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Introduction

“Nobody dares to say that they do not care about the environment any longer”, says Steinar Lem, head of information at Future In our Hands, one of the Scandinavia influential NGOs.¹ Despite being the major focus of so many organizations, the current situation of natural resources and the environment is very grave. Due to the exploitative tendencies of the human race, we are facing a grim risk of losing the precious gifts of nature bestowed upon us by God.

In pursuing the goal of improving the quality of life, the main target upon which all are endeavours are based, various efforts are being made by the society and its confused leaders. But our lack of proper knowledge and improper utilization of these resources is leading to an appalling lifestyle as demonstrated by our leading urban centers. The problem is so serious that even the basic need of survival may become difficult to fulfill in the coming future.

It is not that the problem of natural resources and environmental pollution is not known to anyone. Indeed, it is one of the main issues which the society is trying to address (atleast superficially) . But despite years of effort and hundreds of conferences and discussions on the topic around the world, the problem is only getting worse. Some of them may even be intending well. But still no one seems to be getting to the core of the problem. Pictures of dolphins or pandas are no guarantee of the “eco-friendliness”, though many seem to think so.

TRYING TO FIND A SOLUTION

For most people, it seems obvious that something has to be done. But that is often where it stops; and those who do take action deal with the problem on a material level -- a partial solution only. They may succeed in treating the symptoms to a degree, but they fail to address the underlying cause of the crisis.

To deal with such a serious problem, one must know first of all, what is the primary cause behind all this. That is were the Vedas come in. The solution to all our problems is very well addressed in the ancient and timeless Vedas, the source of all perfect knowledge. The Vedic science deal directly with all aspects of our existence, which include living in harmony with the nature and leading a peaceful life

which provides a very high quality of life. Scriptures are like manuals for the planet. They provide the instructions, which **must** be followed to lead a perfect life.

We must understand that every society - no matter how primitive - needs some guiding intelligence. Today, even in the so-called civilized societies, the leaders (towing the lines of politicians and businessmen) have no absolute standard for their many decisions, big or small. Without the absolute standard, they are simply forced to speculate how to employ their intelligence to create and justify the means by which economic development and material sense gratification may be accomplished. However, despite the erudite intelligence guiding man's societies, his individual and collective endeavours are increasing the world's distress, not its happiness.

This report makes an attempt to look into the Vedic basis of living and explains the primary cause for our current delicate situation and what the Vedas propose to overcome it. Again it must be stressed that it is not just an alternative model. The Vedic literatures clearly state that there are no two ways for doing the right thing (See "Must treat the root cause" on Page 22), hence the model must be taken very seriously.

Consequences of our Greed

Our insatiable material appetites are depleting the earth's resources at a frightening rate. We are also generating waste faster than it can be processed by the planet's absorptive systems. According to the United Nations Agenda 21 report, "the major cause of the continued deterioration of the global environment is the unsustainable pattern of production and consumption, particularly in industrialized countries." ² Many of the world's colossal environmental threats – climate change, ozone depletion, and biodiversity loss (mass species extinction) – are largely the result of developed nations' unbridled consumption patterns.

LOSING OUR RESOURCES FAST

We are clearing and stripping our tropical rain forests with the amazing speed of 30 football fields per minute to help the lumber and meat industries make their profits, depriving about 1000 endangered species of their natural habitat annually, despite their vital role in the ecosystem. ³

Deforestation also creates topsoil loss. Monsoon rains wash away hopes of agriculture together with valuable soil, for the soil now lacks the natural protection of roots and foliage. Another important cause of topsoil loss is the intensive use of chemical fertilizers in factory, all this for providing the "comforts" of a consumer society, where love of ease has demanded quick-and-easy disposable goods.

Mountains of waste have become the pedestals on which the industrialized nations try to make their stand. The problems of consumer garbage, industrial waste, toxic waste, and nuclear waste are still far away from any acceptable solution. The meat, oil, and chemical industries increasingly contaminate the earth's fresh water supplies. Massive oil dumping, accidents from oil drilling and transport, as well as motor vehicle use cause about 3,180,000,000 liters of oil to end up in the oceans yearly. For the sake of living easy, more than a quarter of the world's population lacks adequate or uncontaminated drinking water. ³

GASPING FOR BREATH

The water and soil is laden with toxins, the noxious fumes spewed out by vehicles and industries are fast polluting the air we breathe. S K Chhabra of the Vallabhbhai Patel Chest Institute, Delhi, notes that the levels of suspended particulate matter (SPM) in Delhi's ambient air, on most days of the year, are much above the norms set by the Central Pollution Control Board (CPCB).⁴

Statistics of the World Health Organization show that two-thirds of the world's urban population breaths polluted air. Industries, especially the meat industry, take the biggest part in it, followed by motor vehicles. Much of the industrial exhaust causes the dreaded acid rain, responsible for killing trees, crops, and lakes, as well as the corrosion of buildings. The surplus of carbon dioxide added to the atmosphere by burning of fossil fuels in factories and vehicles, and by burning forests to clear land, constitutes 95% of the total amount to enter the atmosphere yearly.

THREATENING GLOBAL TRENDS

Poverty, social and gender inequalities are increasing globally. According to World Bank, about 3 billion people lived on an income of less than 2 US dollars per day in 1993. Indeed, nearly 1.5 billion of the world population of 6 billion is predicted to live in severe poverty at the beginning of the millennium. The gap between the rich and poor is increasing day by day. About 800 million people sleep hungry every day. One billion people around the world suffer from micronutrient deficiency. It is predicted that by 2050, as much as 42 % of the world's population will live in nations which will not have sufficient freshwater stocks to meet their combined needs of agriculture, industry and domestic use.⁵

Exploitation and Poor Planning

The current havoc is mainly due to poor planning and whimsical decisions not based upon concrete plan.

THE GREEN REVOLUTION TURNS SOUR

For example, the country is on the brink of a serious food crisis. A fine example of short term planning is the Green revolution. Punjab and Haryana were at the forefront of the Green Revolution in the late 1960s and early 1970s, in which farm machinery, pesticides and fertilizers, irrigation and the replacement of traditional crops with high-yielding varieties dramatically increased productivity. But now due to artificial methods, crop yields and water resources are declining alarmingly, and some parts are close to becoming barren. Many farmers are heavily in debt from their investments in new equipment and reliance on chemicals, and rural unemployment is increasing. These are ominous signs of a deteriorating farm economy.⁶

One of the major causes of this crisis was the introduction to Punjab and Haryana of rice, not a traditional crop in these arid states. Irrigation made growing rice possible, and it was introduced as a cash crop and cultivated alongside wheat. Now, however, it has begun to suck the land dry. Excessive pumping during the rice-growing season has led to a drop in the groundwater table of an average of half a meter a year. In some areas, levels have fallen well below the reach of the deep tube wells used by the farmers, or the water has become saline.

