The Zoroastrian View of Ecology

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Today, the march of a dynamic technology and science, the carcinoma of a planless urbanization, the population explosion, the immense deposits of sewage and garbage, the cataclysmic nuclear tests, have all contributed to ravage the earth. Man's gradual devastation of the global environment has culminated in a crisis, which is both urgent and drastic. This is not merely a matter of aesthetics; the quality of life itself has deteriorated. Man's lack of sensitivity towards nature and his exploitative attitude to satisfy his ends, has perpetrated the present ecological imbalance.

The magnitude of the global ecological crisis may be gauged from the following data:

- In June 2013, the Indian Ministry of Environment and Forest revealed startling data: the area of forest land diverted across the country on an average stands at 135 hectares (about 333 acres) per day. This is due to development projects for which large tracts of forest land are handed over to public and private agencies.
- The Ganga whose length stretches over 2525 km is one of the most polluted rivers in the world. In September 2014, the Government of India informed the Supreme Court that it proposes to spend Rs. 51,000 crores in the next five years to completely stop discharge of untreated sewer and waste water from 118 towns into the Ganga river.
- A report from London in October 2014 prepared by the World Wildlife Fund (WWF) has found that 52% of the world's animals have vanished in 40 years i.e. from 1970-2010.
- The United Nation's climate experts had met in Copenhagen on October 27, 2014. The Intergovernmental Panel on Climate Change (IPCC) stated that emissions of three key greenhouse gases—carbon dioxide (CO2), methane

and nitrous oxide were at their highest levels since over 8,00,000 years. This would lead to global warming, droughts, floods, species extinctions, rising seas and health dangers.

• In November 2014, a report from Beijing highlighted the magnitude of pollution crisis faced by China due to its reliance on coal. As a result of this, over 6 lakh people died prematurely due to diseases caused by smog in 2012.

Mastery over nature:

Thus if we have to save planet earth we have to shape a fresh morally viable attitude to nature. The environmental imbalance is due to conflicting values and ideologies.

Darrol Bryant contends "We in the scientific West have sought to be masters over nature rather than partners with nature in a bio-human cosmic community."ⁱ Cromwell Crawford refers to this as a spiritual crisis and states, "These problems are symptoms of the more fundamental problem of how we think about our relation to the earth. Propelled by the legacy of Descartes, and popularised by the fruit of Renaissance humanism, westerners have viewed the physical world as essentially dead matter entitled to be exploited with impunity."ⁱⁱ

Nature is animate:

To a Zoroastrian, the ostensibly 'inert' world is full of life, which is sanctified as it is imbued with the fravashi, "the transcendental divine essence." All creatures, as well as plants possess the fravashi. Nature is seen as not only having its intrinsic value but is perceived as being sacred. In the biosphere all forms of life have a right to live and grow. Our concern for nature is not confined to only plants and vegetation; it respects all creatures. In one of the Afrins, a Zoroastrians recites, "I pray for the good of the life of all the living creatures which Ahura Mazda has created."ⁱⁱⁱ

Essential Dimensions:

Professor Hinnells has described Zoroastrianism as the world's first ecologically conscious religion.^{iv} Before we explore the dimensions of the Zoroastrian perception

of ecology as outlined in the scriptures, we have to understand the relationship between Ahura Mazda (God) and His creation.

Ahura Mazda is the architect of the celestial and terrestrial worlds. Zarathushtra's heart flows out in reverence to Him. In communion with His heavenly Father, he puts rhetorical questions to Him:

What being laid down paths for the sun and the stars? Who made the moon to wax and wane betimes? Whose might doth hold the earth and sky apart?

Who has brought forth the waters and the plants? Who guides the winds in their uncharted course? v

Ahura Mazda, the lord of wisdom^{vi} and the most beneficent^{vii} is not only the creator of the universe but also its protector and sustainer.^{viii} Being the absolute sovereign,^{ix} he reigns over His creation joyfully.^x The Gathas speak of His all-embracing love^{xi} and one of His names in the Hormazd Yasht is "I am the increasor of the world." This signifies Ahura Mazda's munificence, which encompasses every level of His creation.

