Background

The materialistic behaviour of the human being has been proved to be detrimental to the mankind and the ecosystem, the world has started looking for alternatives. Regulating desires and reducing consumption are prescribed as the best solution, to address the problems. India being the cradle of spirituality has got cultural roots of sustainable and resilient lifestyle practices. Nevertheless, globalisation and open market economy in the country, over the last few decades, have strongly influenced the lifestyle of the people. VK-NARDEP has been striving for the last three decades to bring back the lost traditional wisdom and rescuing the people from sufferings through its different programmes. The organisation is committed to translate the grand concepts of sustainable living into packages for application in day-to-day life and take the same to the masses.

In continuum to its efforts in this endeavour, VK-NARDEP organised a workshop on sustainable living on 7 and 8 March 2020, at Kanyakumari. Shri. Dileep Kulkarni, a close associate of VK-NARDEP, based on his long years of self-experimentations in the field of sustainable way of living, led the workshop proceedings as a resource person.

Objectives of the workshop are as follows

1. Motivating the individuals to adopt sustainable living practices
2. Strengthening the individuals’ existing knowledge about sustainable lifestyle
3. Facilitating mutual learning of practices, attitudes and skills
4. Sharing best practices and partnerships
5. Cultivating partnerships and networking
6. Charting out action points for way forward

The two-day event marked participation of 24 people from among organisations that spearhead the concept of sustainable living and individuals who are passionate about the concept.

Proceedings of day 1

Invocation and lighting lamp of wisdom

The session was facilitated by Shri. V. Ramakrishnan and Selvi. V. Saraswathi. Quotes related to sustainable lifestyles were read out. All the programme participants lit the lamp of wisdom.
Session 1: Purpose of the event

Shri. Vasudeoji spelt out the purpose of the event. He mentioned that VK-NARDEP has been the forerunner in the field of sustainable living. The organisation has been making humble efforts to promote the concept among the communities for more than three decades. The purpose of the workshop is to motivate the individuals and enhance their wisdom related to the sustainable lifestyles and cultivating partnership and networking among the like-minded individuals and organisations to scale up the concept of sustainable living.

Session 2: “Is development really sustainable?”

The session was anchored by Shri. Dileep Kulkarniji. He explained the participants how the latest paradigm of development, characterised by increased growth in production and consumption, has been detrimental to the environment and mankind. He introduced an RET framework for assessing sustainability of any activity that we do or product that we use in day to day life. The framework consists of three components namely ‘resources’, ‘energy’ and ‘technology’. Criteria for assessing sustainability is as follows:

- **Resources**: Should be locally available and reproducible
- **Energy**: Should be renewable and have less entropy
- **Technology**: Should be soft and locally and should create damage to the ecosystem
Shri.Dilipji insisted that the lifestyles of individuals (Jeeyana Shayli) should be guided by right vision (Jeeyana Drishti) and right goals (Jeeyana Dheya). Followed by the talk of Shri.Dilipji, the forum deliberated on the subject. Following points were predominantly reflected by the participants.

- There are a good number of individuals and groups, all over the world, practising and striving to promote sustainable lifestyles. E.g. Amsterdam is known as the City of Bicycles as majority of the citizens use only bicycles for mobility. There is a need to networking among these groups and scale up best practices.

- Society plays a key role in adoption and sustenance of any behaviour or lifestyle. Social values and norms existed for many centuries have declined. Hence, promoting right social values and norms, that favour sustainable lifestyles, is a pre-requisite while designing interventions.

- The subject of sustainable lifestyles is still at the conceptual stage and for scaling up best practices, measurable indicators must be developed.

Session 3: Pindanda Aikya: The Perspective of Inner Sustainability

Shri.N.Krishnamurthi - Annaji gave a talk on the inner dimension of sustainability. He stated that the modern science and economies see the parts as divorced from the whole. This approach sees trees and misses the woods. This vision also failed to see the interdependence of the parts of Nature, their underlying linkages and the overall utility. Synthesis and holism lost out the race for a place in man’s scheme of things. Thereafter, the economics got divorced from the social concerns of man and became the study of the management merely of the materials and wealth.

In this paradigm, social units such as family, community and cultural entities suffered the most. The new science ad economies promoted life-style and a thought-pattern that led to the atomisation of the community. This resulted in isolation of the individual from his emotional and biological provenance and cultural background. The modern science and technology are
emphasising on production of ‘over concentrated useful things’ like vitamins through intensifying the technology and leaving the rest of the things as waste. This is the central cause of all problems of today. Life is natural and cannot be compartmentalised.

In earlier days, man was slow, land-loving, Nature-loving and family and community centred. He led a subsistent way of life, which kept him self-contented. The values and norms promoted by the institutions of the early days, guided the man to live in harmony with fellow human beings and Nature through sharing and caring. Commercialisation of social transactions degraded community values and created orphans, who could not ‘purchase their way out’.