The heavy use of fertilizers has had another effect: excess nitrates have leached into the groundwater, which is now contaminated dramatically.

The government is pushing for all - out industrial growth, and this is true in the agricultural sector as much as any other. Such enterprises are more political than agricultural, and they are gravely detrimental. The economic benefits are lapped up by a few, while the long-term fallout will effect millions of poor farmers.

MISUSED TERMINOLOGY: AN EXAMPLE OF EXPLOITATION

Steinar Lem, points to a few examples of misused green labels lately , like “green diesel” , which is just slightly less polluting than ordinary diesel , and air companies marketing “green” aeroplanes !¹

Today , in the upper niche of the Indian consumer market , where fads rule the roost , any product that is tagged “eco-friendly” has an edge. A medley of logos and fancy tags colour up the shelves of up-market departmental stores in urban India - “ environment - friendly” , “CFC-free” , “printed on recycled material” , “non-toxic” , “recyclable” , “animal-friendly” , and so forth. All consumers are literally going into overdrive.⁷

“Go green” seems to be the new marketing buzzword. Anything and everything can become eco-friendly in this vast soup of the consumer market - cosmetics, vehicles, consumer durables , you name it. Nobody knows what is green. Labels merely help companies to cash in on the guilt inherent in a consumer society.

The Urban-Industrial Lifestyle

The urban-industrial lifestyle is hopelessly artificial and heavily strains the development of real human interests. In India, Mahatma Gandhi tried to organize villages in that way so as not to drag people to the town. So, a peaceful atmosphere can be attained only when there is large-scale village organization, actual village life. The ideas of the cities are not to be borrowed by the villages. Poet Cowper said that the country is made by God, and the cities and towns are made by man.

THE PRICE WE PAY

The growth of cities and industries has severely affected the environment. The spread of environmental disease has increased with the spread of civilization

Scientists worldwide now accept that along with industrialization and urbanization, there has been a steady destruction of nature. Cities and industries have both affected clean air and clean water.

Industries produce a lot of hazardous wastes; and cities produce a lot of garbage. Hazardous wastes pollute the groundwater. Accumulation of garbage allows disease-causing agents to proliferate. K C Sahu, formerly with the Indian Institute of Technology, Mumbai, raised the concern that heavy metal contamination was increasing due to mining, mineral processing, the burning of fossil fuels and industrial and agricultural activity.⁴

NATURE'S FURY

Pesticides and industrial waste contaminate water resources. Geological factors contribute to the problem. The problem is aggravated further by environmental degradation. For instance, the ground water in eight out of 16 districts of West Bengal contains arsenic, leading to the worst cases of arsenic contamination in the world. According to the state government, about 4.5 million people are exposed to the problem⁴

WATERS OF HATE

As industrialization and urbanization grow , not only the water demand will skyrocket but so also will the potential to pollute. Therefore, advance action would be a better idea than negotiating in a crisis.

And with industrialization, urbanization and modernization of agriculture, India's rivers are already reaching a stage of advanced decay. Governments are finding that they do not have adequate money to invest in the water sector even as water treatment costs are zooming up because of growing population. Many cities today supply recycled water as drinking water. Getting freshwater to drink is becoming a rarity and a privilege. ⁸

CENTRALIZED ECONOMICS: BOON OR BANE?

Centralized production results in overproduction of many commodities, especially in capitalist economies where a demand for commodities is artificially stimulated through advertising. There is an immense waste of resources for production and advertising. Centralized economics cannot exist without a highly developed system of transportation for shipping raw materials and products. This requires massive inputs of fuel and resources for vehicles and transportation infrastructure. Infrastructure such as roads and railways are public goods funded by government money. Centralization creates a curtain of ignorance, which hides from us the abominable effects of our seemingly innocent transactions

The modern economy is like a fragile and intricate structure, which is improvised and expanded from moment to moment. And with one false move, sooner or later, the whole thing will come crashing down

INDUSTRIALISM

Industry of various types cannot produce the essential needs of man, namely rice, wheat, grains, milk, fruits, and vegetables. The production of machines and machine tools increases the artificial living fashion of a class of vested interests and keeps thousands of men in starvation and unrest. This should not be the standard of civilization.

Industrialism causes life threatening pollution and destruction of the environment. Even when we examine so-called environmentally friendly energy sources such as solar energy, we find that the

cyanide compounds needed for the production of photovoltaic cells come from an industry which is highly polluting and dangerous.

TALL CLAIMS

The real truth is that most persons don't really care about the environment although they may speak a lot of empty words. There are many who speak about pollution. But they are themselves engaged in polluting the environment by promoting the industry, automobiles and so on.

For example in the recent Kyoto summit (1997) on environmental degradation it was stated that :

“For 10 days in Kyoto the world saw highly moral arguments put forward by world leaders to save the planet. But behind all those arguments was murky national self-interest. In Kyoto, it was planetary politics that took an upperhand over planetary ecology. And not surprisingly”⁹ and

“Heated exchanges marked a conference which ended abruptly to hastily patch up a lukewarm agreement”⁹

Politicians and businessmen appear concerned about the environment these days. Their speeches and interviews are laced with expressions like “sustainable development”, “ecology” and “green values”. But do they actually mean what they say? Thus, all these “pollution talks” are only tall claims. Everyday so many thousands of automobiles are produced, while they are writing research proposals. Everyday, so many roads are being built. Roads cover 20 to 25 per cent of the city area.

The chaos is not due to God's arrangement. God makes villages. Man makes cities. God wants us to live simply and in a self-contained manner. The animals are not creating any problems. They are not building any highways. It is we who are bent on destroying the environment.

The Cause of the Crisis

Environmental crisis stems from a crisis in consciousness. There has to be a change in consciousness following the standard of the ancient Vedic teachings. In the light of Vedic understanding, the way to restore the world health is to supply spiritual values, which will automatically promote the rapid decrease of ecological problems. As we experience daily, a godless society results in a consciousness of we-are-nothing-but-machines, and encourages domination and exploitation of the world's resources. The present mechanistic world view fails to see all this.

MUST SEE THE BIG PICTURE

In the modern society , we are guided by very myopic principles with no long-term planning.

In the Vedas, this issue is addressed in terms of *Shreyas* and *Preyas*. *Preyas* means very short term solutions both in terms of time and locality which ultimately end in distress. *Shreyas* means long term solutions which see the overall picture without neglecting any component of the natural system and thus resulting in long term happiness and high quality of life. *Shreyas* is based on higher principles rather than simply acting selfishly for satisfying one's immediate requirements.

