The barnyard, the Barney issues and the brainy concerns

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Abstract
A lot of discussions about meat consumption is consuming a lot of economic energy and resources. With freedom of eating argued upon, Voltaire dictum remembered, Indian Liberalism questioned and politicians tediously digging in and out of the issue, the media coverage completes the picture. Within all this hullabaloo important aspects of the issue are being missed. The cantors of discussion need to be redefined. Economic vegetarianism should be the focus. Its benefit and long term economic sustainability must be highlighted. The lost voices of the economist, environmentalist and the nutritionist should be made heard.

Apart from sentiments the economic cost of the vegetarian plate should be compared with the non-vegetarian platter. The vast livestock wealth should be put to efficient use. They should be given their right importance of being national assets. And to be used for long term sustainability and competitive advantage rather than immediate currency exchange in the form of meat exports. There is a dearth of information regarding the benefits of adopting economic vegetarianism. The need is not to communalise the meat eating preferences. What is required is to activate the grey cells that have resulted in the inability to make ‘educated decisions’ regarding what and how much to eat.

Keywords: Economic vegetarianism, Livestock, sustainability, consumption, ecological consequences.

1. Introduction
Our homeland is bestowed with the world’s largest livestock. Apart from providing an economic support they are closely integrated with the agriculture ecosystem. Recent years have seen the pink revolution leading to the increased export earnings through meat. The leather industry which is a one of the major foreign exchange earner for the country has seen tremendous growth in the last few years. Though these two industries are logically interrelated and dependent, but we as citizens of nation somehow see these as two distant industries.

Today the share of the value added finished products in the total exports from leather sector are 80% as against 20% in 1970s. With an annual turnover of over US$ 11 billion, the export of leather and leather products increased manifold over the past decades and touched US$ 5.91 billion during 2013-14, recording a cumulative annual growth rate of about 14.77% (5 years) (Indian Leather industry).

Presented below is a glimpse shot of the livestock in India.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo Population</td>
<td>Largest in the world. 84.2 million Buffaloes, 204.5 million cattle, 50.8 million sheep, 115.3 million goats, 12.8 million pigs and 307.1 million Poultry. APEDA</td>
</tr>
<tr>
<td>India’s World buffalo population</td>
<td>84.2 million buffaloes (APEDA)</td>
</tr>
<tr>
<td>Cattle Population</td>
<td>204.5 million (APEDA)</td>
</tr>
<tr>
<td>World cattle population</td>
<td>14.7 % (Meattechasia 2015,)</td>
</tr>
<tr>
<td>Registered slaughter houses</td>
<td>2,702</td>
</tr>
<tr>
<td>Meat production</td>
<td>They contribute to 1.48 million metric tonnes of meat, amounting 24.54% of the total meat produced in the country (Buffalopedia)</td>
</tr>
<tr>
<td>Value of output from the country’s livestock sector at current prices</td>
<td>Rs 4,59,051 crore in 2011-12, 24.8 per cent of the total worth of output from agricultural and allied sector at current price. The value of output from the meat group in 2011-12 was Rs. 83.641 crore (Meattechasia 2015).</td>
</tr>
<tr>
<td>Contribution to GDP</td>
<td>6 %</td>
</tr>
<tr>
<td>Contribution to Agricultural GDP</td>
<td>25%</td>
</tr>
<tr>
<td>Growth Rate of Livestock sector</td>
<td>5.6 percent(last two decades)</td>
</tr>
<tr>
<td>Growth Rate of Agricultural sector</td>
<td>3.3 percent</td>
</tr>
</tbody>
</table>

Source:- (Ovais & Ovais, May 2015)
Table 2: India’s export of leather and leather products for Five years

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Leather</td>
<td>627.95</td>
<td>841.13</td>
<td>1024.69</td>
<td>1093.73</td>
<td>1284.57</td>
</tr>
<tr>
<td>Footwear</td>
<td>1507.59</td>
<td>1758.67</td>
<td>2079.14</td>
<td>2066.91</td>
<td>2531.04</td>
</tr>
<tr>
<td>Leather Garments</td>
<td>428.62</td>
<td>425.04</td>
<td>572.45</td>
<td>563.54</td>
<td>596.16</td>
</tr>
<tr>
<td>Leather Goods</td>
<td>757.02</td>
<td>855.78</td>
<td>1089.71</td>
<td>1180.82</td>
<td>1351.50</td>
</tr>
<tr>
<td>Saddlery &amp; Harness</td>
<td>83.39</td>
<td>87.92</td>
<td>107.54</td>
<td>110.41</td>
<td>145.54</td>
</tr>
<tr>
<td>Total</td>
<td>3404.57</td>
<td>3968.54</td>
<td>4873.53</td>
<td>5015.41</td>
<td>5908.82</td>
</tr>
</tbody>
</table>

