean up the area and re-terrace.

The Rurban has about 5500 families and most of them were members of the earlier Panchayath Development Society. This is sought to be revived as the Rurban Development Society(RDS). It will enter in to an agreement with the rubber growers - they will do slaughter tapping of the rubber in the entire area within two or three years and will not replant with rubber but will deposit the land with the RDS to cultivate tapioca, other tubers and food giving timber trees like jackfruit, mango, breadfruit, etc.

A total water balance study inclusive of ground water monitoring will be initiated. Water levels in selected 500

wells will be monitored at two-week intervals for five years. A full-fledged weather station will be set up. Additional weirs will be constructed, both to store water and to measure the outflow.

Today agriculture in the Rurban is chaotic. There is no planning of crops or timings. Ownership being fragmented, to organise collective operations the owners have to agree to abide by some rules. Bilateral and group discussions will be held for any number of times till the majority of the owners agree to pool their lands into a common agricultural plan. It will set up an Agri Bank wherein owners will deposit their land for ten years or more. The interest/rent given will be in two parts: a basic rent equal to their net average income from their land and a supplementary rent based on the profit made by the Agrico Society which manages the entire land on professional enterprise mode.

The Agrico is conceived as a federation of 50 brigades, each serving 100 to 120 households and managing 25 to 35 hectares of land. Each brigade will be an independent enterprise registered as a producer company. Each one of them will have the following divisions:

1. Dairy
2. Olericulture including fodder farming
3. Tree care: coconut, jackfruit, mango, breadfruit and other trees
4. Aquaponics, aquaculture
5. Waste to wealth

In all, there will be 20 to 25 active members in a brigade.

The Rurban level Agrico will run a few central enterprises like:

1. A central piggery

2. A rabbit rearing unit
3. A goat rearing unit
4. A veterinary service unit
5. A milk processing unit
6. An engineering service unit

In the areas of food, energy, transport, education, health care, water supply and sanitation, self sufficiency is accepted as the objective. The following steps are considered:

1. The Rurban will produce all necessary carbohydrates, proteins, fats, vitamins and minerals enough for a balanced diet of all its members.

2. It will produce all the electrical energy required to meet its internal demands and to supply to the grid the embedded energy it consumes.

3. It will take total care of the health of all its members. The chain includes roving health workers, primary health centres, tertiary services and specialised services.

4. Neighbourhood system of schooling will be adopted willingly because there is no special reason to be otherwise. Good quality public education will be assured. Children will walk or cycle to school.

5. Safe cycling paths will be made. Motorised internal transport will be reduced. Private cars will become unnecessary. An efficient public taxi system will be established.

6. By providing local livelihood opportunities and producing food and other items locally, travel and transportation could be considerably reduced.

The stabilised population will be about 25,000 to 26,000. Their annual food requirements are estimated as follows.

1. Cereals @400 gms per capita per day 3900 Te.

2. Proteins (20% pulses, 80% fish and meat)
(Pulses 50 Te; lentils-green 200 Te.
Meat, 120 Te, fish, 250 Te)

3. Milk @ 300ml/p/d 3000 Te

4. Vegetables and fruits @ 250g/p/d 2500 Te.

5. Coconuts for curry and oil 3.5 million nuts

It is a fact that the panchayath has never been and can never be self sufficient in rice. To be self reliant more than 90% of carbohydrate requirements will have to be met from other sources - here tapioca.

The panchayath has got about 1450 ha for new crop planning. Of this about 1000 ha are occupied by perennial crops like coconut, rubber and fruit trees like mango and jackfruit. The total coconut production is about five million nuts per year. The owners of the trees agreed to cull out all trees yielding less than 50 to 60 nuts per year and plant new, high yielding varieties. In place of 600 ha, 200 ha can yield five million nuts. Coconut area can be easily brought down to 300 ha. They also decided to slaughter tap all rubber trees, after assuring the owner a base rent equal to their declared annual net profit. This releases another 300 ha. Thus the RDS gets at its command 1000 ha for planned cultivation.

The Rurban has to produce 12,000 Te of tapioca to substitute 3900 Te of paddy. At current productivity levels this needs 300 ha. To produce 3000 Te of milk annually 20,000 Te of grass is required. A minimum of 300 ha is required for this. The Rurban requires about 3000 Te of fruits and vegetables annually. This needs 150 ha. The new cropping pattern will be:

Coconut	300 ha	6-7 million nuts per year
Tapioca	300 ha	12,000 Te per year
Vegetables	150 ha.	3,000 Te per year

Fodder grass	200 ha	40 ,000 Te per year
Paddy	100 ha.	400 Te rice per year

Each Agrico unit will have one or two aquaponic farm of 200 cu.m pond size and 600 sq. m vegetable area capable of producing 4 Te of fish and 12 Te of vegetables annually. The total production of fresh water fish in the Rurban could be 150 to 200 Te. Vegetable production from these units will be about 600 Te. The worker-owners of these Agricos will be trained and retrained in dairy, aquaponics, fodder farming, olericulture, coconut care, climbing trees, etc . All these are skilled and technical jobs.