For example , the western pattern of life is being blindly copied (along with its problems) in the Indian society and is destroying all peace of mind . Housewives taking to modern electrical appliances in a bid to save time and some so called convenience only end up watching mostly degrading media broadcasted freely to our homes in their free time and getting obese as an added bonus. One can easily note the difference in the health and happiness in their lives today and 20-30 years ago. Today they get over-ridden with disease even at early age of 40 whereas in the villages you can still find hale and lively women at the age of 60. All the exercise they used to get doing their chores is history. Instead of exercise they end up watching aerobics on the TV. And of course, all the background pollution caused by these modern appliances goes unnoticed. Completely defying the natural way of life is certainly going to give rise to unwanted problems. Just rubber-stamping it as a modern lifestyle will not do away with all the problems related with it. In fact as substantiated by the modern day lifestyle, it only ends up in visits to Stress Management Programs , Psychiatrists and doctors by the people in large.

UNLIMITED WANTS AND DESIRES: THE ECONOMIC PROBLEM

One classic way of defining economics is to say that the central problem of economics is how to allocate scarce resources to satisfy unlimited human wants. The two material models of economics, capitalism and communism both seek to satisfy as many of those wants as possible. This is referred to as "increasing the standard of living." Under capitalism wants are deliberately increased by pushing out the aggregate demand curve to stimulate an increase in the gross national product.

The Vedic economic model approaches the problem from completely the opposite perspective. Instead of striving to satisfy unlimited wants, it attacks the problem at its roots: it defuses material wants by replacing them with spiritual pleasure, *param drstva nivartate* - By experiencing far superior things, he ceases from ordinary enjoyment (Bhagavad- gita 2.59).

Bhagavad Gita directly recognizes this problem and addresses it in the following verse :

Bhagavad Gita - Verse 2.70

“A person who is not disturbed by the incessant flow of desires - that enter like rivers into the ocean, which is never being filled but is always still - can alone achieve peace, and not the man who strives to satisfy such desires”

For the materialist, the fact that "you can't always get what you want" is a source of unending frustration. This has to be replaced by a Godly consciousness recommended in the Vedas. The more highly developed the consciousness of the individual, the less material facility is required. As the proverb goes, "Austerity is the wealth of the intellectual." There is more satisfaction, but it's not the kind of satisfaction that simultaneously creates a by-product of misery.

ANCIENT WISDOM

Many thoughtful people have found value in the wisdom of ancient times. The Vedic teachings explain that the root cause of all material problems lies in purposefully disobeying the laws of nature by not recognizing the proprietorship of the Supreme Lord. From a spiritual point of view, all resources of the world are God's energies and should not be misused or wasted.

They are satisfied within and no longer experience the excessive greed that tears our environment asunder. The simple and natural way of life they aspire for contributes to a cleaner, healthier, and more peaceful world.

SIMPLY FOLLOW

If we simply follow the instructions given in the scriptures , all the current problems plaguing our society will be slashed to pieces and will lead to the best utilization of natural resources resulting in a high quality of life full of content and peace.

The Hunger Problem

“I do feel that spiritual progress does demand at some stage that we should cease to kill our fellow creatures for the satisfaction of our bodily wants”

Mahatma Gandhi

THE LAW OF KARMA

Apart from its technical aspects, the environmental crisis also has deeper dimensions. The Vedic teachings relate higher, universal laws that govern the interactions of conscious beings. These laws, called *karma* in Sanskrit, are described in terms of actions and reactions. Thus environmental problems can be explained as the undesirable results of undesirable actions. The most prominent and environmentally destructive of these undesirable actions is the unnecessary and unrestricted killing of animals for food, fur, fun, and cosmetics.

According to the Vedic view, scarcity is the result of the negative *karma* generated by the destructive actions of the world's population and not the result of overpopulation. The earth is perfectly capable of providing all the food necessary for whoever lives on its surface. Scarcity is due to our own greed and insensitivity to other living entities, such as the animals we kill.

On the connection between flesh-eating and violence in human society, Playwright George Bernard Shaw wrote:¹⁰

We pray on Sundays that we may have light
To guide our footsteps on the path we tread;
We are sick of war, we don't want to fight,
And yet we gorge ourselves upon the dead.

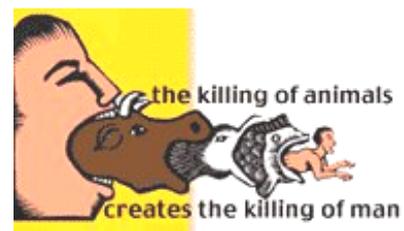


Fig 1. Graphical Description of the Law of Karma

THE COST OF MEAT

More than half the annual world deforestation clears land for beef cattle, which consume about half the world's grain production. Grain cycled through animals loses 90% of its protein, and the production of 1 kilo of beef takes 500 times as much fresh water than the production of a kilo of grain. Since to

produce one kilo of beef requires 4 kilos of grain, the raising of animals to create food is very inefficient. Just consider, the land required to feed one meat eater can feed 20 vegetarians!¹¹

ENORMOUS ENVIRONMENTAL DAMAGE

Another price we pay for meat-eating is degradation of the environment. The United States Agricultural Research Service calls the heavily contaminated runoff and sewage from America's thousands of slaughterhouses and feedlots a major source of pollution of the nation's rivers and streams. It is fast becoming apparent that the fresh water resources of this planet are not only becoming polluted but also depleted, and the meat industry is particularly wasteful. In their book *population, Resources, and Environment*, Paul and Anne Ehrlich found that to grow one pound of wheat requires only 60 pound of water, whereas production of a pound of meat requires anywhere from 2,500 to 6,000 pounds of water. And in 1973 the *New York Post* uncovered this shocking misuse of a valuable national resource-one large chicken slaughtering plant in America was found to be using 100 million gallons of water daily! This same volume would supply a city of 25,000 people.¹¹

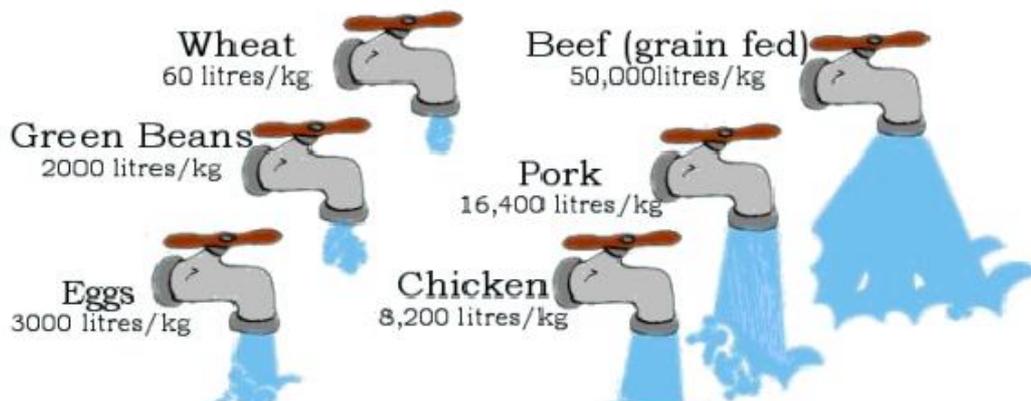


Fig 2. Water – intensive processes involve huge wastage, particularly in meat production. Totals include water use at all levels, e.g. mining and smelting for farm equipment, electricity etc.