% Growth 16.57% 22.80% 29.1% 17.81%

Source: DGCI&S

According to the research of author David Simon, the externalized cost of our animal food system totals about $414 billion per year, which is carried by all of us. That $4 Big Mac actually costs society about $11, and even if you don't eat meat, you still help to underwrite about $38 billion in animal food subsidies each year. (Simon, 2015)

The “Should Be” Barney Issues

Land wastage

It is unnecessary to detail and elaborate upon the growing importance of land in each and every sphere of our lives. It is always advocated that whatever is scarce and valuable use it rationally, right! Let’s just look at the figure below.

![Land needed for the production of 1 kilo food:](image)

**Fig 1:**

The above graph clearly shows the land used to produce different types of food products. The crux is that on the same amount of land needed to produce one kilo of meat, 200 kg of tomatoes or 160 kg of potatoes could be harvested in the same time span (Schreier, 2010). In another research study in Switzerland reported that approximately 67% of agricultural land of Switzerland is used for keeping livestock and the production of animal feed. This corresponds with the worldwide average (Nierenberg, September 2005). A similar picture can be seen in the USA, where World watch institute reported that 230,000 km² of land are taken up with the production of hay for farm animals, and only 16,000 km² (= 7%) are used for growing plant foods for humans (Worldwatch, 2004). Moreover the indirect wastage of land required for producing meat also goes largely unaccounted. It is estimated that: 40% of all rainforest in Central America has been cleared or burned down within the last 40 years, mainly to gain land for grazing and the cultivation of fodder (SVV). It is unnecessary to describe the growing value of land in the present era. And there doesn’t seem any scope of its reduced importance in the coming decades too. In spite of these facts if educated people still prefer food over thought, rather than food for thought, one can only wait to see the consequences of ignoring facts.

Water Consumption

Time and again predictions have been made that future wars will be for water. The increasing trend of packed water suffices this forecast. So logically we should save water, right! This would mean that we should avoid wastage of the scare resource of H₂O. Statistics show that for an average household needs around 2–5 litres of water for drinking, and 100–500 litres for everything else (such as showering, washing etc.) And 2,000–5,000 litres needed every day for the production of foodstuffs for an average family. (SVV). Research by Bohanec 2014 presented that Humans drink less than one gallon of water per day, but a cow can drink up to 23 gallons of water a day, according to a North Dakota State University study. That’s a huge amount of water to keep millions of animals alive (Bohanec, 2014). Similar statistics are being presented by other researchers too.

The research by Stockholm International Water Institute estimates that, worldwide, approximately 1,200 m³ of water are required per person per year for the production of foodstuffs. In the poorest regions of the world, where people can hardly afford animal products, the amount of water needed is around 600 m³. In comparison, regions that consume the most meat (the USA and EU) require circa 1,800 m³ annually per person (SIWI, 2004).

Bekhechi in his article “Meat Is the Biggest Waste of Water” in Huffington post reported that it takes, on average, 1,500 litres of water to produce one kilogram of beef. To put this in context, that is the equivalent of 50 baths of water to produce one steak - 15 times more water than is needed to produce one kilogram of wheat. To produce the diet of a typical meat-eater takes the equivalent of 5,000 litres of water per day - more than enough to water your garden and the gardens of all your neighbours as well (Bekhechi, 2012). Similar figures were reported by Worldwatch institute report in 2004 which claimed that one could shower every day for a year with the same amount of water needed to produce one kilo of meat (Worldwatch, 2004). Bohanec in his article on “California’s Drought — Who’s Really Using all the Water?” further elaborated the fact that you could save more water just by going more vegan. He stated that most people shower every day an average of about seven minutes of hot water with the showerhead flowing out about two gallons of water a minute. The Water Education Foundation calculates that every pound of California beef requires about 2,464 gallons of water to produce. You would save more water just by replacing a pound of beef with plant foods than you would by not showering for six months! (Bohanec, 2014).