Secondary Sector

The RDS will set up a 10,000 TPY tapioca processing plant to convert tapioca into more nutritious and delicious pasta, macaroni and other products such as rice-like pearls which can be cooked as ordinary rice. The RDS will set up, also, a full toiletry unit to produce soaps, detergents, lotions, cleaning agents, a pickle and other condiments unit, a tailoring and garment making unit, a bakery, etc. All products will bear the brand name of the panchayath and citizens are persuaded to buy their own products.

They had estimated the maximum electrical energy they need to achieve the highest quality of life is not more than 1500 units per person per year and that they will not be foolish to consume vanity goods or self destructive goods. This energy will be produced locally. Each house will install solar power units capable of generating per year twice their annual consumption - 2kw to 5kw or more; 30 to 40 MW in all. The panchayath produces annually about 6,000 Te of burnable biomass capable of producing 4 million units of electrictiy.

Efficient use of solar water heaters, hot boxes and planned cooking operations can reduce domestic heating energy.

Adoption of LED lamps, DC fans and other DC equipments like washing machines, mixer-grinders, TV etc. will avoid the necessity of large capacity inverters and storage batteries. Everyone is energy conscious.

There are a large number of 'industrial' goods which they consume daily, such as processed foods, dairy products, toileteries, bakery products including high end ones such as chocolates, papads, fryems, jams and pickles, ready to eat foods etc. Every one of these will be produced locally. Production units will be set up for all of them after assessing the market for each item. Repairs of all gadgets and vehicles will be done locally. All household repairs too will be done by local home repair shops.

The RDS will, as mentioned earlier, set up a Green Technology Centre with the following mandate:

1. Install 'state of art' roof top SPV units, provide total maintenace, stock necessary spare parts;

2. Provide training services to upgrade the skills of artisans and mechanics;

3. Service Green Task Forces in the 'waste to wealth' program;

4. Provide entrepreneurship training for Agricos, repair shops, toiletry units, bakeries, integrated agriculture, aquaponics, etc.

5. Installation and operation of biogas plants

All the enterprises will be under group ownership - as co-operatives or as producer companies. Shares are limited to workers and registered consumers and are non-negotiable. The citizens have, since long, realised that 'shares' have no real value except when involved in actual production of use values and that share market is merely a gambling den.

With increased local employment and neighbourhood

schooling, need for internal motorised travel can be brought down drastically. They have entrusted resident engineers to design an efficient network of footpaths and cycle paths. The need for motorised vehicles will come down drastically. An efficient taxi-pool can reduce the need of private vehicles still further.

The RDS has set up a Rurban Planning Board to take these ideas forward. Luckily the Rurban has experts in all fields. Besides the panchayath office, the RPB too stocks all information, both current and historical, which can be easily retrieved. The RPB services all the standing committees of the Rurban.

■

Glossary

Alienation - is a state of affairs where one is not free to do what one wants.

Aspirations and Achievement - people desire to have everything that is presently available, but only a few do have the ability to achieve them. The more the gap between what they desire to achieve and what they could, the more unhappy they are.

Collective Greed - when the pursuit of more than what is needed, what does not enhance one's quality of life, gains social sanction and becomes widespread, we call it collective greed.

Collective Injustice - can be described as a situation when the rights of an individual or a section of people are systematically ignored or violated and it has the sanction of a majority of the people or institutions or the government.

Consumer Producer Linkage - in the rurban society that we envisage, the producer shall not dictate consumption. The consumers decide what they want and the producers produce accordingly. A new form of production consumption relationship is envisaged leading to the concept of the producer - consumer, prosumer.

Consumerism - is a state of affairs in which the economy is driven by people's desire to have everything that the market offers.

Contradiction - is a typical term in Marxist philosophy which states that everything can be considered as a set of two opposing elements. The resolution of this opposition changes both these opposing elements. The classical contradictions in Marxism are

1. between capitalism and socialism, 2. between capital and labour, 3. between imperialism and colonialism, 4. between capitalist countries, and 5. between capital and nature.

Cultural Revolution - this denotes a basic change in the thinking of the people, for example, in their attitude towards women, towards luxury, etc.

Ela - A land parcel comprising of paddy field and surrounding garden land. A feature quite common to homestead farms in Kerala.

Environmental Education - people should know the impact of their economic activity on the environment. For example if there is a proposal to have a railroad across a paddy field what will be its impact on hydrology, food production and economy; whether the negative impacts on these fronts would be compensated with the benefits of the railroad. The process of enabling citizens to understand both the positive and negative impacts of their developmental activities form the content of environmental education.

Footloose Capital - a term used to denote the unplanned and unpredictable flow of capital.

Grama Panchayath - the word grama is used to denote rurban. The panchayath is an assembly of representatives of people.

Grand Oceanic Circles - this is the way Gandhi describes the relationship between rurban republics.

Happiness - is a state of mind which everyone likes and is often subjective in character. And is not amenable to numerical calculation.

Happiness Index - is a measurable quantity. It is defined in terms of three components.

1. Longevity and health
2. Freedom to be
3. Sustainability

Horizontal Networking - networks can be on a horizontal plane or be on a hierarchical mode. The networks both within a rurban republic and between rurban republics are not to be hierarchical in structure.