THE ECONOMICS OF A NON - VEGETARIAN DIET

The wasteful process of meat production, which requires far larger acrages of land than vegetable agriculture, has been a source of economic despair in human society for thousands of years. A study

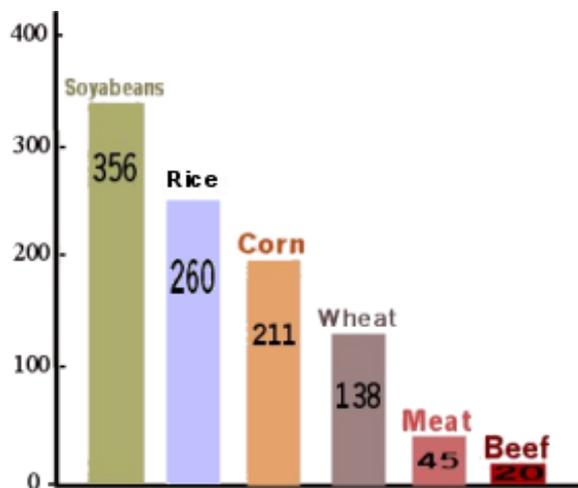


Fig 3. Relative Per-Acre Yields of usable protein from various food sources

published in plant Foods for Human Nutrition reveals that an acre of grains produces five times more protein than an acre of pasture set aside for meat production. An acre of beans or peas produces ten times more, and an acre of spinach twenty-eight times more protein. ¹¹

THE VEDIC SOLUTION

The Vedic scriptures of India, stress non-violence as the ethical foundation of vegetarianism.

The Manu - samhita, the ancient India code of law , states , “Meat can never be obtained without injury to living creatures , and injury to sentient beings is detrimental to the attainment of heavenly bliss : let him therefore shun the use of meat”. In another section , the Manu-Samhita warns , “Having well considered the disgusting origin of flesh and the cruelty of fettering and slaying of corporal beings , let him entirely abstain from eating flesh.”

In the Manu-samhita the concept of life for a life is sanctioned, and it is actually observed throughout the world. Similarly, there are other laws which state that that one cannot even kill an ant without being responsible. Since we cannot create, we have no right to kill any living entity , and therefore man-made laws that distinguish between killing a man and killing an animal are imperfect....According to the laws

of God killing an animal is as punishable as killing a man. Those who draw distinctions between the two are concocting their own laws.

SOLVING THE HUNGER PROBLEM

According to information compiled by the United States Department of Agriculture, over ninety percent of all the grain produced in America is used for feeding livestock-cows, pigs, lambs, and chickens-that wind up on dinner tables. Yet the process of using grain to produce meat is incredibly wasteful. For example, information from the USDA's Economic Research Service shows that we get back only one pound of beef for every sixteen pounds of grain.

In his book *Proteins: Their Chemistry and Politics*, Dr. Aaron Altshul notes that in terms of calorie units per acre, a diet of grains, vegetables, and beans will support twenty times more people than a diet of meat. As it stands now, about half the harvested acreage in America is used to feed animals. If the earth's arable land were used primarily for the production of vegetarian foods, **the planet could easily support a human population of twenty billion and more.**¹¹

Facts such as these have led food experts to point out that the world hunger problem is largely illusory. The myth of "overpopulation" should not be used by advocates of abortion to justify the killing of more than fifty million unborn children worldwide each year. Even now, we are already producing enough food for everyone on the planet, but unfortunately it is being allocated inefficiently. In a report submitted to the United Nations World Food Conference (Rome, 1974), Rene Dumont, an agricultural economist at France's National Agricultural Institute, made this judgment: "The over-consumption of meat by the rich means hunger for the poor. This wasteful agriculture must be changed-by the suppression of feedlots where beef are fattened on grains, and even a massive reduction of beef cattle."

The amount of grains fed to U.S. livestock alone can feed 1.3 billion people, a sixth of the earth's population ! Abandoning a meat-based diet would release a vast quantity of food grains for human consumption, solving much of the imaginary world hunger problem.¹¹

SAVING MONEY WITH A VEGETARIAN DIET

But now let's turn from the world geopolitical situation, and get right down to our own pocketbooks. Although not widely known, grains, beans, and milk products are an excellent source of high-quality protein. Pound for pound many vegetarian foods are better sources of this essential nutrient than meat. A 100-gram portion of meat contains only 20 grams of protein. (Another fact to consider: meat is more than 50% water by weight.) in comparison, a 100-gram portion of cheese or lentils yields 34 grams of protein. But although meat provides less protein, it costs much more. A spot check of supermarkets in Sydney in February 1984 showed sirloin steak costing \$8.95 a kilogram, while staple ingredients for delicious vegetarian meals averaged less than \$1.50 per kilogram. A 250 gram container of cottage cheese costing 55 cents provides 60% of the minimum daily requirement of protein. Becoming a vegetarian could potentially save an individual shopper at least several hundred dollars each year; thousands of dollars over the course of a lifetime. The savings to Australia's consumers as a whole would amount to hundreds of millions of dollars annually. Considering all this, it's hard to see how anyone could afford **not** to become a vegetarian.¹¹

Sustainable Consumption

“The world has enough for everyone’s need but not enough for everyone’s greed”

Mahatma Gandhi

By definition Sustainable Consumption means consumption of natural resources in an optimal manner which sustains nature and also leads to a better quality of life. This issue must be addressed to the core because it is a major concern in relation to the fast depletion and contamination of the natural resources. The current consumption patterns are certainly not very encouraging and predict a grim future. A relatively small fraction of the world's population consumes a disproportionate amount. Globally, 20% of world’s people in the highest income countries account for 86% of total private consumption expenditure whereas the poorest 20% live on a mere 1.3%. Since 1950, the richest 20% of the world's population has increased its per capita consumption of meat and timber two-fold, its car ownership four-fold and its use of plastics five-fold. The poorest 20% has increased its consumption hardly at all.⁵

“It is simply impossible for the world as a whole to sustain a Western level of consumption for all. In fact, if 7 billion people were to consume as much energy and resources as we do in the West today we would need 10 worlds, not one, to satisfy all our needs.”