The present paradigm of development, for sure, is leading to an irreversible destruction to the mankind. It is the responsibility every individual human being to change the present situation. Each individual’s role in restoring our ancient lifestyles is inescapable. Everyone should keep doing at his/her own capacity towards this cause and one should not wait the whole society to change. “Be, but don’t expect”

**Session 4: Sustainable living: Where am I?**

Dr. A. Madhan Kumar moderated the session. Purpose of the session was to sensitise the participants to what extent, the practices in our day to day life have become unsustainable.
Followed by the lead presentation, the participants, in sub-groups, deliberated on the subject. The subgroups applied Resource, Energy and Technology (RET) framework suggested by Shri. Dileep Kulkarniji to analyse the extent of sustainability in the day to day practices on domains namely food, mobility, housing and consumer goods. Following key points emerged out of the sub-group discussions.

**Food**
- Self-control is the key determinant of sustainability related to food production and consumption
- Food should be locally grown and consumed
- Nature has given everything for human beings in their vicinity. Problems emerged when the people started drawing food from distant locations

**Housing**
- Embodied energy, operational energy and life expectancy are the key determinants of eco-friendly housing.
- Laurie Baker’s principles of livable, lovable and affordable housing should be scaled up.
- Sustainable housing models, which have been developed world wide should be pooled for dissemination to the masses.
- Housing should be context specific and should caters to the needs of the local climatic conditions and functional needs of the people.
- Huge money is being invested by the people for housing. Cost of housing is a crime driven by ego.

**Mobility**
- All the predominant means of mobility today are unsustainable and are harmful to the ecosystem. The primitive method of walking is the most sustainable mean of mobility.
- Self-control is the key determinant for promoting sustainable mobility.
- Electric and solar vehicles, which are promoted as sustainable solutions, are in fact not sustainable. They increase entropy
- Bodily energy is positive, bio-energy is less bad and petroleum energy is more hazardous.

**Consumer goods**
- The corporate world has been continuously persuading the people to be consumeristic
- Consumer goods are ego-boosters driven by inner poverty.
- Earning, consumption and accumulation should be downsized for peaceful life.
- If the goods at homes are classified, based on regularity of use, into used daily, sometimes used, rarely used and never used, more than 50% of the goods will fall under the last two categories.
- Emphasis must be given to recycling of goods. Recycling should be a natural process. Human beings induced recycling is energy intensive and are unsustainable.
**Evening assembly**
This session was facilitated by Sri. V. Ramakrishna. Documentary films related to sustainable lifestyles were exhibited to the participants. Games and songs for refreshment were performed by the participants.

**Proceedings of day 2**

**Session 5: Promoting sustainable lifestyle among communities**
A lead paper presentation was made by Shri. N.Karthikeyan. The session intended to introduce potential strategies to work with the communities for promoting sustainable lifestyles. Changing the existing lifestyles is challenging. Each individual is unique and different interventions are required for different people. Common solutions will not work. Perceptions, social values, cultural aspects etc. are difficult to change. The existing IEC based interventions are inefficient and ineffective and they are far less comprehensive. The model recommended by United Nations Environmental Programme (UNEP) is more comprehensive and realistic. The model encompasses three broader components namely attitudes (value orientation and propensity to consume), facilitators (ability to meet needs) and infrastructure (options available).

Followed by the lead presentation, the participants split into subgroups and deliberated on the subject in detail. Each subgroup took on a specific practice that is considered to be sustainable (yoga, home gardening, domestic water management and domestic waste management) and reflected on the present status and gaps and potential strategies while designing community programmes. Key outcomes of the subgroup discussions are as presented below

**Yoga**
- Age category specific strategies should be worked out. For example, among children yoga should be positioned as a game (e.g. Krida Yoga). Youth can be motivated to
practise yoga by emphasising the employment opportunities available around yoga. Among middle aged people, it could be envisaged as a solution for chronic diseases. Yoga could be used as a therapy to treat ailments of old aged people.

- Positive social values about yoga should be promoted through conducting social events and organising festivals and involving community leaders.
- Resource centre on yoga should be promoted in every urban area.
- Children love physical activities. Hence, children could be the best entry point. Yoga can be introduced in schools and evening study centres.
- For each locality, volunteers who can guide/train the people on yoga need to be promoted in large numbers.

**Home gardening**

- Media should be enabled to showcase the best practices.
- Concept of freshness should be reiterated among the people, which will motivate them to adopt home gardening practice.
- Social events and festivals around home gardening should be organised regularly to promote positive social values among the communities.
- Village level, inter-household sharing of vegetables should be promoted as a custom.
- Successful experiences of countries like Cuba in promoting home gardening should be studied for developing more insights.