A study by Rockström and et al in 1999 gave a direct comparison of a non-vegetarian v/s vegetarian diet. Their research showed that a diet consisting of 80% plant-based foods and 20% meat (in industrialised countries the proportion of meat is actually 30–35%) requires 1,300 m³ of water per year, while a purely vegetarian diet requires around half this amount (Rockström, Gordon, Folke, Falkenmark, & Engwall, 1999).
The below table gives a clear shot idea of the water required to produce different foodstuff.

**Table 3:** Typical values for the volume of water required to produce common foodstuffs

<table>
<thead>
<tr>
<th>Foodstuff</th>
<th>Quantity</th>
<th>Water consumption, litres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chocolate</td>
<td>1 kg</td>
<td>17,196</td>
</tr>
<tr>
<td>Beef</td>
<td>1 kg</td>
<td>15,415</td>
</tr>
<tr>
<td>Sheep Meat</td>
<td>1 kg</td>
<td>10,412</td>
</tr>
<tr>
<td>Pork</td>
<td>1 kg</td>
<td>5,988</td>
</tr>
<tr>
<td>Butter</td>
<td>1 kg</td>
<td>5,553</td>
</tr>
<tr>
<td>Chicken meat</td>
<td>1 kg</td>
<td>4,325</td>
</tr>
<tr>
<td>Cheese</td>
<td>1 kg</td>
<td>3,178</td>
</tr>
<tr>
<td>Olives</td>
<td>1 kg</td>
<td>3,025</td>
</tr>
<tr>
<td>Rice</td>
<td>1 kg</td>
<td>2,497</td>
</tr>
<tr>
<td>Cotton</td>
<td>1 @ 250g</td>
<td>2,495</td>
</tr>
<tr>
<td>Pasta (dry)</td>
<td>1 kg</td>
<td>1,849</td>
</tr>
<tr>
<td>Bread</td>
<td>1 kg</td>
<td>1,608</td>
</tr>
<tr>
<td>Pizza</td>
<td>1 unit</td>
<td>1,239</td>
</tr>
<tr>
<td>Apple</td>
<td>1 kg</td>
<td>822</td>
</tr>
<tr>
<td>Banana</td>
<td>1 kg</td>
<td>790</td>
</tr>
<tr>
<td>Potatoes</td>
<td>1 kg</td>
<td>287</td>
</tr>
<tr>
<td>Milk</td>
<td>1 x 250ml glass</td>
<td>255</td>
</tr>
<tr>
<td>Cabbage</td>
<td>1 kg</td>
<td>237</td>
</tr>
<tr>
<td>Tomato</td>
<td>1 kg</td>
<td>214</td>
</tr>
<tr>
<td>Egg</td>
<td>1</td>
<td>196</td>
</tr>
<tr>
<td>Wine</td>
<td>1 x 250ml glass</td>
<td>109</td>
</tr>
<tr>
<td>Beer</td>
<td>1 x 250ml glass</td>
<td>74</td>
</tr>
<tr>
<td>Tea</td>
<td>1 x 250 ml cup</td>
<td>27</td>
</tr>
</tbody>
</table>

*Source: IME (Sedghi, 2013)*

The increasing consumption of animal products leads to ever-larger quantities of water being needed in agriculture. Water is already being pumped up from depths of over 1,000 metres in certain parts of India. One generation ago, hand-dug wells were sufficient for farm irrigation. Today, 95% of these small pumps have run dry (Spiegel, 2004.).