Gro Harlem Brundtland¹²

The consumption of the most affluent part of the population influences the consumption patterns and aspirations of others worldwide. The western lifestyle of consumption which is highly wasteful and resource-heavy is being adopted the world over in hope of a better lifestyle (See “Quality of Life” on Page 23). But this blind imitation will only result in disaster. The capitalist approach promotes a luxurious lifestyle in the affluent class of population creating an overall imbalance of resources. Due to heavy dependence on industrialization, consumption is at highly unsustainable levels. If this pattern is copied instead of being rectified, the ecosystem that provides us with renewable resources could well collapse long before the world runs out of non-renewable resources.

AGENDA 21

This issue has been addressed in Agenda 21 (an action plan to solve the above problems) produced by the United Nations as follows :

4.4. Measures to be undertaken at the international level for the protection and enhancement of the environment **must take fully into account the current imbalances in the global patterns of consumption and production. This results in excessive demands and unsustainable lifestyles among the richer segments, which place immense stress on the environment.** Changing consumption patterns will require a multipronged strategy focusing on demand, meeting the basic needs of the poor, and reducing wastage and the **use of finite resources** in the production process. ²

THE VEDIC DIRECTION

Though the above points refer to the importance of a sustainable lifestyle, they don't have a strong underlying foundation. But Vedic science addresses the same issue much more deeply with a solid basis. According to Sri Isopanishad , the most confidential of the 108 Upanishads , the issue is addressed as follows :

Isopanishad Verse One

Everything animate or inanimate that is within the universe is controlled and owned by the Lord. One should therefore accept only those things necessary for himself , which are set aside as his quota , and one should not accept other things , knowing well to whom they belong.

UNSATIABLE GREED OF HUMANS

There is a very interesting example in this connection which very simply demonstrates our never ending tendency to accumulate more than necessary. If we throw a bag of grain on the street , pigeons may come and eat four or five small grains and then go away. They will not take more than they can eat, and having eaten they go freely on their way. But if we were to put many bags of flour on the sidewalk and invite people to come and get them , one man would take ten or twenty bags and another would take fifteen and thirty and so on. But those who do not have the means to carry so much away will not be able to take more than a bag or two. Thus the distribution will be uneven. This is the modern advancement of civilization.

According to the above verse, everything belongs to the Supreme Lord, and we can accept whatever we need , but not more. That is real knowledge. There is actually no scarcity of anything. Everything is sufficient, provided that we know how to distribute it. However, the deplorable condition is that one is taking more than he needs while another is starving.

Isopanishad Verse Two

One may aspire to live for hundreds of years if he continuously goes on working in that way, for that sort of work will not bind him to the law of karma. There is no alternative to this way for man.

The above verse states that there is only one right path and there is no alternative to it (See “Introduction” , Page 3) It also says that if mankind follows the instructions of Verse one and accepts the authority of God, then he is not governed by the law of karma which binds one to a never ending cycle of action and reactions.

MUST TREAT THE ROOT CAUSE

“Given that the disproportionately high level of natural resource use of the rich industrialized countries cannot be reproduced on a worldwide scale, these countries should reduce their use of natural resources so that their consumption level can be reproduced on a worldwide scale.”

Friends of the Earth Netherlands ¹²

The problem of sustainable consumption has been raised world-wide and many solutions have been proposed. But all these solutions do not address the issue to the core and are usually presented from an industrialization point of view , dealing with such issues as globalization , poverty , superficial measures of progress like GNP etc. Such solutions are bound to fail due the very nature of market-based mechanisms which are fluctuating in nature and are subject to such ills as inflation and unemployment. This is the very anti-thesis of sustainability.

What is desired is self-sufficiency in every respect. Instead of adapting a centralized model and then trying to come up with a solution , de-centralization of resource allocation should be done according to the above discussion. The Vedic lifestyle ensures proper usage of resources and is also simple to adopt. A simple lifestyle is the key to treat the cause. The Vedic motto is “Simple living , high thinking”.

Quality of Life

ADVANCED TECHNOLOGY AND POOR QUALITY OF LIFE

It is easy to see how the principle of *Preyas* discussed in the previous section applies to the modern society. In the name of advanced technology and the desire to fulfill unlimited material wants, mankind makes all kinds of efforts. All this is related to a progressing quality of life by the society and its leaders. This propaganda is popularly ingrained in our minds through the media, through books, magazines, friends and other agencies. Is this a fact, or just popular opinion?

DIRECT ASSAULT ON NATURE

Of course, one would be foolish to argue that science and technology have not advanced by leaps and bounds in the last four decades. Fifty years ago, you could hardly expect to watch Star Television (and become irradiated) in the comfort of your home, while eating a stale TV dinner carefully preserved in the refrigerator. Fifty years ago, you could hardly expect to drive in your new Maruti 1000 through the polluted city roads of Delhi. Fifty years ago, you could expect to find hospitals treating AIDS and Cancer. Fifty years ago, you could hardly expect the productive chemical industries to cause rainfall, which could supply all "essential" acids to our high school labs. Fifty years ago, you could hardly expect space shuttles blowing up in mid air. Fifty years ago, you could hardly expect the Three-Mile Island or Chernobyl nuclear disasters as the gifts of the Atomic Age. Fifty years ago, you could hardly expect major oceanliners causing major oil spills, killing many millions of aquatics and many more...

Whatever yardstick we chose, aren't basic contentment and peace of mind necessary ingredients of good quality life?

There will still be skeptics, who will argue, that in the future science will find a solution to these few(!) problems such as ozone layer depletion, ground water poisoning, nuclear radiation, acid rains, teenage pregnancies, AIDS, cancer etc. But these problems are not due to modern science at all. They are due to misuse of science!