The devout Zoroastrian regards the elements of nature with the most profound reverence. The Avestan texts clearly reflect this veneration for the earth, the air, the waters and even plant life. In his daily prayers he is reminded of the beauty and majesty of nature and from nature he turns to nature's God.

In my opinion, the most important ecological reference from our sacred literature is Yasna 12.7

> Of what faith are the waters, Of what faith the trees, Of what faith the bounteous mother earth, Of what faith Ahura Mazda, Of what faith Ahura Mazda, Of what faith was Zarathushtra, Of that faith and of that Law as well, A Mazda-worshipper am I.

Among the first prayers taught to Parsi children is the Confession of Faith (Jasa-Me-Avanghe-Mazda), which emphasizes the principle of non-violence (nidhasnaithishem) towards all living creatures. These values are embedded in the Zoroastrian psyche: man is a trustee of nature; he should not violate that trust. This ancient precept finds echo in the writings of Robert Bellah, for whom the only answer to the ecological issue is a moral ecology, which he defines as moral connectedness and interdependence. Others are part of us, not competitors against us.^{xii}

The most fundamental concept of Zoroastrianism, Asha (Vedic rta) is the foundation on which the Prophet based his religion. It is the Divine Plan to which creation moves. It is the immutable order of the resistless tides, the unswerving planets and the unfailing seasons. When man ravages the environment, he sets nature's order in turbulence. The Hom Yasht intones, "I am for those who preserve order, not for those who create disorder."^{xiii}

Man is urged to live in hamazor (harmony, co-operation, unity) with his fellow man and with nature. In the prayer, Namach-i-chahar nem (salutation to the four directions), a devotee turns respectfully towards each direction. In deferring thus to nature, he not only acknowledges the omnipotence of Ahura Mazda, but also develops a seminal bond with the environment, which is the temple of nature. Man is thus connected to the trees, mountains, animals and oceans in his daily life.

Zoroastrianism explains this interdependence in the form of the Amesha Spentas. These 'Holy Immortals' preside over the material creations. They represent the six attributes of Ahura Mazda.

"Every human being must strive to understand the Eternal Law of Truth and Righteousness (Asha) and must try to realize it in his daily life. In order to do this he must cultivate Love universal Love (Vohu-Mano) and realize it deep within his Inner Self. This Truth and Love thus realized must next be translated into Acts of Service (Kshathra). All through one must hold fast to firm unshaken Faith (Armaiti) Faith in the essential divinity and goodness of all creation. And thus one attains to

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Perfection and Immortality (Haurvatat and Ameretat). And becomes perfect as our Father in Heaven is perfect and conquers death."xiv

When these attributes are personified, they are taken as the guardians of the seven material creations in later Zoroastrian literature. Some scholars refer to them as Archangels. The Avesta and Pahlavi names of the Amesha Spentas together with the material creations over which they preside are given below:

Avesta	Pahlavi	Spiritual Creations	Material Creations
1. Ahura Mazda	Ohrmazd (Hormazd)	All creations	Mankind
2. Vohu Manah	Vahuman (Bahman)	Good Mind	Animal
3. Asha Vahishta	Artvahisht (Ardibehesht)	Divine Law	Fire
4. Khshathra Vairya	Khshatrivar (Shahrevar)	Divine kingdom	Metals
5. Spenta Armaiti	Spandarmat (Aspandarmad)	Holy Devotion	The Earth
6. Haurvatat	Khvardat (Khordad)	Perfection, Wholesomeness	Waters
7. Ameretatat	Amardat (Amardad)	Immortality	Vegetation

Representation of the material creations in Zoroastrian ritual:

Spirituality needs to be formalized and expressed. This is done through rituals. In rituals the presence of the Amesha Spentas are invoked for their benediction. Professor Mary Boyce explains that the rituals enacted by the priests with plants and animals were man's contribution to the advancement of the world in its regular course. By daily rites they consciously purified, blessed and strengthened every one of the seven creations, which were all represented there: earth in the ritual precinct, water in a vessel, fire burning in a vase, the sky represented by the metallic implements, plant life by the flowers and fruits, the animal kingdom by milk. Mankind was represented through the celebrating priest who, being a co-worker of Ahura Mazda helped in keeping the world in a state of strength and purity.^{xv}

The Middle Path:

Accordingly, man is expected to share the resources of the earth equitably. Statistics today reveal that less than a quarter of our planet's human population uses approximately 85% of all capital resources. The unwarrantable material demands of the richer nations lacerate the economy of the poorer ones. That Indian's poverty stemmed from a continuous exploitation by Britain was Dadabhai Naoroji's (1825-1916) main contention in his book, Poverty and Un-British Rule in India. His "drain theory" was effectively propagated in the British Parliament. It became the dogma of a whole generation of Indian nationalist economists. Mahatma Gandhi had claimed Dadabhai as his mentor.

The Menok-i-Khrat asks: "By what means can we make Ahura Mazda, the Amesha Spentas and the fragrant heaven our own?" And the response to this is several virtues of which moderation (patmanak) is one.^{xvi} To avoid excess (frehbutih) is repeatedly preached in Zoroastrian texts. A rich man who is always anxious to have more of everything is accounted poor.^{xvii} Man is urged to be unselfish, in a spirit of kindliness towards all. "May the chosen ones of Mazda be supporters and helpers of the world" sings the Ahunavaiti Gatha.^{xviii}

Reverence for the earth, the water, the air, animals and plant life:

References from the extant Zoroastrian texts reveal that the ancients acknowledged the earth as providing the basic resources for the sustenance of life, and extolled agriculture as a noble profession. We thus read that it is Ahura Mazda who has created this joy-producing earth. Man venerates it as it nurtures him. The Videvdat text clearly details the things that bring joy to the earth and those which cause it sorrow. Those who till the land cultivate the fallow and dry areas making them productive, bring joy to the earth. Those who kindly and piously give in charity the produce of the earth, delight the earth. So blessed is it accounted to tend the earth, that the Videvdat declares, "He who sows corn, sows righteousness."

Herodotus in his History (completed before 445 B.C.) informs us "The Persians revere the rivers, they would neither make water nor spit nor wash their hands therein, nor suffer anyone so to do." Water, whether it be of the rivulet, lake or the mighty sea, is sacrosanct to the Zoroastrian. He esteems it as indispensable to life, and worshipfully eulogizes its intrinsic purity. All possible precautions should be taken not to pollute it. According to the Videvdat it is an abomination to defile water by placing a corpse in it. This text details the purification of the moving as well as the still waters, when so polluted.

John Chardin, a French merchant traveling in Persia during 1665-77, made an interesting observation about the Zoroastrians. "...Their priests teach them that the most virtuous action is to beget children and after that to cultivate a piece of waste land, or to plant a tree."^{xix}

An American world-traveler of the 19th century, Andrew Carnegie, offers a vignette of Parsi worship: "It was the first of the new moon.... here on the shore of the ocean, as the sun was sinking...they congregated to perform their religious rites. Fire was there in its grandest form, the setting sun, and water in the vast expanse of the Indian Ocean stretched before them. The earth was under their feet, and wafted across the sea the air came laden with perfumes.... surely no time or place could be more fitly chosen for lifting up the soul to the realms beyond sense. I could not but participate in what was so grandly beautiful...I have seen many modes and forms of worship some disgusting, others saddening, a few elevating, when the organ peeled forth its tones, but all poor in comparison with this. Nor do I ever expect to witness a ceremony which will so powerfully affect me as that of the Parsis on the beach at Bombay."^{xx}

The ancients valued the purity of the wind. Yasna 1.16 eulogizes the pure air, and the Khorshed Niyayishn speaks of the beneficent wind.^{xxi} There is an entire yasht dedicated to Vayu.^{xxii} Air pollution has become a threat much written about, much spoken of. Too late have we become conscious of it? The putrescent air today menaces mankind.