The desirability of reducing our carbon footprint is generally recognized, but the related and equally urgent need to reduce our water footprint is often overlooked. Recent research has shown that about 27% of the water footprint of humanity is related to the production of animal products (Mekonnen and Hoekstra, 2011). Only 4% of the water footprint of humanity relates to water use at home. This means that if people consider reducing their water footprint, they should look critically at their diet rather than at their water use in the kitchen, bathroom, and garden. Wasting water never makes sense, so saving water at home when possible is certainly advisable, but if we limit our actions to water reductions at home, many of the most severe water problems in the world would hardly be lessened. (Hoekstra, April 2012, Vol. 2, No. 2)

Bekhechi observed that around 90% of the world's total managed water supply is used to grow food. Most of this is completely wasted by irrigating land used to grow crops for livestock rather than food for direct consumption by humans. A staggering one-third of the world's total cereal crop and more than 90% of the world's soya crop is used for animal feed. The water that it takes to grow all that, plus what it takes to clean away the filth of factory farms, transport trucks and abattoirs, means that the livestock industry is placing a serious strain on our water supply, and not surprisingly, most of the water comes from the countries that have the least. These statistics are being discussed world over and further researches conducted to estimate more accurate water footprint. The UN report stated that the livestock sector as, "one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global". The 2006 report, Livestock's Long Shadow, highlighted freshwater scarcity among the many environmental problems and called the livestock sector "a key player in increasing water use" and "probably the largest sectoral source of water pollution"(Bekhechi, 2012).

Reviewing the water situation in India. The country with a diverse population that is three times the size of the United States but one-third the physical size, India has the second largest population in the world. Although India has made improvements over the past decades to both the availability and quality of municipal drinking water systems, its large population has stressed planned water resources and rural areas are left out. In addition, rapid growth in India's urban areas has stretched government solutions, which have been compromised by over-privatization. Synder in his research stated that regardless of improvements to drinking water, many other water sources are contaminated with both bio and chemical pollutants, and over 21% of the country's diseases are water-related. Furthermore, only 33% of the country has access to traditional sanitation (Snyder). Moreover UNICEF report on Indian water situation mentioned that, "There will be constant competition over water, between farming families and urban dwellers, environmental conservationists and industrialists, minorities living off natural resources and entrepreneurs seeking to commodify the resources base for commercial gain-UNICEF report on Indian water" (Giridharadas, 20 Aug 2005)

In The New York Times Harris in his article Rains or Not, India Is Falling Short on Drinkable Water listed the following water situation in India.

1. India is facing a fresh water crisis. India has just 4% of the world’s fresh water — but 16% of the global population.
2. Half of India’s water supply in rural areas, where 70% of the country’s population lives, is routinely contaminated with toxic bacteria.

3. Every year, about 600,000 Indian children die of diarrhea or pneumonia, often caused by toxic water or poor hygiene.

4. Lack of clean water has even gone beyond affecting the health of Indians.

5. Employment in manufacturing in India has declined in recent years and a prime reason is that companies face difficulties getting clean water (Harris, 2014). Figure 3 and figure 4 present the water demanded by various sectors in India and also the utilizable water, demand, and available water in India respectively.

![Surface Water Withdrawals and Ground Water Withdrawals](source)

**Fig 3:** Water Demand by Sector

![Utilizable water, demand, and available water](source)

**Fig 4:** Utilizable water, demand, and available water

**Food wastage**

Coming to the food grains and pulses that are wasted in the form of animal feed, Food and Agriculture Organization of the United Nations reported in 2011 that much of the grain cultivated in the world is not for human consumption but is utilised for animal consumption. In the period from 2001 to 2007, on average 37% of the cereals produced in the world were used for animal feed (FAO, 2011).

A research by SVV stated that 7–16 kg of grain or soya beans are needed to produce 1 kg of meat. This can easily be defined as one of the most effective ways to waste foodstuffs (SVV). Isn’t it mind-boggling that world over we are talking about eradicating poverty and food crises and on the other hand ignoring facts. If not due to selfish desire of safeguarding our health and giving due respect to our hard earned money, let’s harp on the idea of being vegan for the cause of humanity.

The earth save foundation reported that 57% of the grain in Switzerland is still being fed to animals (1990). In the USA, 8 billion slaughter animals eat their way through 80% of the grain harvest. 90% of the world’s soya beans serve as animal fodder. That would mean that if Americans ate 10% less meat, the quantity of the grain saved could protect around one billion people from starvation (SVV). In Switzerland alone, about 1,700,000 tons of concentrated feed (mostly grain) are fed to livestock. Switzerland may be able to afford this waste; however, the figures are not much different in developing countries. The FAO reported that in 1981, 75% of the grain imports into the Third World were used for fodder. The domestic cultivation of foodstuffs also competes with the worldwide production of animal feed: in Egypt over the last 25 years the cultivation of corn as fodder has been given priority in fields that used to produce staple foods such as wheat, rice and millet. The proportion of land planted with grain used for fodder has thereby increased from 10% to 36% (Durning). Disturbed by these facts even if one decides to go for grass fed animals the grass is no greener there too. Research by Bohanec stated that pasture raised animals require more water than their factory farmed cousins, because they have a higher activity level and spend more time in the sun, especially during the summer months. Also the grass-fed beef can produce 50 to 60 percent more greenhouse gas emissions than their grain-eating counterparts, sometimes producing as much as four times more methane emissions than feedlot cattle, reports Science News (Bohanec, 2014).