The Myth of Over Population

Current leaders are quick to use population as a **convenient scapegoat** as a cause of all our miseries, hunger problem and quick depletion of natural resources. Today everything gets blamed on overpopulation. It is an easy device to fool the masses in general and to convince them that it is not the leaders or the government to blame but something else. It serves as a very easy way to shift the focus from the real cause to something else. Actually it is not a problem of over-population but a issue of gross exploitation and mismanagement. Earth can feed much more than the world's present population. According to the Vedas, the Lord declares himself to be the father of all living beings. God is not a poor man , incapable of looking after his children. His opulence is unlimited. But we misuse our free will in various perverted ways to cause a dreadful situation for ourselves and the other living entities. Overpopulation is a theory concocted to conceal the sin of mismanagement. By turning everyone's attention to this red herring, we have conveniently side stepped the real problem. In fact, prices of foodstuffs are increasing even in countries like America and Australia where population is stagnant or going down.

EXAMPLES OF MISMANAGEMENT

The points discussed previously in the "The Hunger Problem" clearly show how wasteful our current food consumption style is. People have been misled to believe that eating animal flesh is the only means to obtain the protein essential for good health. Moreover, cultivating rice yields six to ten times more usable proteins than an identical piece of land used for cultivating meat. Soy beans yield fifty percent more than rice. Note further that animal slaughter on the present huge scales rips the ecological balance apart. There are lots of other avenues of mismanagement. There is heavy misuse of natural resources in so many other ways. The excessive use of fertilizers has practically polluted the ground water and eaten up the top soil. Massive deforestation in the rain forests have accelerated the environmental degradation. Rapid industrialization without any long term concerns has caused havoc in the lives of people. People

are encouraged to leave their rural homes in search of seemingly lucrative jobs, only to work like donkeys in the hot sun in big polluted cities for a pittance.

Humans must realize that we all live downstream. If we offer pollution and waste to the environment we can only expect the same in return. Only people who are disciplined and manage their environment properly end up being prosperous and healthy.

The importance of cow

"During the reign of Maharaja Yudhisthira, the clouds showered all the water that people needed, and the earth produced all the necessities of man in profusion. Due to its fatty milk bag and cheerful attitude the cow used to moisten the grazing ground with milk.

Srimad-Bhagavatam 1.10.4

In the Vedic system, the main emphasis is on cows, oxen, and land. According to Vedas, the cow is like our mother, because her milk is very essential for the development of fine intelligence. In agriculture cows and oxen are indispensable. (See "Agriculture and Self Sustainability" on Page 26). Therefore, according to the Vedic system, the cow is to be carefully protected. *Go - raksya* is a vital human principle.

It is an amazing fact that the cows eat dry grass and produce the most miraculous of foods: milk. It is a mystic potency of the cow. In fact every product of a cow is useful especially its dung and urine.

LIVING COWS ARE AN ECONOMIC ASSET

It is quite clear that a living cow yields society more food than a dead one-in the form of a continuing supply of milk, cheese, butter, yogurt and other high-protein foods. In 1971, Stewart Odend'hal of the University of Missouri conducted a detailed study of cows in Bengal

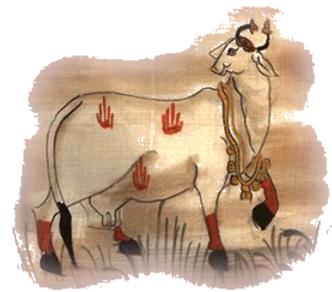


Fig 4. Godhana

and found that far from depriving humans of food, they ate only inedible remains of harvested crops (rice husk, tops of sugarcane, etc.) and grass. "Basically," he said, "the cattle convert items of little direct human value into products of immediate utility." This should put to rest the myth that people are starving in India because they will not kill their cows. Interestingly enough, India recently seems to have surmounted its food problems, which have always had more to do with occasional severe drought or political upheaval than with sacred cows. A panel of experts at the Agency for International Development, in a statement cited in the Congressional Record for December 2, 1980, concluded, "India produces enough to feed all its people."

If allowed to live, cows produce high quality, protein-rich foods in amounts that stagger the imagination. In America, there is a deliberate attempt to limit dairy production; nevertheless, Representative Sam Gibbons of Florida recently reported to Congress that the U.S. government was being forced to stockpile "mountains of butter, cheese, and nonfat dried milk." He told his colleagues, "We currently own about 440 million pounds of butter, 545, million pound of cheese, and about 765 million pounds of nonfat dried milk." The supply grows by about 45 million pounds each week. In fact, the 10 million cows in American provide so much milk that the government periodically releases millions of pounds of dairy products for free distribution to the poor and hungry. It's abundantly clear that cows (living ones) are one of mankind's most valuable food resources.

Movement to save seals, dolphins, and whales from slaughter are flourishing-so why shouldn't there be a movement to save the cow? From the economic standpoint alone, it would seem to be a sound idea-unless you happen to be part of the meat industry, which is increasingly worried about the growth of vegetarianism. In June 1977, a major trade magazine, Farm Journal, printed an editorial entitled, "Who Will Defend the Good Name of Beef?" The magazine urged the nation's beef-cattle raisers to chip in \$40 million to finance publicity to keep beef consumption and prices sky high.¹¹

COW DUNG

Imagine a self-sufficient village that meets its energy, fertilizer and food requirements in its own. Cow dung makes all this possible. Its utility ranges from an important fuel to repelling pests. It is also one of the most decentralized resources available at a very low cost. Despite all these, we have not exploited cow dung's potential fully. Cow dung and urine also help in making medicinal preparations. Abdul Warsi , a Unani practitioner from Durg in Madhya Pradesh says "Take a preparation made by me which



Fig 5. A Poster campaigning against beef

contains cow dung and urine and see your obesity vanish.” He treats patients free of cost for diseases ranging from hypertension to tumours. ¹³

Also, in the Vedic System, cow dung is the natural fertilizer. (See “Agriculture and Self Sustainability” on Page 26)

"Progressive human civilization is based on brahminical culture, God consciousness and protection of cows. All economic development of the state by trade, commerce, agriculture and industries must be fully utilized in relation to the above principles, otherwise all so-called economic development becomes a source of degradation...Where wealth and strength are not engaged in the advancement of brahminical culture, God consciousness and cow protection, the state and home are surely doomed by Providence.

Srimad-Bhagavatam 1.19.3

BEING CRUEL TO OUR OWN MOTHER

One of the primary responsibilities of the society is to protect the cows. This beloved animal is declared by the Vedas to be one of man's seven original mothers. A gentle, giving creature, she asks only a little grass from which a world of wonderful foods spring forth. Milk, curd, butter, cream, yogurt, ghee, cheese, ice cream and the enumerable preparations from them nurture not only the body, but the mind and spirit as well. Sadly, the payment to our mother for such nice service is a one way ticket to the horrors of the slaughterhouse. For years the cruel practice of cow killing was restricted primarily to the West, but no more. Today even in India people are enjoying the flesh of this most benevolent of God's creations. The result of such illicit activity, of course, is an ongoing concomitant karmic reaction, which is surely wreaking untold misery the world over.