Ahura Mazda in His bounty has created innumerable healing plants. Man expresses his gratitude for them. At the end of every niyayishn and yasht, a devotee prayerfully acknowledges the beneficence of these plants. Moreover, he praises atar urvazishta, the form of energy that exists in plants. While reciting the short prayer "Homage unto the Plants", the devotee, besides esteeming their usefulness, asks for forgiveness of any breach of action committed towards them.

Some Solutions:

The earnest search for alternatives to pollutants, the attempts to preserve endangered species all over the globe, the multifarious activities of environmental groups are all signs of our times.

Ecological awareness has to be fostered through education. Moreover, in the developing countries, there is a need for environmental education to become a part of adult literacy programmes. Besides the introduction of more national and international legislation for the protection of the environment, there is a greater urgency in ensuring that this legislation is adequately implemented. Subsequently it can find a place in the constitutions of all countries.

Furthermore, the environmental issue cannot be divorced from the question of development. And no form of development should ignore the welfare of man in its totality. We have to ensure that future economic growth is not detrimental to man.

And when we speak of humanity, in this context it is also the question of the survival of future generations that we should consider a perspective for nurturing our children and theirs. In all decision-making, this is a factor that should not be overlooked. Moreover, economic growth should not only be sustainable, but also regenerative. This implies that besides not degrading the environment, we ought to actively renew it.

In order to overcome the ecological crisis we have to decelerate the population growth. With millions of people starving and living below the poverty line, more and more exploitation of nature is taking place. In India, 1.5 million hectares of forests are being stripped every year.

In 1951, the population of India was 361 million. At that time, the late Mr. J. R. D. Tata, captain of Indian industry was the first prominent Indian to have warned the Government of India of the dangers of population explosion. If the Government had followed his advice then, the country would have had a higher quality of life and greater access to economic opportunities for all.

Another important solution to the problem is to have ecology on the business Agenda. I would like to site the example of House of Tata and their contribution in this direction.

Social and Environmental Accountability:

In November 2003, when Prince Charles visited Mumbai, he spoke about the loftiness of Indian values to the leaders of industry. He remarked: "India more than any other nation has a true sense of the sacred. I hope that modernization and economic growth will not be at its expense." He further added, "In today's world, where public attitudes are changing rapidly, high standards of corporate governance and business ethics are important."

The practical way to deal with environmental issues in business is to have a proactive environmental management. Hence it is not merely quality, health and safety but also the environment, which must be on the business agenda. In this context, it is pertinent to examine what the House of Tata, India's largest industrial conglomerate has been doing in dealing with environmental concerns. The man, who laid the foundation of Indian industry, Jamsetji Tata imbibed the sterling values of discipline, integrity and service from his religious tradition, Zoroastrianism, as he was inducted into the priestly fold at an early age. Called "a one-man planning commission"^{xxiii} by the first Prime Minister of India, Pandit Jawaharlal Nehru, he gave the country the infrastructure for heavy industry, a scientific research institute and electric power. Perhaps his greatest contribution was the visualization of the steel city, Jamshedpur (named after him). His concern for the environment can be gauged in his letter to his son written from abroad in 1902, whilst the city was being planned: "Be sure that there is plenty of space for lawns, playgrounds and parks…and to lay wide streets planted with shady trees, every other of a quick growing variety." His sons Dorab and Ratan carried on the work of this industrial visionary.

Within recent history, the late J. R. D. Tata had been internationally recognized. It was as early as the sixties that he took the lead as chairman to guide the large number of companies under him to extend their sense of responsibility beyond the gates of their factories to the villages and towns around. He acknowledged the humanitarian nature of his religious tradition when he wrote to a friend in April 1984: "The Zoroastrian philosophy of hard work, honesty and charity is one that the world should know today."xxiv

He also stressed that this ethos of caring had to be extended from man to his environment: "There is still considerable scope for most industrial ventures to extend their support not only to human beings but also to the lands, to the forests, to the waters and to the creatures that inhabit them."xxv The Tata group of companies have already moved in this direction over the last many years.