An analogous pattern could be seen in other countries where meat consumption has increased. In 1950, 170 kg of grain per head was adequate to nourish the population of Taiwan. By 1990, meat and egg consumption had multiplied sixfold. The grain requirement per head has increased to 390 kg due to this extension of the food chain. Taking the case of Taiwan, despite steadily increasing harvests, it can only meet this rising demand through imports. While Taiwan was a grain exporter in 1950, in 1990 it had to import 74% of the quantity needed, mostly in the form of fodder (Durning). Similar figures apply to the former Soviet Union: meat consumption has tripled since 1950 while the demand for fodder has quadrupled. In 1990, cattle in the former Soviet Union consumed three times as much grain than the people. Imports of grain used as fodder reflect this, with an increase from almost zero in 1970 to 25 million tons per year in 1990. Through this, the Soviet Union became the world’s second largest importer of fodder (Earth save foundation). In total, approximately half of the grain produced worldwide is fed to animals so that their meat can be eaten.

Well that’s quite a significant fodder for thought for the responsible citizens of our country. Maybe the history of the above economies will lead us to where we are heading. While we should rearrange our platter for better survival chances we should also shuffle our causes to promote a particular
government act. What should be debated, bickered, argued is the meat exports of our country. This fight should be for sustainability, and the unity should be for self-reliance.

Forest Destruction through Liquid Manure
Scientific research clearly indicates that today's mass keeping of livestock is one of the main causes of forest destruction. Around 90% of ammonia emissions from agriculture come from liquid manure and dung (Mohr, January 1994). Biologist Dr. Hans Mohr states in «Spektrum der Wissenschaft», January 1994:
«An essential insight gained through ten years of research on forest damage is that the amounts of nitrogen, in particular ammonia, which stems primarily from agriculture, being released into the atmosphere must be reduced. [...] The disposal of the steadily increasing quantities of liquid manure and human excrement remains the cardinal problem», (Mohr, January 1994).

Today, human excrement is mostly disposed of by sewage plants; animal excrement, however, is still poured or sprayed on to fields. The result of this is that 85% of nitrogen (N) in the form of ammonia (NH3), today still considered to be mainly responsible for the destruction of forests, is caused by livestock emissions (Holzer, 1993).

Nitrates, actually an essential nutrient for meadows, forests and water-based life, can lead to over-fertilisation if found in excess. However, this was only noticed when it was already too late. Forests initially grew faster with a higher nitrogen supply, and only showed the first signs of damage once the soil was already over-saturated with nitrogen (SVV).

In 1992, the German Bundestag’s Research Committee into the Preservation of the Earth’s Atmosphere reached the same conclusion. On the subject of ammonia (NH3), they published the following text in «Climatic Changes Threaten National Development»:
«NH3-emissions are nationally (West Germany), continentally (Western Europe) and globally to be assigned 90% to agriculture and 80% to the keeping of livestock. 528,000 tons of NH3 are emitted annually in the Federal Republic of Germany. Ammonia originates in the cattle stable area, in pastures and through the storage and spreading of organic fertiliser. Ammonia and nitrogen release could be decreased by reducing the number of livestock, making changes in feeding and reducing the use of liquid manure as fertiliser. This would be desirable not only in ecological, but also in economic respects, (SVV).