Agriculture and Self Sustainability

THE MODERN-DAY AGRICULTURE

Modern agricultural practices lead to the saturation of soil and water with chemicals used as fertilizers and pesticides. Data show that the total production of pesticides in India has increased from 13,948 tonne in 1966 to 88,890 tonne in 1994-95. By 2025 India may have to feed 1.6 billion people and may need about 301 million tonne (mt) foodgrain alone. This means more fertilizers and more pesticides.

Scientists note that availability of good quality land and water is rapidly declining due to chemical-intensive agriculture practices (See also “Exploitation and Poor Planning” on Page 7) The toxins generated enter the human body through the food chain. Intensive agriculture also leads to depletion of micronutrients such as copper and molybdenum from the soil. This leads to poor food quality and micronutrient deficiency in human beings⁴

FIELD ECONOMICS

Today the field production has been made dependent on factory production. People think that instead of following the instructions of the Lord, we can simply increase production of the factory and thus become self-sufficient. But there are inherent problems with making agriculture and milk production dependent on technology. For one thing, It makes the world of politics enter into agriculture. And a small increase in the price of oil can cause severe inflation of food prices. World political climate will also determine which crops a particular country grows.

This ideology runs completely counter-logical to the goal of self-sufficiency and bringing agriculture into the mainstream. Such an economy may artificially thrive for some time, but it cannot provide a lasting solution.

Agriculture and milk - production should never be made subordinate to technology!

The real wealth is in agricultural fields, cows and bulls. An intelligent society will maintain and protect its cows and ox very carefully. Cows mean milk, butter, ghee, yogurt, cheese and so many other

wonderful things. Cows and bulls also give plenty of manure, which is an excellent fertilizer. So, cows are called *godhana*.

THE IMPORTANCE OF AGRICULTURE

Bhagavad Gita - Verse 18.44

krsi-go-raksya vanijyam

vaisya karma svabhava jam

"The duty of the mercantile community is agriculture and cow-protection"

One should be satisfied with agricultural produce rather than go into the large cities to be engaged in industry. Peaceful life depending on agricultural produce can bring a person real happiness and prosperity, not otherwise.

In Bhagavad Gita, it is stated:

Bhagavad Gita - Verse 3.14

“All living entities subsist on grains, grains are produced by rains, and rains result from performance of sacrifice. Without performance of sacrifice, there is no possibility of rains”.

In the Vedic times the main emphasis was on cows, oxen and land. Any man could maintain himself with a little land, cows and ox. In fact, even small farmers could easily protect cows and provide ample grazing pastures. Cow protection is very important for the proper balance in society.

THE ROLE OF OXEN

In the Vedic context, growing foodgrains means growing grain with the oxen. Someone might object that we can grow more grain with tractors, but in fact, that is only in the short run. In the long run, growing food grains with tractors will not "develop the earth"; it will destroy the earth:

Producing grain with tractors ruins the earth and eventually makes it barren.

“No permanent or effective system of agriculture has ever been devised without the animal. Many attempts have been made, but sooner or later they breakdown. The replacement of livestock by artificial methods is always followed by disease the moment the original store of fertility is exhausted”

Sir Albert Howard¹⁴

THE NATURAL FERTILIZER

In the Vedic System, Cow dung is the natural fertilizer. Cow dung is considered even more precious than gold and the people do not know this. The Mahabharata states that the goddess of fortune, Lakshmi-devi resides in cow dung and urine! With cow dung and urine, even desert soils like those found in Northern India and in the Middle East can be transformed into humus-rich soils, which can retain moisture.

There is no need for synthetic stuff, which are now being found to pollute the water table, river water and the atmosphere. These quick yield methods will never last.

Manure alone makes the cow and bull protection valuable. Milk is just bonus. By increased manure, the fields will produce bountiful supplies, which in turn will reflect in milk production.

With plenty of manure, water requirements will be much less. With enough cow and bull manure, even cultivation and plowing is not so much required. The main purpose of plowing is to loosen the topsoil, which gets compacted by rain and feet. Cow manure makes the soils rich in humus and minimizes water requirements. All this is an integral part of the Vedic wisdom. But in our pursuit of technological advancement, we have forgotten the most basic facts.

Sanitation

WASTED EFFORTS

The desire to be clean and modern creates further problems. Most conventional sanitation technologies are based either on removal of human excreta through a network of underground pipes or on-site storage in deep pits. In both cases there are disposal problems. Says Uno Winblad, a Swedish consultant, "The sewage system is causing a major ecological problem. Not only does it lead to contamination of our lakes and rivers, but it also leads to a lot of wastage of water."

There is a need for a third option. Dry compost latrines which disintegrate the waste are the solution, he says. For this purpose is required a latrine where faeces and urine do not come into contact with each other.⁴

In the Vedic System the current sewage disposal system is not recommended. Currently we have built our toilets into our buildings. By nature, these are most unclean, being the storehouse of so many high-powered germs. Previously, human excretions were automatically rendered antiseptic by exposure to direct sunlight. Now, we very "scientifically" mix our excrements with water, have an elaborate sewerage system, and finally let that same water mix with our drinking water. This is highly unintelligent. And somehow, we have to drink the same water. It may be filtered but basically this is an artificial strategy. We waste too many natural resources this way. And we create artificial need for energy.

Conclusion

DECENTRALIZATION

Today the society is being misled in a wholesale fashion. We have devised a whole system of economic instability. Only the exploiters remain in the controlling positions whereas the masses are helpless and are dictated by the market fluctuations and other factors. Because of failure to give true education to people, the people at large have been fooled into accepting this unnatural course of things. Today the system is so interdependent and helpless that if the petrol costs go up because of international politics, there is an increase in the price of rice and wheat. If we were less dependent on the world, by means of natural sustainable economy, then such situations will not arise.

The solution to all this is to promote de-centralization in the use of resources. By promoting a local grain-based economy, the dependence on the modern economic structure will decrease and reduce our problems. Localized economics go hand in hand with simple living. And localized economics go hand in hand with cow protection, especially productive engagement of the oxen

The over all effect of the development of a localized, self-sufficient economic system will be to accord a high degree of independence and freedom from worry to the society. Independence from petroleum powered shipping and agriculture means society is free from worries about oil wars and embargoes. Independence from the dollar means inflation and unemployment do not victimize society. Therefore, in essence simple living brings independence.

We have to consider developing our economics so that as far as possible we meet the real needs of living through the natural economy.