Humanness - today's development path leads to barbarism and self destruction. We have to change this path to one which

leads to more happiness, to more humanness.

Integrated Planning - today development planning is done in an ad hoc manner. For example, one plans for an increase in milk production without taking into account the availability of good quality cows, of enough animal feed or the variability of milk production and the market. Plans that account for all of these are integrated plans.

Leisure - in order to improve health and longevity one has to work for a definite time. Improvement in productive forces reduces this time, allowing leisure.

Local Self Government - villages and towns are supposed to be self governed. In order to be a true government it should have the power to formulate laws, to regulate and execute. Thus a self government is same as a republic.

Mainstream Marxists - there are Marxists and Marxists, each giving their own interpretation of Marxism. The main stream of them are the communist parties.

Metabolism - refers to the absorption of one element and its rejection in another form. In living things this refers to absorption of food and conversion of food into energy. Anabolism refers to the process of rejection of waste such as carbon dioxide, urea, etc. Often the word metabolism is used to denote both absorption and rejection; i.e, both metabolism and anabolism. Traditionally used for living things, Marx used it to denote the flow of various elements in the soil.

Modernity - modern is considered as progressive compared with ancient. Today the word modernity is used to denote the achievements of western civilization.

Need and Greed - these are considered as two different categories. Need is something which satisfies both health and freedom. Greed satisfies only vanity.

North South Divide - this is a loose term used to denote the rich, industrialised nations, the majority of which lie in northern hemisphere and the poor nations which are for the majority located in the southern hemisphere.

Nuclear Holocaust - a nuclear war will leave nobody

unaffected. It could result in human extinction.

Payat - a common practice prevalent in northern Kerala to defray expenses of weddings, building a house, starting a small business, etc. was to organise a payat. The invitees are to make a contribution, which is diligently recorded by the host. When any of the invitees holds a similar payat, the host is expected to participate and make a contribution that is little more than what he received from that invitee for his payat. Not doing is considered a social disgrace. The system works on the trust factor: that what you donate in a payat will come back to you when you have some contingency and holds a payat yourself. This is what renders it the form of social currency.

Productive Forces - denote the knowledge and skills a society has acquired in order to produce the goods and services it requires.

Progress - the word progress today is used to denote increase in production of consumer goods. It should be changed to mean increase in human happiness.

Renewable Resources - resources are of two types. Non renewable, meaning, they get exhausted as we use them, while renewable resources are those which get replenished through natural processes.

Reorganisation of States - the states in India are historical. They do not have any physiographical or cultural element. In an article in the *Economic and Political Weekly* (Vol.49, Issue No.42, 18 Oct, 2014) it is argued that a more scientific division of India is advisable. The population size of any state shall be 3-4 crores.

Rural Science Forum - Rural Science Forum is a tool set up by KSSP comprising of local scientists.

Rurban - rurban is an area showing both rural and urban features. It is used both as a common noun like village, panchayath, town etc. and as an adjective.

Rurban Republic - is a rurban area capable of becoming local self government.

Social Leisure - reduction in socially necessary labour time

increases social leisure.

Socially Necessary Labour Time - is the average labour time of an entire society in order to produce the goods and services necessary to achieve a given longevity and health.

Solar Democracy - refers to decentralised and community based approach to energy production and distribution where the sun is the prominent energy source.

System Theory - everything can be conceived as a system comprising of several interconnected components which themselves form sub systems. Any change in one component can cause a corresponding change in the system. So knowledge about how such changes take place and affect the system is important. For example a change in rainfall may cause a change in food production. Both animals and humans need food. The change in animal health can impact human health. So both are to be taken into account.

Sharing the Loot - this term is used to denote economism in trade union activities.

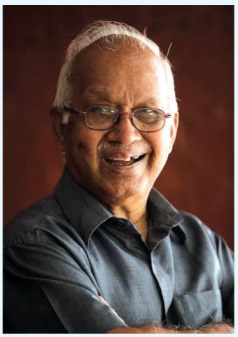
Species Suicide - the human species is approaching extinction. Knowing this and failing to take any action to stop it, is virtual suicide.

Swaraj - is a state in which one is free to do what one wants. It is the opposite of alienation.

Tipping Point - growth of GHG in the atmosphere will cause climate change which may stabilise at one point. However beyond a certain quantity of GHG, this stabilisation may not occur and climate change will be unpredictable. The scientists have set this limit to 400 PPB. Today it stands at 420 PPB!

Trickledown Theory - there are many who argue that ultimately what the rich spends will reach the poor and so one need not worry too much about inequality in wealth. Incentivising the wealthy will result in benefits trickling down to the poor, argue the proponents of this theory.

Womb of the Existing Society - Marx contended that the new society has to germinate within the womb of the old society and grow there till it becomes powerful enough to burst it.



THE RURBAN REPUBLIC

M P PARAMESWARAN

Any new society has to germinate within the old society, grow against odds and prove its superiority. The seed has to be 'sown'. If it grows healthily in large enough number of locations, it will spread further and ultimately replace the old society. A new 'grand narrative', a new steering wheel for the new society is required.

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