Air pollution due to animal husbandry
Ammonia from animal faeces does not only play a deadly role in acid rain. Secondary aerosols form in the atmosphere through ammonia, endangering human health in the form of particulate matter (PM10) or fine dust. The Director of the Swiss Ministry for the Environment, Forests and Agriculture, Philippe Roche, reckons on 3,700 deaths annually due to fine dust in Switzerland. He estimates the additional health-related costs to be around 4.2 million Swiss francs per year (BUWAL, 2005). Swiss Union for Vegetarianism – www.vegetarismus.ch/en – with statistics from: Foodwatch Germany

Despite its large contribution to the problem, animal husbandry is seldom mentioned in the fight against fine dust. The reaction of Swiss President and Environment Minister Moritz Leuenberger at the press conference on particulate matter on 2 February 2006 shows how difficult politicians find it to address this topic. When asked about the contribution of animal farming to the fine dust problem, he merely replied that «it is an awkward topic». In the USA, pollution from animal factories is 130 times as high as the pollution from humans (Worldwatch, 2004).

The Greenhouse Effect
Up until now, traffic and industry have been held almost exclusively responsible for the greenhouse effect. Here too, the influence of animal husbandry has also been neglected for a long time. The head of the Wuppertal-Institute for Climate, Environment and Energy, Ernst Ulrich von Weizsäcker commented: «Cattle breeding’s contribution to the greenhouse effect is about the same as that of all automobile traffic, if we take into consideration the clearing of forests for cattle and for fodder. And the transformation of savannas into deserts, the erosion of mountain areas, the excessive need for water for cattle, and the gigantic energy requirement for keeping animals fattened are simply added reasons why we damage the environment further with each additional pound of beef (Rifkin, 1992).

The greenhouse effect is caused by the three gases methane, carbon dioxide and nitrogen oxide, among other things. All three gases originate through animal husbandry on a large scale. The 1.3 billion cattle kept worldwide (and the consumers of their meat) alone are responsible for 12% of annual methane gas emissions. Breeding of livestock creates 115 million tons (115,000,000,000 kg) of methane gas per year. This becomes even more critical when one considers that one molecule of methane contributes 25 times more to the greenhouse effect than one molecule of carbon dioxide (J.Rifkin, 1992).

Antibiotics and Hormones
Unnecessary to state that for long term sustainability the ecological balances needs to be checked. Activities disturbing this balance need to be curbed. One example of this disturbed equilibrium is the increased amount of antibiotics found in eatables. There have long been limits on the levels of antibiotic residues allowed in animal products intended for human...
consumption. In April 2005, a study published by the Consumer Protection Ministry in Nordrheim-Westphalen, Germany announced that antibiotics had been found in grain plants for the first time (EVANA, 2005). Excrement from animals treated with antibiotics is sprayed on the fields and through this spreads into the eco-system. Although the values measured were below the permitted limit for human foodstuffs, the constant absorption of small amounts of antibiotics causes bacteria to become resistant to the antibiotics normally used to kill them. Over time, these antibiotics lose their effectiveness. As a result, ever stronger medicines need to be developed which upset the natural balance even more.

All medicines and hormones (those used frequently in the USA to increase milk and meat output) that are given to animals end up in the eco-system sooner or later through meat, milk, eggs or excrement. The long-term consequences of this are impossible to predict (Blackwell).

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**The Ins and Outs of Meat Production**

**Inputs**
- Feed
  - A calorie of beef, pork, or poultry needs 11-17 calories of feed.
  - 80 percent of soybean harvest is eaten by animals, not people.
  - Feed containing meat and bone meal can cause mad cow disease, which has affected thousands of cattle in industrial countries.

**Outputs**
- Manure from intensive pig operations signed to lagoons can leak into groundwater or pollute nearby surface water.
- Methane
  - Belching, Natural livestock emit 16 percent of the world’s annual production of methane, a powerful greenhouse gas.
- Disease
  - Eating animal products high in saturated fat and cholesterol is linked to cancer, heart disease, other chronic illnesses.
  - Factory farm conditions can spread E. coli, Salmonella, and other food-borne pathogens.
  - Creutzfeld-Jakob disease, the human variant of mad cow disease, has killed at least 150 people.