The Tata Electric Companies (TEC) have planned to cover 45,000 acres under afforestation, a large part of which has already been accomplished. An ecological programme in 29 schools of Lonavla has been introduced to create awareness for the environment among children. A breeding programme for fish, which was on the verge of extinction in Lonavla, has also been launched. Furthermore, a number of gardens have been developed and maintained by TEC in and around Bombay.

Long before ecology became a cause celebre, the Tata Iron and Steel Company (TISCO) at Jamshedpur had embarked on a massive afforestation programme and had evolved a milieu where industry and the environment were complementary. Today the steel plant has an Environment Management Division monitoring pollution. Recycling plants to save water as well as sewage treatment plants have been installed. When the Company celebrated its golden jubilee in 1958, it gifted to the citizens of Jamshedpur the 237-acre Jubilee Park with its exquisite Moghul Garden.

The operations of the Tata Engineering and Locomotive Company (TELCO) started 18 kms outside the city of Pune in 1965. The Company acquired 126 acres land at Chinchwad and about 800 acres at Pimpri. During this period, TELCO has transformed the industrial belt of Pune and emerged as the largest engineering base in Western Maharashtra. What was essentially wasteland in 1965 has today become a verdant paradise with over 3 lakh trees and two man-made lakes. An excellent bird sanctuary has been developed with a number of migratory birds visiting the area. Soil and water conservation projects have also been undertaken.

Another industrial house founded by a Zoroastrian, Godrej has a well-developed environment policy clearly laid down and enforced. They have preserved a vast expanse of mangrove forest, perhaps the best on the West Coast of India, adjoining their township in the eastern suburbs of Bombay. In the same spirit, WWF-India, head-quartered at the Pirojsha Godrej National Conservation Centre in New Delhi, disseminates environmental education and awareness programmes.

The reverence for nature, which is characteristic of Zoroastrian culture, is inculcated in children at the school of the Godrej Township. For his social commitment, corporate environmental achievement and exemplary service, the late Mr. Sohrab Godrej had been repeatedly felicitated.

Thoughts in Conclusion:

In the Zoroastrian tradition, the earth is approximated to the feminine attribute of Ahura Mazda, the archangel, Spenta Armaiti. A 9th century Pahlavi text declares, "I am created, I did not (simply) exist... my mother is Spandarmat (Spenta Armaiti) my father Ohrmazd (Ahura Mazda)."^{xxvi}

Taraporewala has epitomized Zoroastrian sentiments for the earth thus: "Armaiti has been identified with Mother Earth who sustains and nourishes us all upon her bosom. We have our birth from her, we are nourished in life by her and after death we rest in her bosom again."xxvii The concept of interdependence between man and nature is poignantly validated by this metaphor. The role of the earth as Mother has fecund possibilities because it is a metaphor, which crosses historical and religious lines and combines the current trends of earth consciousness and women consciousness.

It is man's mission to have such an inwardness of God's Divine Plan that he can work for the advancement of the world, for his progress, for that of others, and for the weal of all creation. Work he must, for every Zoroastrian is a soldier in the army of Ahura Mazda, fighting against evil. As we have seen, the pollution of the elements and vegetation is held as an evil to be strenuously combated.

Ours is a perfecting world. Groping to attain the creator's ideal, the Zoroastrian remembers Zarathushtra's declaration to man: That the choice between good and evil is his. The scriptures have shown the way. It is for him to follow or not; to revere where reverence is urged, or to defile what should be sacrosanct. Zoroastrianism makes it incumbent on man to exercise his free will. How he exercises it will determine the environment of the world he lives in.

May I quote to you, words from the Afrin-i-haft Ameshaspandan, which are very evocative:

May the waters be ever and ever flowing, the trees be ever and ever growing, the corn be ever and ever ripening. May the thoughts, words and actions of us all be

truthful and righteous, so that, in the end, all of mankind may be benefited, in this world and in the other world.^{xxviii}

Foot Notes:

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- viii. Yasht, 1.13
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