**Domestic water management**

- People should be educated on recycling and reuse of water and motivated to practise the same.
- Rain water harvesting should be promoted on a large scale.
- Drawing ground water is unsustainable. Hence people should be encouraged to conserve surface water sources.
- Cultural practices available in the communities should be studied and best practices should be disseminated (e.g. Cumin water practice of Kerala)
- Application of traditional inputs like Thethan Kottai, Drumstick Seeds etc. should be promoted over RO like technologies.

**Home waste management**

- Zero waste culture should be promoted among the communities.
- Community led waste audit system should be established
- Incentivising and monetising practices related to waste management may lead to generation of more waste. Hence, incentives are not advisable.
- Domestic composting over centralised composting should be promoted

**Session 6: Homemade household utilities**

Shri.Hariharasudan from a village of Thoothukudi district shared his experience of domestic preparation of household utilities like tooth powder, bathing powder, washing powder, floor cleaning liquid, mosquito repellent etc., using inputs available in the locality. He stated that
nearly 150 household products could be prepared domestically. He insisted that purchasing goods from market is not at all required, everything can be produced by the householders.

Session 7: Entropy and sustainability

Sri. Dileep Kulkarniji gave a talk on the concept of entropy. A law of physics says that it takes work to make the entropy of an object or system smaller; without work, entropy can never become smaller – you could say that everything slowly goes to disorder - higher entropy.

Entropy is simply a quantitative measure of what the second law of thermodynamics describes: the spreading of energy until it is evenly spread. The meaning of entropy is different in different fields.

The pressure is on to reduce greenhouse gas emissions to slow climate change. The way proposed by most people is to switch away from fossil fuels to alternatives such as wind, solar, tidal and geothermal. Such alternative energy sources are often described as ‘renewable’ or ‘sustainable’. This terminology implies to most people that such alternatives can meet our energy demands in perpetuity, without polluting the environment. This is wrong, and will lead to serious errors in policy making.

Energy generated for human use cannot be ‘green’, ‘clean’, ‘renewable’ or ‘sustainable’. These words are all part of the ‘greenwashing’ or ‘sugar-coating’ vocabulary used for the benefit of corporate or political interests, or simply words of misunderstanding.

Humans increasingly wish to convert solar radiation into different forms of energy such as electricity or fuel, that can-do work. This can only be achieved by creating devices or machines to convert one form of energy into another and the resources for those devices come from the Earth’s crust. Those devices have a finite life span and depend on yet further infrastructure (transport, cities, factories, universities, police, etc.) to maintain and operate them, which in turn has a finite life span. Continued mining, refining and manufacturing is required.

The amount of energy captured from the sun by such devices can never be enough to restore the Earth to its original condition. This is determined by the second law of thermodynamics. So, the process of mining, building and manufacturing, to convert and use energy, inexorably depletes and degrades the Earth’s mineral resources. It is irreversible and unsustainable. It makes no difference whether we consider solar, wind, hydro, coal, bio, nuclear or geothermal energy. They are all unsustainable according to the laws of physics.

The second law of thermodynamics also tells us that we cannot completely recycle resources that have been extracted from the Earth and refined for use (such as metals, helium or phosphate fertiliser). The greater the percentage we try to recycle, so the energy cost increases disproportionately. So, whether the resources that we want to use are still in the ground or are in circulation above ground, human industry will inevitably dissipate and lose those resources.

Energy for human use is as unsustainable and non-renewable as mining. So, to talk about ‘renewable energy’ or ‘sustainable energy’ is an oxymoron, as is ‘sustainable mining’ or ‘sustainable development’. The more energy we use, the less sustainable is humanity. The sooner that people realise this, the sooner we can embark on the process of reducing energy
consumption, rather than clutching at the straws of alternative energy sources to perpetuate the unsustainable.

Session 7: Brainstorming on Inner Sustainability Exhibition
VK-NARDEP has established a permanent exhibition entitled Gramodaya Park that gives insights into sustainable solutions to the problems encountered by the world on water management, agriculture, housing and health. The organisation plans to include a new component namely ‘inner sustainability’ in the Gramodaya Park. A working group is in the process of designing the content and presentation of the exhibition set up.

Purpose of the session was to get ideas from the workshop participants on the concept, style and components of the exhibition. Shri.G.Vasudeo, briefed about the inner sustainability exhibition to the participants. This was followed by the participants visiting the existing exhibitions of the Gramodaya Park. Later, a brainstorming session was organised moderated by Shri.G.Vasudeo and Dr.A.Madhan Kumar. Key recommendations by the participants are as follows

- The exhibition should be interactive
- The exhibition should target cognitive and emotional aspects of the visitors on the subject
- The content should be presented in three languages (English, Hindi and Tamil).
- Local issues related to sustainability, rather than global issues, to touch the emotions of the visitors, should be used.
- Technology is fast and dynamic. Hence, a latest technology used today may become obsolete very soon. Hence, it would be good to present the content in panels. This could be supplemented by application of QR Code technology.