**Source:** Worldwatch Paper #171: Happier Meals: Rethinking the Global Meat Industry (Nierenberg, September 2005)

**Fig 6:**

**Subsidies will find its way to those who tend cows.**

The last decade has seen an increasing trend of meat exports. The lucrative foreign currency from the pink revolution is so good a temptation that a lot of subsidies are being provided to ensure its increased demand in foreign countries. According to Agriculture Agricultural and Processed Food Products Export Development Authority (APEDA) is providing 25% to 60% subsidy on transport of meat, pre-cooling facilities, cold storage, brand publicity, quality control, packaging development, brand publicity etc. (savetemples.org)

It was observed by S. Mukherjee & V.S. Rawa that “The Centre provides a transport subsidy of Rs 70 a kg for buffalo meat exports. It also gives grants of 50 per cent for general areas and 75 per cent for hill areas up to Rs 15 crore for setting up and modernizing abattoirs. Between 2006-07 and 2011-12, the Centre’s total subsidy for setting up abattoirs was Rs 240 crore; another Rs 300 crore went into buffalo rearing. India became the world’s biggest buffalo meat exporter in 2012, ahead of Brazil.” (Business Standard, April 15, 2014). Blackwell too gave a glimpse of the same scenario in the international market where he noted that although the majority of the costs of meat production are passed on to the general public (i.e. taxpayers), this is not enough to keep meat production profitable. The industry is distorted by heavy subsidies to ensure that the production of meat is attractive to companies. Livestock farming is supported financially on an international basis, and thereby kept alive. Between 1963 and 1985, the World Bank pumped 1.5 billion dollars into livestock farming in Latin America alone, the majority of which went to large cattle farms (Durning & Brough). (Blackwell).

Another research shows that one reason why the meat industry still exists is that the revenues are being transferred into private ownership while the costs are still being shifted on to the public (and therefore the taxpayer) (Durning).

**The Brainy Concerns**

It is unnecessary to describe the growing value of land in the present era. What is required is only the activation of those dormant grey cells that will debate and argue for the long term sustainability and maximum utilisation of scare natural resources.

Little attention among scientists or policy makers is given to the relationship between meat and dairy consumption and water use. It is becoming increasingly relevant to study the implications of farm animals on water resource use, not only because global meat production almost doubled in the period from 1980 to 2004 (FAO, 2005), but also because meat production is projected to double in the period from 2000 to 2050 (Steinfeld et al., 2006). One concern is that India may lack overall long-term availability of replenishable water resources. While India's aquifers are currently associated with replenishing sources, the country is also a major grain producer with a great need for water to support the commodity. As with all countries with large agricultural output, excess water consumption for food production depletes the overall water table (Snyder).

There is no easy answer for India which must tap into water sources for food and human sustenance, but India's overall water availability is running dry, noted Snyder. He further added that India's water crisis is often attributed to lack of government planning, increased corporate privatization, industrial and human waste and government corruption. In addition, water scarcity in India is expected to worsen as the overall population is expected to increase to 1.6 billion by year 2050. To that end, global water scarcity is expected to become a leading cause of national political conflict in the future, and the prognosis for India is no different (Snyder). Now that should be the topic for debate amongst the politicians. What should be the cantor of the debate should be, is the value attached to meat consumption logical. What should be discussed is weather the alleged benefits of meat consumption surpass the proportionate cost of meat production. What out to be studied is the growth and fall of meat oriented societies. The analysis should be made on the irrational market driven push factors that are promoting the meat consumption in the society. What should be checked is the growth of meat oriented food chain. What need to be monitored is the social and psychological factors promoting meat consumption through advertisement. A leading authority on climate change, Lord
Stern, told The Times, "Meat is a wasteful use of water and creates a lot of greenhouse gases. It puts enormous pressure on the world's resources". He indicated that he favoured significantly higher prices for meat and other foods that contribute to climate change and concluded that "a vegetarian diet is better" (Bekhechi, 2012). According to estimates made by the renowned Worldwatch Institute in Washington, the price of meat would have to be doubled or tripled if one took into consideration the full ecological costs, including the burning of fossil fuels, lowering of the ground water level, chemical pollution of the soil and release of gases such as ammonia and methane (Durning & Brough). As such the most logical way for us to conserve water, land and other resources - and reduce animal suffering - is to kick our meat habit. We can save more water by not eating meat for just a few days than we can by not showering for an entire year. By going vegan, we'll be able to clean our cars and clear our consciences.(Bekhechi, 2012)

The ideology of a political party or a leader should not be made as the reason to oppose or support an act. The latent cells that urges for sustainability should be disturbed. If one needs to be selfish be selfish and decide the best platter for oneself, health wise and economics wise.

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