There must a fundamental change in our value system which are currently being fed by the mechanistic world view which projects humans as machines just satisfying their needs. According to the direction of the Vedas, we again need to adopt a God-centered lifestyle and live in peace and harmony with nature.

THE REAL CAUSE

As long as the leaders and the intelligentsia fail to realize that the real goal of human life is to lead a godly life instead of trying to feed our unlimited material desires, these problems will only increase. In the Vedic times, the leaders were not only administrators, they were sages as well. They ruled the state based on guidance received from the Vedas.

PROPER EDUCATION

What is needed today is a community of environmentalists willing to tackle problems at the source. Unless communities become disciplined and manage their environment in a sustainable manner the environment is bound to degrade.

Everyone must be educated in the problems of flesh eating, and ban all animal killing for the purpose of the palate. Mass media should be used to teach the people the advantages of leading a simpler way of life, than to artificially try to fulfill their needs. The importance of cow protection needs to be reestablished in the society. Vedas promote *godhana* as real wealth.

Our consumption patterns also need to be changed to lead a more sustainable and peaceful lifestyle. Our parameters of “quality of life” are so artificial that they can not provide real satisfaction. Ultimately, the lifestyle will be perfect only if the people are educated at a large scale and a change in their internal consciousness is brought about. This is the root cause. Just external formalities will not help. The change has to be internal, not external. This education has to start from the school if very long-term sustenance is required.

The importance of agriculture needs to be ingrained in the minds of the people and more natural ways need to be adopted. Any artificial means will only result in long term destruction.

It is important to understand that it is best not to mix the pure Vedic science with our own ideas and misconceptions otherwise the desired result will not be produced. The leaders of our society need to consider this seriously and must be educated properly so that they can actually bring about this change slowly and steadily. The Vedic science is a long-term science and if it is changed to meet short-term needs, it will only result in frustration.

Appendix A

A Peek inside a Slaughterhouse

Each year about 134 million mammals and 3 billion birds are killed for food in America. But few people make any conscious connections between the slaughter and the meat products that appear on their tables. A case in point: In television commercials a clown called Ronald McDonald tells kiddies that hamburgers grow in hamburger patches. The truth is not so pleasant. Commercial slaughterhouses are like visions of hell. Screaming animals are stunned by hammer blows, electric shocks and concussion guns. They are then hoisted into the air by their feet and move through the factories of death on mechanized conveyer systems. Often still alive, their throats are sliced and their flesh is cut off. Describing his reaction to a visit to a slaughterhouse, champion tennis player Peter Burwash wrote in his book *A Vegetarian Primer*, “I am no shrinking violet. I played hockey until half of my teeth were knocked down my throat and I am extremely competitive on tennis court. But that experience at the slaughterhouse overwhelmed me. When I walked out of there, I knew I would never again harm an animal! I knew all the physiological, economic and ecological arguments supporting vegetarianism, but it was first hand experience of man’s cruelty to animals, that laid the real groundwork for my commitment to vegetarianism.”



Fig 6. Plight of cattle in slaughterhouses

An important point to note is that the person who slaughters the animal, the seller, the buyer, the person who cooks it and the eater are all equal partners in this brutal and merciless crime and according the Vedic Law of Karma, each person must face the heavy consequences incurred by the sinful reactions.

Appendix B

Energy Wastage in Meat Consumption

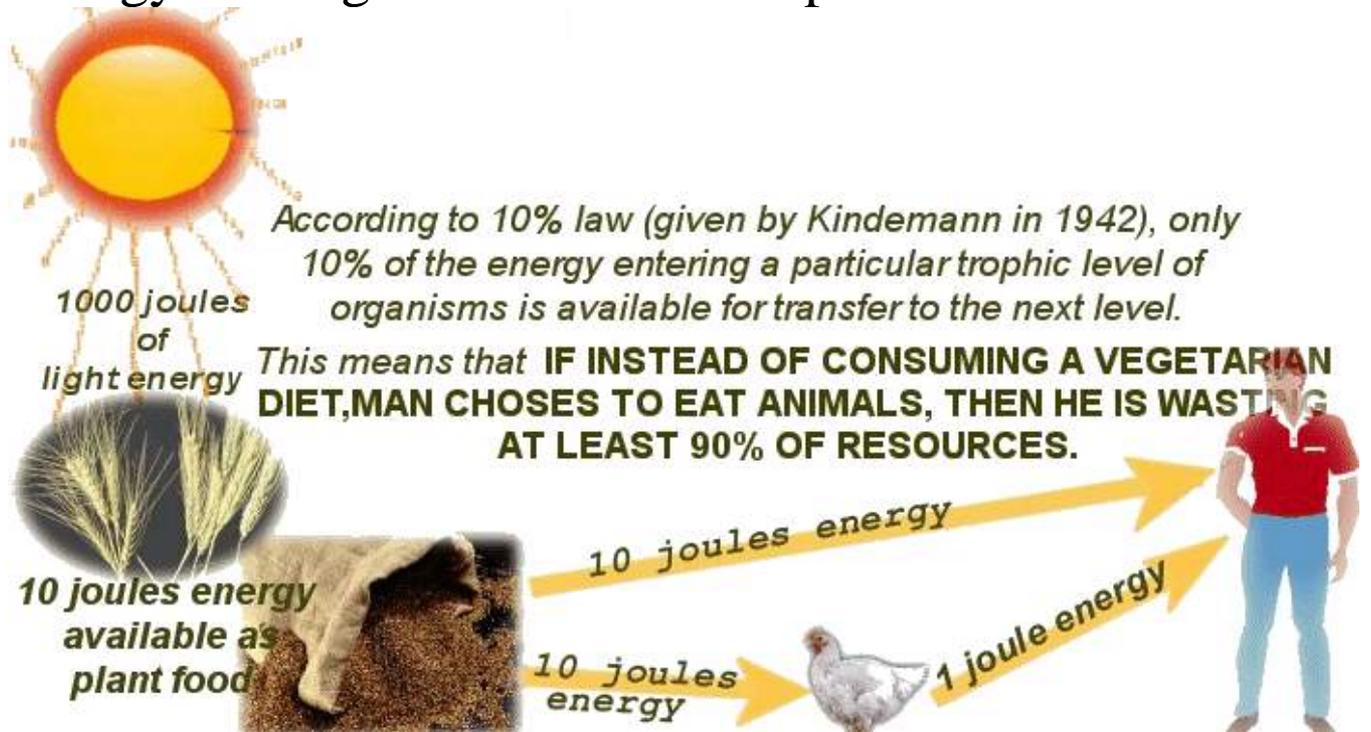


Fig 7. Energy transfer in the natural food cycle and the enormous loss involved in flesh consumption

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